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## Possessive pronouns as oblique DPs: Linkers and affix stacking

In many familiar European languages, e.g. German or Italian, possessive pronouns agree in  $\phi$ -features with their head noun. We argue that they are genitive pronouns, endowed with an extra  $\phi$ -features set. As such, they are part of a range of phenomena including case stacking and linkers unified under the historical-typological label of *Suffixaufnahme*. We express the formal basis for this unification as the Stacking Generalization (section 1). We then apply our analysis to the narrower domain of facts involving possessive pronouns, specifically in Balkan and Romance languages. We further find that 1/2P pronouns present a richer stacking structure than their 3P counterparts (section 2). We examine this latter fact in the context of a more general phenomenon, whereby the 1/2P vs 3P Person split not only tends to correlate with different case and agreement alignments – but seems to govern the morphological expression of case and agreement itself, in terms of richer vs poorer content (section 3).

**Key words:** oblique case; genitive; possessives; pronouns; linkers; agreement; person.

### 1. Linkers and affix stacking

This section aims at establishing the framework for the discussion of agreeing possessive pronouns to be pursued in later sections. According to a well established historical-typological view (Plank 1995), modifier structures involving both free standing heads (linkers) and stacked affixation (case stacking), are to be unified on the basis of functional considerations. Manzini et al. (to appear) advocate the view that a unification of the same set of phenomena is well motivated on formal grounds. In sections 1.1-1.2 we focus on two instances of linkers and affix stack-



ing, namely Albanian pre-genitival articles and Punjabi agreeing postpositions. We take up phenomena involving possessive pronouns in sections 2 and 3.

Consider the Australian language Lardil in (1). The DP *marun-ngan-ku* ‘boy-GEN-INST’ is inflected both for genitive and for instrumental case, reflecting its status as the possessor (GEN) of the instrumental *maarnku* ‘spear-INSTR’. For Merchant (2006) case stacking amounts to the fact that “a single DP may be the goal for multiple probes”. Richards (2013) in turn speaks of concord as the process responsible for case stacking configurations, where concord is “a series of Agree operations” with the same c-commanding probe. In other words, case stacking is an Agree phenomenon.

- (1) *Ngada latha karnjin-i marun-ngan-ku maarn-ku*  
I spear wallaby-ACC boy-GEN-INSTR spear-INSTR  
‘I speared the wallaby with the boy’s spear’ Lardil (Richards 2013: 43)

Plank (1995) points to a close similarity between case stacking and linkers (Lkr), namely self-standing heads embedding genitives and other modifiers, which have a separate tradition of studies in the generative framework. Within the Indo-European family, the non-agreeing Persian *ezafe* is often at the center of discussions of Lkrs in the generative literature (den Dikken & Singhapreecha 2004; Larson & Yamakido 2008; Richards 2010). In other Iranian languages, notably Kurdish varieties (Rebuschi 2005; Holmberg & Odden 2008; Haig 2011; Franco et al. 2015), *ezafes* vary according to the  $\phi$ -features, case and definiteness of the modified DP, with which they agree. In Balkan languages, linkers are often identical to definite articles (Campos & Stavrou 2005; Franco et al. 2015), for instance in Albanian (2), where the article is enclitic to the noun.<sup>1</sup>

- (2) a. *libr-i i vëdha-it*  
book-MSG.DEF LKR.MSG brother-MSG.OBL.DEF  
‘the book of the brother’  
b. *putr-a e cën-it*  
leg-NOM.FSG.DEF LKR.FSG dog-MSG.OBL.DEF  
‘the leg of the dog’ Albanian

In Plank’s (1995) typological framework (and in the abundant literature he re-

<sup>1</sup> Our data are generally taken from sessions with native informants and are transcribed in a broad IPA. In the case of standardized languages like Albanian, unless otherwise stated in the text, the transcribed data represent the standard language. The Albanian data used in (1) come from Gjirokastrë speakers.



views), there is a clear functional equivalence between case stacking and linkers. In Lardil (1), two cases are suffixed to the possessor, namely its own genitive case and the instrumental case of the DP it modifies. In Albanian (2) the possessor has a single genitive suffix – but it is prefixed by a head bearing  $\phi$ -feature and case specifications, agreeing with those of the modified DP. Manzini et al. (to appear) argue that the functional equivalence is the byproduct of formal identity. In essence, both (1) and (2) result from merging the fully inflected genitive DP with a further layer of  $\phi$ /case/definiteness specification agreeing with the modified DP. The differences correspond to parameters of externalization – namely whether the relevant feature cluster is an affix or a clitic head and whether it is ordered postnominally or pre-nominally. The merger structure is identical, as outlined in (1'–2').

- (1') ... [INSTR [GEN [N *marun-*] *ngan-*] *ku*]    *maarn-ku*  
 (2b') *putr-a* [NOM  $\epsilon$  [GEN [N *cen-*] *it*]]

As it turns out, generative discussions are largely oblivious to the unification of stacking and linkers. Thus Richards (2013) takes an Agree view of case stacking. But Richards (2010), writing on the Persian *ezafe*, supports the thesis that it is a PF device aimed at N-N identity avoidance (Ghameshi 1997). Larson & Yamakido's (2008) conclusion that linkers are to be explained in terms of case seems to hold some promise towards the unification of linkers with case stacking. However these authors argue that linkers play a role as case assigners, allowing Ns, that do not normally licence case, to be construed with DP complements and AP modifiers. On the contrary, a stacked case is a case being assigned (on top of another one). A third stream of literature on linkers (den Dikken & Singhapreecha 2004; Campos & Stavrou 2005) treats them as copulas in the DP domain. Again, it is hard to see how stacked case could fit into this definition. The same can be said of Rubin's (2002) proposal, whereby the linker is identified with a specialized head Mod(ifier), yielding structures of the type [Mod [<sub>YP</sub> Adjunct]] – or of Rebuschi (2005), who proposes a Conj(unction) head to host linkers.<sup>2</sup>

This then leaves proposals that linkers should be understood in terms of Agree (Philip 2012; Franco et al. 2015 for different versions). Thus in Albanian (2) the

<sup>2</sup> Rebuschi's label Conj has semantic implications – thus it is crucial to constructing 'the leg of the dog' as 'the x such that x is a leg and x of the dog'. We will return to interpretive matters in the next section. Von Prince (2008), Höhn (2012), Struckmeier & Kremers (2014) avoid proposing a specialized category for the linker by reducing it to C. In this connection, we should mention that vice versa recent literature takes complementizers (English *that*, French *que* etc.) to be themselves just pronouns, namely relative pronouns (Arsenijevic 2009; Kayne 2010; Manzini & Savoia 2011).



linker agrees in case, as well as in  $\phi$ -features with the head of the possession construct, providing an obvious link with case stacking in (1), described by Richards (2013) himself in term of concord. If so, we have on the one hand a structural similarity between case stacking in (1') and linkers in (2'), while on the other hand at least a subset of analyses of case stacking and linkers treats them both as reducing to or in any case as involving Agree, along the lines of (1''–2'').

- (1'') ... [INSTR [GEN [N *marun-*] *ngan-*] *ku*] *maarn-ku*  
 |\_\_\_\_\_| Agree in INSTR
- (2b'') *putr-a* [NOM  $\epsilon$  [GEN [N *cɛn-*] *it*]]  
 |\_\_\_\_\_| Agree in FSG.NOM

Other phenomena, descriptively intermediate between case stacking and linkers, fall under the constituent structure and Agree criteria suggested here. One is agreeing postpositions in (Central) Indo-Aryan languages, illustrated by Punjabi (3). Thus on *muŋd-* 'boy' in (3) we find, from left to right, the oblique masculine singular inflection *-e-* of 'boy', the *d-* genitive postposition and finally a  $\phi$ -features inflection agreeing with the head noun. Punjabi (3) is like Lardil (1), modulo the presence of stacked case in (1) and of stacked agreement in (3). It is also like Albanian (2), modulo the fact that agreement is externalized by the linker in Albanian and by the inflection on the genitive postposition in Punjabi. This is schematized in (3').<sup>3</sup>

- (3) *muŋd-* *e-* *d-* *i/-ĩã* *kita:b/kitabb-a*  
 boy -MSG.OBL- of- FSG/-FPL book.FSG/book-FPL  
 'the book/the books of the boy' Punjabi
- (3') [NOM [GEN [N [*muŋd-e-*] *d-*] *ĩã*] *kitabb-a*  
 |\_\_\_\_\_| Agree in FPL.NOM

Case stacking in Lardil, linkers in Albanian and agreeing postpositions in Punjabi are entirely productive phenomena. We take Plank's (1995) point that possessive pronouns agreeing with their possessor in Western European languages are just a residual manifestation of the same fundamental structure. Thus German (4a) shows that *uns-er* 'of us, our' can be used as a genitive on its own. In (4b) it is seen

<sup>3</sup> As mentioned in footnote 1, our data set generally derive from sessions with native informants and are transcribed in a broad IPA. The choice of Punjabi derives from the availability of native speakers; specifically the data reflect the Hoshiarpur (India) variety. Standard Hindi has identical facts, as far as we can tell, except that the inflected postposition is *-k(a)*. Von Prince (2008) also connects Hindi *-k(a)* with linkers such as Chinese *de* (cf. footnote 5).



in its usual role as a possessor pronoun agreeing with the head noun *Sieg* ‘victory’.<sup>4</sup>

- (4) a. *Sie gedachten uns-er*  
 they commemorated 1PL-GEN  
 ‘They commemorated us’
- b. *Sie gedachten uns-er-es Sieg-es*  
 they commemorated 1PL-GEN-MSG.GEN victory-MSG.GEN  
 ‘They commemorated our victory’ German (Plank 1995: 75-76)

In the rest of this section, we pursue the parallelism between linker heads as exemplified by Albanian (Franco et al. 2015) and Punjabi-style agreeing postpositions (Manzini et al. to appear).<sup>5</sup> We aim at substantiating our claims about their formal parallelism in terms of phrase structure and Agree and at providing more refined representations of this parallelism. In sections 2 and 3, we proceed to the actual object of the present paper, namely agreeing possessive pronouns, which we will consider with special reference to Eastern Romance and again Albanian.

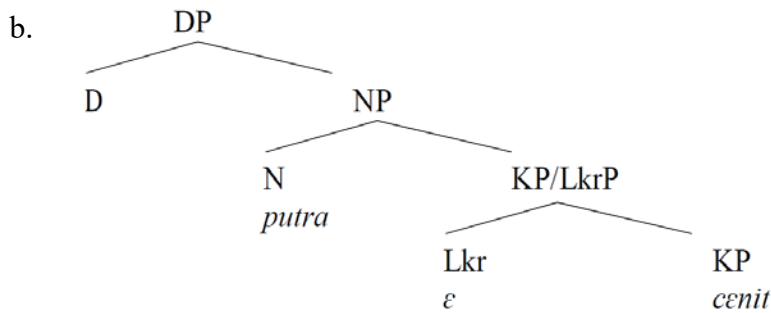
### 1.1 *Linkers in Albanian*

While there is considerable discussion in the literature on the role of Lkrs in the functional architecture of the DP and of the sentence, briefly alluded to above, there is general consensus as to their constituent structure, as partially reflected by (2’) above. Even in Iranian languages, where the so-called *ezafe* is generally enclitic to the modified noun, constituency tests indicate that it forms a constituent with the genitive modifier (Larson & Yamakido 2008; Philip 2012). Hence we end up with a structure like (5b) for Albanian (2b), repeated as (5a).

- (5) a. *putr-a ε cen-it*  
 leg-NOM.FSG.DEF LKR.FSG dog-MSG.OBL.DEF  
 ‘the leg of the dog’

<sup>4</sup> For the sake of completeness we mention that 1/2P singular behave differently. Thus *mein-er* ‘me-GEN’ in contexts like (4a) contrasts with *mein-(\*er)-es* ‘me-MSG.GEN’ in contexts like (4b). As an anonymous reviewer points out, there are obvious Number (singular vs. plural splits) governing pronominal paradigms, besides the Person splits discussed here. Here we are simply following Plank’s discussion; German (and Num splits) are beyond the scope of the present article.

<sup>5</sup> This is not say that we are unaware of non-Indo-European instantiations of the relevant patterns. Chinese *de* is probably the most popular example of linkers on a par with the Iranian *ezafe*. Given the coincidence of linkers with articles in Albanian (in Greek, in Romanian), it is worth mentioning that Simpson (2011) argues for *de* as a grammaticalization of D.



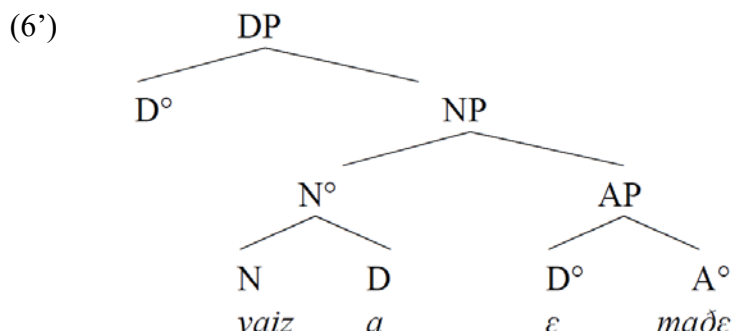
The constituent structure in (5b) leaves open several questions, beginning with the exact categorial content of the nodes notated with the diacritics K (Case) and Lkr. Reasons of morphological continuity would lead us to assign Lkr to the D category. Indeed Albanian Lkrs are traditionally called articles, and coincide with definiteness inflections/postnominal determiners. In Greek, Lkr configurations (traditionally labelled as polydefiniteness), involve the copying of a definite article in front of an adjective or genitive. In Romanian, discussed below in section 2, the pregenitival Lkr is a form of the pan-Romance *l-* determiner; in Aromanian, also discussed in section 2, the preadjectival Lkr is the demonstrative. If the Lkr is a D, however, issues of interpretation arise. In order to tackle this question, let us briefly introduce a more elementary set of data than (2), involving the positioning of Lkrs in front of adjectives, as in (6).

- (6) a. *εrði dial-i i mað*  
       came boy-MSG.DEF LKR.MSG big  
       ‘The big boy came’
- b. *εrði vaiz-a ε mað-ε*  
       came girl-FSG.DEF LKR.FSG big-F  
       ‘The big girl came’
- c. *εrðən diem-t tə məðijɛn-t*  
       came boy.PL-DEF LKR.PL big-PL  
       ‘The big boys came’

If we assign Lkr to the category D, then (6b) takes the shape in (6’). Both word-internal and phrasal structures are indicated; to facilitate processing we notated the word boundary by an X° diacritic. The D element *ε* merged with *maðε* is taken to be a pronominal clitic. Pronominal clitics are normally taken to merge with the main (sentential, nominal, adjectival) spine without projecting. The D element *-a* suffixed to *vaiz-* is understood to be word-internal. The abstract D closing the DP



structure marks the scope position of *-a*.<sup>6</sup>



Let us turn to interpretive matters. We assume that nouns, even non-eventive ones, are predicates and have an argument slot (called the R-role, Williams 1994). In English, the determiner D saturates the argument of N, according to Higginbotham (1985). The saturation is provided by definite nominal inflections in Albanian. Adjectives in turn are predicates. When embedded under DPs their argument slot is ultimately bound by D. According to Higginbotham (1985), this takes place via an operation of theta-identification between the argument slots of N and A.

We propose that in Lkr structures like (6'), the Lkr element  $\varepsilon$  provides a partial saturation for the argument slot of the predicate *maðε* 'big', to be ultimately bound by the D head of the DP. The resulting configuration lays the basis for the common lexicalization of Lkrs and determiners. Lkrs are Ds saturating argument slots of verbal predicates. More precisely, Lkrs are like pronominal clitics in so-called resumptive clitic configurations, in that they serve as bound variables of higher operator Ds. A similar picture of the distribution of determiners and Lkrs is proposed by Lekakou and Szendrői (2012) in their account of Greek. They however associate two different categories with Lkrs (D) and with determiners (Def). We propose that the two elements have the same categorial content and only differ because of their distribution.

In (6'), the higher D, i.e. the determiner, is interpreted in the standard way – i.e. as a quantifier, indicating that there is a unique/familiar/etc. individual (or set of individuals) on which the properties of the NP predicate and those of the sentential predicate overlap. On the other hand, the lower D, i.e. the Lkr, values the argument

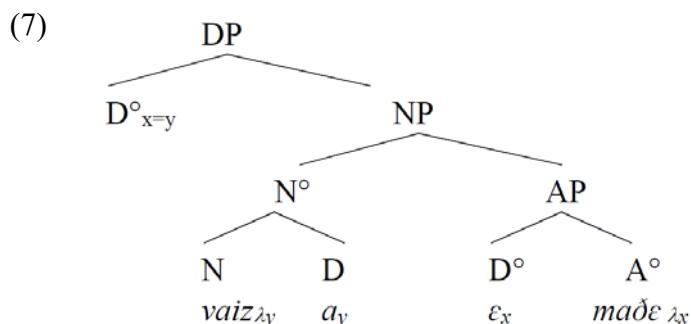
<sup>6</sup> The redundancy between word spines and phrasal spines is addressed by Brody (2003), who proposes eradicating it by Mirror Theory. The matter is beyond the scope of the present work.



slot of A, but does not provide a quantificational closure. The latter is provided by the higher D. One could take the path indicated by Lekakou & Szendrői, namely identifying two semantically separate, though homophonous elements. If we are to maintain the more economical single categorization, we must show that interpretive distinctions are entirely based on distribution.

As already mentioned, the relation between determiner and Lkr Ds is essentially the same as between pronominal clitics and doubling/resumptive clitics within the sentential domain. In Albanian, articles overlap not only with nominal inflections, but also with pronominal clitics (Franco et al. 2015). Two interpretations are available to pronominal clitics. In non-doubling contexts, the clitic has referential import, and is capable of deictic or anaphoric pronominal reference. On the other hand, when a doubling DP is present, the clitic is interpreted as a bound variable of it. At this point of the discussion, we are ready to define what a Lkr D is, as opposed to a determiner D. A Lkr D and a determiner D have in common the fact that both are able to satisfy argument slots. They differ in their position of merger. A determiner D, closing off the DP is an operator, establishing a relation between a restrictor (the NP) and a domain of quantification (a VP). A Lkr D is a bound variable of the higher D – it provides a satisfaction for a theta-role ultimately bound by the higher D.

Let us then consider again the embedding of an AP under a larger DP, for example in (6a), with the structure in (6'). The adjective *madë* 'big' has a single, obligatory argument position, suggested in (7) by the  $\lambda x$  notation (cf. Adger & Ramchand's (2005)  $\Lambda$  feature). The pre-adjectival Lkr  $\varepsilon$  provides a satisfaction of the argument slot of the predicate. The *-a* definite inflection of the noun in turn satisfies the R-role of the noun (here  $\lambda y$ ). Its scope position is notated by the D closing the DP. Following Higginbotham (1985), we assume that adjectival modification involves the identification of the theta-role of the adjective with that of the noun. Therefore, in (7) there is ultimately a single argument, satisfying both the predicate 'girl' and the predicate 'big'. The referent denoted by the complex DP correspondingly lies at the intersection of the 'big' and 'girl' properties.

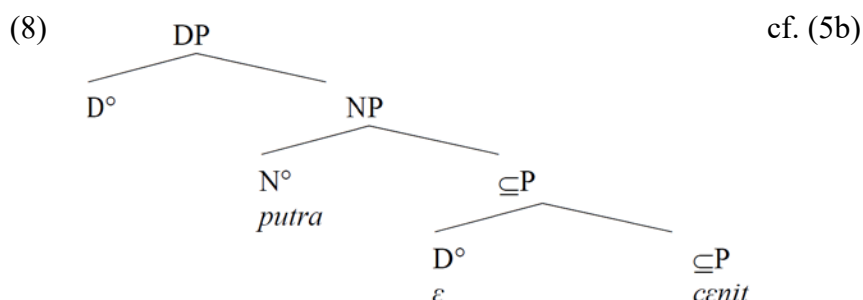




In (6'–7) we may further connect the identification of the two argument slots of the adjective and the noun with the agreement holding between these two categories. These elements are in a c-command configuration, since the noun N c-commands the adjective A and its associated Lkr; furthermore, locality holds, in that all relevant material is within the same DP phase. Standard minimalist Agree further requires an indication of where interpretable and uninterpretable features reside. This may be considered an obvious matter if N and A are involved ( $\phi$ -features interpretable on N, uninterpretable on A). However matters become notoriously complicated if one considers D and N, which both may lay claim to hold the interpretable feature set (Carstens 2001; Danon 2010 among many others).

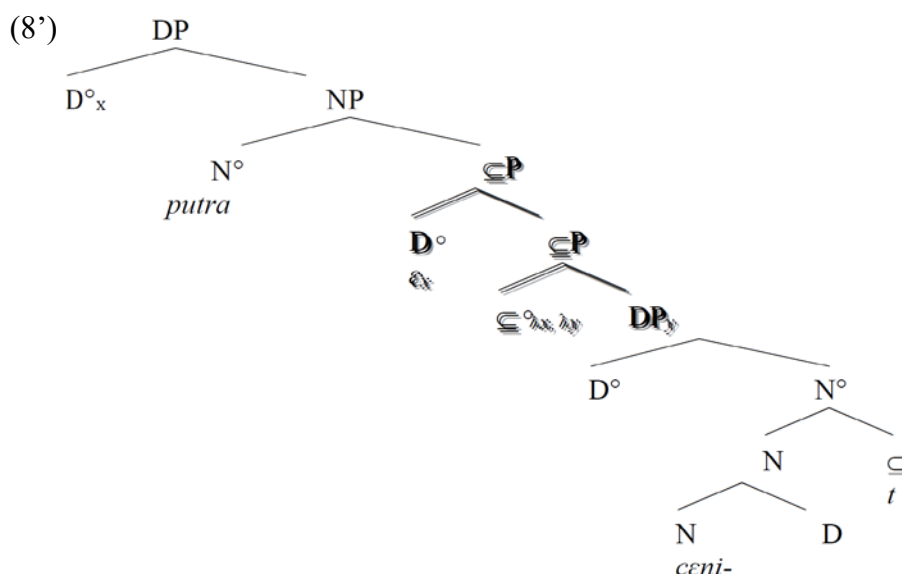
For this reason, Manzini & Savoia (2007; 2011; 2018) assume that at least within the DP, all  $\phi$ -features are equally interpretable. The result of Agree then is not the deletion of uninterpretable features, but the creation of an equivalence set of different occurrences of the same (interpretable)  $\phi$ -feature cluster – where each equivalence set individuates a single referent. Thus in structure (7), abstracting from any pre-encoding of features and of probe/goal status, Agree applies under c-command, locality and identity. The Lkr D agrees with A, N agrees with the Lkr D, and so on, while  $\phi$ -features are interpretable throughout and the resulting sequence of occurrences individuates a single referent.

Turning next to the actual subject of this contribution, namely pre-genitival Lkrs, we retain the traditional characterization of genitives as possessors. Following Belvin & den Dikken (1997), we take the relevant characterization of possession to be an inclusion one, that we notate as  $\subseteq$ . Under this proposal, the representation of an Albanian Noun-genitive DP structure, for instance (5a), is (8); see (8') for the same structure in more detail. We adopt the same position and structure for pre-genitival Lkrs as for pre-adjectival ones. In other words, they are clitic Ds merged with the main spine and not projecting. The genitive *cenit* 'of the dog' in turn is taken to be a  $\subseteq P$ , given the  $\subseteq$  content we impute to genitive case. The  $\subseteq$  content establishes a possessor/inclusion relation such that its complement, *the dog*, possesses/includes the head DP *the leg*.



We indicate the rough semantic types associated with the constituents in (8) (predicate or argument) in (8'), where we also articulate word-internal structure. In order to understand the structure of *cenit* it must be kept in mind that the *-t* ending contributes both definiteness and obliqueness to the structure.<sup>7</sup> Under standard assumptions, the word internal structure is mirrored by phrasal structure (cf. fn 6). In (8') we assume that the definiteness content of *-t* projects (the lowest) DP in the syntax, while the oblique content of *-t* projects  $\subseteq$ P. The crucial part of the structure, highlighted in (8'), is that immediately surrounding  $\subseteq$ , which as already informally indicated is a two-place predicate. The role of the pre-genitival Lkr in (8') is essentially the same as that of the pre-adjectival Lkr, namely to provide a partial saturation of an argument slot. In this instance, the predicate of which it satisfies an argument is the inclusion predicate  $\subseteq$ . Though the external argument is ultimately supplied by the head noun *putra* 'the leg', in Albanian it is necessary to provide a saturation of the external argument of  $\subseteq$  within the embedded complement  $\subseteq$ P, namely by the Lkr  $\varepsilon$ . This is parallel to the analysis provided in (7) for pre-adjectival Lkrs.

<sup>7</sup> An extensive discussion of the morphology of Albanian nominal categories can be found in Manzini & Savoia (2011; 2018) and references quoted there.



In contrast with many of the analyses referred to at the outset, the linker is taken to be neither an elementary relator (the copula of den Dikken & Singhapreecha 2004) nor an elementary operator (the conjunction of Rebuschi 2005), though we agree that an elementary predication and a conjunctive (intersective) interpretation are involved. Rather, the linker is argument-like in that it provides a partial satisfaction of a predicate. Specifically, the predicate that it provides a saturation of is a relator  $\subseteq$ , which we identify with the traditional genitive. It would have been possible for us to adopt a neutral label K or perhaps Rel. However we offer the  $\subseteq$  characterization for the sake of falsifiability. The notion of inclusion that we have in mind is the “zonal inclusion” in terms of which Belvin & den Dikken (1997) characterize the content of the verb *have*. The latter extends to roughly the same semantic relations as genitive structures (‘I have blue eyes/a hat’ but also ‘I have a worry/a thought/three children’). The reader is referred to Belvin and den Dikken’s discussion, as well as to the discussion by Manzini & Franco (2016) concerning  $\subseteq$ .

As for agreement, the same points raised in the discussion of pre-adjectival Lkrs in (7) could be repeated for pre-genitival Lkrs in (8'). In (8') the N *putra* ‘the leg’ and the D linker  $\varepsilon$  are in a c-command relation; locality also holds, since all elements involved are inside the DP phase. Therefore the basic configuration for Agree is satisfied. At the same time, standard minimalist theory would require  $\phi$ -features to be characterized as either interpretable or uninterpretable. In relation to (7) we have briefly commented on the difficulties connected with establishing (un)interpretable status within DPs. We therefore tentatively adopted the idea that



at least within DPs all  $\phi$ -feature sets are interpretable and that the result of agreement is best conceived as the creation of a set of occurrences of identical feature clusters denoting a single referent at the SEM interface.

Finally, under c-command and locality (and in the absence of any pre-encoded probe/goal status) one could in principle envisage the Lkr D agreeing with the genitive. We hinted at the fact that the role of Lkr is to provide a partial satisfaction of the external argument of  $\subseteq$  within the maximal projection of the predicate. We develop this intuition into the Stacking Generalization in section 1.2. The latter is responsible for the fact that the Lkr agrees with the head noun, i.e. it identifies the same referent. At the same time, Lkrs agreeing with the embedded noun, though rare, are not impossible; Aromanian in section 2 will provide an example.

## 1.2 Case and agreement stacking in Punjabi

Next, we turn to the Punjabi genitival construct illustrated in (3). In Punjabi (3), a genitive modifying a head noun bears its own  $\phi$ -features inflection, followed by the postposition *d-* and then by a  $\phi$ -features inflection agreeing with the head noun. Some more examples are provided in (9). In (9a) *munḍ-* ‘boy’ bears the masculine plural inflection *-ea*, followed by the genitive *-d*, followed by a masculine singular inflection *-a* which agrees with *darwajj-a* ‘door’. In (9b-b’) the inflection following *-d* varies according to whether *kitab* ‘book’ is in the singular or plural.

- (9) a. *Munḍ-ea- d-a darwajj-a nam-a a*  
 boy-MPL.OBL- of-MSG door-MSG new-MSG be  
 ‘The boys’ door is new’
- b. *Munḍ-e- d-i kitab nam-i a*  
 boy-MSG.OBL- of-FSG book.FSG new-FSG be  
 ‘The boy’s book is new’
- b’. *Munḍ-ea- d-ĩã kitabb-a nam-ĩã a*  
 boy-mpl.obl- of-FPL book-pl new-FPL be  
 ‘The boys’ books are new’

Punjabi

In order to understand the Punjabi data, it is useful to have a sketch of Punjabi morphology at hand (Bathia 2000). In Punjabi, there are two nominal classes, conventionally masculine and feminine. A sub-set of masculine nouns present the inflection *-a* in the non-oblique singular form (10a) and *-e* in the oblique singular (followed by postposition) and in the non-oblique plural (10b). The oblique plural masculine (followed by postposition) is in turn realized as *-ea* (10c). Case postposi-



tions, like genitive *de*, dative *nu* or the *ne* ergative suffix all attach to the inflectional oblique, as exemplified in (9) for *muṇḍ-e/ muṇḍ-ea* followed by *-d*. The feminine does not display a specialized oblique form. At least some feminine nouns present the inflection *-a* in the plural as in (11a–a’); another subset of them alternates between a singular with final *-i* and a plural with *-ĩã*, as in (11b–b’).

- (10) a. *muṇḍ-a* ‘boy-MSG’  
       b. *muṇḍ-e* ‘boy-MSG.OBL/boy-MPL’  
       c. *muṇḍ-ea* ‘boy-MPL.OBL’
- (11) a. *kita:b* ‘book.FSG’  
       a’ *kitabb-a* ‘book-FPL’  
       b. *kur-i* ‘girl-FSG’  
       b’ *kur-ĩã* ‘girl-FPL’

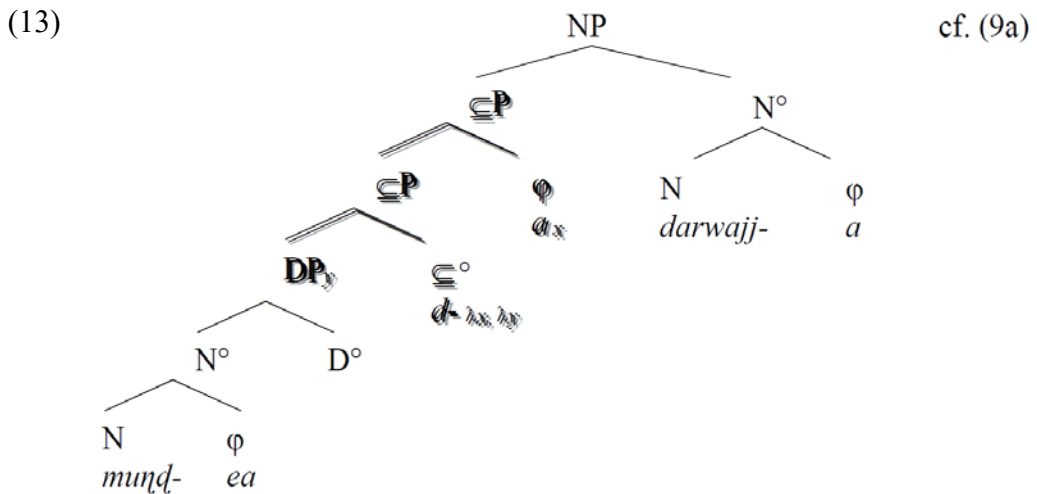
Since in the masculine, direct case is differentiated from oblique we may wonder whether this case distinction is recorded by the feature set which inflects the genitive postposition. The answer is positive. Consider for instance the examples in (12). The most embedded genitive, i.e. ‘of the boy’ agrees with the head it modifies, which in turn is a genitive i.e. ‘of the brother(s)’. Therefore the inflection on the genitive postposition *d-* is oblique masculine (singular or plural) *-e*. This contrasts with (10a) where the masculine singular head of the construction is in the absolute form (direct case) and the agreement following *d-* is therefore the masculine singular (non-oblique) *-a*.

- (12) a. *Muṇḍ-e-*      *d-e*      *prah-d-i*      *kitab*      *nam-i*      *a*  
       boy-MSG.OBL- of-M.OBL brother.MSG-of-FSG book.FSG new-FSG be  
       ‘The book of the boy’s brother is new’
- b. *Muṇḍ-e-*      *d-e*      *prama-d-i*      *kitab*      *nam-i*      *a*  
       boy-MSG.OBL- of-M.OBL rother.MPL-of-FSG book.FSG new-FSG be  
       ‘The book of the boy’s brothers is new’

From a typological point of view, the fact that agreement on *d-* is sensitive to direct vs. oblique features strengthens the continuity between the phenomena we are describing in Indo-Aryan and the Albanian Lkrs, equally sensitive to case (Franco et al. 2015). Following the discussion of Albanian (8’), we take genitive case to correspond to the part-whole elementary predicate, notated  $\sqsubseteq$ , whereby a possessor genitive is essentially a whole including a part (the possessum head noun). Thus, we propose the structure in (13) for (9a). Following the literature (e.g. Payne 1995) we take Punjabi *d-* to be a phrasal head (a postposition). The highlighted portions of the trees in (8’) and in (13) present a considerable degree of parallelism, modulo



the fact that the Albanian structure (8') is right branching and the Punjabi structure is left branching.<sup>8</sup> Recall that in Albanian, the definite nominal inflection was categorized as D. However in Punjabi, as is more generally the case in Indo-Aryan languages, the inflected noun is in principle compatible with both a definite and an indefinite reading. Because of this it appears to be more appropriate to impute to the Punjabi inflections only  $\varphi$ -feature properties and correspondingly categorize them as  $\varphi$ , as in (13).<sup>9</sup>



The structure in (13) is interpreted as saying that a  $\subseteq$  relation holds between the argument to which the genitive morphology attaches, i.e. ‘the boys’ (the whole or possessor), and the head DP ‘the door’ (the part or possessum). Under the account we just gave of it, the role of the suffixal agreement *-a* in the structure in (13) is the same played by the Lkr in Albanian. This role is to provide an instantiation (a copy) of the external argument of the genitive relation  $\subseteq$  internal to the maximal projection of  $\subseteq$  itself. In other words, we conclude that Lkrs and agreeing possessive postpositional phrases are unified by the generalization in (14).<sup>10</sup>

<sup>8</sup> It may be more correct to construe *d-a* in (13) as a morphological constituent [ $\subseteq$  *d* [ $\varphi$  *a*]], embedded as sister to NP. The nature of the logical relations involved does not change (see the discussion below).

<sup>9</sup> Since the only occurrences of the oblique masculine inflections, e.g. *-ea* in (13), are as bound forms selected by postpositions, e.g. *d-* in (13), it seems unlikely that they bear  $\subseteq$  content; rather they also seem to have  $\varphi$  content (sensitive to selection by a  $\subseteq$  element).

<sup>10</sup> Manzini et al (to appear) extend the generalization from the  $\subseteq$  predicate to the other predicates displaying linkers namely APs and relative clauses. An anonymous reviewer asks an interesting question, namely whether the Stacking generalization may be extended to all predicates, say VP/vP,

(14) *Stacking generalization*

Both arguments of the  $\subseteq$  predicate are instantiated within the  $\subseteq P$  phrase.

In the rest of the paper, we zoom in on possessive pronouns. First, we will consider Lkr languages including Albanian, Romanian and Aromanian – and show that these languages supplement Lkrs in front of 1/2P genitive pronouns with suffixal agreement. This suggests that 1/2P pronouns present a doubling of the morphology satisfying the Stacking Generalization in (14). Therefore it is natural to construe agreement on possessive pronouns in familiar Western European languages, e.g. in German (4), as the last residue of (14). In section 3, we discuss the interaction of (14) with referentiality hierarchies and specifically with the Person split.

## 2. Eastern Romance and Albanian possessives: Linkers and agreement cooccurring

Pre-genitival Lkrs are attested in Eastern Romance, including standard Romanian, where the Lkr agreeing with the head noun has the familiar *l-* morphology of Romance Ds, namely *al* (msg), *a* (fsg), *ai* (mpl), *ale* (fpl), as seen for instance in (15).

- (15) a. *un pahar al băiat-ul-ui*  
           a glass      LKR-MSG    boy-MSG.DEF-OBL  
           ‘a glass of the boy’
- b. *două cămăși ale băiat-ul-ui*  
           two shirts-PL    LKR-FPL    boy-MSG.DEF-OBL  
           ‘two shirts of the boy’

Romanian

The structure in (16) for Romanian (15b) parallels those in section 1. For reasons of space, we only indicate the structure corresponding to the highlighted portion of tree in (8'). In (16), the  $\subseteq$  possession/inclusion predicate is introduced by oblique case, represented by the suffix *-ui* of *băiat-ul-ui* ‘of the boy’. The internal argument of  $\subseteq$  is the DP to which the oblique case attaches, i.e. the possessor, whose D content is introduced by the *-ul-* suffix. The Lkr *ale* is a D which provides a lexicalization of the external argument of  $\subseteq$ , i.e. the possessee and acts essentially

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but also TP (assuming saturation of the EPP at the C-phase). More specifically, s/he asks whether clitic doubling phenomena generally may be construed as stemming from the need of an  $X^{\max}$  internal saturation. It is indeed implicit in our proposal that all doubling is in fact a matter of partial local satisfaction of argument properties of predicates – and the same may even more generally be true of agreement. We acknowledge the relevance and significance of these issues, which however are beyond the scope of the present contribution.



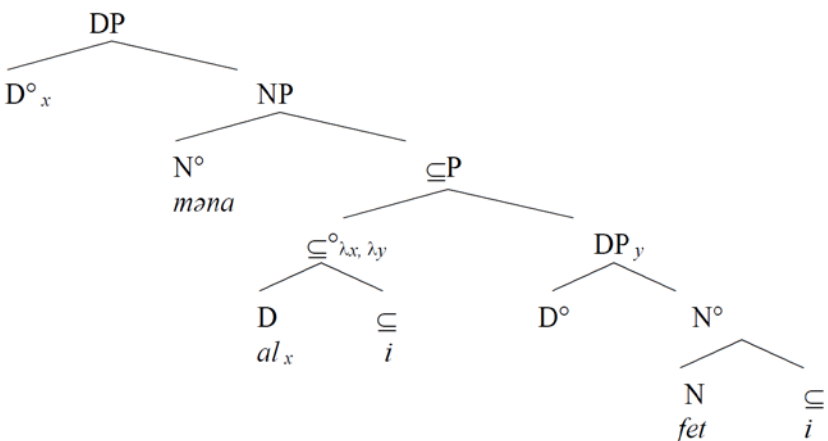
as a bound variable (i.e. a doubling clitic) of the head noun or more precisely of the quantifier ‘two’ closing it.

- (16) *două kăməși* [<sub>⊆P</sub> *ale* [<sub>⊆</sub> [<sub>DP</sub> *băiat-ul-ui*]]]] cf. (15b)

Aromanian differs from Romanian, in that pre-oblique Lkrs agree with the oblique DP, as in (17). In (17) the head N remains fixed, namely *məna* ‘hand’; the form of the Lkr changes according to whether the oblique DP is feminine singular (Lkr *ali*) or masculine/plural (Lkr *o*).<sup>11</sup>

- (17) *mən-a o fitfor-u/ al-i fət-i*  
the hand LKR boy-MSF.DEF/ LKR-FSG.OBL girl-FSG.OBL  
‘the hand of the boy/the girl’ Aromanian

The gist of structure (18) for example (17) is that the Aromanian Lkr *ali* is preposition-like, helping to introduce the oblique case, i.e. the  $\subseteq$  relation.

- (18)  cf. (17)

In a typological perspective, one may want to connect this to the fact that Aromanian has a much reduced inflectional case declension, which for instance does not make any case distinctions in the masculine singular, e.g. *fitfor-u* ‘the child’ in (17). In any event, there is a clear connection with the fact that the Lkr of Aromanian precedes not only obliques in adnominal modification (i.e. the traditional genitives), but all obliques, including goals in ditransitive constructions (i.e. the tradi-

<sup>11</sup> Aromanian data are from speakers of Libofshë (South Albania). Perfect minimal pairs or perfectly matching examples are not always available to us. An anonymous reviewer notices that inalienable possession is involved in (17). The Albanian example *putra e cenit* ‘the dog’s leg’ also involves inalienable possession, while the Punjabi example *munḑeada darwajja* ‘a/the boy’s door’ involves alienable possession. In all languages considered alienable and inalienable possession are treated alike, as they also are in English.



tional datives, see Manzini & Savoia 2014a; 2018). In a theoretical perspective, what is happening is fairly clear; in Romanian or Albanian the D content of the Lkr projects; in Aromanian, what projects is its  $\subseteq$  specification. Generalizing, we would predict that adpositions or inflections carrying elementary relator content may project their label (P,  $\subseteq$ , etc.) or else let the D label of their argument project. This matter cannot be pursued here, but see Manzini & Franco (2018).

Another, related issue raised by Aromanian concerns our core proposal that a Lkr “is argument-like in that it provides a partial satisfaction of a predicate”, as stated immediately below the Albanian structure in (8’). Given the Aromanian structure in (18), the overall outcome of our discussion seems to be that a unified characterization of the descriptive class Lkr cannot be provided. In itself, this is not problematic in the sense that we do not generally expect theoretical analysis to leave descriptive classes unscathed. However, external evidence strongly connects the Aromanian pregenitive element with canonical Lkrs, as in Albanian and Romanian. Indeed the structure in (18) contains exactly the same elements as the structure in (8’). Specifically there is a D element acting as a partial saturation of  $\subseteq$  within the the genitive phrase ( $\subseteq$ P), as required by the Stacking Generalization; this is the *al-* base of the descriptive Lkr *ali*. In short, only the labelling algorithm differs, as just discussed.<sup>12</sup>

Our object of study here is the fact that in genitive contexts, splits are observed between 1/2P possessive pronouns, and 3P pronouns and nouns, both in Romanian and in Aromanian. In Romanian all possessors must be preceded by a Lkr, as in (19a), but the 1/2P possessive pronoun is set apart by the fact that it agrees with the head noun *casa* ‘house’. Thus it is in the feminine singular independently of the understood gender of the speaker. Under adjacency with a definite noun, the Lkr is deleted, as in (19b) – still the 1/2P pronoun must bear agreement with the modified noun.

- (19) a. *cas-a*                      *de vacanta*    *a*            *me-a/*    *professor-ului*  
           house-FSG.DEF for vacation   LKR-FSG my-FSG/ professor-MSG.OBL.DEF  
           ‘my/the professor’s vacation home’
- b. *cas-a*                      *me-a/*            *professor-ului*  
           house-FSG.DEF    mine-FSG/    professor-MSG.OBL.DEF

<sup>12</sup> If a parameter is involved, the value chosen by each given language is not (necessarily) predictable. Manzini & Franco (2018) argue that the parameter is responsible for the fact that crosslinguistically obliques may agree or not agree with a verb (D and  $\subseteq$  projecting, respectively). The Romance oblique clitic *en/ne* ‘of it/them’ (Belletti & Rizzi 1996) is one of several cases in point.



‘my/the professor’s house’

Romanian

In Aromanian (20), the masculine/plural 3P oblique is preceded by the Lkr *o*. On the other hand, 1/2P pronouns are associated with possessive forms agreeing with the head N. For instance, the inflection on the possessives in (21a) and (21b) differs depending on the number of the head noun ‘book(s)’; the same holds of (21c) and (21d). These 1/2P possessive pronouns are preceded by the invariable Lkr *a*.<sup>13</sup>

(20) *librə o ts-ui/ts-uȳɔɾə*

books LKR he-MSG.OBL.DEF/they-PL.OBL.DEF  
‘his/their books’

(21) a. *libr-a/ mən-a a mɛ-u/ta-u/nɔst*  
book-FSG.DEF/ hand-FSG.DEF LKR my-SG/your-SG/our  
‘my/your/our book/hand’

b. *libr-ə a mɛ-li/ta-li/nɔst-i*  
book-PL LKR my-FPL/your-FPL/our-PL  
‘my/your books’

c. *kɛn-li a ʝɛ-u/to-u/nɔst*  
dog-DEF LKR my-SG/your-SG/our  
‘my/your/our dog’

d. *kɛʝn-li a ʝɛ-ʌi/to-ʌi/nɔst-i*  
dog.PL-DEF LKR my-MPL/your-MPL/our-PL  
‘my/your/our dogs’

e. *ar vənɪt frat-ʌi/ surɛr-li a tɛ-ʌ/ ta-li*  
they.have come brother-MPL.DEF/sister-FPL.DEF LKR your-MPL/your-FPL  
‘Your brothers/sisters came’

Aromanian

<sup>13</sup> In Romanian the Lkr element in front of genitives depends on the presence of a case inflection on them; in its absence, for instance in (i), the preposition *a* is used (Cornilescu 1992; Giurgea 2012). The pregenitival *a* element in front of 1/2P pronouns in (21) could be the same preposition *a*.

(i) *haine a mai multe persoane*  
clothes to several people  
‘clothes of several people’

Romanian

On the other hand, the Romanian literature contains complex discussions on the internal analysis of the Lkr series, *a-l*, *a-i*, *a-l-e*. Some scholars take *a* to be the preposition ‘to’ (Grosu 1994) while others consider *a* to be an invariable nominal base N to which the enclitic articles attach (d’Hulst et al. 2000; Dobrovie-Sorin et al. 2013). In (21) therefore *a* could be an invariable Lkr, as indicated in our glosses.



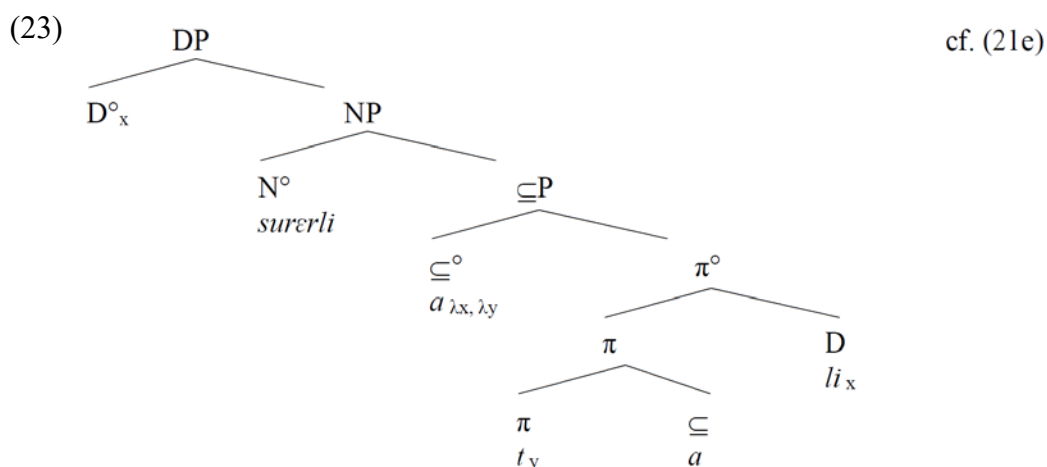
The examples in (22) further show agreement of the 1/2P possessive pronoun with an oblique head noun.

- (22) a. *i o dād ali sor-i a ta-u*  
 to.her it I.gave LKR sister-FSG.OBL LKR your-SG  
 ‘I gave it to your sister/sisters’
- b. *i o dād o surer-li a ta-li*  
 to.them it I.gave LKR sister-FPL LKR your-FPL  
 ‘I gave it to your sister/sisters’
- c. *i o dād o fratf-ău a to-ăi*  
 to.them it I.gave LKR brother-MPL.OBL.DEF LKR your-MPL  
 ‘I gave it to your brothers’
- Aromanian

According to Dobrovie-Sorin & Giurgea (2011), Romanian agreeing possessives display both an inherent set of  $\phi$ -features as well as a set of  $\phi$ -features that they characterize as inherited. Giurgea (2011) further suggests that in Romanian the agreement morpheme does not attach directly to the root, but the root is first extended by a case suffix. Therefore the agreement morpheme of agreeing possessors attaches to a Case projection. We adopt this line of analysis translating it into present terminology.

Consider the Aromanian example in (21e). In present terms, the structure of *surerli a tali* ‘the sisters of yours’ is as in (23), adopting the idea that the extension of the 2P root *t-* by *-a* is a form of genitive marking. In present terms, the genitive case is the relational predicate  $\subseteq$  taking as its internal argument the 1/2P pronoun ‘you’, represented by the root *t-* and as its external argument the head N *surer-li* ‘the sisters’. The *-li* ending on *surer-li* is doubled on *ta-li*, where it provides a representation of the external argument of the  $\subseteq$  predicate internal to the maximal projection  $\subseteq P$ .<sup>14</sup>

<sup>14</sup> To avoid confusions between P(erson) and P(hrase) or P(reposition) we notate person as  $\pi$ .



Under the account we just gave of it, the role of the suffixal agreement *-li* in the Aromanian structure in (23) is the same played by the Lkr of the Albanian or Romanian type, i.e., agreeing with the head noun. More precisely the *-li* suffixal agreement provides an instantiation (a copy) of the external argument of the genitive relation  $\subseteq$  which is internal to the maximal projection  $\subseteq P$ . Thus in Aromanian, with 1/2P possessors, suffixal agreement insures the satisfaction of the Stacking generalization in (14). In Romanian, the presence of both a Lkr agreeing with the head noun and of a suffixal agreement for instance, in (19a), *a me-a* ‘LKR-FSG my-FSG’ results in a doubling of the structures satisfying the Stacking Generalization.

The same doubling properties displayed by 1/2P possessors in Romanian hold in Albanian. By way of an example, we illustrate the 1/2P singular forms from the Shkodër variety in (24–25).<sup>15</sup> In keeping with the analysis suggested in Demiraj (1986), we segment these forms into an initial element *j/e/t* which is sensitive to the case and  $\phi$ -features of the head noun, like other Lkrs. This is followed by an element fixing the 1/2P referent and by a final agreement element occurring at least with feminine head nouns. Thus the internal structure of possessives in Albanian, as in Aromanian (23), includes at least three parts, namely an initial Lkr, the 1/2P pronominal element and an agreement inflection. The morphemes carrying 1/2P reference consist of a simple radical form in singular DPs in (24). However, in plu-

<sup>15</sup> The main dialectological division within Albanian is between Tosk dialects, including the standard, and Geg dialects, to which the Shkodër variety belongs. While our transcribed and morphologically analysed data come from Shkodër speakers, essentially the same facts hold in standard Albanian.

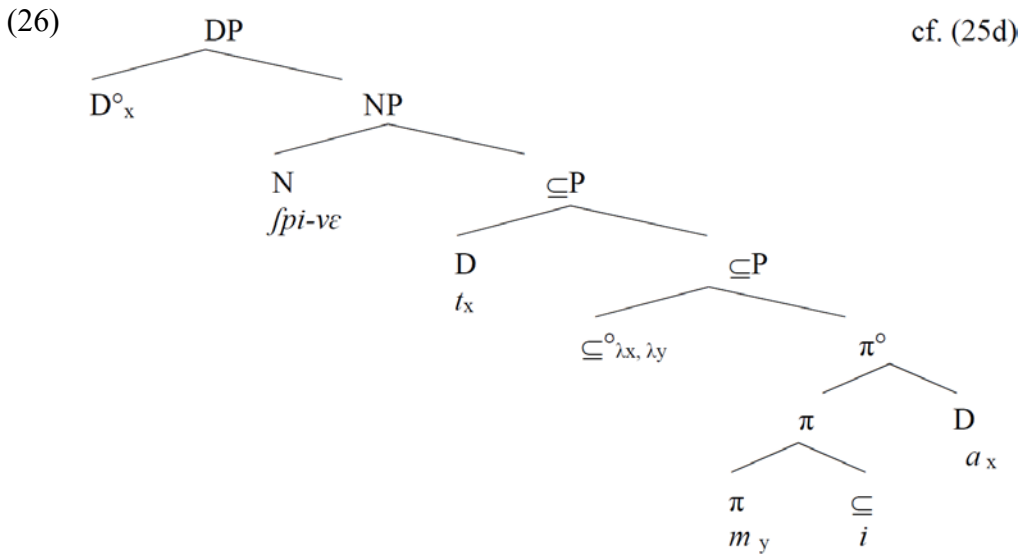


ral DPs in (25) we can further distinguish the *m-*, *tu-* root from an *-i* inflection which we may identify with a  $\subseteq$  genitive morpheme.

- (24) a. *tʃɛn-i*                      *j*                      *em/at*  
           dog-MSG.DEF    LKR    my/your  
           ‘my/your dog’
- b. *tʃɛn-in/*                      *tʃɛn-it*                      *t*                      *em/and*  
           dog-MSG.ACC.DEF/    dog-MSG.OBL.DEF LKR    my/your  
           ‘(to) my/your dog’
- c. *ʃpi-a*                      *j*                      *em-e/ɔt-e*  
           house-FSG.NOM.DEF    LKR    my-F/your-F  
           ‘my/your house’
- d. *ʃpi-n/*                      *ʃpi-s*                      *t*                      *em-e/and-e*  
           house-ACC.DEF/house-FSG.OBL.DEF    LKR    my-F/your-F  
           ‘(to) my/your house’
- (25) a. *tʃɛj-t*                      *e*                      *mi/tui*  
           dog-PL.DEF    LKR    my/your  
           ‘my/your dogs’
- b. *tʃɛj-vɛ*                      *t*                      *mi/tui*  
           dog-PL.OBL    LKR    my/your  
           ‘to my/your dogs’
- c. *ʃpi-t*                      *e*                      *mi-a/tui-a*  
           house-PL.DEF    LKR    my-FPL/your-FPL  
           ‘my/your houses’
- d. *ʃpi-vɛ*                      *t*                      *mi-a/tui-a*  
           house-PL.OBL    LKR    my-FPL/your-FPL  
           ‘to my/your houses’

Geg Albanian (Shkodër)

The structure in (26) for (25d) differs from Aromanian (23), in that the Albanian Lkr belongs to the core class of Lkrs agreeing with the head noun and hence satisfying the Stacking generalization in (14). If we put this together with the analysis of the agreement suffix on the 1/2P pronoun in (23), we end up with a structure which satisfies the Stacking generalization in (14) twice. Indeed in (26) the external argument of  $\subseteq$  is introduced twice within the possessor phrase, once via the Lkr element and then again via the suffixed agreement. This allows us to clarify that Lkrs and suffix stacking are not in complementary distribution; this is in fact not implied by the generalization in (14).



In the structure in (27) for (24c) it is more difficult to segment away a  $\subseteq$  morpheme. However, the essence of what we have called the Lkrs/agreement stacking generalization holds, namely the presence of both arguments of the possessive relation inside the possessive phrase, leading us to postulate the presence of an abstract  $\subseteq$ . The possessor is of course represented by the 1/2P pronoun, while the possessee (ultimately the head noun) is represented by the Lkr and by the inflectional agreement.

(27)  $[DP \text{ } \textit{spia} \quad [\subseteq P \text{ } j_x \quad \subseteq_{\lambda x, \lambda y} \text{ } [1/2\pi \text{ } [em_y] \text{ } e_x] ] ]$  cf. (24c)

In the Slavic languages, possession is externalized by means of adjectival formations (Corbett 1995; Pesetsky 2013). One may therefore wonder whether the 1/2P agreeing possessives reviewed in this section for Eastern Romance and Albanian should be construed as adjectives rather than as genitives. At least in Eastern Romance, this option is excluded for empirical reasons. Romanian has Lkrs only in front of genitives and not in front of adjectives. The presence of Lkrs in front of 1/2P possessive pronouns proves that they are genitives, rather than adjectives. In Aromanian, both genitives and adjectives are preceded by Lkrs. However two different morphological series of Lkrs are involved; pre-genitival linkers are *o/ali* as in (17), while pre-adjectival linkers are identical to the distal demonstratives, *atseu* etc., as in (28) (Campos 2005; Manzini & Savoia 2014a; 2018). It is true that the *a* element introducing possessives does not exactly overlap with the pregenitival Lkr (*o/ali*), but it is clear that it is morphosyntactically related to them (cf. fn 13), whereas it is completely unrelated to the pre-adjectival (demonstrative) series in



(28). The fact that Eastern Romance bases *me-*, *ta-*, *nost(r)-*, *vost(r)-* are best construed as genitives does not necessarily carry over to their characterization in other Romance languages, but puts the burden of proof on alternative derivations, specifically an adjectival one.

- (28) a. *fitfor-u*            *(a)tse-u*        *mar-u*  
           boy-MSG.DEF    LKR-MSG        big-MSG  
           ‘the big/tall/short boy’
- b. *fët-a*                *ats-ε*            *mar-ε*  
           girl-FSG.DEF    LKR-FSG        big-FSG  
           ‘the big/tall/short girl’

Summarizing so far, in section 1 we examined Lkrs in Albanian and agreeing postpositions in Punjabi concluding that the phenomena collected under the typological label of *Suffixaufnahme* admit of a structural unification. We expressed the formal basis for this unification as the Stacking Generalization in (14). In section 2 we applied our understanding of affix stacking phenomena to a narrow domain of facts, involving possessive pronouns, specifically 1/2P ones. We also found that in Eastern Romance and in Albanian, 1/2P pronouns present a richer stacking structure than their 3P counterparts.<sup>16</sup> The Person split will be briefly addressed in section 3.

### 3. The Person split problem

The fact that in Romanian, Aromanian, Albanian, 1/2P pronouns present a richer stacking structure than their 3P counterparts (section 2) resonates with a more general phenomenon, whereby the 1/2P vs 3P Person split seems to govern the morphological expression of case and agreement in pronominal paradigms as a whole. Many Romance languages which lack inflectional case in nouns, preserve it in the

<sup>16</sup> Similarly in Italian, agreeing 1/2P plural possessive pronouns alternate with the non agreeing 3P oblique plural pronoun *loro* (Cardinaletti & Starke 1999; Manzini 2014 for differing views) recreating the kind of paradigm that we have seen in Romanian, Aromanian and Albanian. In the singular, the 3P possessive pronoun also agrees with the possessee; interestingly, it is not formed with the *l-* base but with the (suppletive) *s(u)-* base. Why there should be a suppletion in the 3P is a matter which we leave open for future research. As for the *s-* morphology, Manzini & Savoia (2007; 2011) simply propose that it has free variable content, compatible with 3P denotation under appropriate contextual restrictions (which include the Spurious *se* of Spanish and the middle-reflexive *si*). French and Spanish also have an *s-* form of agreeing 3P possessive pronoun, both for singular and plural.



pronominal system. More specifically case may be preserved only on 1/2P pronouns (Loporcaro 2008; Manzini & Savoia 2014b on Italian varieties). Though Romance languages normally lack case in nominal paradigms (with the obvious exception of Eastern Romance), they may have up to four cases in the 1/2P paradigm. (29) illustrates the 1/2P case paradigm of the Southern Italian variety of Sasso di Castalda. Only Participant pronouns have case. Non-Participant pronouns are not differentiated for case, nor are plural Participant pronouns, presumably because their denotation includes Speaker, Hearer but also ‘others’.

| (29) | Nom       | P Obj(Acc)        | a Obj(Dat) | ku Obj(Instr) |
|------|-----------|-------------------|------------|---------------|
| 1sg  | <i>ji</i> | <i>me</i>         | <i>mi</i>  | <i>mikkə</i>  |
| 2sg  | <i>tu</i> | <i>te</i>         | <i>ti</i>  | <i>tikkə</i>  |
| 3sg  |           | <i>iddə/ edda</i> |            |               |
| 1pl  |           | <i>nujə</i>       |            |               |
| 2pl  |           | <i>vujə</i>       |            |               |
| 3pl  |           | <i>lɔrə</i>       |            |               |

Apart from the nominative form, illustrated in (30a), Sasso has three forms embedded in different prepositional contexts. One form is specialized for embedding under the preposition *a* ‘to’, as in the canonical dative context in (30b’). Apart from this, *a* phrases also lexicalize Differential Object Marking (DOM) of human/definite objects, hence of 1/2P pronouns, as in (30b).<sup>17</sup> In turn, what we may call the instrumental/locative form is specialized for embedding under a few prepositions that include *ku* ‘with’, as in (30d). The remaining prepositions embed what we take to be the ordinary accusative form of the 1/2P pronoun, as in (30c).

- (30) a. *ijə rɔrmə/ tu ruərmə/ jiddə rɔrmə*  
           I sleep/ you sleep/ he sleeps
- b. *camənə a mmi/tti/jiddə*  
      they.call to me/you/him  
      ‘They call me/you/him’
- b’. *u rainə a mmi/tti/jiddə*  
      it they.give to me/you/him  
      ‘They give it to me/you/him’
- c. *l a ffattə pə mme/tte/jiddə*  
      it he.has done for me/you/him

<sup>17</sup> Recent approaches take the coincidence of DOM and dative to be not a matter of accidental syncretism, but rather to reveal that DOM is realized via dativization (Torrego 2010; Pineda 2016; Manzini & Franco 2016).



‘He has done it for me/you/him’

d. *viənə*      *addo/ku*      *mmikə/ttikə*  
 he.comes    where/with    me/you

‘He comes to/with me/you’

Sasso di Castalda (Lucania)

In Eastern Romance varieties, the 1/2P pronominal system also displays a higher case differentiation than the 3P system. The Romanian pronominal system is summarized in table (31). The 3P case system reflects the two-case organization (direct/oblique) also holding for lexical nouns. However, 1/2P singular have an accusative case distinct from the nominative. The accusative only occurs embedded under prepositions, including the *pe* preposition that introduces DOM. Second, while 3P oblique pronominal forms are embeddable in both dative and genitive contexts, 1/2P forms are restricted to dative contexts. Genitive contexts are given over to so-called possessive adjectives/pronouns, whose inflectional endings agree with the head N, as already illustrated in section 2. 1/2P plural are similar to 3P pronouns in displaying a single direct case – at the same time they are like 1/2P singular in possessive structures.

|      |                    |                    |                |               |                     |                     |
|------|--------------------|--------------------|----------------|---------------|---------------------|---------------------|
| (31) | 1sg                | 2sg                | 3sg            | 3pl           | 1pl                 | 2pl                 |
| Nom  | <i>eu</i>          | <i>tu</i>          | <i>el/ea</i>   | <i>ei/ele</i> | <i>noi</i>          | <i>voi</i>          |
| Acc  | <i>mine</i>        | <i>tine</i>        | <i>el/ea</i>   | <i>ei/ele</i> | <i>noi</i>          | <i>voi</i>          |
| Dat  | <i>mie</i>         | <i>ție</i>         | <i>lui/lei</i> | <i>lor</i>    | <i>nouă</i>         | <i>vouă</i>         |
| Gen  | <i>me-u/a/i/ie</i> | <i>tă-u/a/i/ie</i> | <i>lui/lei</i> | <i>lor</i>    | <i>nostr-u etc.</i> | <i>vostr-u etc.</i> |

Romanian

The pronominal case system of Aromanian varieties is summarized in (32). Contrary to Romanian, all pronouns are associated with a single direct case. However 1/2P pronouns differ from 3P pronouns in the expression of the oblique. 3P pronouns behave like nouns in that they have a single oblique form for both dative and genitive contexts. On the contrary, in genitive contexts 1/2P pronouns take the form of possessives, whose inflection agrees with the head N, as illustrated in section 2.

|        |                        |                        |                    |                 |                    |                    |
|--------|------------------------|------------------------|--------------------|-----------------|--------------------|--------------------|
| (32)   | 1sg                    | 2sg                    | 3sg                | 3pl             | 1pl                | 2pl                |
| Direct | <i>mini</i>            | <i>tini</i>            | <i>eu/ia</i>       | <i>e/eli</i>    | <i>noi</i>         | <i>voi</i>         |
| Dat    | <i>a pia</i>           | <i>a tsea</i>          | <i>o yui/a jei</i> | <i>o yor(ə)</i> | <i>a nau</i>       | <i>a vau</i>       |
| Gen    | <i>a me-u/-li/etc.</i> | <i>a ta-u/-li/etc.</i> | <i>o yui/a jei</i> | <i>o yor(ə)</i> | <i>a nɔst/etc.</i> | <i>a vɔst/etc.</i> |

Aromanian

In short, the overall picture of pronominal case systems in (29) and (31–32) confirms the conclusions about the relation between Person splits and case/agreement structures already drawn from the observation of possessives in section 2. Partici-



pant pronouns and 3P pronouns display split patterns and 1/2P pronouns have the richest case/agreement structures. Descriptively, the split between 1/2P pronouns and 3P pronouns falls under the animacy/definiteness scale known from typological and functionalist work. Kiparsky (2008) suggests that the latter is essentially a D-hierarchy, ranking referential properties in terms of “individuation” (or perhaps ‘topicality’, see also DeLancey 1981). The hierarchy we suggest in (33) largely overlaps with that of Dixon (1979) except that definiteness/referentiality is taken into account.

(33) *Referentiality hierarchy*

1P > 2P > 3P (dectic) > Proper/kinship name > Animate & Definite > Animate or Definite > Inanimate & Indefinite

In a functionalist vein, Dixon (1979: 85–86) comments that “it is plainly most natural and economical to ‘mark’ a participant when it is in an unaccustomed role... A number of languages have split case-marking systems exactly on this principle: an ‘ergative’ case is used with NP’s from the right-hand end, up to some point in the middle of the hierarchy, and an ‘accusative’ case from that point on, over to the extreme left of the hierarchy”. However, note that the generalization holding of the Romance languages does not concern the alignment of some particular referents with some particular case. Rather it concerns whether certain referents are associated with case/agreement at all.

According to Chomsky (2001), at least direct case does not have any independent reality – the only thing that has any reality is Agree in  $\phi$ -features with I and  $v$ , corresponding to what we call nominative and accusative respectively. Languages/lexical subsets without any case morphology, for instance lexical DPs in most Romance languages (or in English), represent instances where  $\phi$ -features are indeed necessary and sufficient for satisfaction of sentential attachment. However, in most Romance languages, including for instance the Italian variety of Sasso, 1/2P referents require a more articulated structure of embedding. This structure of embedding is what case lexicalizes. Specifically, in sections 1-2 we have adopted the view that oblique case is an elementary predicate, introducing a relation between the argument it selects and another argument. If so, the generalization we arrive at for a language like Sasso is that 1/2P referents are hooked to the eventive core of the sentence by a more complex system, where complexity is to be understood in terms of levels of embedding. The same generalization holds of the extra-layer of agreement observed in 1/2P possessives as opposed to 3P ones.

Here we will outline possible avenues of research, though we will not reach any conclusion. Recent formal analyses of Person splits seem to move within the



conceptual orbit of what Chomsky (2001) calls Maximize Matching (MM).<sup>18</sup> As is well-known, in a language like English *there*-sentences agree in number with the postverbal subject, cf. *there is likely to arrive a man* (vs *there are likely to arrive several men*), as in (34). The MM principle acts as an Earliness principle, requiring agreement of the copula with the closest possible match, namely *there*. However, *there* is reasonably associated only with a Person feature; therefore number and gender features of the copula probe for the embedded subject, again under the MM, which acts in this instance as a completeness requirement.

(34) [C [T *be likely* [ Expl *to-arrive a man*]]]



The mechanics involved in (34) has been exploited in the literature in the derivation of Person split phenomena such as Inverse Agreement. In Inverse Agreement languages, the agreement morphology of the verb always picks up the higher ranked person among direct arguments, independently of their thematic role: this is 1P in the Plains Cree examples in (35). Suffixal morphology varies between so-called direct forms, when the agreement prefix coincides with the external argument, as in (35a), and so-called inverse forms, when the agreement prefix coincides with the internal argument, as in (35b).

(35) a. *ni-wa-pam-a-na n*

1-see-DIRECT-1PL

‘We see him’

b. *ni-wa-pam-iko-na n*

1-see-INVERSE-1PL

‘He sees us’

Plains Cree (Algonquian, Aissen 1997: 707–708)

For Bejar & Rezac (2009), Inverse Agreement languages bear an agreement probe on  $v$ ;  $\pi$ -features, namely person features, are discharged as soon as possible in the derivation, hence by the internal argument, even if only partially. Take for instance ‘We see him’ in (35a). The internal argument checks the Person feature of the  $\pi$  probe. The Participant feature of the  $\pi$  set however remains active, i.e. unchecked, and is checked by the external argument. In other words, what appears to be agreement with the external argument, is in reality agreement with both arguments, governed by some version of the MM; Bejar & Rezac (2009) call this Cyclic Agree. The added complexity of ‘He sees us’ in (35b) is that the internal argument checks all of the  $\pi$ -features of  $v$  so that the external argument remain unli-

<sup>18</sup> An anonymous reviewer reminded us of the relevance of this principle.



censed by Agree. Therefore, an added probe is inserted on  $v$  and it is this added probe, checked by agreement with the external argument, which is spelled out by the Inverse morpheme.

Cyclic Agree requires that potential violations can be repaired by the insertion of an additional probe, hence effectively backtracking. Apart from this, it requires a very specific theory of Person articulated in  $\pm$ Speaker,  $\pm$ Participant,  $\pm$ Person features. The first assumption is very powerful, the second one is not self-evident. Even accepting the premises of Cyclic Agree, the problem arises that Cyclic Agree is a framework built to predict the matching of Person prominence with verbal agreement. Our problem is different – Person prominence does not lead to agreement in 1/2P features, say with the head noun. Rather the 1/2P pronoun finds itself embedded into a layer of structure (Lkr of affixal) resuming the head noun. In conclusion, it is far from obvious that the facts noted in this section fit current proposals for reducing Person splits to a formal analysis under Agree. Nevertheless, their potential relevance for this line of research makes them worth noting, in our view.

#### 4. Conclusions

In many familiar European languages, e.g. German or Italian, possessive pronouns agree in  $\phi$ -features with their head noun. We argued that they are genitive pronouns, endowed with an extra  $\phi$ -features set, and part of larger set of phenomena, including affix stacking and linkers. In section 1, we examined Lkrs in Albanian and agreeing postpositions in Punjabi concluding that the phenomena collected under the typological label of *Suffixaufnahme* admit of a structural unification. We expressed the formal basis of this unification in the Stacking Generalization in (14). In section 2, we applied our understanding of affix stacking phenomena to a narrow domain of facts, involving possessive pronouns, specifically 1/2P ones. We also found that in Eastern Romance, in Albanian, partially in Italian, 1/2P pronouns present a richer stacking structure than their 3P counterparts. In section 3, we examined this latter fact in the context of a more general set of phenomena, whereby the 1/2P vs 3P Person split not only tends to correlate with different case and agreement alignments – but seems to govern the morphological expression of case and agreement itself.



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### POSVOJNE ZAMJENICE KAO OBLIQUE DPs: LINKERS AND AFFIX STACKING

U brojnim poznatim europskim jezicima, primjerice njemačkom ili talijanskom, posvojne se zamjenice slažu s posjedivim prilikama koje se slažu s posjedivim prilikama. We argue that they are genitive pronouns, endowed with an extra  $\phi$ -features set. As such, they are part of a range of phenomena including case stacking and linkers unified under the historical-typological label of Suffixaufnahme. We express the formal basis for this unification as the Stacking Generalization (section 1). We then apply our analysis to the narrower domain of facts involving possessive pronouns, specifically in Balkan and Romance languages. We further find that 1/2P pronouns present a richer stacking structure than their 3P counterparts (section 2). We examine this latter fact in the context of a more general phenomenon, whereby the 1/2P vs 3P Person split not only tends to correlate with



different case and agreement alignments – but seems to govern the morphological expression of case and agreement itself, in terms of richer vs poorer content (section 3).

**Ključne riječi:** oblique case; genitive; possessives; pronouns; linkers; agreement; person.