

Te puse la mano en el hombro ‘*I put my hand on your shoulder*’: A solution to a puzzling constraint on multiple external possession relations in Spanish

Grant Armstrong
University of Wisconsin-Madison
gwarmstrong@wisc.edu



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Abstract

The main goal of this paper is to provide a solution to a puzzle regarding a constraint on multiple external possession relations in Spanish prepositional double object verbs like *poner* ‘put.’ When both the direct object and prepositional object are body parts with different external possessors, the subject must be the possessor of the direct object body part and a dative clitic the possessor the prepositional object body part, not the other way around. Assuming that possessor movement to theta positions is what gives rise to external possession, I claim that the unacceptable interpretation is due to a locality violation that is incurred when an external possession relation is established between a subject and prepositional object body part that crosses over another external possession relation between a dative clitic and direct object body part.

Keywords: external possession; possessor raising; locality; applicatives

1. Introduction

A well-known property of Romance languages is that possessors of body parts may surface external to the body part DP as verbal dependents, usually as subjects or datives, as in the Spanish examples in (1).

- (1) a. Diego_i levantó la mano_i
Diego raise.3sg.pst the hand
'Diego raised his hand'
b. Me_i duele la cabeza_i
DAT.1sg hurt.3sg.prs the head
'I have a headache (lit. my head hurts)'

The possessive relation established between the verbal dependent and body part is subject to various structural and semantic constraints, which has given rise to numerous kinds of analyses. These include linking the relevant verbal dependent with an empty category within the body part DP through binding, control or predication (Guéron 1985, 2003; Authier 1992; Kempchinsky 1992; Vergnaud & Zubizarreta 1992; Koenig 1999), possessor movement analyses in which the verbal dependent originates within the body part DP and moves to a position within the VP where it receives case and, potentially, an event-related theta role (Szabolsci 1983; Demonte 1995; Landau 1999; Nakamoto 2010; Rodrigues 2010; Rooryck & Vanden Wyngaerd 2011) and, for dative possessors, analyses in which the possessor and body part DP are generated in an applicative phrase within the complement position of the verb and are interpreted, simultaneously, as possessors and event participants (Cuervo 2003).

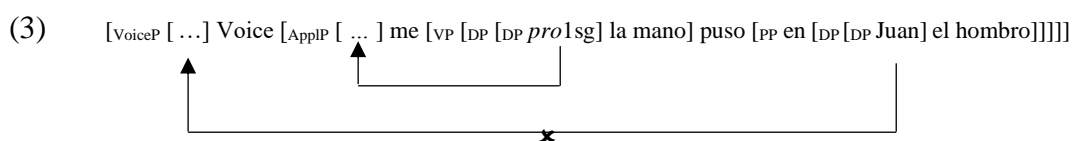
The point of departure for this paper is an observation about multiple dependencies involving external possessors and body part objects in Spanish. When prepositional double object verbs like *poner* 'put' take body parts as their direct and prepositional objects, there exists the possibility of establishing distinct external possessive dependencies with a subject and dative clitic, respectively. Interestingly, only one of these possibilities is readily accepted by all speakers of Spanish (body part possessor of direct object = subject; body part possessor of prepositional object = dative clitic) while the other one (body part possessor of direct object = dative clitic; body part possessor of prepositional object = subject) is either rejected or judged as highly marked (Roldán 1972; Kliffer 1983; Picallo & Rigau 1999). This is shown in (2).¹

- (2) Juan_i me_j puso la mano_{i/*j} en el hombro_{*i/j}
Juan DAT.1SG put.3SG.PST the hand on the shoulder
✓ 'Juan put his hand on my shoulder' Poss BP_{DO} = Subject, Poss BP_{PP} = Dative
✗ 'Juan put my hand on his shoulder' Poss BP_{DO} = Dative, Poss BP_{PP} = Subject

¹ These judgments originally come from Roldán (1972), Kliffer (1983) and Picallo & Rigau (1999), and it should be noted that the second interpretation, while not entirely acceptable for any speaker, shows some variability with respect to acceptability judgments. This variability is not a topic of inquiry here, but is briefly discussed in section 4.

The main goal of this paper is to propose an explanation for why this difference in possible links between body part objects and external possessors is observed in these contexts.

I propose that the unacceptable interpretation in (2) is due to a locality violation. Assuming that possessor movement to case/theta positions (see Szabolsci 1983 and Landau 1999 for the original possessor movement proposals and Deal 2017 for a detailed historical overview) is a valid explanation for how external possession relations are established,² the long-distance movement requiring the subject *Juan* to move from within a PP complement into subject position would have to cross over an already established external possessive relation between the direct object body part *la mano* and an applicative head where the dative clitic *me* surfaces. This is illustrated in (3) below.



While nesting paths of movement like the ones in (3) are not ruled out in principle (in fact, they are predicted to be the only possible way to move multiple DPs to multiple attractors – see Pesetsky 1982; Richards 1997), I present evidence that possessors from within locative complements must pass through Appl and cannot move directly to the subject position. The fact that there is already a DP in the Appl head explains the locality violation and accounts for the unacceptability of the second interpretation in (2).

The paper is organized as follows. In section 2, I present a working hypothesis that treats external possession in Spanish as possessor movement to case or theta positions based on work by Nakamoto (2010) and Rodrigues (2010). Section 3 discusses the role of applicatives in external possession. I show that there are two kinds of applicative heads that count as interveners, blocking an external possessive relation between a subject and a body part object. I label these Appl, a plain applicative head associated with an event participant, or affectee, role, and Appl_[LOC], an applicative head associated with a locative role. I present evidence that these two heads are in complementary distribution and thus only one is able to license an external possessive relation. I suggest that this observation can be subsumed under Ormazabal & Romero's (2007) *Object Agreement Constraint* (OAC). In section 4, I present a solution to the puzzle described above by combining predictions of the possessor movement hypothesis with locality and the OAC. Section 5 concludes.

² I note here that the hypothesis in the paper is based on this working assumption about how to analyze external possession. I do not rule out the possibility of a superior alternative hypothesis that is based on non-movement analyses of external possession.

2. External possession in Spanish: the movement to theta positions hypothesis

Deal (2017) partitions external possession sentences into the following groups based on whether the possessor receives a theta role from the verb and whether it moves, as shown in table 1.

Table 1. A typology of external possession

		Does the possessor phrase move?	
		Yes	No
Does the possessor receive an additional theta role?	Yes	Hybrid analysis: movement to a theta position	Binding analysis
	No	Possessor raising analysis	Possessor government analysis

Source: Deal (2017: 18)

Recent analyses of external possession in Romance (Nakamoto 2010; Rodrigues 2010) have claimed that the hybrid analysis and possessor raising analysis (depending on the particular constructions involved) referenced in table 1 are the most adequate ones for French and Brazilian Portuguese. On this analysis, possessors are generated within a DP, where they receive a possessor role but no genitive case, and then move to a clausal position where they receive case and, potentially, an additional theta role. Theoretical motivation for this analysis began in the wake of the movement theory of control (Hornstein 1999 and subsequent work). While there are various analyses of external possession in Spanish that focus primarily on possessor datives (Kempchinsky 1992; Demonte 1995; Cuervo 2003), none to my knowledge unifies a broad range of external possession constructions that go beyond datives. In this background section, I outline some arguments in favor of applying the hybrid/possessor raising analyses of Nakamoto (2010) and Rodrigues (2010) to Spanish external possession.

2.1 Structural constraints on external possession of body parts

The first important property of an externally possessed DP is that it must have an overt antecedent. MacDonald (2017a: 361) observes that external possessors in Spanish must be syntactically present as shown in (4).

- (4) Context: A parent is answering her daughter's question about why she runs so fast
- a. *pro*_{2sg}_i tienes las piernas_i largas
pro have.2SG.PRS the legs long
 'You have long legs'
- b. #Las piernas son largas
 The legs be.3PL.PRS long
 Intended: 'You're legs are long'

Pragmatics is not enough to link the possessor (= the daughter) to the body part (= the legs) in (4b).

A second property of externally possessed body parts is that the overt antecedent must c-command the body part DP as shown in (5).

- (5) a. La hija_i de Diego_j levantó la mano_{i/*j}
 The daughter of Diego raise.3SG.PST the hand
 ‘Diego’s daughter raised her/*his hand’
- b. A la mujer_i que visitó a su esposo_j en el hospital
 DAT the women that visit.3SG.PST DOM her husband in the hospital
 le duele la cabeza_{i/*j}
 DAT.3SG hurt.3SG.PRS the head
 ‘The woman that visited her husband in the hospital has a headache’
 (= her/*his head hurts)

A third property is that the overt c-commanding antecedent must be local as shown in (6). This applies both to body part DPs in argument position (6a) and in adjunct position (6b); both must be clause mates of their antecedents.

- (6) a. Diego_i dijo que María_j levantó la mano_{*i/j}
 Diego say.3SG.PST that Maria raise.3SG.PST the hand
 ‘Diego said that Maria raised {*his/her} hand’
- b. Diego_i convenció a María_j de PRO_j marcar un gol
 Diego convince.3SG.PST DOM Maria of PRO score.INF a goal
 con la mano_{i/j}
 with the hand
j coindexation: ‘Diego convinced Maria to score a goal with her hand’
i coindexation: ‘Diego, with his hand, convinced Maria to score a goal’

2.2 Thematic properties of external possessors

I will now turn to thematic restrictions on external possessors. External possessors that are subjects may receive an agent or causer interpretation with dynamic verbs (see Nakamoto 2010; Rodrigues 2010 for similar conclusions). Evidence in favor of this proposal comes from the fact that they are compatible with manner adverbs that require control from an agent.³

- (7) a. La doctora_i movió cuidadosamente la mano_i
 the doctor move.3SG.PST carefully the hand
 ‘The doctor carefully moved her hand’

³ Most of these verbs can also be interpreted as non-volitional as in (i) below.

- (i) Moví la pierna sin querer
 move.1sg.pst the leg without want.inf
 ‘I moved my leg on accident’

I follow Folli & Harley (2008) and Schäfer (2012) in not conflating volitionality with agentivity. Agents may have volition or not.

- b. El niño_i cerró deliberadamente los ojos_i para no ver
 the child close.3SG.PST deliberately the eyes for NEG see.inf
 la imagen del payaso
 the image of.the clown
 ‘The child deliberately closed his eyes to not see the image of the clown’

A second piece of evidence comes from the kinds of inanimate subjects that may appear in certain types of inalienable possession sentences. Consider the contrast in (8).

- (8) a. El reloj_i mueve la manecilla_i grande cada minuto
 the watch move.3SG.PRS the hand big each minute
 ‘The watch moves its big hand each minute’
 b. *La casa_i abrió la puerta_i
 the house open.3SG.PST the door
 Intended: ‘The door of the house opened’

In (8a), *el reloj* ‘the watch’ is construed as agentive in the sense that it is programmed to move its hands. Folli & Harley (2008) cite similar cases of inanimate subjects that pattern like agents because the event described by the verb is something that they are “teleologically capable” of doing. For example, sound emission verbs like *squeak* or *ring* often take inanimate subjects that pattern like agents cross-linguistically because certain inanimate objects are inherently capable of producing the relevant sounds. On the other hand, a house is not programmed to open its door, so this is not an agentive action that this inanimate object is teleologically capable of doing.

In addition to agents and causers, external possessor subjects may also appear with verbs that have non-agentive affected readings like *perder* ‘lose’ and in constructions with *tener* ‘have’ when this verb selects a small clause with an AP or PP predicate as shown in (9). In the latter cases, the subject arguably does not receive any additional theta role and moves primarily for case reasons. This would constitute a case of possessor raising in Deal’s (2017) typology rather than the hybrid analysis that involves movement into a thematic position (see Español-Echevarría 1997 for an analysis of these constructions in Spanish and Rooryck & Vanden Wyngaerd 2011 and Myler 2016 for a general discussion).

- (9) a. Juan_i perdió el brazo_i en un accidente.
 Juan lose.3SG.PST the arm in an accident
 ‘Juan lost his/an arm in an accident’
 b. Marcos_i tiene la cabeza_i grande.
 Marcos have.3SG.PRS the head big
 ‘Marcos has a big head/Marcos’ head is big’
 c. Marcos_i tiene los codos_i en la mesa
 Marcos have.3SG.PRS the elbows on the table.
 ‘Marcos has his elbows on the table’
 d. Marcos_i tiene una mosca en la cara_i
 Marcos have.3SG.PRS a fly on the face
 ‘Marcos has a fly on his face’

While possessor datives in Romance and Germanic languages are generally thought to involve affectedness (see Kempchinsky 1992; Demonte 1995; Landau 1999; Lee-Schoenfeld 2006 and Deal 2017), Spanish is somewhat of an outlier in that not all possessor datives are necessarily interpreted as affected in the narrow sense of the term. For instance, affectedness is typically thought to be limited to animate entities that undergo a change as a result of some action. Spanish permits possessor datives with inanimate entities and stative verbs (see Cuervo 2003 for a critical discussion of affectedness in Spanish possessor datives). I follow Cuervo (2003) in assuming that possessor datives are event participants, and that the notion of affectedness arises due to the lexical semantic characteristics of individual verbs. Since possessed body parts are attached to their possessors, they are required to be expressed as datives because they are, by meronymy, event participants. I contend that there is an underspecified theta role associated with an applicative head responsible for assigning dative case to external body part possessors. This role may be an experiencer, beneficiary or maleficiary depending on the nature of the verb. I use the label “affectee” as shorthand for this group of interpretations, some of which are shown in (10).

- (10) a. Me_i duele la cabeza_i
 dat.1sg hurt.3SG.PRS the head
 ‘I have a headache’
- b. Le_i temblaban los labios_i
 DAT.3SG tremble.3PL.IPFV the lips
 ‘His lips were trembling’
- c. Te_i miraba la nariz_i (Picallo & Rigau 1999: 1015)
 DAT.2SG look.at.3SG.IPFV the nose
 ‘He was looking at your nose’
- d. Se le_i cerró el ojo_i
 REFL.3SG DAT.3SG close.3SG.PST the eye
 ‘His eye closed’
- e. Le_i lavé los dientes_i a mi hija_i
 DAT.3SG wash.1SG.PST the teeth DAT my daughter
 ‘I brushed my daughter’s teeth’


2.3 Working hypothesis: the hybrid analysis (movement to theta positions)

The structural constraints on external possession of body part DPs as well as their thematic properties can be accounted for if we adopt the hybrid analysis discussed in Deal (2017): the possessor moves from a caseless position within the body part DP to a thematic position within the VP where it can get case. Simplifying greatly, I assume that the extended DP projection of a body part noun may or may not assign genitive case to its possessor argument. Possessor DPs are merged as part of *nP* and move to the edge of the DP if they cannot receive case *in situ* as in (11a).⁴ From the edge of the


⁴ It should be highlighted here that the determiners in external possession constructions are weak definite determiners (Guéron 1985; Vergnaud & Zubizarreta 1992; Zamparelli 2000; Ticio 2005). DPs with weak definite determiners do not have specific readings and are transparent for extraction. Most analyses of such DPs claim that there is no strong D layer present in the DP, and some even claim that there is no D at all, generating the weak definite article in a lower projection such as Agr (see Ticio 2005). While I will represent the possessum as a DP, it is entirely possible that there is no DP layer at all and that movement to the edge of

DP, the possessor argument then moves to a position labeled X within the VP, where it receives case and, potentially, an additional theta role (see Lee-Schoenfeld 2006; Nakamoto 2010; Rodrigues 2010; Deal 2013 for details) as in (11b). In what follows, I will represent the internal structure of the body part DP as in (11b), glossing over the finer-grained structure in (11a).

(11) a. [DP_{possessum} [...] D [nP [DP_{possessor}] n[-GEN] body part]]

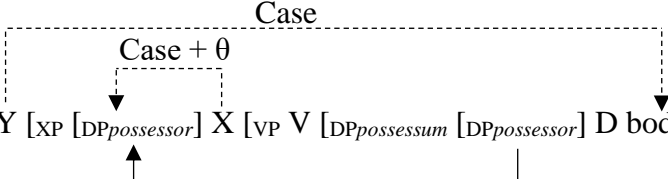


b. [XP [DP_{possessor}] X [VP V [DP_{possessum} [DP_{possessor}] D body part]]]



In the majority of work on possessor raising, X assigns some kind of object-related case – either dative, accusative or objective. Lee-Schoenfeld’s (2006) analysis of possessor datives in German is based on the claim that all movement is driven by formal features. The possessor DP moves in order to value an unvalued case feature. If X assigns inherent case to its specifier, then the DP will also get an additional theta role. This is what is at work in most instances of possessor datives in Germanic and Romance. In (12), X assigns inherent dative to its specifier in addition to an affectee role. The possessum DP then receives structural case, either accusative or nominative depending on the verb. I have represented this as Y in (12) – Y is Voice if transitive and T if intransitive.

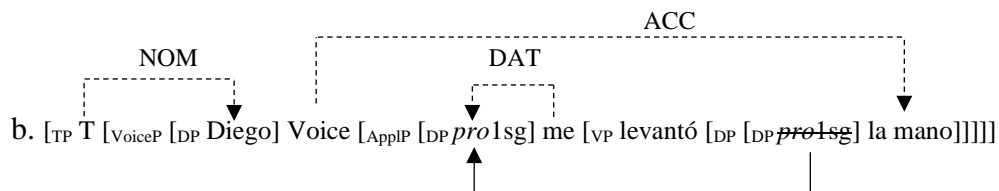
(12) [YP Y [XP [DP_{possessor}] X [VP V [DP_{possessum} [DP_{possessor}] D body part]]]]]



Following Cuervo (2003), I assume that in Spanish X is an applicative (Appl) head that assigns inherent dative case to its specifier. Dative clitics are Appl heads that spell out phi features of the argument in the spec, Appl. A transitive sentence with possessor movement would have the structure in (13b).

the DP is not necessary. I leave this aside in the presentation so as not to add unnecessary technical details to the representations.

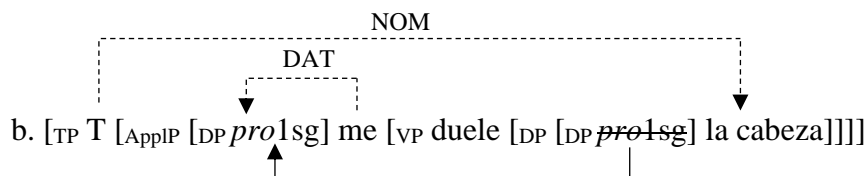
- (13) a. Diego_i levantó la mano_i^{5 6}
 Diego DAT.1SG raise.3SG.PST the hand
 ‘Diego raised my hand’



The DP containing both the caseless possessor (= *pro*1sg) and possessum (= *la mano*) is merged in the object position of the verb. Once Appl is merged, the possessor raises to spec, Appl where it receives dative case and an affectee role. Voice is then merged, and it assigns accusative case to the possessum as well as an agent role to a DP in its specifier (= *Diego*). The agent DP receives nominative case from finite T.

For intransitive verbs, which lack Voice, the caseless possessor raises to Appl in the manner specified above, where it receives dative case and an affectee role. The possessum DP receives nominative case through an agreement relation with finite T is shown in (14).

- (14) a. Me_i duele la cabeza_i
 DAT.1SG hurt.3SG.PRS the head
 ‘I have a headache’



In both scenarios, movement of the possessor is driven by the need to value case. The additional theta role is a consequence of movement to an inherent case

⁵ When the raised possessor is an overt DP, it surfaces to the right of the body part as in (i).

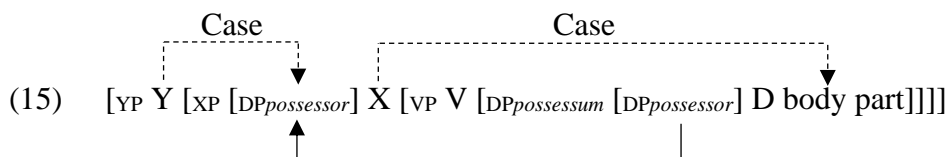
- (i) Diego le_i levantó la mano_i a Juana_i
 Diego DAT.3SG raise.3SG.PST the hand DAT Juana
 ‘Diego raised Juana’s hand’

I assume, following Cuervo (2003) and Pineda (2020), that an overt direct object must raise to an intermediate position above ApplP and below Voice in order to enter an agreement relation with Voice. I omit that position here for simplicity and generally use null *pro* as the moved possessor.

⁶ I only show possessor movement and agreement relations that are relevant for case-assigning. For instance, V-to-T movement is omitted here for simplicity as is EPP or Topic-related movement of either the subject or some other argument to spec, TP or a higher projection in the clause.

position, mainly Appl. I would like to highlight the issue of timing with respect to case valuation in these derivations. Since Appl merges prior to the structural case assigners Voice or T, movement of the possessor precedes structural case valuation of the possessum DP. The possessor DP receives inherent case from Appl and thus does not count as an intervener for structural case valuation of the possessum DP since it is not an active goal with respect to case valuation.

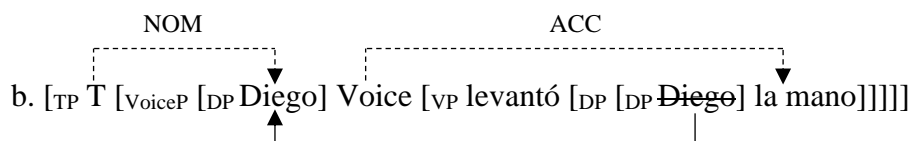
A different type of derivation for possessor movement is outlined in Deal (2013). She also endorses the view that movement of possessor DPs is driven by formal features, but shows that there is no additional theta role assigned to the raised possessor in Nez Perce. Instead, the possessor raises to a position X from which it may enter an agreement relation with a higher probe Y. The head X, which is labeled μ in Deal's analysis, assigns structural case to the possessum DP and Y is the Voice head that assigns objective case to the possessor DP.



In a scenario like (15), where two cases are assigned through AGREE and c-command to the possessor and possessum DPs, I suggest that the possessor moves just as in the scenario in (12) above. The difference here is that the case that is valued as a result of this movement is that of the possessum DP. Subsequently, the possessor receives structural case from a higher probe. The distinction between this derivational procedure and the one above depends on the nature of X – whether it assigns inherent case to its specifier or structural case to a suitable goal in its c-command domain.

Though some works on external possession claim that nominative possessors should not be treated on par with possessor datives in a movement analysis (see Lee-Schoenfeld 2006), both Nakamoto (2010) and Rodrigues (2010) propose to unify all external possession in French and Brazilian Portuguese under a movement analysis. In fact, the derivational steps involved in deriving nominative external possession are nearly identical to what Deal (2013) proposes for possessor raising in Nez Perce, with one key difference. While Deal's (2013) case-assigning head μ is a *non-thematic* landing site for the raised possessor DP and case-assigner for the possessum DP, in Nakamoto (2010) and Rodrigues (2010), Voice is a *thematic* landing site for the raised possessor DP and case-assigner for the possessum DP. The structural configuration in which case is assigned to the possessor and possessum DPs after movement to Voice is shown in (16) below.

- (16) a. Diego_i levantó la mano_i
 Diego raise.3SG.PST the hand
 'Diego raised his hand'



A final note is in order on external possessors of a body part DP that is within an adjunct. When the body part DP is within an adjunct, such as an instrumental PP, sideward movement (Nunes 2004; Nakamoto 2010; Rodrigues 2010) is employed to move the possessor DP out of the PP before it adjoins to the VP. In brief, when a copy of the possessor is generated and merged with the VP, the instrumental PP is not an adjunct yet, so there is no adjunct island that would prohibit extraction from it to higher position. In order to illustrate the mechanics of sideward movement in external possession, I provide the relevant derivational steps to derive example (17) in (18) below (see Nakamoto 2010; Rodrigues 2010 for a more detailed discussion).

- (17) Juan_i dibuja con el pie_i
 Juan draw.3SG.PRS with the foot
 ‘Juan draws with his foot’

- (18) a. Stage 1

K: [PP CON [DP [DP Juan₁] el pie]] L: Juan₂

copy

M: [Voice [VP dibuja]]

- b. Stage 2

Merge L+M: [VoiceP [DP Juan₂] Voice [VP dibuja]]

Merge K + VoiceP:

[VoiceP [VoiceP [DP Juan₂] Voice [VP dibuja]] [PP CON [DP [DP Juan₁] el pie]]

- c. Stage 3 (chain reduction)

[TP [DP Juan₃] T [VoiceP [VoiceP [DP Juan₂] Voice [VP dibuja]] [PP CON [DP [DP Juan₄] el pie]]]

First, two syntactic objects are built in distinct workspaces: the adjunct PP (= K) and Voice (= M). A copy of the possessor DP in the adjunct PP is made and must extend the Voice projection, creating a VoiceP. By the extension condition, the PP must then adjoin to the VoiceP (stage 2). Finally, an additional copy of the DP in Voice is internally merged in spec, T followed by chain reduction, where all inferior copies of it are deleted.

The hybrid analysis whereby a possessor moves from a DP-internal position to a position in the clausal spine where it receives a theta role and case is able to account for the main properties of external possession discussed in section 2.1. First, the fact that an overt antecedent is required is accounted for by the presence of a copy of moved possessor in a higher position. Second, the c-command requirement is accounted for by general constraints on movement and licensing of inferior copies/empty categories. Third, locality can be accounted for by general constraints on unbounded dependencies like movement. Finally, the thematic properties of external possessors can be accounted for through the different thematic positions to which possessors may move, mainly Appl or Voice. I would like to make clear that this does not constitute definitive evidence in favor of the hybrid approach over others in which external possession is established through control, binding or predication (see

Guéron 1985, 2003, 2006; Kempchinsky 1992; Vergnaud & Zubizarreta 1992; Koenig 1999). The point of this section is merely to establish a working set of assumptions in order to propose a possible account for the constraints on multiple external possession relations.

3. Applicative heads in external possession: locality and case-related constraints

In this section I discuss the role that applicatives play in external possession constructions, focusing on locality and case-related constraints. It is shown that only certain kinds of applicative heads count as interveners in the establishment of a possessive relation between a subject and a body part object and that there is a constraint on how many applicative heads may appear within the VoiceP domain.

3.1 Natural physical gestures versus externally caused events: the role of Appl

Previous research on external possession, primarily from French (Guéron 1985, 2006; Authier 1992; Vergnaud & Zubizarreta 1992; Koenig 1999; Nakamoto 2010) and Spanish (Kliffer 1983; Picallo & Rigau 1999; MacDonald 2017a), has described an important distinction between external subject possessor sentences based on the absence or presence of reflexive clitics. The two general classes are illustrated in (19).

- (19) a. *pro*1sg_i bajé la cabeza_i [-CI]
 pro lower.1SG.PST the head
 ‘I lowered my head’
 b. *pro*1sg_i me_i lavé las manos_i [+CI]
 pro REFL.1SG wash.1SG.PST the hands
 ‘I washed my hands’

[-CI] sentences like (19a) describe voluntary or involuntary body movements and changes of body position or configuration that are triggered by an internal biological mechanism (Authier 1992; MacDonald 2017a), which have been given labels such as “natural physical gesture” (Guéron 2006: 598) and “motion from internal biological mechanisms” (MacDonald 2017a: 363).⁷ On the other hand, a heterogeneous mix of verbs fall into the [+CI] class, which I will call “externally caused” following Levin & Rappaport Hovav (1995). These include descriptions of bodily injury such as *lastimar-se el tobillo* ‘to hurt one’s ankle’, activities that are performed by an implicit agent such as *cortar-se el pelo* ‘to get a haircut (see Rooryck & Vanden Wyngaerd 2011 and Armstrong & Kempchinsky 2021) and agentive actions such as *lavar-se las manos* ‘to wash one’s hands.’ Following Nakamoto’s (2010) analysis of French, I claim that the distinction between these two formal classes of external subject possessors can be captured by the presence of an Appl head that hosts a null *pro* in its specifier that is bound by the subject in (20b). The Appl head is spelled out as a reflexive clitic as shown in (20b).

- (20) a. [TP T [VoiceP [DP *pro*1sg] Voice [VP bajé [DP [DP *pro*1sg] la cabeza]]]]]
-

⁷ The absence of the reflexive clitic can also be observed with possessive verbs *tener* ‘have’ and *perder* ‘lose.’ I do not discuss these in detail here.

- b. [TP T [VoiceP [DP *pro*_{1SG*i*}] Voice [AppIP [DP *pro*_{*i*}] me [VP lavé [DP [DP *pro*] las manos]]]]]]
-

The consequence of this analysis is that when there is an externally caused event that affects someone's body part, the external possessive relation must be established through Appl and not directly with Voice. The example in (21) corroborates this idea.

- (21) *pro*_{1SG*i*} me_{*i*} bajé la cabeza_{*i*}
 pro REFL.1SG lower.1SG.PST the head
 'I grabbed my own head and pushed it down'

The sentence is pragmatically odd, but not ungrammatical. If it is analyzed as an externally caused event similar to *lavar-se las manos* 'wash one's hands' in (19b), an explanation for its odd interpretation is readily available. On the other hand, sentences in which the subject acts upon someone else's body part can only be externally caused. We thus predict that there will be no formal difference between natural physical gestures and externally caused events in such scenarios since both require Appl. The examples in (22) show that this is indeed the case as they both contain non-reflexive dative clitics and describe externally caused events.

- (22) a. Le_{*i*} bajé el brazo_{*i*}
 DAT.3SG lower.1SG.PST the arm
 'I lowered his/her arm'
 b. Le_{*i*} lavé las manos_{*i*}
 DAT.3SG wash.1SG.PST the hands
 'I washed his/her hands'

The locality constraint *shortest move* (Chomsky 1995; Richards 1997, and subsequent work) can be used to explain the role that the Appl head has in determining the difference between natural physical gestures and externally caused events. In (20a), a possessor can move directly into the subject position because there is no intervening Appl head, whereas in (20b), it must move to Appl since this is a closer case/theta position. What we rule out is a scenario like (23), where a possessor skips over Appl in order to move directly to Voice.

- (23) [VoiceP [...]] Voice [AppIP [...]] Appl [VP V [DP_{possessum} [DP_{possessor}] D body part]]]]
-

In the next subsections, we will examine two cases in which it appears that locality is violated in a scenario like that of (23) and provide an explanation for these apparent violations.

3.2 Datives with benefactive or malefactive readings

Dative clitics that have benefactive or malefactive readings appear in sentences in which a possessive relation is established between a subject and a body part object

without counting as interveners. For instance, if I am a teacher and Diego is one of my students, it is possible to express the idea that Diego never raises his hand in class for/on me in the following way.

- (24) Diego_i nunca me levanta la mano_i
 Diego never DAT.1SG raise.3SG.PRS the hand
 ‘Diego never raises his hand for me’

In this case, *me* is associated with a benefactive or malefactive reading used to express the fact that the speaker is not a core participant, but has some vested interest in the event. So-called benefactive and malefactive datives are often analyzed as high applicatives in Pylkkänen’s (2008) system, generated between VP and Voice (see Cuervo 2003). If Appl were in this position, it should count as an intervener as in (25).

- (25) [VoiceP [...] Voice [AppIP [...] Appl_{ben/mal} [VP V [DP_{possessum} [DP_{possessor}] D body part]]]]
-

There are two possible explanations for why *me* does not intervene in (25). The first is that there are different flavors of Appl heads and only those associated with possession are possible landing sites for a moved possessor. On this analysis, *pro*_{1sg} may merge as the benefactive or malefactive argument in (25), and since this type of applicative head is not a possible landing site for possessor movement, the possessor could move directly to Voice without incurring a violation of locality. This explanation is essentially one of Relativized Minimality (Rizzi 1990 and subsequent work), where only heads with relevant features count as interveners to movement operations.

Another possible explanation is that the Appl head associated with these very broadly construed benefactive and malefactive interpretations is actually generated higher in the structure, perhaps somewhere between Voice and higher functional projections as in (26).

- (26) [TP T [AppIP me [VoiceP [DP Diego] Voice [VP levanta [DP [DP Diego] la mano]]]]]]
-

In (26), what are labeled as benefactive/malefactive arguments (high applicatives in Cuervo 2003; Pylkkänen 2008) are actually ethical datives or datives of interest. The idea behind this analysis is that these dative clitics introduce participants at the level of the utterance rather than the event. Here, the Appl head does not structurally intervene between the subject and object, thus there is no locality violation if the possessor moves to Voice. One source of evidence in favor the latter proposal is that there are few, if any, restrictions on which type of verbs admit these datives. They appear with all kinds of verbs – stative and dynamic, transitive and intransitive.

- (27) a. Desde que traje el perro a la casa, nunca me lo
 since that bring.1sg.pst the dog to the house, never DAT.1sg ACC.3sg

- has querido
 have.2SG.PRS love.PTCP
 ‘Ever since I brought the dog home, you’ve never loved it (and this hurts me)’
- b. Me le dieron una mala nota a mi hija
 DAT.1SG DAT.3SG give.3PL.PST a bad grade DAT my daughter
 ‘They gave my daughter a bad grade on me’
- c. La niña ya me camina
 the child already DAT.1SG walk.3SG.PRS
 ‘The child is already walking on/for me’

The lack of event and argument structure related constraints on these datives can be taken as weak evidence that they are not part of the event and argument structure of the VoiceP. Another source of evidence in favor of this proposal is that they cannot be reflexive. If I am my daughter’s teacher and my giving her a bad grade has a negative effect on me, this cannot be expressed with a reflexive clitic (28a). Likewise, if a child starts walking to her own benefit or detriment, this cannot be expressed with a reflexive clitic (28b).

- (28) a. (*Me) le di una mala nota a mi hija
 REFL.1SG DAT.3SG give.1SG.PST a bad grade DAT my daughter
 Intended: ‘I gave my daughter a bad grade (to my own detriment)’
- b. La niña ya (*se) camina
 the child already REFL.3SG walk.3SG.PRS
 ‘The child is already walking (to her own benefit/detriment)’

There is no obvious reason why reflexive beneficiary/maleficiary interpretations should be ungrammatical if they are Appl heads generated below Voice. On the other hand, if they are Appl heads generated above Voice, we might explain their impossibility by appealing to the idea that reflexive interpretations of arguments in spec, Appl arise only when they are bound by an argument in spec, Voice. Ethical datives cannot be reflexive because they are generated above VoiceP and cannot be bound by an argument in spec, Voice. While more work on this topic is needed, I believe that this last piece of evidence is much more straightforwardly explained by generating datives that fall into this blurry benefactive/malefactive/dative of interest/ethical dative category as left-peripheral elements that are related to the utterance. If this is on the right track, it has the added benefit of accounting for why we do not see an intervention effect in examples like (24). In what follows, I will use the term “ethical datives” to refer to these non-intervening clitics.

3.3 Locative datives

Dative clitics may express locative meanings that translate as the objects of prepositions like ‘to’, ‘at’, ‘on’, ‘from’ or ‘toward’, among other locative meanings, in English. These are limited to verbs that take locative complements as in (29).

- (29) a. Esa canasta se me cayó encima
 that basket REFL.3sg DAT.1SG fall.3SG.PST on.top
 ‘That basket fell on top of me’

- b. Él se puso una venda
 he REFL.3SG put.3SG.pst a bandage
 ‘He put a bandage on (himself)’

With verbs that select locative complements that can be expressed as datives, it is possible for a possessive relation to be established between a subject and a body part object in the presence of a locative dative as shown in (30).

- (30) a. El mono_i me acercó la mano_i
 the monkey DAT.1SG move.toward.3SG.PST the hand
 ‘The monkey moved its hand toward me’
 b. La niña_i me sacó la lengua_i
 the child DAT.1SG stick.out.3SG.PST the tongue
 ‘The child stuck her tongue out at me’
 c. El director_i no me dio la mano_i en la reunión
 the director NEG DAT.1SG give.3SG.PST the hand in the meeting
 ‘The director didn’t shake hands with me (lit. didn’t give me his hand)’

Since locative datives can only appear with verbs that take locative complements and can be reflexive as in (29b), it is unlikely that they are generated high in the structure like the ethical datives discussed in the previous section. We need an alternative explanation for why they do not count as interveners in sentences like (30). I propose that these locative datives do not count as interveners because of a locative feature that is present on the Appl head that specifies its potential target. Appl_[LOC] attracts a DP that is within the complement of a P_[LOC] verbal complement as shown in (31).

- (31) [AppIP [...] Appl_[LOC] [VP [DP] V [PP P_[LOC] [DP]]]]
-

I suggest that the kind of agreement illustrated in (31) arises primarily when P_[LOC] is null (see MacDonald 2017b for a similar analysis of aspectual *se* in Spanish) and in complex prepositions like *encima (de)* ‘on top (of)’ or *por delante (de)* ‘in front (of)’ that may lack the capacity to assign case to their complements. Such complex prepositions may assign genitive case to their complements *in situ*, which surfaces as *de* ‘of’ in expressions such as *encima de mí* ‘above me’ or as a genitive pronoun in expressions such as *encima mío* ‘above me.’ In the absence of genitive case *in situ*, the complement of the preposition may move to a position where it may receive dative case.⁸ This produces a situation in which another DP that is closer to Appl, such as the DP in spec, VP, may be by-passed since it is not within the appropriate locative complement to be attracted to Appl_[LOC]. Applying this idea to the examples in (30) accounts for why the possessor of the direct object can skip over the Appl and move to Voice as in (32b).

⁸ In this sense, there is a close connection between these complex prepositions and body part DPs. Both may assign genitive case *in situ* or not. In the absence of genitive case, raising is triggered to a case/theta position. I thank an anonymous reviewer for noting the possessive nature of the clitic in these constructions.

- (32) a. La niña_i me sacó la lengua_i
 the child DAT.1SG stick.out.3SG.PST the tongue
 ‘The child stuck her tongue out at me’
- b. [VoiceP [...] Voice [ApplP_[LOC] [...] me [VP [DP [DP la niña] la lengua] sacó [PP \emptyset _[LOC] [DP *pro*1sg]]]]]
-

The fact that this is Appl_[LOC] means that its search domain is limited to locative complements. The body part object *la lengua* ‘the tongue’ is not inside a locative complement and can therefore be skipped over by Appl_[LOC]. The result is a scenario in which there are crossing paths of movement from within the VP to distinct case/theta positions. If the locative complement of the verb does not receive dative case, then there would be no Appl_[LOC] present and possessor movement is predicted to be subject to shortest move. This prediction is borne out as can be observed in (33).

- (33) a. La niña me_i sacó la mano_i del fuego
 The child DAT.1SG remove.3SG.PST the hand of.the fire
 ‘The child pulled my hand out of the fire’
- b. [VoiceP [DP la niña] Voice [ApplP [...] me [VP [DP [DP *pro*1sg] la mano] sacó [PP del fuego]]]]]
-

While a plausible explanation for why ethical datives do not count as interveners is because they are not structurally between Voice and the VP, the case of locative datives is different. Evidence suggests that they should be generated lower in the structure in a position between Voice and VP. They do not count as interveners in the establishment of an external possessive relation between a subject and an object body part due to a [LOC] feature. This explanation is based on Relativized Minimality in that Appl_[LOC] is not a potential landing site for any DPs that are not with a locative PP.

3.4 Restrictions on multiple Appl heads: the Object Agreement Constraint (OAC)

In this final subsection I turn to restrictions on multiple Appl heads. Multiple dative clitics may appear in the same clause, but these are limited to an ethical dative and an affected possessor or locative. In (34a) below, an ethical dative appears with an affected possessor and in (34b) with a locative. An appropriate context for (34b) is that I am part of a team of primatologists who has worked extensively with a particular monkey, and I ask it to move a book toward a new researcher on our team and it performs this action for me.

- (34) a. Me le_i cortaste el pelo_i a mi hijo_i
 DAT.1sg DAT.3SG cut.2SG.PST the hair DAT my son
 ‘You cut my son’s hair for me’

- b. El mono me le_i acercó un libro
 The monkey DAT.1SG DAT.3SG move.toward.3SG.PST a book
 (a la nueva investigadora_i)
 DAT the new researcher
 ‘The monkey moved a book toward the new researcher for me’

Affected possessor and locative datives, however, cannot co-occur with one another in the same sentence as shown in (35).

- (35) *Ella me le acercó la mano
 she DAT.1SG DAT.3SG move.toward.3SG.PST the hand
 Intended: ‘She moved my hand toward him/her’/ ‘She moved his/her hand toward me’

I suggest that the restrictions described above are part of a larger set of constraints on the licensing of multiple objects through agreement. Ormazabal & Romero (2007: 336) have proposed the object agreement constraint in order to account for such restrictions.

- (36) Object Agreement Constraint (OAC): if the verbal complex encodes object agreement, no other argument can be licensed through verbal agreement

The OAC is meant to explain a host of restrictions that emerge in multiple clitic double object configurations that interact in complex ways with person and animacy features. While going into the minute details of the OAC is beyond the scope of the present paper, it will be useful to present a basic example in order to establish a parallelism with the restrictions on multiple applications described above.

Ormazabal & Romero (2007, 2013) argue that object clitics in Spanish can be divided into two main groups: agreement morphemes and determiners. Agreement morphemes include first and second person clitics as well as *le* and *les* regardless of whether they function as direct or indirect objects. The presence of more than one agreement morpheme in the verbal complex leads to unacceptability. For instance, in Basque *leísta* varieties, third person direct objects that are animate are expressed as *le* (sing) and *les* (plur) respectively. These clitics, since they are agreement morphemes cannot co-occur with a first or second person dative clitic due to the OAC as in (37a). An alternative strategy is used to express such sentences, such as using a full DP object or strong pronoun that is case-marked with *a*, as in (37b) (Ormazabal & Romero 2007: 338).

- (37) a. *Me les entregaron
 DAT.1sg ACC.3PL turn.in.3PL.PST
 Intended: ‘They turned them in to me’
 b. Me entregaron a los sospechosos / a ellos
 DAT.1SG turn.in.3PL.PST DOM the suspects / DOM them
 ‘They turned the suspects/them in to me’

Importantly, the OAC only applies to combinations of clitics that are linked to arguments within the VP, not to ethical datives, as shown by the following contrast (Ormazabal & Romero 2007: 331).

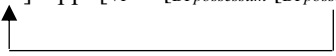

- (38) a. Te me van a desnucar
 ACC.2SG DAT.1SG go.3PL.PRS to break.neck.inf
 ‘They’re going to break your neck (and this affects me)’
 b. *Te me van a vender
 ACC.2SG DAT.1SG go.3PL.PRS to sell.inf
 Intended: ‘They’re going to sell you to me’

The constraints on multiple applicatives described above (see 35) may be subsumed under the OAC in that only one Appl head that forms part of the verbal complex (between Voice and VP) can license a DP argument within the VP. Support for this idea comes from two sources. As in more familiar double object configurations like (37), alternative strategies for expressing the desired meanings intended in unacceptable sentences like (35) involve eliminating one of the clitics either by expressing the possessor as a DP-internal genitive pronoun (39a) or by expressing the locative with an overt P as in (39b).

- (39) a. Ella le acercó mi mano
 She DAT.3SG move.toward.3SG.PST my hand
 ‘She moved my hand toward him/her’
 b. Ella me acercó la mano hacia él
 She DAT.1SG move.toward.3SG.PST the hand toward him
 ‘She moved my hand toward him’

This is exactly parallel to alternative strategies involved in sentences that are unacceptable due to OAC effects. Second, the fact that ethical datives do not trigger OAC effects in double object configurations is mirrored in the multiple applicative contexts in (34).

I propose to capture OAC effects in the following way: only one object agreement relation between Voice/AppI may be established with a VP-internal argument. Ethical datives may co-occur with either affected possessors or locatives because they are generated higher in the structure as in (40a) and (40b).

- (40) a. [_{TP} T [_{AppIP} Appl [_{VoiceP} Voice [_{AppIP} [...] Appl [_{VP} V [_{DP_{possessum}} [_{DP_{possessor}}] D body part]]]]]]]]

 b. [_{TP} T [_{AppIP} Appl [_{VoiceP} Voice [_{AppIP} [...] Appl_[LOC] [_{VP} V [_{PP} P_[LOC] [DP]]]]]]]]]]


Affected possessors and locatives, on the other hand, are generated in the same position and only one agreement relation between an Appl head and a DP may be established in this position. Either of the scenarios in (41) are permitted since only one agreement relation is established and one clitic will be generated in Appl.

- (41) a. [_{VoiceP} Voice [_{AppIP} [...] Appl [_{VP} [_{DP_{possessum}} [_{DP_{possessor}}] D body part] V [_{PP} P_[LOC] [DP]]]]]]]]


- b. [VoiceP Voice [AppIP [...]] Appl_[LOC] [VP [DP_{possessum} [DP_{possessor}] D body part] V [PP P_[LOC] [DP]]]]
-

The scenarios in (42) are ruled out. (42a) is one in which multiple AGREE relations can be established with the same head (Richards 1997; Hiraiwa 2005) while (42b) is a scenario in which Appl heads stack and establish independent AGREE relations with a possessor and locative. Both of these are ruled out by the OAC.

- (42) a. *[VoiceP Voice [AppIP [...]] [AppIP [...]] Appl [VP [DP [DP_{possessor}] body part] V [PP P_[LOC] [DP]]]]]
-

- b. *[VoiceP [AppIP [...]] Appl_[LOC] [AppIP [...]] Appl [VP [DP [DP_{possessor}] body part] V [PP P_[LOC] [DP]]]]]]]
-

Building on the content of this section, I now turn to an explanation of restrictions on multiple external possession relations with prepositional double object verbs.

4. Accounting for the restrictions on multiple external possession

The puzzle presented in the introduction involves verbs like *poner* ‘put’ when they take body parts as their direct and prepositional objects. As noted in (2), repeated as (43) below, there is only one way in which each body part may establish a relation with a distinct external possessor (Roldán 1972; Kliffer 1983; Picallo & Rigau 1999).

- (43) Juan_i me_j puso la mano_{i/*j} en el hombro_{*i/j}
 Juan DAT.1SG put.3SG.PST the hand on the shoulder
 ✓ ‘Juan put his hand on my shoulder’ Poss BP_{DO} = Subject, Poss BP_{PP} = Dative
 ✗ ‘Juan put my hand on his shoulder’ Poss BP_{DO} = Dative, Poss BP_{PP} = Subject

As mentioned in footnote 1, there is some degree of variability with respect to the acceptability judgments of the second interpretation. Kliffer (1983: 769-772) reports that 2 speakers out of 8 consulted accepted the second interpretation but categorized it highly marked while the other 6 rejected it entirely. I consulted 5 speakers from different regions of the Spanish-speaking world to corroborate this. Two speakers (from Spain and Mexico, respectively) rejected the interpretation entirely, indicating that they require the genitive *su* in the prepositional object (= *su hombro* ‘his shoulder’) to get this interpretation. Another two (from Colombia and Venezuela) indicated that they would accept the interpretation if primed in the right way, but preferred using *su hombro* if that were the intended reading. Finally, one speaker (from Spain) indicated that the second interpretation is acceptable but requires a lot of contextual priming while the first interpretation is the most natural one and does not require any contextual priming. In sum, there is a clear sense in which the second interpretation is degraded, and judgments range from completely unacceptable to

questionable and marked, but acceptable. In what follows, I outline a proposal for those speakers that reject the sentence, leaving for future investigation an account of variation in acceptability judgements.

4.1 Single external possession relations in prepositional double object verbs

Prepositional double object verbs involve a transfer of location. The direct object changes location and the prepositional object represents either a goal, source or path. The major verbs in this category include *poner* ‘put’, *meter* ‘introduce/insert/put’, *colocar* ‘place’, *acercar* ‘move toward’, *sacar* ‘remove’, and *quitar* ‘remove/take away.’ When there is a single body part that is either the direct or prepositional object, there are no restrictions as to which verbal dependent the possessor may be linked to. An external possessor subject may be linked a direct object body as in (44). Since these verbs are natural physical gestures, no reflexive clitic is present when this particular external possessive relation is established.

(44) ExtPOSS_{SUBJ} – BP_{DO}

a. Juan_i metió la mano_i en la cubeta
 Juan put.3SG.PST the hand in the bucket
 ‘Juan put his hand in the bucket’

b. [VoiceP [DP Juan] Voice [VP [DP [DP Juan] la mano] metió [PP en_[LOC] [DP la cubeta]]]]

When an external subject possessor is linked to a prepositional object, a reflexive clitic is generally required. This is an instance of Appl_[LOC] establishing a relation with a DP that is within a locative PP.⁹

(45) ExtPOSS_{SUBJ} – BP_{PP}

a. La niña_i se_i sacó una piedra de la boca_i
 the child REFL.3sg remove.3SG.PST a rock from the mouth
 ‘The child pulled a rock out of her mouth’

b. [VoiceP [DP la niña_i] Voice [AppIP [DP *pro*_i] se_[LOC] [VP [DP una piedra] sacó [PP de_[LOC] [DP [DP *pro*_i] la boca]]]]]

An external possessor dative may also be linked to a direct object body part. Here, there is an Appl head that endows the possessor with an affectee interpretation.

⁹ Interestingly, while all speakers consulted for this study indicated that the reflexive clitic is required in (45), there are examples in which it is not. One consultant indicated that the reflexive is not required in an example like (i), where a magician pulls a rock out of his mouth.

(i) El mago_i sacó una piedra de la boca_i
 The magician remove.3SG.PST a rock of the mouth
 ‘The magician pulled a rock out of his mouth’

(46) ExtPOSSDAT – BP_{DO}

- a. La niña me_i sacó el pie_i del hoyo
 The child DAT.1SG remove.3SG.PST the foot from.the hole
 ‘The child pulled my foot out of the hole’

- b. [VoiceP [DP la niña] Voice [AppIP [DP *pro*1sg] me [VP [DP [DP *pro*1sg] el pie] sacó [PP de_[LOC] [DP el hoyo]]]]]
-

In (47), there is an Appl_[LOC] head that establishes an agreement relation with a body part DP inside a locative PP.

(47) ExtPOSSDAT – BP_{PP}

- a. Juan me_i metió un tapón en el oído_i
 Juan DAT.1SG put.3SG.PST an earplug in the ear
 ‘Juan put an earplug in my ear’

- b. [VoiceP [DP Juan] Voice [AppIP [DP *pro*1sg] me_[LOC] [VP [DP un tapón] metió [PP en_[LOC] [DP [DP *pro*1sg] el oído]]]]]
-

4.2 Multiple external possession relations in prepositional double object verbs

Let us turn now to the puzzle related to multiple external possession relations in prepositional double object verbs. I claim that the acceptable interpretation in sentences like (48) arises because no locality or object agreement constraints are violated.

- (48) a. Juan_i me_j puso la mano_i en el hombro_j
 Juan DAT.1SG put.3SG.PST the hand on the shoulder
 ‘Juan put his hand on my shoulder’

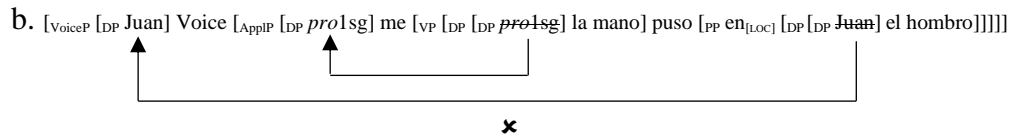
- b. [VoiceP [DP Juan] Voice [AppIP [DP *pro*1sg] me_[LOC] [VP [DP [DP Juan] la mano] puso [PP en_[LOC] [DP [DP *pro*1sg] el hombro]]]]]
-

An Appl_[LOC] attracts a possessor from within a locative PP to its specifier and the dative clitic spells out the features of this possessor. The possessor in direct object position can move to spec, Voice since Appl is [LOC] and does not count as an intervener. Moreover, since prepositional double object verbs involve natural gestures, possessors do not have to move to Appl and can establish a direct relation with Voice.

The unacceptable interpretation of the same sentence can be explained most simply through a locality violation. Assuming that the Appl head associated with this interpretation is not equipped with a [LOC] feature, it cannot by-pass the possessor in the direct object position. The possessor in the prepositional object of the verb then must move directly to Voice as in (49b).¹⁰

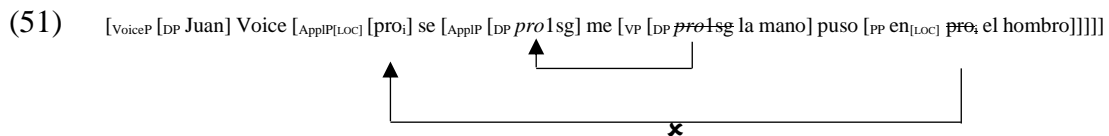
¹⁰ As mentioned in the first part of this section, some speakers (2 out of 8 speakers for Kliffer 1983 and 1 out of 5 speakers in my case) marginally accept the following interpretation with some contextual priming.

- (49) a. *Juan_i me_j puso la mano_j en el hombro_i
 Juan DAT.1SG put.3SG.PST the hand on the shoulder
 Intended: ‘Juan put my hand on his shoulder’



This step violates locality since possessors within a locative complement must move to Appl_[LOC]. The presence of an Appl_[LOC] head here would violate the OAC since there is already an object agreement relation established between Appl and the possessor of a VP-internal argument as shown below in (50) and (51).

- (50) *Juan_i se_i me_j puso la mano_j en el hombro_i
 Juan REFL.3SG DAT.1SG put.3SG.PST the hand on the shoulder
 Intended: ‘Juan put my hand on his shoulder’



The only way to express the intended reading of (49a) is by using a genitive pronoun within the body part DP possessum that is the prepositional object as in (52a) or in both body part objects (52b).

- (52) a. Juan_j me_i puso la mano_i en su_j hombro
 Juan DAT.1SG put.3SG.PST the hand on his shoulder
 ‘Juan put my hand on his shoulder’
 b. Juan_j puso mi mano en su_j hombro
 Juan put.3SG.PST my hand on his shoulder
 ‘Juan put my hand on his shoulder’

In sum, it is a combination of locality and the object agreement constraint that makes it impossible to express an external possessive relation between an Appl and a direct object and a subject and a locative object at the same time. This is the explanation for the puzzle presented in the introduction.

-
- (i) Juan_i me_j puso la mano_j en el hombro_i
 Juan DAT.1SG put.3SG.PST the hand on the shoulder
 ‘Juan put my hand on his shoulder’

Future research with larger scale surveys will be able to look into the finer grained details of this variation. It is possible that some speakers allow for the establishment of an external possessive relation between a subject and a prepositional body part object without the mediating presence of a locative Appl head (see footnote 8 above).

4.3 Acceptable cases of multiple external possessors

In this section I review two cases where multiple external possession relations can be established without violations of locality and agreement constraints. The first case involves multiple possessors that are linked to the same external position. In (53) the possessor of both the direct and prepositional object body part is linked to an Appl.

- (53) Le_i saqué los dedos_i de la boca_i
 DAT.3SG remove.1SG.PST the fingers from the mouth
 ‘I took his fingers out of his mouth’

Following Nakamoto (2010), I claim that DP may move through multiple possessor positions on its way to Appl. The resulting chain contains copies of the possessor DP in both the direct and prepositional object positions as in (54).

- (54) [VoiceP [DP *pro*1sg] Voice [AppIP [*pro*3sg] le [VP [DP [DP *pro*3sg] los dedos] saqué [PP de [DP [DP *pro*3sg] la boca]]]]]]
-

The second case involves multiple external possession in which the subject is interpreted as the external possessor of a body part in a PP adjunct and the dative of a direct object.

- (55) Ana_j me_i peinó el cabello_i con las uñas_j
 Ana DAT.1SG comb.3SG.PST the hair with the nails
 ‘Ana combed my hair with her fingernails’

These kinds of examples are accounted for by using the following derivational steps. First, the core VP is created and the possessor of the direct object moves to Appl as in (56a). Then the instrumental adjunct PP is created and the possessor of body part DP within the adjunct undergoes sideward movement and merges with Voice as in (56b) and (56c). The adjunct PP is then adjoined to VoiceP. Finally, the subject enters an agree relation with T and moves to spec, TP after which the lower copies of it are deleted (56e).

- (56) a. K: [Voice [AppIP [DP *pro*1sg] me [VP peinó [DP [DP *pro*1sg] el cabello]]]]
-

- b. L: [PP con [DP [DP Ana₁] las uñas]] M: Ana₂
-
- Copy

- c. Merge K+M:

[VoiceP [DP Ana₂] Voice [AppIP *pro*1sg me peinó *pro*1sg el cabello]]

- d. Merge VoiceP+L:

[VoiceP [VoiceP [DP Ana₂] Voice [AppIP *pro*1sg me peinó *pro*1sg el cabello]] [PP con Ana₁ las uñas]]

- e. Movement to T and chain reduction

[TP [DP Ana₃] T [VoiceP [VoiceP [DP Ana₂] Voice [AppIP *pro*1sg me peinó *pro*1sg el cabello]] [PP con Ana₁ las uñas]]]

In neither of these cases does a scenario arise in which a locality or object agreement constraint violation is incurred.

5. Concluding remarks

In this paper I have shown how a hybrid analysis (= possessor movement to a theta position) of external possession in Spanish, combined with independently motivated locality conditions and constraints on object agreement, conspire to account for a heretofore unsolved puzzle involving multiple external possession dependencies in prepositional double object verbs. Three important areas of future work emerge from the present analysis. The first is that more investigation is needed in order to determine whether a hybrid analysis like the one outlined here is ultimately the most adequate one for external possession. If it turns out that there is not an adequate explanation for the constraints observed on multiple external possession relations in other, non-movement analyses of external possession, then what has been outlined here could be taken as evidence in favor of possessor movement to theta positions. The second area involves looking for additional motivation for Appl_[LOC]. Positing a special applicative head with a locative feature explains why dative clitics can have locative meanings and provides an explanation for the constraints on multiple external possession observed in this paper. While there is ample work on locative clitics across Romance such as French *y* and *en*, and their equivalents in other languages, there is very little work on the kind of locative datives discussed here. More work in this area would add further evidence for the necessity of this particular type of applicative head. Finally, as discussed in the last section, there is some variability in the acceptability judgments of multiple external possession constructions that correlates with variable judgments on the obligatory presence of an Appl head in single external possession constructions between a subject and prepositional direct object. Future research in Spanish and other Romance languages will help unearth the fine-grained details behind this variability.

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