The significance of parasitic gap licensing by pronominal cliticization in Spanish

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1. Introduction

While non-subject DPs in Spanish typically appear post-verbally, pronominal arguments often must be displaced to a pre-verbal position, as we see in (1) below. Previous research has observed that this process, which is commonly referred to as *pronominal cliticization*, has characteristics of A-movement in Spanish and related languages (see Demonte 1987, 1995, Kayne 1991, Anagnostopoulou 2003, Cuervo 2003, a.o.). However, in this paper we describe and analyze the fact that in the Iberian Spanish of rural Valladolid, such cliticization also has a canonical Ā-property. Specifically, based on new data from 12 speakers, we show that this variety of Spanish allows such cliticzation to license parasitic gaps (PGs), as (1) also shows.[1] Here we see a PG in the bracketed adjunct clause, which co-refers with the moved pronominal clitic *lo* in the main clause:

(1) María lo_1 escondió t_1 [para   proteger PG_1 de los padres]
     María CL.3SG.M.ACC hid   in order to.protect   of the parents

     'María hid him_1 [to protect PG_1 from the parents]' (*Valladolid Spanish: PG licensing by clitic*)

We demonstrate that in this variety of Spanish this form of PG-licensing is indeed genuine, and that this Ā-property co-exists with the A-properties that are cross-linguistically typical for pronominal cliticization. Since PGs in Valladolid Spanish cannot be licensed by A-movements (as we show), we argue that such cliticization in this particular variety is derived by composite A/Ā-movement, which has traits of both movement types (Webelhuth 1989, Coon & Bale 2014, van Urk 2015, Erlewine 2018). Spanish also has a *clitic doubling* construction, in which the expected gap left behind by the clitic's movement is filled by a co-referent full DP. We show that PG-licensing by clitic doubling fails, and suggest that this phenomenon involves pure A-movement, unlike the composite movement of non-doubled clitics.

We also show that this PG-licensing by pronominal cliticization behaves precisely as predicted in a number of other ways, building from the theory of PGs in Nissenbaum (2000). Nissenbaum's theory makes a variety of predictions about the syntax and semantics of PGs in natural language, including predictions about PGs in multiple movement contexts, which we focus on here. In Iberian Spanish, both a direct object (DO) and an indirect object (IO) can be cliticized (Bonet 1991). We show that the patterns of PG licensing in multiple cliticization contexts mirror those seen in multiple Ā-movement configurations in English explored by Nissenbaum (2000) as well as Fox & Nissenbaum (2018) and Davis (2020a,b). We also verify similar predictions about contexts where pronominal cliticization and *wh*-movement co-occur.

These new facts about pronominal clitics and PGs are thus significant for several reasons. These facts advance the study of pronominal syntax specifically, and the typology of syntactic movement more broadly. These findings also provide new cross-linguistic verification of Nissenbaum's syntax/semantics for PGs, and related proposals about the syntax of multiple movement structures.

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[1] While many Spanish speakers reject (1), and PGs in general, the interviewed speakers from rural Valladolid do generally accept PGs and constructions like (1). We report these judgments here.

2. Pronominal cliticization with A- and Ā-traits

It has been argued since at least Postal (1971) and Chomsky (1973) that A- and Ā-movement have different properties. Some of the canonical properties attributed to A-movement include clause boundedness, the creation of new antecendents for binding, and the licensing of depictives. Cliticization in Spanish has all these canonical A-properties. Since it is clause bounded (Kayne 1991, Ordoñez 2012, a.o.), a clitic can move within an embedded clause but not beyond it, as in (2).[2]

(2) (* Le$_1$)   quiero   [que (le$_1$)   beses   t$_1$]
     CL.3SG.DAT want.1SG   that   CL.3SG.DAT kiss.2SG.SUBJ
     'I want you to kiss him'

Such cliticization also feeds binding (Demonte 1987, 1995, Cuervo 2003), as we see in (3). In (3a), the dative clitic *le* moves across the anaphor *sí mismo* ('himself') and thus binds it, while in (3b) such binding is impossible when the clitic is replaced with an (un-moving) full DP.[3]

(3) a.   La terapeuta [le$_i$]$_1$ devolvió [la   estima de sí mismo$_i$] t$_1$
         The therapist   CL.3SG.DAT returned   the esteem of himself

         'The therapist gave him his own self-esteem back'

     b. * La   terapeuta devolvió [la   estima de sí mismo$_i$] [a Juan$_i$]
         The therapist returned   the esteem of himself   to Juan

         'The therapist gave his own self-steem back to Juan'   (based on Cuervo 2003)

Cliticization also licenses depictives (Toquero-Pérez 2021, cf. Demonte 1987), as (4) shows. In (4a), we see that the predicative adjective *contento* ('happy') can be controlled by the moved clitic *le*, while in (4b) we see that this is not possible if the pronoun is replaced by a full DP (here *el abuelo*, 'the grandfather').

(4) a.   La niña [le$_i$]$_1$ dio la leche t$_1$ [contento]$_i$
         the girl   CL.3SG.DAT gave the milk   happy.M

         'The girl gave him$_1$ the milk happy$_1$'

     b. * La niña dio la leche [al   abuelo]$_i$ [contento]$_i$
         the girl gave the milk   to.the grandfather   happy.M

         'The girl gave the milk to the grandfather$_i$ happy$_i$'

   Importantly, we have shown in (1) above that pronominal clitics also have a characteristic property of Ā-movement in Valladolid Spanish: the ability to license PGs. We see another example of this in (5):

(5) María { me/   te}$_1$ dio un beso t$_1$ [tras conocer PG$_1$ en la playa por la mañana]
     María CL.1SG/ CL.2SG gave a kiss   after to.meet   in the beach by the morning

     'María gave {me/ you} a kiss [after meeting PG in the beach in the morning]'

If such cliticization is actually derived by composite A+Ā-movement, we expect one instance of cliticization to be able to achieve both an A- and Ā-process. This prediction is verified in examples like (6), where one clitic simultaneously licenses a PG and controls a depictive adjective:

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[2] Throughout the paper we are using (i) numerical indices – e.g. 1, 2 … – to indicate movement dependencies and (ii) letter indices – e.g. *i*, *j* … – to indicate binding dependencies.

[3] We are assuming, following Demonte (1995) and Cuervo (2003), that the unmarked canonical order of ditransitive constructions is V DO IO: (ia). The V IO DO order (ib) is also possible, though it has been argued to be "stylistically marked" and associated with narrow focus on the IO, as a result of scrambling (Demonte 1995: 21-22). We would like to note, though, that these intuitions are nuanced, and are subject to a lot of inter-speaker variation.

(i) a.   Recité   el poema a María.   b. (%) Recité   a María el poema.
         recited.1SG the poem to María   recited.1SG to María the poem

         'I recited the poem to María'   'I recited the poem to María'

(6) La niña [le$_i$]$_1$ dio la leche t$_1$[contento]$_i$ [tras haber asustado PG$_1$ previamente]
the girl CL.3SG.DAT gave the milk happy.M after to.have spooked previously

'The girl gave [him$_i$]$_1$ the medicine [happy]$_i$ [after having spooked PG$_1$ previously]'

Thus we argue that pronominal cliticization in Valladolid Spanish is derived by composite A+Ā-movement. The above example is especially relevant for this proposal, given Pylkkänen's (2002) observation that depictive licensing is typically in complementary distribution with PG-licensing.

3. Avoiding potential confounds

Campos (1991) already observed that pronominal cliticization in Spanish can license PGs. However, Masullo (2017) argued against this claim, noticing that Campos' gaps are acceptable even without the presence of movement: in (7a), adapted from Campos (1991), we see an alleged PG in the bracketed adjunct that co-refers with the moved clitic, while in (7b) we see that the same PG is evidently possible even when the clitic is replaced by a full DP that has not undergone any movement.

(7) a. Lo$_1$ archivó t$_1$[sin leer PG$_1$] b. Archivó [el papel]$_1$ [sin leer PG$_1$]
CL.3SG.ACC filed without to.read filed the paper without to.read

'S/he filed it [without reading PG$_1$]' 'S/he filed the paper [without reading PG$_1$]'

Masullo argues that adjuncts headed by *sin* ('without'), as in (7), are actually a type of depictive predicate and do not involve PGs per se. Additionally, a verb like *leer* ('to read') as in (7) can also be intransitive, as (8) shows. For these reasons, it is possible to parse the problematic example in (7a) above as involving no PG. If we want to truly identify PGs in Spanish, it is necessary to avoid these confounds. We can do this by placing the potential PG in a VP headed by a verb such as *abofetear* ('to slap'), which is obligatorily transitive, e.g. (9), and introducing the adjunct clause with something other than 'without'. We do these things in (10) below, where the PG is in the object position of 'to slap', and the adjunct is headed by *tras* ('after'). We see here that movement of the pronoun successfully licenses the PG:

(8) María lee (un libro) (9) María abofeteó *(al novio)
María reads a book María slapped to.the boyfriend

'María reads (a book)' 'María slapped (the boyfriend)

(10) María le$_1$ dio un beso t$_1$ [tras abofetear PG$_1$ aquella mañana]
María CL.3SG.DAT gave a kiss after to.slap that morning

'María gave him$_1$ a kiss [after slapping PG$_1$ that morning]'

It has been observed that A-movement is generally unable to license PGs, which is why PG-licensing is a canonical Ā-property (Nissenbaum 2000, Culicover & Postal 2001, van Urk 2015, 2017). Nevertheless, we might hypothesize that in this variety of Spanish A-movement can license PGs. In fact, Campos (1991), Sheehan (2015), and VanDyne (2020) claim that in general Spanish, A-movement of the subject in passives licenses PGs, as in (11). However, we argue that such constructions in fact involve no PG.

(11) [El articulo]$_1$ fue archivado t$_1$ [sin abrir PG$_1$]
the article was filed without to.open

'The article was filed without opening (it)' (Sheehan 2015)

The example in (11) has several confounds. First, as already discussed, the alleged PG here is acceptable even in transitive sentences where the object DP does not undergo A-movement such as (12), which is acceptable in both general and Valladolid Spanish.

(12) $\varnothing_{pro}$ Archivaron [el artículo]$_1$ [sin abrir PG$_1$]
they filed.3PL the article without to.open

Lit. 'They filed the article without opening'. Int. 'They filed the article unopened'

Second, the works cited above test PGs under passivization using adjuncts headed by *sin*, which as discussed above, are argued by Masullo (2017) to not be appropriate PG-hosting constituents. In fact, such examples are ungrammatical when the PG-hosting adjunct is headed by a different element, as in (13).

(13)   * [El articulo]$_1$ fue archivado t$_1$ [{ después de/ antes de/ para}   abrir   PG$_1$]
            the article   was filed   after   of before of in order to.open
         'The article was filed {after/ before} opening/ in order to open (it)'

The final problem here is that, as Sheehan (2015) and VanDyne (2020) acknowledge, A-movement of the subject in typical active sentences never licenses PGs (14). This is unexpected if A-movement licenses PGs in general in Spanish.[4]

(14)   * [El árbol]$_1$ tenía t$_1$ una marca en el tronco [para   talar Juan PG$_1$ después]
            the tree   had   a   mark in the trunk   in order to.cut Juan   after
         'The tree had a mark on its trunk for Juan to cut afterwards'

We thus conclude that in Spanish, like other languages, A-movement is generally incompatible with PG licensing. See van Urk (2017) for a potential semantic explanation for this fact.

4. Analysis of PG-licensing by clitic movement

We take pronominal clitics to be DPs, which move to the edge of the *v*P phase (Gallego 2016), and then to a position in TP below the subject (Matushansky 2006). Since V (or an auxiliary verb) moves to T in Spanish (Torrego 1984, Suñer 1994, Gallego & Uriagereka 2006), the clitic precedes V. We assume that the step of movement through *v*P is driven by agreement of *v* with the pronoun (Gallego 2016, Preminger 2019). To formalize our composite movement proposal, we assume that in addition to the usual φ-features (Person, Number and Gender), the clitic DP bears an Ā-feature. We assume that the probing head *v* thus bears corresponding features $[u\varphi:\_]$ and $[u\bar{A}:\_]$, given the composite nature of the pronoun's movement. This agreement (15a) and subsequent *v*P-internal movement (15b) are illustrated below:

(15)   a. $[_{vP} v_{[u\varphi:\_] \atop [u\bar{A}:\_]}$ $[_{VP} DP_{[\varphi] \atop [\bar{A}]}$]]   b. $[_{vP} DP_{[\varphi] \atop [\bar{A}]}$ $[_{v'} v_{[u\varphi:\underline{VAL}] \atop [u\bar{A}:\underline{VAL}]}$ $[_{VP} V t_{DP}$]]]

This movement through spec,*v*P is important for PG-licensing. Building on the theory of PGs in Nissenbaum (2000), we propose that Spanish clitics license PGs in the way shown in (16) below, which models the sentence in (1) above. Here composite movement of the clitic through spec,*v*P triggers Predicate Abstraction (Heim & Kratzer 1998), creating a *v'* node of type $\langle e, t \rangle$. The PG is formed by movement of a semantically vacuous null operator (OP) (Chomsky 1986, Heim & Kratzer 1998, Nissenbaum 2000, a.o.) to the edge of the Adjunct Phrase (AP). The OP triggers Predicate Abstraction there as well, changing the AP from type *t* to type $\langle e, t \rangle$. This AP is then merged to the *v'* of the same type, and is semantically combined with it by Predicate Modification (Heim & Kratzer 1998). The rule of Predicate Modification creates the boxed *v'* node, also of type $\langle e, t \rangle$. The individual argument of this node is saturated by the intermediate trace of the clitic's movement, thus binding the true gap and PG.[5]

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[4] When the subject DP is *wh*-moved (directly from Spec,*v*P; Torrego 1984, Suñer 1994, a.o.), the PG is acceptable (ii). This example rules out the possibility that (14) is ungrammatical due to a mismatch in the syntactic position of the gaps (Engdahl 1983, Kayne 1983), since in (ii) the PG is in object position but the real gap is in subject position.

(ii)   Qué$_1$ tenía t$_1$ una marca en el tronco [para   talar Juan PG$_1$ después]?
         what had   a   mark in the trunk   in order to.cut Juan   after
         'What had a mark on its trunk for Juan to cut afterwards?'

[5] We assume that the clitic DP is an individual of type *e*, which thus leaves traces of and triggers Predicate Abstraction over type *e*. However, if it is the case that A- and Ā-movements involve different types of abstraction (Sauerland 1998, Ruys 2004, van Urk 2017), then a question arises about the semantic types involved in traces of and Predicate Abstraction caused by composite movement. We leave this question for future work.

(16) *The LF for PG-licensing by clitic movement (V to T movement omitted)*

TP
- DP$_2$ *María*
- DP$_1$ *lo*
- T
- vP
  - t
    - t$_1$
    - v' $\langle e,t \rangle$
      - v' $\langle e,t \rangle$
        - λ1
        - t
          - t$_2$
          - $\langle e,t \rangle$
            - *hid* $\langle e, \langle e,t \rangle \rangle$
            - t$_1$
      - AP $\langle e,t \rangle$
        - OP$_3$
        - $\langle e,t \rangle$
          - λ3
          - t
            - *to protect* t$_3$ (=PG) *from the parents*
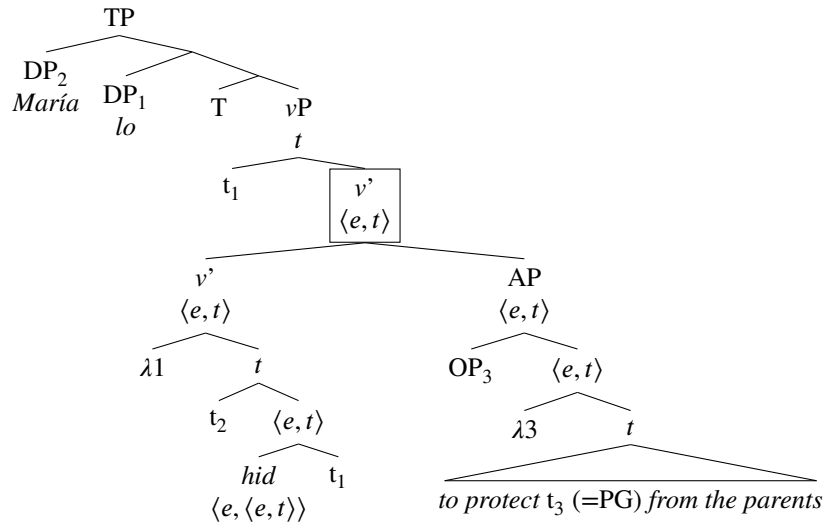
5. Multiple movement and PGs

Having argued for the legitimacy of the PG configuration under consideration, and provided an analysis of how such PG licensing works, we now go on to discuss some relevant predictions. In particular, we focus on predictions about PGs in contexts with multiple moving elements. Fox & Nissenbaum (2018) and Davis (2020a,b) argue based on English data, building from the theory in Nissenbaum (2000), that when multiple phrases successive-cyclically move through vP the generalization in (17) holds.

(17) *Generalization about PGs and multiple movement*
      When multiple phrases move through one vP, only the structurally higher moved phrase can license a lone PG, but the lower moved phrase can license an additional PG.

This is illustrated by (18) and (19) below. In (18), we see that when topic/focus fronting and *wh*-movement are combined, the topic/focus phrase (which lands in a higher position) can license a lone PG, but the *wh*-phrase cannot, even though *wh*-movement in English is normally capable of PG licensing.

(18) [This book]$_2$, who$_1$ should we talk to t$_1$ about t$_2$...   (Davis 2020a: 36, ex.37)
      a.   ...before commenting on PG$_2$?   b.   * ...before arranging a meeting with PG$_1$?

However, when we modify the structure so that there are two PGs for both of the moved phrases to license, both gaps succeed as in (19):

(19) [This book]$_2$, who$_1$ should we talk to t$_1$ about t$_2$, [before giving comments on PG$_2$ to a student of PG$_1$]?   (Davis 2020a: 224, ex.53)

Next, we show that in Valladolid Spanish configurations involving (i) multiple instances of cliticization, as well as (ii) cliticization along with *wh*-movement, behave precisely as expected given (17).

5.1. Multiple cliticization

Iberian Spanish allows simultaneous cliticization of IO and DO. In multiple cliticization structures, the dative IO clitic must surface higher than the accusative DO clitic (Bonet 1991, Ordoñez 2012), as in: [$_{TP}$ Subject > cl$_{IO}$ > cl$_{DO}$ > T]. We have shown that these clitics can individually license PGs in Valladolid Spanish: see (1) for a DO clitic and (5)-(6) for an IO clitic. The generalization in (17) above predicts that, when both of these clitics are in one clause, only the structurally higher clitic will be able to license a single PG, but the lower moved clitic will be able to license a second PG if present. This is correct. In (20a) we see that the dative IO clitic licenses the lone PG in the bracketed adjunct, while (20b)

shows that the same is impossible for the lower DO clitic. However, in (20c) we see that when we include a second PG in the adjunct, it is possible for both of the moved clitics to license one PG each:

(20) a. María **se**$_2$ la$_1$ recitó t$_1$ t$_2$ [tras dar-**PG**$_2$ -la   ese día]
         María CL.DAT CL.ACC recited   after give-   -CL.ACC that day

      Lit. 'María recited it to him$_2$ after giving it PG$_2$ that day'   (✔ *Higher clitic → lone PG*)

   b. * María se$_2$ **la**$_1$ recitó t$_1$ t$_2$ [tras dar-{le/se} **PG**$_1$ ese día]
       María CL.DAT CL.ACC recited   after give-CL.DAT   that day

      Lit. 'María recited it$_1$ to him after giving him PG$_1$ that day'   (* *Lower clitic → lone PG*)

   c. ? María **se**$_2$ **la**$_1$ recitó t$_1$ t$_2$ [tras dar **PG**$_2$ **PG**$_1$ ese día]
       María CL.DAT CL.ACC recited   after give   that day

      Lit. 'María recited it$_1$ to him$_2$ after giving PG$_2$ PG$_1$ that day'   (✔*Lower clitic → PG 2*)

Given our syntactic and semantic assumptions about clitics and movement, both clitics must successive cyclically move through the edge of *v*P. This means that the *v*P has two specifiers (ignoring the origination position of the subject), each ultimately containing one trace of clitic movement, as in (21).

(21)   [$_{TP}$ María se$_2$ la$_1$ recetó$_{[[v+V]+T]}$ [$_{vP}$ t$_2$ t$_1$ $_v$ [$_{VP}$ V t$_1$ t$_2$]]]
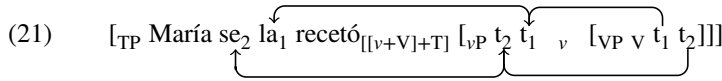
Due to the two successive-cyclic moving clitics, Predicate Abstraction applies in the *v*P twice, creating a *v*' node of type $\langle e, \langle e, t \rangle \rangle$, as in (22). The intermediate trace of the lower clitic (t$_1$) saturates this function's first individual argument, yielding a type $\langle e, t \rangle$ *v*'. The individual argument of that resulting node is then saturated by the intermediate trace of the higher clitic (t$_2$), yielding a *v*P node of type *t*:[6]

(22)   María CL$_2$ CL$_1$ T [$_{vP}$ t$_2$ [$_{v'_3}$ t$_1$ [$_{v'_2}$ $\lambda 1 \lambda 2$ [$_{v'_1}$ recitó t$_1$ t$_2$]]]]   (*LF of matrix clause*)
        t $\langle e,t \rangle$ $\langle e, \langle e,t \rangle \rangle$ *t*

An AP with one PG contains a single moving OP, which triggers a single instance of Predicate Abstraction (23a). In contrast, a two-PG AP must contain two OPs, which each trigger Predicate Abstraction (23b):

(23) a. [$_{AP}$ tras OP$_3$ [$\lambda 3$ [PRO dar-t$_3$-la ese día]]]   (*LF: AP with one PG*)
         $\langle e,t \rangle$ $\langle e,t \rangle$ *t*

   b. [$_{AP}$ tras OP$_4$ OP$_3$ [$\lambda 3 \lambda 4$ [PRO dar-t$_4$-t$_3$ ese día]]]   (*LF: AP with two PGs*)
      $\langle e, \langle e,t \rangle \rangle$ $\langle e, \langle e,t \rangle \rangle$ *t*

The AP in (23a) that contains a lone PG is of type $\langle e, t \rangle$ after OP-movement. In a multiple cliticization structure like that schematized in (22) above, such an AP can only attach to v'_3. This is because for Predicate Modification to unite the AP and the relevant *v*', they must have the same semantic type. When attaching to v'_3, the trace left by the IO-clitic after moving through the *v*P (t$_2$) saturates the individual argument of the predicate, and thus binds the PG inside the AP.

   Merger of the same AP to v'_2 in (22) – the *v*P node created by the second instance of λ-abstraction – will lead to a crash due to a type mismatch: the AP is of type $\langle e, t \rangle$, but the *v*'-node is of type $\langle e, \langle e, t \rangle \rangle$. Thus the lower clitic cannot bind the PG inside the AP, as in the ungrammatical (20b). Crucially, though, if the AP contains two PGs (and thus two OPs) as in (23b), it will be type $\langle e, \langle e, t \rangle \rangle$, and will thus be able to merge to v'_2 in (22). In such case, the intermediate trace of each clitic licenses one PG each, as in (20c).

   We can summarize the facts with the diagram in (24) below. The relevant *v*' nodes are boxed, and arrows are used to represent adjunction of PG-containing APs:

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[6] Predicate Abstraction creates a function f, which corresponds to a syntactic node, by applying an index/variable to f's daughter α (Heim & Kratzer 1998): $[\![f]\!] = \lambda x.[\![\alpha]\!]^x$. When two elements move to the specifier of the same head, e.g. *v*, each triggering abstraction, the order of f's arguments matters: the semantic arguments of f must have the opposite order of the specifiers of *v* containing the traces that saturate f's arguments. That is, the inner Spec,*v*P in the syntax corresponds to the function's first argument, while the outer specifier corresponds to its second argument. This ordering, illustrated in (22), ensures the appropriate binding of the variables at LF (iii).

(iii) $[\![vP]\!] = \lambda 1 \lambda 2.\exists e[recited(e) \wedge \text{agent}(e, María) \wedge \text{theme}(e, 1) \wedge \text{recipient}(e, 2)]$ $([\![1]\!]^{la})$ $([\![2]\!]^{se})$.

(24) $[_{vP_t} \; t_2 \; \boxed{[_{v'\langle e,t\rangle}} \; t_1 \; \boxed{[_{v'\langle e,\langle e,t\rangle\rangle}} \; \lambda 1\lambda 2[_{v'} \; V \; t_1 \; t_2]]]]$

                       ⇑   ⇑

                AP: 1PG AP: 2PGs

As we see next, similar predictions are verified in contexts that combine cliticization and *wh*-movement.

5.2. *The interaction of cliticization and wh-movement*

What we have just said also makes predictions about the interaction of cliticization and other Ā-operations like *wh*-movement. In Spanish, *wh*-phrases land in Spec,CP, while clitics land in Spec,TP (specifically, a second Spec-TP below the subject). Thus *wh*-phrases land in a structurally higher position. Given (17) above, we predict that when we combine cliticization and *wh*-movement, if there is one PG it will be licensed by the *wh*-phrase. In contrast, we predict that if there are two PGs, the clitic will be able to license the second one. These predictions are correct (25):

(25)   a.   **Qué**$_1$ le$_2$ recitó María t$_1$ t$_2$ [tras dar-le   **PG**$_1$ aquella mañana]
             what CL.3SG.DAT recited María   after to.give-CL.3SG.DAT   that   morning
             'What$_1$ did María recited to him after giving him PG$_1$ that morning?'   (✔*Wh→lone PG*)

    b.   * Qué$_1$ **le**$_2$ recitó María t$_1$ t$_2$ [tras dar   **PG**$_2$ la carta aquella mañana]
             what CL.3SG.DAT recited María   after to.give   the letter that   morning
             'What did María recite to him$_2$ after to.give PG$_2$ the letter ?'   (**Clitic→lone PG*)

    c.   **Qué**$_1$ **le**$_2$ recitó María t$_1$ t$_2$ [tras dar   **PG**$_2$ **PG**$_1$ aquella mañana]
             what CL.3SG.DAT recited María   after to.give   that   morning
             Lit.'What did María recite to him after giving PG PG that morning?'
             'What did María recite to him after giving him the letter that morning?' (✔*Clitic→PG 2*)

For these patterns to be derived, in (25) the *wh*-phrase must target an outer specifier of *v*P (Davis 2020a,b). Given that the surface order is 'WH > CL', the derivation must proceed as in (26). The *wh*-element moves above the specifier of vP created by clitic movement (26a). Thus the *wh*-element is able to license the only PG inside the adjunct (26b). The LF representation of (25), ignoring the APs, is exactly as in (24); the only difference is that the higher trace corresponds to a *wh*-element in (25).[7]

(26)   a. $[_{vP} \; WH_1 \; [_{v'} \; CL_2 \; recitó_{[[V+X]+v]} \; [_{XP} \; t_1 \; X \; [_{VP} \; V \; t_2]]]]$ (WH > CL *at vP*)

    b. $[_{vP} \; WH_1 \; [_{v'} \; CL_2 \; recitó_{[[V+X]+v]} \; ...] \; [_{AP} \; ...PG \; ...]]$ (WH *binds PG*)

    c. $[_{CP} \; WH_1 \; C \; [_{TP} \; CL_2 \; recitó_{[[[V+X]+v]+T]} \; [_{vP} \; t_1 \; t_2 \; v \; ...] \;]]$ (WH > CL *at CP*)

6. The distinctness of clitic doubling

So far we have focused on plain cliticization. However, Spanish also has a *clitic doubling* construction (27), in which the moved clitic is co-indexed with a full DP that sits in what otherwise would have been the gap left behind by that clitic. In Iberian Spanish, only the IO can be doubled (Ordoñez 2012).

(27)   María le$_1$ dio un beso [a Juan]$_1$
        María CL.3SG.DAT gave a kiss   to Juan
        Lit.'María gave him$_i$ Juan$_i$ a kiss'   Int. 'María gave him$_{Juan}$ a kiss'   (*IO doubling*)

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[7] In Spanish ditransitives DO originally precedes IO, prior to movement (see fn.3). Typically their order is reversed under multiple cliticization as we have shown. However, after IO-clitic movement + *wh*-movement of the DO (25), DO precedes IO. Note that in order to properly capture the behavior of PGs, it is necessary to posit that co-occurring moving elements adopt their final relative order as soon as they land in Spec,*v*P, (see fn.6, and Davis 2020a,b).

In (28) below we see that clitic doubling also has the core characteristics of A-movement shown in §3 for plain cliticization: clause boundedness, interaction with binding, and depicitve licensing. Examples (28b) and (28c) contrast with the ungrammatical (3b) and (4b) respectively, where we see a full DP but no corresponding doubled clitic.

(28) a. (* Le$_1$)   quiero   [que (le$_1$)   des   un beso [a Juan]$_1$]
           CL.3SG.DAT want.1SG that CL.3SG.DAT give.2SG.SUBJ a kiss   to Juan

           'I want you to give him$_{Juan}$ kiss'   (*Doubling is clause bounded*)

      b. La   terapeuta [le$_i$]$_1$ devolvió [la   estima de sí mismo$_i$] [a Juan]$_1$
           The therapist   CL.3SG.DAT returned   the esteem of himself   to Juan

           'the doctor gave him$_{Juan_i}$ his$_i$ own self-steem back'   (*Doubling feeds binding*)

      c. La niña [le$_i$]$_1$ dio la leche [al   abuelo]$_1$ [contento]$_i$
           the girl   CL.3SG.DAT gave the milk   to.the grandfather   happy.M

           'The girl gave him$_{the\ grandfather_i}$ the milk happy$_i$'   (*Doubling licenses depictives*)

Unlike plain cliticization, doubling does not license PGs, as we see in (29) below. This example contrasts with its grammmatical plain cliticization counterpart in (10) above.

(29) * María le$_1$ dio un beso [a Juan]$_1$ [tras abofetear PG$_1$ aquella mañana]
        María CL.3SG.DAT gave a   kiss   to Juan   after to.slap   that   morning

        'María gave him$_{Juan}$ a kiss after slapping PG$_1$ that morning'

   We conclude that while plain clitics undergo composite A/Ā-movement, doubled clitics involve plain A-movement. The latter conclusion has been indepentedntly argued by Anagnostopoulou (2003), Harizanov (2014), Preminger (2019), and Di Tulio et al. (2019), a.o. Since A-movement does not license PGs cross-linguistically (Culicover & Postal 2001 a.o.) or in this variety of Spanish, the ungrammaticality of (29) follows. While this may be the correct answer, it is still necessary to explain why plain clitic movement can be composite, while clitic doubling cannot. We will leave this puzzle for future work.

7. Remaining puzzles and alternative analyses

   We have argued that pronominal cliticization in rural Valladolid Spanish involves composite movement of the clitic through Spec,*v*P. This analysis captures the fact that such cliticization has A-properties, but also licenses PGs (unlike normal A-movements in Spanish). However, several puzzles remain. van Urk argues that composite movement always has the properties of the less restrictive feature, thus a composite A+Ā-probe has the locality profile of Ā-movement. While van Urk shows that this is correct for Dinka, this is evidently not so for Valladolid Spanish, where cliticization is clause-bounded. Additionally, we have shown in (6) above that cliticization can simultaneously license a depictive and a PG, though in that example the depictive is leftward, and thus presumably structurally lower than the right-leaning PG-containing adjunct. The composite movement analysis predicts that switching around the order of the depictive and adjunct should be possible. However, it is not clear that this is so (30):[8]

(30) ?? La niña [le$_i$]$_1$ dio la leche t$_1$ [tras haber   asustado PG$_1$ previamente] [contento]$_i$
          the girl   CL.3SG.DAT gave the milk   after to.have spooked   previously   happy.M

        'The girl gave [him$_i$]$_1$ the medicine [happy]$_i$ [after having spooked PG$_1$ previously]'

   These points challenge our composite movement analysis. Alternatively, we might capture the facts about Valladolid Spanish by hypothesizing a step of A-movement followed by Ā-movement. In an example like (6) above, the first movement step would license the depictive, and the second would license the PG in the higher adjunct. Since A-movement must precede Ā-movement (Chomsky 1973, *et seq.*), switching the order of those constituents as in (32) would indeed thus be expected to fail. Under this analysis, it is still the case that pronominal cliticization involves the clitic itself undergoing a step of Ā-movement – something not reported so far in previous literature.

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[8] We thank Stefan Keine for discussion of these points.

However, there is another alternative analysis of PG-licensing under cliticization in which the clitic does not undergo Ā-movement at all. Preminger (2019: 14) argues that plain cliticization is actually clitic doubling of a null co-indexed *pro*. If this is so, we can posit that when we see a structure where a PG seems to be licensed by a moving clitic, the clitic simply undergoes A-movement, while the PG is actually licensed by the null *pro* undergoing Ā-movement to the left periphery. This configuration would be analogous to another Spanish construction termed *clitic left dislocation*, in which clitic doubling occurs, but the doubled DP is displaced to the left periphery as in (31):

(31) Estos libros, los   leyó Juan ayer.
      these books CL.3PL.ACC read Juan yesterday

      'These books, Juan read yesterday'   (adapted from Arregi 2003: 31, ex.1a)

Delfitto (2002) analyzes plain cliticization similarly (though without reference to PG-licensing). Under this analysis, there is not composite movement, but simply two separate A- and Ā-chains (Mahajan 1990).

While this analysis elegantly unites plain cliticization with clitic doubling, it faces at least one challenge. In §5, we saw a variety of facts that fit the generalization in (17) about PGs and multiple movement. In clitic left dislocation structures that contain *wh*-movement, the dislocated DP lands in a position above the *wh*-phrase (Arregi 2003). Furthermore, as expected given (17), the dislocated DP can license a lone PG in such contexts, though the *wh*-phrase cannot, as we see in (32).

(32) A Juan$_2$, qué$_1$ le$_2$ recitaste t$_1$ t$_2$ [tras dar-   {PG$_2$ la carta/* le   PG$_1$}]?
      to Juan   what CL.3SG.DAT recited   after to.give the letter CL.3SG.DAT

      'To Juan, what did you recite after giving {PG the letter/ * him PG}?'

Suppose that PG-licensing under plain cliticization is actually doubling of a null *pro*, with PG-licensing by left-dislocation of that *pro*. Combining (32) with the predictions of (17), we expect the dislocated *pro* to land in a position above a co-occurring *wh*-moved phrase: *pro* > *wh*. Consequently, it should not be the *wh*-moved phrase but the null *pro* (co-indexed with the clitic) that licenses a lone PG, since it is the highest moved phrase. This prediction is incorrect as already shown in (25a) versus (25b), where only the *wh*-element licenses the lone PG. This is precisely the opposite of what we would predict if we hypothesized that plain cliticization is reducible to clitic doubling of *pro*. We thus suggest that this cannot be correct (at least *prima facie*), and thus that the moving clitic itself is responsible for PG licensing, rather than null *pro* dislocation.

8. Conclusion

We have provided new data from a variety of Iberian Spanish in which plain pronominal cliticization has both A and Ā-properties. Specifically, it has the Ā-property of PG-licensing. The facts about this phenomenon support the theory of PGs initiated by Nissenbaum (2000), while enriching the cross-linguistic study of clitics and PGs. Additionally, we have established a difference between plain cliticization and clitic doubling: the latter lacks the ability to license PGs. Thus, despite their similarities, we have identified a difference between these two constructions that have long been treated similarly. A deeper analysis of these phenomena, including accounting for the (micro-)variation in cliticization properties, awaits.

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