A uniform approach to Guarani possessive constructions and variation in Paraguayan Spanish possessive constructions: a reprojection-based account*

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Abstract It has been shown in recent years that generative grammar can be a compelling theoretical framework for understanding sociolinguistic phenomena in syntactic terms. Specifically, morphosyntactic variation in South American Spanish spoken in the areas in contact with indigenous languages has been focused on in a wide range of studies from the generative perspective (see Gutiérrez-Rexach and Sessarego 2014 and the references therein). This paper puts forth an account of Guarani possessive constructions and nonstandard variation of Paraguayan Spanish possessive constructions that arise due to the interference of the former language, adopting Georgi and Müller's(2010) reprojection approach to head movement. It is shown that a reprojection-based analysis can yield a uniform explanation of the referred possessive constructions, and correctly predict the restrictions on the possessor-denoting elements in the latter case.

Key words possessives, reprojection, head movement, Spanish, Guarani

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I. Introduction

This paper has a twofold aim. On one hand, it attempts to account for possessive constructions in Guarani, a South American indigenous language from Tupi-Guarani family, from a new perspective. Guarani has two types of possessive constructions: the first one recurs to juxtaposition of two nouns in which no morphological device shows up to indicate possessive relation as in (1a); the other one uses possessive pronouns in the genitive case as in (1b).

(1) a. Maria   róga
       Maria   house
       'Maria's house'

   b. i   róga
       her   house

A special focus is laid on the former type of constructions in this paper. The analysis is drawn from Georgi and Müller's(2010) reprojection hypothesis: a head can move out of its projection to remerge with it and project anew. The authors' reinterpretation of DPs with proper nouns is adopted here on the assumption that DPs project as specifiers of N by a subcategorization feature on this head (N over D), thus, against the conventional idea that D is the head of noun phrases (D over N)(Abney 1987; Longobardi 1994). On the other hand, the analysis is extended to a specific type of irregular possessive constructions of Spanish attested in the Paraguayan bilingual regions where this language is spoken with Guarani. An example is given in (2a).

(2) a. María   su   casa
       María   her   house

   b. su   casa
       her   house

Standard Spanish only requires a possessive pronoun to denote the possessor as shown in (2b); any additional materials about the possessor's identity are banned. However, in (2a) the proper noun precedes the string that is a complete possessive construction on its own. These constructions are taken to be transfer from juxtaposition-type possessive constructions in Guarani such as (1a)(De Granda 1996).

In what follows, a uniform analysis is put forth to understand Guarani possessive constructions(GPCs) as well as the structural variation of Spanish possessive constructions affected by them. The paper proceeds as follows. Section II gives an overview of Georgi and Müller's(G&M, henceforth) proposal on reprojection, and their arguments for considering DPs as specifiers of NPs. Section III explores GPCs within this framework. In section IV, the derivation of the aforementioned variant of Spanish possessive constructions is explained in accordance with the analysis developed in the previous sections and by decomposing possessive pronouns. Section V concludes with comments on some pending issues.

II. Theoretical framework

G&M(2010) propose to analyze head movement by reprojection. Reprojection consists of movement of a head out of its projection to remerge with it; the moved head takes its former projection as complement and project again in the derived position. Consider the following diagram in which X is the reprojecting head:

(3) [XP X [XP [YP] ̶X̶ [ZP]]

G&M argue that every syntactic operation is triggered by features. They assume two different groups of features: (i) structure-building features (SBFs); (ii) probe features. SBFs (rendered in a [•F•] notation) are in turn divided into two fine-grained subgroups: (i) subcategorization features that trigger external merge; (ii) movement-type specific specifier features that trigger internal merge (movement). Subcategorization features show up on stacks in reverse order of the hierarchy of θ-roles on a predicate. These features must be discharged (deleted) in a successive fashion by creating a complement and (multiple) specifiers. According to G&M, features triggering movement are always placed below subcategorization features in [•F•] stacks so that if a head has both kinds of features, structure-building operations always take place prior to movement. On the other hand, probe features (represented as [∗F∗]) are understood as suggested by Chomsky(2000; 2001). They are located on a different stack separated from SBFs. Only the uppermost feature of each stack is accessible at a given point of derivation. The peculiarity of the G&M's proposal emerges when a probe feature containing a specific category as its content goes hand in hand with a SBF with the same category label. G&M call this kind of probe features *Münchhausen features* following Sternefeld(1991).[1] The probe feature [∗F∗] scans its c-command domain to find the category. If [•F•] is topmost on the subcategorization feature stack, the designated category is merged as complement; then, Agree takes place and [∗F∗] is discharged. If [•F•] is not topmost, it generates a specifier, and [∗F∗] cannot scan the specifier. Thus, it seems that this feature cannot be deleted, and subsequently the derivation collapses.[2] In this case,

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1) As described by G&M (2010, 12, note 12), Baron Münchhausen comes on in German tales. It is told that he gets trapped once in a swamp and manages to escape from there by pulling himself up by his own hair. See below for the reason why this name is chosen for the probe features.

according to G&M, the head bearing the Münchhausen probe feature moves out of its projection and remerges with it to reproject. These operations make Agree feasible since [∗F∗] on the moved head can scan the specifier of its former projection from the derived position. Consider the following example:

(4) a. [X' [X{[•Y•] > [•Z•], [∗Y∗]} [WP]]]
    b [X' [YP] [X' [X{[•Z•], [∗Y∗]} [WP]]]]
    c. [X' [X{[•Z•], [∗Y∗]} [XP [YP] [X' X{[•Z•], [∗Y∗]} [WP]]]]]
    d. [X' [X{[•Z•], -} [XP [YP] [X' X{[•Z•], [∗Y∗]} [WP]]]]]
    e. [XP [ZP] [X' X{-, -} [XP [YP] [X' X{[•Z•], [∗Y∗]} [WP]]]]]

In (4a), [∗Y∗] is a Münchhausen feature since the category Y is also contained in a subcategorization feature. At the stage of (4a), where [•W•] has been already discharged by merging WP as complement, [•Y•] is the (topmost) accessible feature of the stack for subcategorization features (> stands for c-command). It generates YP as its specifier and becomes discharged. This is illustrated in (4b). Then, X containing [∗Y∗] moves out of XP and reprojects taking it as complement. A projection qualifies as a maximal projection if and only if its head discharges all SBFs and probe features. Hence, the ultimate projection of X in (4a), (4b) is X' as X still involves some features of these types to be deleted. It becomes XP after X leaves its original position empty through movement in (4c). The new projection of the moved X must qualify as X' since the head contains {[•Z•], [∗Y∗]}. Now it follows that the category Y is available for Agree by the Münchhausen probe feature in (4d). Finally, [•Z•] is discharged by merging ZP as specifier

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2) Presumably, G&M do not assume upward-probing hypotheses for Agree(see Baker 2008; Wurmbrand 2012; 2014; Zeijlstra 2012 for this possibility).

and the whole constituent becomes a maximal projection (4e).

A number of further remarks are in order. First, as noted by G&M, the reprojection-based approach can shed light on the well-known technical issues regarding the conventional view that head movement is an instance of adjunction. Under the current view, moved heads c-command their base position, and do not violate the Extension Condition(Chomsky 1995; G&M 2010, 10-12). Second, as briefly mentioned above, G&M's analysis assumes that a head containing more subcategorization features than those that can be discharged by introducing a complement and a (sole) specifier necessarily gives rise to multiple specifiers, as schematized below. (5b) derives from (5a).

(5) a. [X' X{[•H•] > [•Y•] > [•Z•]} [WP]]
    b. [XP [ZP] [X' [YP] [X' [HP] [X' X [WP]]]]]

Multiple specifiers are generally deemed prohibited ever since Kayne's(1994) pioneering work because they cannot be linearized by the LCA. However, Abels and Neeleman(2012) recently argue that the LCA, as is formulated, does not derive a phrase structure theory that rules out multiple specifiers on its own, and that it indeed stipulates specific premises to dispense with them(see the cited work for details). While it is an open question whether multiple specifiers are derivable, I take it for granted that they do not raise problems for our discussion. Lastly, it is not too much clear in G&M's proposal how a subcategorization feature on a head is determined as complement- or specifier-creating material. They briefly state that the topmost feature projects complement and other features below it subsequently project specifiers; when a visibly unique feature seems to create a specifier, it is posited there that there may have been a putative topmost feature on the stack that has already been discharged by introducing complement. However,

this hypothesis presents some inconsistencies. There are cases in which it is difficult, if not impossible, to conceive a complement for the head. For instance, it is generally assumed that possessives are subcategorized on N and project as specifiers in a string such as his book; empirically, it is obscure how the silent complement of book can be defined while there is no need for it at all. Furthermore, G&M's hypothesis would lead us to an undesirable conclusion that the unique argument of unergative verbs is merged as complement. Therefore, I tentatively propose that grammar distinguishes whether the topmost subcategorization feature is for complement or specifier; presumably, one of possible ways to implement this distinction is by observing the θ-role that a (subcategorized) category plays, as will be shown below.

G&M elaborate various arguments to refute D as head of the nominal phrase; instead, it is argued to project as specifier of N. By way of illustration, let me present one of their arguments in a simplified way, which will be also relevant for our discussion below. G&M attempt to reinterpret Longobardi(1994)'s proposal that null D must be identified by moving N to D in the case of proper names. G&M suggest that this identification is brought about in a different manner, namely, by N encoding a probe feature [*D*] accompanied by [•D•]:

(6) a. N's feature set: {[•D•], [*D*]}
   b. Merge(N: {[•D•], [*D*]}, DP) → [N' DP N: {[*D*]}]
   c. Move(N: {[*D*]}, [NP DP N]) → [N' N: {[*D*]} [NP DP N̶]]
   d. Agree([*D*], DP) → [NP N: {-} [NP DP N̶]]

N is always equipped with the Münchhausen feature [*D*] insofar as it involves a proper noun (6a). First, D projects as N's specifier, by which [•D•] on N is discharged (6b). N moves then out of its projection for [*D*] and

reprojects (6c). This licenses [∗D∗] to be deleted against DP in its c-command domain (by Agree). The approach sketched here (i.e., N over D) is in a sharp contrast with the conventional DP hypothesis (D over N)(see Abney 1987). I will take it as a starting point for the following analysis.

III. Guarani possessive constructions by reprojection

1. Preliminary remarks

Guarani distinguishes two types of possessive constructions. First, two nouns can appear in juxtaposition as exemplified in (7). The preceding noun designates the possessor and the following one refers to the possessee that is the head of the construction. The possessor can be a proper noun as in (7a) as well as a common noun as in (7b). There is no special morpheme that overtly indicates the possessive relation.[3]

> (7) a. Maria   róga
>   Maria   casa
>   'Maria's house'
>
>   b. yvyra   raka
>   tree   branch
>   'the branches of the tree'

Second, GPCs can involve possessive pronouns that always precede possessee nouns. As represented in <Table 1>, possessive pronouns of the 1st person singular and plural, and the 2nd person singular are morphologically identical to the pronouns in the nominative and accusative case(hence, they are underspecified 'elsewhere items' in terms of Halle 1997).[4]

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3) GPCs show the definiteness effect not only regarding the possessor but also regarding the possessee(Vázquez-Castillo 1996).

4) Guarani is an agglutinative language. Pronouns can appear as free-standing

<Table 1> Guarani personal pronouns

	NOM	GEN	ACC	DAT
1SG	che	che	che	cheve
2SG	nde	nde (ne)	nde/ro	ndeve
3SG	ha'd	i/ij/hi'(iń)	ichupe	ichupe
1PL INCL	ñande	ñande (ñane)	ñande	ñandeve
1PL EXCL	ore	ore	ore	oreve
2PL	peẽ	pende (pene)	pende/po	pééme
3PL	ha'ekuera	che	ichupekuera	ichupekuera

The items in brackets in <Table 1> occur with nouns that begin with a nasal sound. For example, in the case of the 3rd person singular, *i* is used before a non-nasal consonant (8a), *ij* is used before a non-nasal unstressed vowel (8b), and *hi'* before a non-nasal stressed vowel (8c); *iñ* co-occurs with nouns that begin with a nasal sound (8d)(Estigarribia 2017, 64).[5] On the other hand, possessive pronouns exhibit the animacy constraint in the sense that they can only refer to animate entities as possessors.

(8) a. i   po
       his/her hand

   b. ij   ao
       his/her clothes

   c. hi'   áva
       his/her hair

   d. iñ   akã
       his/her head

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forms or as prefixed forms. In the latter case, they must be distinguished from case markers, which are suffixes in this language. See Dietrich (2010) for more details.

5) Nasal harmony arises when the nasality of a stressed nasal vowel spreads to its left. In (6d), the stressed nasal vowel of the second syllable turns the first oral vowel into a nasal one(/ãkã/).

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Having laid out these preliminary considerations, let us consider now how possessive interpretation can be derived from juxtaposition-type constructions in such a way that the fine distinction of a possessor and a possessee is made. In his reference point model, Langacker(1991; 1995) points out the ease of identifiability as the underlying property of all possessive relationship. According to the author, people tend to construe as reference point the entities of which they have higher individual awareness than other entities of less awareness. As indicated by the attributive adjective "individual", awareness relies on some contextual factors such as personal experience, familiarity, empathy, etc., on the part of the participants of discourse(see also Seiler 1983a; b). However, it seems to be the case that language communities share quite a general view about awareness. For instance, when a certain relation is supposed to exist between a person and an object, it is the person that is more salient, thus, identifiable as reference point; then, a relevant interpretation of the object is brought about with respect to the reference point in accordance with the context or encyclopedic knowledge.[6] Langacker argues that it is more efficient to locate things in relation to a person than the other way around. The same is true of a relation between an animate entity that is not a person and an object. When it comes to a relation involving a person and a non-human animate entity, the former is also likely to be the reference point (there can be always exceptions insofar as the context permits them). Another example comes from the part-whole relation. It is affordable to identify the whole as reference point and then locate the part belonging to it, but not the other way around. Hence, *the cat's paws* can be a spontaneous

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6) Note that possession is a cover term for different types of relationship(see Higginbotham 1983; Barker 1995). For instance, *John's book* may refer to a book of which John is the author, a book that John owns, a book that John is carrying in his bag, etc.

construction, whereas *the paws' cat* is hardly conceivable despite the involved nouns designate the same entities.

This perspective is followed by Vázquez-Castillo(1996) regarding GPCs by juxtaposition, according to which the proper noun *Tani* in (9a) should be the reference point (i.e., possessor); in (9b), the hand is located with respect to *Maria*, which represents the whole. Therefore, Vázquez-Castillo suggests that the lack of specific morphological devices does not affect the interpretation of possessive relation in Guarani.

(9) a. Tani   ajaka
      Tani   basket

    b. Maria   po
      Maria   hand

The cognitive approach presented above may give a satisfactory account of the interpretability of juxtaposition-type GPCs. However, the formation of these constructions requires a more detailed analysis. As repeatedly noted in the generative tradition, syntax can involve silent materials. Then, it may follow that the formation of juxtaposition-type GPCs should be thought of as involving some covert functional elements that syntactically license the combination of possessor and possessee nouns. In other words, they are not in juxtaposition in theoretical terms. This should be the case if we consider that possessor nouns need to be assigned some case as NPs(Chomsky 1986) and that, crosslinguistically, possessor-denoting nouns require some case -be it genitive or any other case- to be licensed, even though the case is not morphologically overt(Szabolcsi 1983; see also Koptjevskaja-Tamm 2003 for a typological study). Furthermore, assuming bare strings of two juxtaposed nouns in these constructions would be at odds with the fact that pronouns require the genitive case to be licensed as possessives in Guarani(see Table 1).

2. Juxtaposition possessive constructions

In this section, I propose that the derivation of juxtaposition-type GPCs varies depending on which type of noun is used as possessor-denoting element. Examples of (7) are repeated as (10).

(10) a. Maria   róga
         Maria   casa
         'Maria's house'

     b. yvyra   raka
        tree   branch
        'the branches of the tree'

First, consider the case in which the possessor is a proper noun as in (10a). The subcategorization feature for the possessor noun (N_2) is inserted into the possessee noun (N_1) in the numeration or lexical subarray, as indicated in (11). The other feature [•D•] determines the definiteness of the whole construction at a later stage and, thus, is out of our interest (this feature is discharged by merging D with the projection of N_1 after the possessor noun projects)(see (12)).[7]

(11) N_1's feature set: {[•N_2•] > [•D•]}

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7) As commented above, G&M propose that subcategorization features on a predicate are distributed in reverse order of the hierarchy of θ-roles(see section II). However, their analysis may need further refinement. Whereas they provide arguments enough to corroborate this insight regarding the verbal domain, they appear to stipulate that the hierarchy of subcategorization features is 'A > Num(erals) > D' in the nominal domain, that is, the opposite of the most common order of materials in this domain (i.e., D > Num > A > N; see Cinque 2005; Abels & Neeleman 2012; Ouwayda and Shlonsky 2017). It is not clear how this order can be explained in terms of θ-role hierarchy. In this paper, I follow G&M's proposal without discussing it in detail, which would take us too far afield.

N$_2$ is merged as specifier of N$_1$ and discharges [•N$_2$•]. This proposal is compatible in its core properties, if differing in specificity, with the widely acclaimed hypothesis that possessor is a θ-role higher than agent in the nominal domain, and that possessives are generated at the specifier position of a dedicated functional category above NP(Cardinaletti 1998; Alexiadou *et al.* 2007; among others). N$_2$ has in turn the feature as indicated in (12a). Its proper noun status requires D as its specifier, as argued in section II (see (6)).

(12) a. N$_2$'s feature set: {[•D•] > [•K•], [∗D∗]}
      b. Merge(N$_2$: {[•D•] > [•K•], [∗D∗]}, DP) ⟶ [N$_2$' DP N$_2$: {[•K•], [∗D∗]}]
      c. Move(N$_2$: {[•K•], [∗D∗]}, [NP$_2$ DP N$_2$]) ⟶ [N$_2$' N$_2$: {[•K•], [∗D∗]} [NP$_2$ DP N$_2$: {[•K•], [∗D∗]}]]
      d. Agree([∗D∗], DP) ⟶ [N$_2$' N$_2$: {[•K•], -} [NP$_2$ DP]]
      e. Merge([N$_2$' N$_2$: {[•K•], -} [NP$_2$ DP]], KP) ⟶ [NP$_2$ KP N$_2$: {-, -} [NP$_2$ DP]]

Note that, with the possessor being a proper noun, the first steps of the derivation are identical to what is depicted regarding the derivation of NPs with proper nouns in (6). Later, DP is merged as specifier and [•D•] on N$_2$ is discharged (12b). N$_2$ is moved out of its projection for the probe feature [∗D∗]; as a result, the remaining projection becomes a maximal projection (NP$_2$)(12c). Then, the moved N reprojects and Agree takes place between [∗D∗] and DP, which eliminates this feature (12d). In addition, N$_2$ has another subcategorization feature for phonologically null K, which is the category that assigns it the genitive case. KP is merged and [•K•] on N$_2$ is discharged. The whole construction is identified as NP$_2$ since there is no SBF nor probe feature left on the moved N$_2$ (12e).

Regarding GPCs by juxtaposition that have common nouns as possessors

as in (10b), it seems plausible to consider that possessor nouns do not have the probe feature [*D*], although they select D for their referential import(see note 3). Therefore, the derivation is completed in a simple way after D projects as specifier of N_2 and, later, another D selected by N_1 projects as this head's specifier to end the derivation.

3. Possessive constructions with possessive pronouns

Déchaine and Wilschko(2002) argue that there are three types of pronouns (i.e., pro-DP, pro-φP, pro-NP) on the assumption that pronouns are not primitives. So, they differ in their syntactic composition. If a pronoun is a full-fledged pro-DP, which necessarily contains pro-φP and pro-NP as subconstituents (under the conventional D over N approaches), it is a referential expression with definiteness, and only appears in argument position. A pronoun with the status of pro-φP corresponds to any intermediate projection that is located between D and N, encodes φ-features, and involves pro-NP as subconstituent. It can behave as argument or as predicate. A pro-NP is syntactically identical to (bare) lexical nouns, and is predicate. I reinterpret these three pronominal projections in accordance with G&M's N over D analysis as follows:

(13) a. [DP [φP [NP]]] → [NP DP [N' φP N]]
      b. [φP [NP]] → [NP φP N]
      c. [NP] → [NP]

In addition, Déchaine and Wiltschko make a categorical distinction of personal pronouns: 1st/ 2nd person pronouns are pro-DPs, whereas 3rd person pronouns (also called *non-person pronouns* by Benveniste 1966) are pro-φPs. Accordingly, I consider that 1st/2nd person possessives instantiate

(13a), and 3rd person possessives instantiate (13b), and that there is no need for an additional category such as K for the inherent genitive case of these pronouns to be licensed.

To build possessive constructions with 1st/2nd person possessives as in (14a), the posseessee noun (N_1) subcategorizes a pro-N_2 with its own subcategorizaion feature set $\{[\bullet\varphi\bullet] > [\bullet D\bullet]\}$, which yields the structure in (14a'). No probe feature that would give rise to reprojection is involved here. In contrast, N_2 only has $[\bullet\varphi\bullet]$ (also without any Münchhausen feature) on its subcategorization feature stack if the possessor is 3rd person as in (14b). The corresponding derivation is represented in (14b').

(14) a. nde   yvotyty
      your   garden

   a'. $[NP_1 [N_1' [NP_2 DP$ *nde* $\varphi P\ N_2]\ N_1$ *yvotyty*$]$

   b. ij   ao
      her   clothes

   b'. $[NP_1 [N_1' [NP_2 \varphi P$ *ij* $N_2]\ N_1$ *ao*$]$

IV. Variation in Paraguayan Spanish

Spanish has prenominal and postnominal possessives. It is generally assumed that the former are structurally impoverished variants of the latter(Cardinaletti 1998; Alexiadou *et al.* 2007): full-fledged postnominal possessives arise in the specifier of a functional projection above the noun and remain *in situ*, while the noun moves across them to a higher position (below D); prenominal possessives share the same merge position with postnominal ones, but they must move towards the left due to their structural deficiency. Without attempting to summarize every single grammatical property or behavior of Spanish possessives(see Picallo 1994; Cardinaletti

1998), I focus directly on a special type of possessive constructions. Consider the following examples:

(15) a. su   casa
         her   house

    b. María su   casa
       María her   house

(15a) suits standard contemporary Spanish. Possessives do not require any further material to specify the identity of the possessor more than its grammatical features like person and number; rather, they reject any further information. However, in the bilingual regions of Paraguay where Guarani is spoken alongside Spanish, the possessor is sometimes overtly identified by the preceding proper noun as exemplified in (15b). De Granda(1996) considers them as a transfer from juxtaposition-type GPCs(see section III.2). Although this conjecture seems intuitively correct, a more detailed analysis must be provided because the possessor-denoting proper noun co-occurs with a string that already incorporates a possessive pronoun. Another peculiar point worthy of noting is that, to the extent that our data indicate, pronouns in the nominative case do not substitute for proper nouns in these constructions:

(16) a. *yo   mi   casa
          I   my   house

    b. *tú   tu   casa
        you   your   house

    c. *ella   su   casa
        she   her   house

It is the goal of this section to give a principled explanation of the derivation of constructions such as (15b) — call them double possessor possessive constructions(DPPCs). A clue comes, I submit, from another type of Spanish possessive constructions such as (17):

(17) su   casa   de   María
      her   house   of   María

Standard contemporary Spanish bans *de*-PPs that duplicate the semantic import of possessor from appearing in DPs together with possessive pronouns. However, the co-occurrence of these elements was quite common in Medieval Spanish, and is still productive in American Spanish insofar as the possessor is 3rd person(Company 2009). This is partially because Spanish possessive *su* can refer to all types of 3rd person (i.e., *he/she/it/they*) and honorific 2nd person as possessor and, hence, it is sometimes necessary to provide complementary information about which one among various 3rd persons present in the given context is the possessor. I claim that constructions like (17) underlie DPPCs while being interfered by Guarani in the course of derivation. Empirical data appear to corroborate this hypothesis. On one hand, DPPCs do not occur in Guarani(as illustrated in (18)), nor in Standard Spanish, both lacking constructions such as (17):

(18) *Maria   i   róga
      Maria   her   house

On the other hand, the intervention of juxtaposition-type possessive constructions of Guarani seems also decisive for the derivation of DPPCs; otherwise, DPPCs would arise in other Spanish-speaking communities where constructions like (17) are possible, for example, in Central American countries.

Taking into consideration this observation, let me detail the proposal. To this end, it is necessary to understand first how the construction of (17) is derived. I take the head noun to have the feature set of (19a) (the italicized strings on the right indicate the linear distribution of the involved lexical items after each step). Here, [•P•] is topmost on the subcategorization feature

stack, so it generates PP complement (19b). N_1 also subcategorizes a pro-N (N_2), which is the next accesible subcategorization feature(cf. (14)). N_2 projects as specifier and the projection of N_1 is identified as NP_1 (19c) (the projection of N_1 might be represented as N_1' instead of NP_1 if it was the case that N_1 still contains some other SBFs or probe features, which is irrelevant to our discussion). N_2 has in turn its own feature set, as shown in (19d), by which pro-φP projects as its specifier(see (13b)).[8] Finally, there is no more subcategorization feature on N_2 and its projection is defined as NP_2.

(19)   a. N_1's feature set: $\{[\bullet P\bullet] > [\bullet N_2\bullet]\}$ (*casa*)

b. Merge(N_1: $\{[\bullet P\bullet] > [\bullet N_2\bullet]\}$, PP)
                    $\longrightarrow$ [N_1' N_1 $\{[\bullet N_2\bullet]\}$, PP]   (*casa de María*)

c. Merge([N_1' N_1 $\{[\bullet N_2\bullet]\}$, PP], NP_2)
                    $\longrightarrow$ [NP_1 NP_2 [NP_1 N_1 PP]]

d. N_2's feature set: $\{[\bullet\varphi\bullet]\}$

e. Merge(N_2: $\{[\bullet\varphi\bullet]\}$, φP)
                    $\longrightarrow$ [NP_1 [$NP_2\varphi$P N_2] [NP_1 N_1 PP]]   (*su casa de María*)

Arguably, illegitimate but widely occurring linguistic phenomena may indicate that there are motives enough for the speakers to share the same derivational deficiency that provokes the deviation (cf. Fábregas 2011; Gutiérrez-Rexach and Sessarego 2014). When it comes to DPPCs, the motives are the intervention of juxtaposition-type possessive constructions of Guarani. At an initial conceptualizing stage that precedes the grammatical modules(see Levelt *et al.* 1999), the speaker, who is bilingual of Guarani and Spanish, intends to produce a possessive construction in Spanish like (17). However,

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8) The internal make-up of Spanish possessives will be revisited below. For now, it suffices to note that the 3rd person possessive *su* is provisionally represented as instantiating pro-φP as in Guarani for expository reasons.

the feature subcategorizing the preposition fails to be inserted into the head noun (e.g., *casa*); instead, only the one that introduces a proper noun (e.g., *María*) that otherwise would appear as part of the PP-complement is directly encoded into the head noun as a specifier-creating feature.[9] This deficiency can be attributed to the aforementioned intervention of Guarani in the derivation, a language lacking prepositions (instead, it has postpositions) in which constituents bearing possessor role are inherently merged as specifiers. The feature subcategorizing the proper noun must be topmost on the stack since it would form part of the PP complement of the head noun in the ordinary environment. Then, the problem arises with respect to the fact that there are two candidates to denote possessor -the proper noun and the possessive- in the same lexical subarray, while there is only one position available for the possessor role. Failure of any of these elements in receiving the corresponding θ-role would lead the derivation to crash. In this regard, I propose that they are syntactically co-indexed (therefore, co-referential) in such a way that they can integrate as a last resort an internally complex pronominal phrase (i.e., pro-NP containing pro-DP and/or pro-φP as specifier(s); see (13)) that projects in the specifier position to which the possessor role is assigned. Specifically, the proper noun, as being the hierarchically highest one among the subcategorized elements, is merged as head of a pro-NP. This is represented in (20b).

(20) *Derivation of DPPCs (unrevised version)*

    a. N_1's feature set: $\{[\bullet N_2 \bullet]\}$ (*casa*)

    b. Merge(N_1: $\{[\bullet N_2 \bullet]\}$, NP_2) $\longrightarrow$ [NP_1 NP_2 N_1]   (*María casa*)

    c. N_2's feature set: $\{[\bullet \varphi \bullet]\}$

    d. Merge(N_2: $\{[\bullet \varphi \bullet]\}$, φP) $\longrightarrow$ [NP_1 [NP_2 φP N_2] N_1]   (*su María casa*)

Recall that, in the conventional D over N approach, 1st and 2nd person

pronouns are pro-DPs, while 3rd person pronouns are pro-φPs(see section III.3). Déchaine and Wiltschko(2002) argue that pro-DPs can take an overt NP subconstituent, and pro-φPs cannot, as illustrated below:

(21) a. [DP *we/you* [φP [NP *analysts*]]]
     b. *[φP *they* [NP *analysts*]]

Therefore, further explanation is needed to justify that *su* occurs as specifier of overt *María* in (20d) under the current approach that attempts to reinterpret Déchaine and Wiltschko's proposals. Preferably, the noun must contain a pro-DP as the highest specifier. I put forth a hypothesis by decomposing Spanish possessives: they always partially spell out a pro-DPs regardless of their grammatical person. Note that *m/d/s* are recurrent pronominal elements in Indo-European languages(Benveniste 1966; Kayne 2000). They can appear as reflexive pronouns with the support of the epenthetic vowel *-e* in Spanish (22a); crosslinguistically, they also appear as part of possessives, for instance, in Spanish (22b), French (22c), German (22d), among others.

(22) a. me/te/se   'myself/yourself/himself, herself, themselves'
     b. mi/tu/su   'my/your/his, her, its, their'
     c. mon/ton/son   'my/your/his, her, its, their'
     d. mein/dein/sein 'my/your/his'

The structural configuration in (23) follows, then. I take *m/t/s* to spell out the highest specifier pro-DP as full pronominal materials; *i/u* spell out pro-φP.[10]

(23)   [NP [DP *m/t/s*] [N' [φP *i/u*] N]]

Now, the derivation of DPPCs in (20) can be reformulated as follows: N2

has another subcategorization feature [•D•] below [•φ•]. Furthermore, as argued by G&M and corroborated in this paper, it must contain the Münchhausen probe feature [∗D∗] insofar as it is a proper noun:

(24) *Derivation of DPPCs (final version)*
   a. N_1's feature set: {[•N_2•]}   (*casa*)
   b. Merge(N_1: {[•N_2•]}, NP_2) → [NP_1 NP_2 N_1]   (*María casa*)
   c. N_2's feature set: {[•φ•] > [•D•], [∗D∗]}
   d. Merge(N_2: {[•φ•] > [•D•], [∗D∗]}, φP)
      → [NP_1 [N_2' φP N_2: {[•D•], [∗D∗]}] N_1]]   (*-u María casa*)
   e. Merge([NP_1 [N_2' φP N_2: {[•D•], [∗D∗]}] N_1], DP)
      → [NP_1 [N_2' DP φP N_2: {[∗D∗]}] N_1]   (*su María casa*)
   f. Move(N_2: {[∗D∗]}, [N_2' DP φP N_2])
      → [NP_1 [NP_2 N_2: {–} [NP_2 DP φP –] N_1]   (*María su casa*)

The probe feature [∗D∗] on N2 triggers movement and reprojection in (24f) in order to agree with D in its c-command domain. This analysis also accounts for the reason why pronouns in the nominative case cannot substitute for proper nouns as observed in (16): duplicated possessor-denoting elements are generated in the NP layer; however, these pronouns are full-blown

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10) *-i/-u* seem to be appropriate candidates for pro-φP, provided that the plural marker *-s* appear suffixed to them when they agree with plural nouns. Furthermore, Spanish postnominal possessives show gender agreement: *-o* and *-a* alternate in accordance with the masculine and feminine gender of the noun. These vowels appear between *i/u* and the number marker as shown below (compare these possessives to the prenominal counterparts in (22b)); *-y-* of *tuyo* and *suyo* is added at the PF stage to prevent *-u-* and *-o/a* from producing a diphthong.

(i) mí-o/a(-s), tuy-o/a(-s), suy-o/a(-s)

On the other hand, I assume that linearly adjacent *m/t/s* and *i/u* are concatenated into a string at PF, for example, by string-vacuous (noninverting) local dislocation(Embick and Noyer 2001). In (ii), which shows this post-syntactic operation for the 3rd person possessive *su*, ∗ stands for linear precedence, and + stands for the adjunction resulting from local dislocation.

(ii) [s ∗ u] → [s + u]

pronouns, and cannot be merged by N.[11]

V. Conclusions and further questions

In this paper, I have argued for a uniform approach to GPCs and (nonstandard) Spanish possessive constructions attested among Paraguayan Guarani-Spanish bilingual speakers within a theoretical framework that takes head movement as an instance of reprojection. The analysis has explained the interference of Guarani in the derivation of Spanish possessive constructions in strictly syntactic terms. Along the way, Spanish possessives have been decomposed into different functional layers. The analysis made here also gives a support to the reprojection approach and, particularly, to the perspective that DP projects as specifier of NP. A couple of questions remain to be explored. First, the tentative adaption of Déchaine and Wiltschko's(2002) analysis of pronouns to the current view (N over D) may need further independent arguments. Second, it could be conceivable that DPPCs contain a common noun accompanied by a determiner instead of a proper noun (e.g., *la niña su casa* 'lit. the girl her house'), although to the extent that the data are available constructions of this sort are not attested. In case they were derivable, the picture would be more complicated than sketched here because an additional uppermost position must be available in DPPCs so that the article could move past the already moved common noun.

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11) A reviewer raises the question of whether strings like *María su casa* can derive following the D over N hypothesis, for instance, by moving the proper noun from *su casa (de) María* to the specifier of D. There could be more possible ways to explain the derivation in addition to the one sketched here. However, this approach may require further arguments to be properly considered regarding the motives of D to probe the proper noun while it hosts the possessive, its EPP-like property to attract the proper noun, etc. I will not go into this in detail now.

I leave these issues for future research.

References

Abels, K. & A. Neeleman.(2012), "Linear Asymmetries and the LCA", *Syntax*, Vol. 15, pp. 25-74.

Abney, S.(1987), "The English noun phrase in its sentential aspect", Doctoral dissertation, MIT.

Baker, M. C.(2008), *The syntax of agreement and concord*, Cambridge: Cambridge University Press.

Barker, C.(1995), *Possessive Description*, Stanford: CSLI Publications.

Benveniste, É.(1966), *Problemes de linguistique générale*, Paris: Gallimard.

Cardinaletti, A.(1998), "On The Deficient/Strong Opposition in Possessive System", A. Alexiadou & C. Wilder(eds.), *Possessors, Predicates and Movement in the Determiner Phrase*, Amsterdam: John Benjamins, pp. 17-53.

Chomsky, N.(1986), *Barriers*, Cambridge, MA: MIT Press.

Chomsky, N.(1995), *The Minimalist Program*, Cambridge, MA: MIT Press.

Chomsky, N.(2000), "Minimalist inquiries: The framework", R. Martin, D. Michaels & J. Uriagereka(eds), *Step by step*, Cambridge, MA: MIT Press, pp. 89-155.

Chomsky, N.(2001), "Derivation by phase", M. Kenstowicz (ed.), *Ken Hale: A life in language*, Cambridge, MA: MIT Press, pp. 1-52.

Cinque, G.(2005), "Deriving Greenberg's Universal 20 and its Exceptions", *Linguistic Inquiry* Vol. 36, pp. 315-332.

Company Company, C.(2009), "Artículo + posesivo + sustantivo y estructuras afines", C. Company Company (ed.), *Sintaxis histórica de la lengua española. Segunda parte: La frase nominal*, Vol. 1, Mexico City, Universidad Nacional Autónoma de México, pp. 759-880.

Déchaine, R. M. & M. Wiltschko(2002), "Decomposing Pronouns", *Linguistic Inquiry* Vol. 33, pp. 409-442.

de Granda, G.(1996), "Interferencia y convergencia sintáctica e isogramatismo amplio en el español paraguayo", *International Journal of the Sociology of Language*, Vol. 117, pp. 63-80.

Dietrich, W.(2010), "Lexical evidence for a redefinition of Paraguayan 'Jopara'", D.

Bakker & U. Ansaldo(eds), *Languages in contact with Spanish*, Bremen: Akademie-
Verlag, pp. 39-51.

Embick, D. & R. Noyer(2001), "Movement Operations after Syntax", *Linguistic Inquiry*
Vol. 32, pp. 555-595.

Estigarrbia, B.(2017), "Insertion and Backflagging as Mixing Strategies Underlying
Guarani-Spanish Mixed Words", B. Estigarribia, Bruno & J. Pinta(eds.), *Guarani
Linguistics in the 21st Century*, Leiden: Koninklijke Brill, pp. 315-347.

Fábregas, A.(2011), "Rising possessors in Spanish", *Iberia*, Vol. 3, pp. 1-34.

Georgi, D. & G. Müller.(2010), "Noun-Phrase Structure by Reprojection", *Syntax*, Vol.
13, pp. 1-36.

Gutiérrez-Rexach, J. & S. sessarego(2014), "Morphosyntactic variation and gender
agreement in three Afro-Andean dialects", *Lingua*, Vol. 151, pp. 142-161.

Halle, M.(1997), "Distributed morphology: Impoverishment and fission", B. Bruening,
Y. Kang & M. Mcginnis(eds.), *MITWPL 30: Papers at the interface*, pp. 425-449.

Higginbotham, J.(1983), "Logical Form, Binding and Nominals", *Linguistic Inquiry*, Vol.
14, pp. 395-420.

Kayne, R.(1994), *The antisymmetry of syntax*, Cambridge, MA: MIT Press.

Kayne, R.(2000), "Person Morphemes and Reflexives in Italian, French, and Related
Languages", R. Kayne, *Parameters and Universals*, New York: Oxford University
Press, pp. 129-162

Koptjevskaja-Tamm, M.(2003), "Possessive noun phrases in the languages of Europe",
F. Plank(ed.), *Noun Phrase Structure in the Languages of Europe*, Berlin: Mouton de
Gruyter, pp. 621-721.

Langacker, R. W.(1991), *Foundations of Cognitive Grammar*, Vol. 2, Stanford: Stanford
University Press.

Langacker, R. W.(1995), "Possession and Possessive Constructions", J. R. Taylor & R. E.
MacLaury(eds.), *Language and the Cognitive Construal of the World*, Berlin: Mouton de
Gruyter, pp. 51-79.

Levelt, W., A. Roelofs & A. S. Meyer.(1999), "A theory of lexical access in speech
production", *Behavioral and Brain Sciences*, Vol. 22, pp. 1-75.

Longobardi, G.(1994), "Reference and proper names: A theory of N-movement in syntax
and Logical Form", *Linguistic Inquiry*, Vol. 25, pp. 609-665.

Ouwayda, S., & U. Shlonsky(2017), "Word Order Variation in Lebanese Arabic DPs: In

Support of Low Numerals", *Linguistics Inquiry*, Vol. 48, pp. 181-193.

Picallo, C.(1994), "Catalan Possessive Pronouns: The Avoid Pronoun Principle Revisited", *Natural Language & Linguistic Theory*, Vol. 12, pp. 259-299.

Seiler, H.(1983a), "Possessivity, Subject and Object", *Studies in Languages*, Vol. 7, pp. 89-117.

Seiler, H.(1983b), *Possession as an Operational Dimension of Language*. Tübingen: Gunter Narr Verlag.

Sternefeld, W.(1991), *Syntaktische Grenzen. Chomskys Barrierentheorie und ihre Weiterentwicklungen*. Opladen, Germany: Westdeutscher Verlag.

Szabolcsi, A.(1983), "The possessor that ran away from home", *The linguistic Review*, Vol. 3, pp. 89-102.

Vázquez-Castillo, M.(1996), *The grammar of possession: inalienability, incorporation and possessor ascension in Guarani*, Amsterdam: John Benjamins.

Wurmbrand, S.(2012), "The syntax of valuation in auxiliary-participle constructions", J. Choi, E. A. Hogue, J. Punske, D. Tat, J. Schertz & A. Trueman(eds.), *Coyote working papers: Proceedings of the 29th West Coast Conference on Formal Linguistics (WCCFL 29)*, Tucson: University of Arizona, pp. 154-172.

Wurmbrand, S.(2014), "The merge condition. A syntactic approach to selection", P. Kosta, S. L. Franks, T. Radeva-Bork & L. Schürcks(eds.), *Minimalism and Beyond: Radicalizing the interfaces*, Amsterdam: John Benjamins, pp. 139-177.

Zeijlstra, H.(2012), "There is only one way to agree", *The Linguistic Review*, Vol. 29, pp. 491-539.

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A uniform approach to Guarani possessive constructions and variation in Paraguayan Spanish possessive constructions: a reprojection-based account

Una aproximación uniforme a las construcciones posesivas del guaraní y la variación de las construcciones posesivas del español paraguayo: una explicación basada en la reproyección

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Resumen Se ha demostrado en los últimos años que la gramática generativa puede ser un sostenible marco teórico para comprender fenómenos sociolingüísticos en términos sintácticos. En particular, se ha enfocado desde el punto de vista generativista la variación morfosintáctica del español hablado en las regiones sudamericanas en contacto con lenguas indígenas en múltiples ocasiones (cf. Gutiérrez-Rexach y Sessarego 2014, y las referencias citadas ahí). El presente trabajo propone un análisis de las construcciones posesivas del guaraní y la variación no estándar de las construcciones posesivas del español paraguayo que tienen lugar debido a la interferencia del guaraní, adoptando el modelo de Georgi y Müller(2010) en el que el movimiento de núcleo se realiza mediante la reproyección. Argumentamos que el análisis fundado sobre la reproyección puede proporcionar una explicación uniforme sobre las referidas construcciones posesivas y, además, predecir con acierto las restricciones con respecto a los elementos que denotan el poseedor en el segundo tipo de construcciones.

Palabras clave posesivos, reproyección, movimiento de núcleo, español, guaraní