

PRO-DROP IN NOMINAL POSSESSIVE  
CONSTRUCTIONS

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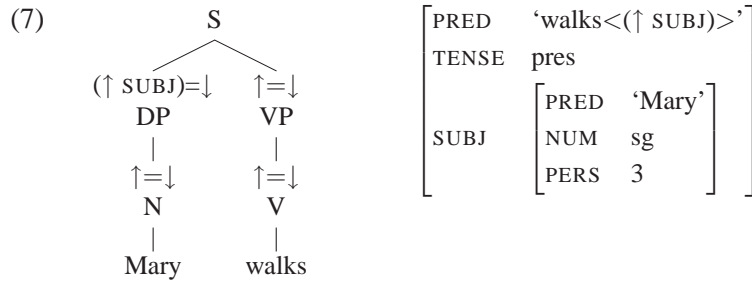
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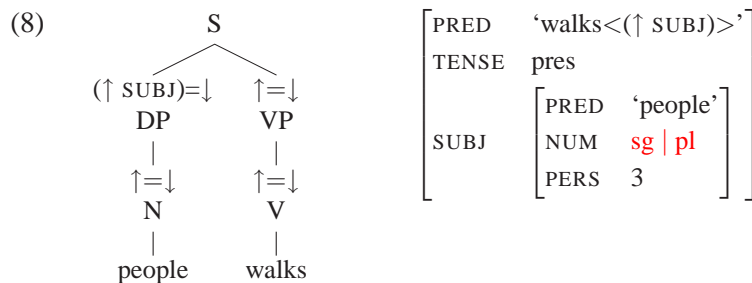


- (6) walks V (↑ PRED) = 'walk<(↑ SUBJ)>'  
 (↑ TENSE) = pres  
 (↑ SUBJ NUM) = sg  
 (↑ SUBJ PERS) = 3

When *walks* is combined with the third person singular subject *Mary* in the c-structure shown in (7) the result is a well-formed f-structure because the agreement information specified by the head noun of the subject DP and that projected into the SUBJ function by the agreement affix on the verb do not differ.

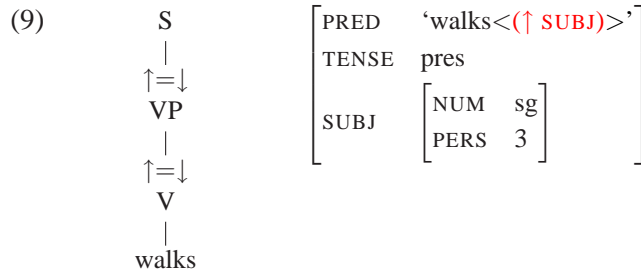


When *walks* is combined with a plural subject like *people* as in (8) the resulting f-structure is not well-formed because the value for the number feature of the subject projected from the head noun of the subject DP itself and the value projected from the agreement affix on the verb are in conflict which leads to a violation of the *uniqueness principle*.



The fact that the sentence *walks* without an overt subject DP in (3) is ungrammatical is modelled by assuming that the agreement affix on the verb only restricts the values of certain agreement features of its subject but does not provide any semantic content, i.e. no PRED feature, for its subject. The c-structure without an overt subject in (9) leads to an *incomplete* f-structure because the verbal head *walks* not only requires the presence of a SUBJ function but the *completeness principle* also demands that this function have semantic content.

To sum up, **agreement** means that a head puts restrictions on one of its argument functions by projecting agreement features into this function. However, simple **agreement** morphology does not provide any semantic content, i.e. no PRED feature, for this function.



In some languages, heads may appear with morphological material that allows them to occur without an overt complement phrase in which case the missing complement is interpreted pronominally. The Chicheŵa example in (10)<sup>1</sup> taken from Bresnan (2001, chapter 8), for example, contains a verb form with a subject affix and an object affix. The subject affix *zi-* agrees with the overt subject *njûchi* (“the bees”); the object affix *wá-* indicates the noun class of the object, but no overt object is present. Instead, the object affix gives rise to a pronominal interpretation for the object.

- (10) *Njûchi zi- ná- wá- lum -a.*  
 10.bee 10.S- PST- 2.O- bite -FV  
 “The bees bit **them**.”

In contrast to the English subject-verb agreement suffix *-s*, the Chicheŵa object affix *wá-* cannot co-occur with an overt realization of the argument that it indexes; cf. example (11) also taken from Bresnan (2001, chapter 8).<sup>2</sup>

- (11) \* *Njûchi zi- ná- wá- lum -a a- lenje.*  
 10.bee 10.S- PST- 2.O- bite -FV 2- hunter  
 “The bees bit them the hunters.”

The object affix thus behaves like an ordinary syntactic object pronoun that has been incorporated into the verbal head. This phenomenon is therefore referred to as **pronoun incorporation**. In LFG, incorporated pronouns are modelled by assuming that they provide a pronominal PRED value for the argument function in question in addition to agreement information; cf. the lexical entry of the verb in (12) and the nominal entries in (13) and (14).

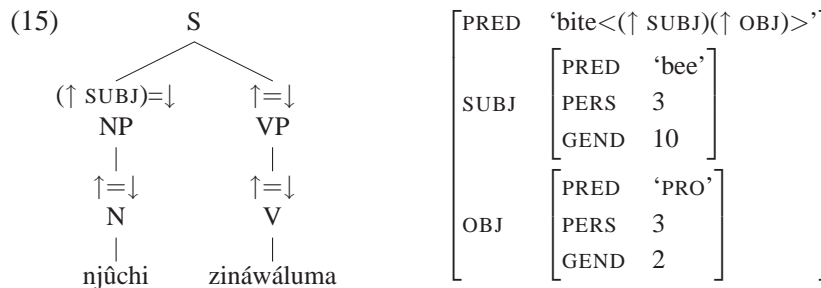
- (12) *zináwáluma V* (↑ PRED) = ‘bite<(↑ SUBJ)(↑ OBJ)>’  
 (↑ SUBJ GEND) = 10  
 (↑ OBJ PRED) = ‘PRO’ ← *pronominal PRED value*  
 (↑ OBJ GEND) = 2

<sup>1</sup>Abbreviations used in the glosses: ACC – accusative, FV – final vowel, LK – possessive linker, NOM – nominative, O – object, PL – plural, PST – past, S – subject, SG – singular. Numbers indicate noun classes in the Chicheŵa examples and person in Low Saxon examples.

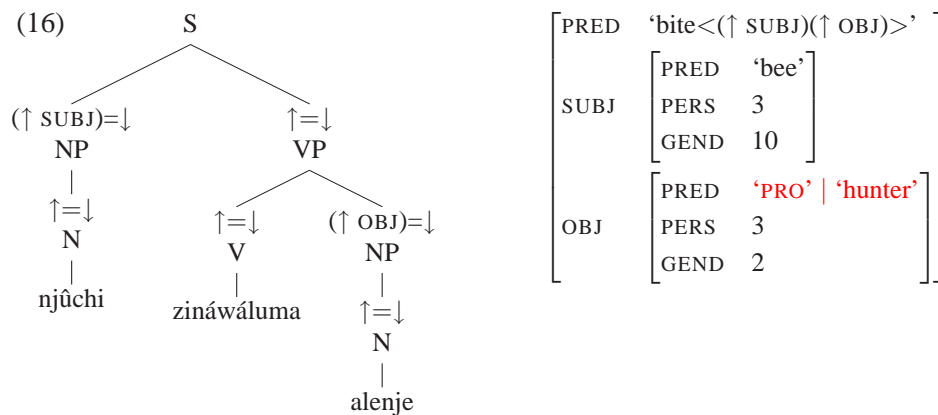
<sup>2</sup>Like its English translation, sentence (11) can be made grammatical by setting the NP *alenje* (“the hunters”) off intonationally. In this case, however, *alenje* would be a right-dislocated topic that is coreferent with the pronominal object affix contained in the verb and not itself the verb’s object.

- (13) njûchi N (↑ PRED) = ‘bee’  
 (↑ PERS) = 3  
 (↑ GEND) = 10
- (14) alenje N (↑ PRED) = ‘hunter’  
 (↑ PERS) = 3  
 (↑ GEND) = 2

The pronominal PRED feature projected into the OBJ function by the object affix on the verb provides semantic content for the OBJ function and thus satisfies the *completeness principle* in a sentence without an overt object NP such as example (10); cf. the structure in (15).



However, if an overt object NP is present at the same time as the object affix the sentence is correctly ruled out because the PRED feature of the object head noun *alenje* and the PRED feature projected from the affix on the verbal head clash and violate the *uniqueness principle*; cf. (16).<sup>3</sup>



To sum up, **pronoun incorporation** means that an affix on a head can provide a pronominal interpretation for an argument of that head but cannot co-occur with an overt, syntactic realization of this argument.

<sup>3</sup>PRED is a semantic feature which means that its value can never be unified with anything else (cf. Bresnan 2001, p. 47): Not even two different ‘PRO’ values can unify, so that a Chicheŵa object affix cannot even co-occur with an overt object NP that is pronominal.

Agreement morphology that *can* co-occur with an overt exponent of the grammatical function that it indexes but is interpreted pronominally if no overt, syntactic complement phrase is present exhibits so-called **pro-drop** behavior. Pro-drop morphology functions like agreement morphology when an overt complement phrase is present; cf. the subject affix *zi-* in the Chicheŵa example (17);<sup>4</sup> but can nevertheless provide a pronominal interpretation for a missing complement; cf. (18).

- (17) *Njũchi zi- ná- wá- lum -a.* (18) **Zi-** ná- wá- lum -a.  
 10.bee **10.S-** PST- 2.O- bite -FV **10.S-** PST- 2.O- bite -FV  
 “The bees bit them.” “**They** bit them.”

This behavior is standardly modelled in LFG by assuming that the agreement affix on the head provides an *optional* pronominal PRED value for the argument function; cf. the revised lexical entry of *zináwáluma* in (19).

- (19) *zináwáluma* V (↑ PRED) = ‘bite<(↑ SUBJ)(↑ OBJ)>’  
 ((↑ SUBJ PRED) = ‘PRO’) ← *optional* PRED feature  
 (↑ SUBJ GEND) = 10  
 (↑ OBJ PRED) = ‘PRO’ ← *non-optional* PRED feature  
 (↑ OBJ GEND) = 2

This lexical entry can be combined with an overt subject NP as in (15) because there is one solution in which the verbal head does not project a PRED feature for its subject, but the verb can also satisfy the *completeness principle* if no overt subject NP is present by projecting a PRED feature into its SUBJ function; cf. (20).

- (20)
- |                   |      |      |                         |      |       |   |
|-------------------|------|------|-------------------------|------|-------|---|
| S                 | [    | PRED | ‘bite<(↑ SUBJ)(↑ OBJ)>’ |      |       |   |
|                   |      | SUBJ | [                       | PRED | ‘PRO’ | ] |
| ↑=↓               |      |      | PERS                    | 3    |       |   |
| VP                |      |      | GEND                    | 10   |       |   |
|                   |      | OBJ  | [                       | PRED | ‘PRO’ | ] |
| ↑=↓               | PERS |      | 3                       |      |       |   |
| V                 | GEND |      | 2                       |      |       |   |
|                   |      |      |                         |      |       |   |
| <i>zináwáluma</i> |      |      |                         |      |       |   |

To sum up, an affix on a head shows **pro-drop** behavior if it can act as agreement marking when the argument it indexes is overtly realized but can also provide a pronominal interpretation if no overt argument phrase is present.

## 1.2 The Low Saxon Language

Low Saxon is a West Germanic language spoken in northern Germany, the east of the Netherlands, and in emigrant communities throughout the world. It can be

<sup>4</sup>The pronominal interpretation of *zi-* vanishes completely when an overt subject is present. *Njũchi* is a real subject in example (17), not a left-dislocated topic.

considered a “major” minor language in that estimates of the number of speakers are sometimes as high as 10,000,000; cf. the Ethnologue.<sup>5</sup> However, its survival is threatened because the language is often no longer passed on to children.

Typologically, Low Saxon is a typical West Germanic language with the unmarked word order SVO in main clauses and the order SOV in subordinate clauses. It shows verb-second behavior which means that only one constituent is allowed to appear in front of the finite verb in main clauses. Its case system has been eroded considerably in comparison e.g. with German or Icelandic and only nominative and accusative forms are distinguished.<sup>6</sup> Low Saxon has three different genders: masculine, feminine, and neuter. Determiners and adjectives in nominal phrases have to agree with the head noun in number, gender, and case. Verbal pro-drop does not occur in the dialects of Low Saxon.

Most of the examples that I use to illustrate my points in the rest of the paper are authentic examples taken from a one million word corpus of Low Saxon that I built by manually harvesting the internet for Low Saxon texts.<sup>7</sup> All invented examples are explicitly marked.

## 2 The Possessive Pronoun Construction

A pronominal possessor in Low Saxon is usually expressed by a possessive pronoun preceding a possessum NP; cf. examples (21)–(23). I will refer to this construction as the *possessive pronoun construction*.

- |                                                  |                                                      |                                                                |
|--------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------|
| (21) <i>ehr Huus</i><br>her house<br>“her house” | (22) <i>uns Vadder</i><br>our father<br>“our father” | (23) <i>miene eajne Henj</i><br>my own hands<br>“my own hands” |
|--------------------------------------------------|------------------------------------------------------|----------------------------------------------------------------|

The possessive pronoun occurs in the same syntactic position as the definite and indefinite articles, demonstratives, etc. and is in complementary distribution with them; cf. Strunk (2004, p. 40). I therefore conclude that the possessive pronouns are of category determiner and analyze them as a D co-head of the possessum NP; cf. also Dipper (2003) for German. The possessive pronoun agrees with the possessum NP in number, gender, and case; cf. examples (24) and (25).

- (24) *he geiht sien-en Weg*  
he goes his-M.SG.ACC way.M.SG.ACC  
“He goes his way.”

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<sup>5</sup>[www.ethnologue.com](http://www.ethnologue.com)

<sup>6</sup>In fact, only pronouns and masculine singular nouns have preserved the distinction between nominative and accusative.

<sup>7</sup>There is neither a written nor a spoken standard variety of Low Saxon. Authors use their own dialectal forms and often idiosyncratic writing systems. I will not attempt any form of normalization of the examples I analyze but will always provide an interlinear gloss and an English translation.

- (25) \* *he geht sien-e Weg*  
 he goes his-F.SG/-PL way.M.SG.ACC

The stem of the possessive pronoun specifies the person, number, and gender of the possessor; cf. examples (21)–(23). The possessive pronoun thus has a kind of dual nature: It indexes both the possessor with the stem and the possessum with an agreement affix. The DP analysis, in which the possessive pronoun of category D is a co-head of the possessum NP, allows for a straightforward modelling of these agreement facts; cf. the lexical entry of a possessive pronoun in (26).

- (26) *ehr* D (↑ POSS PRED) = ‘PRO’  
 (↑ POSS PERS) = 3  
 (↑ POSS NUM) = sg  
 (↑ POSS GEND) = f  
 (↑ NUM) = sg  
 (↑ GEND) = n  
 (↑ CASE) = acc
- (27) *Gesicht* N (↑ PRED) = ‘face<(↑ POSS)>’  
 (↑ PERS) = 3  
 (↑ NUM) = sg  
 (↑ GEND) = n  
 (↑ CASE) = acc

The agreement information about the possessum is projected into the f-structure of the pronoun’s mother node, which is the same as that projected by the head noun of the possessum NP because possessive pronoun and possessum NP are co-heads. Thus, agreement with the possessum is enforced. The information about the possessor is projected into the grammatical function POSS(essor) in the mother’s f-structure; cf. (28).<sup>8</sup>

- (28)
- |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $  \begin{array}{c}  \text{DP} \\  \swarrow \quad \searrow \\  \uparrow = \downarrow \quad \uparrow = \downarrow \\  \text{D} \quad \text{NP} \\    \quad   \\  \text{ehr} \quad \uparrow = \downarrow \\  \quad \quad \text{N} \\  \quad \quad   \\  \quad \quad \text{Gesicht}  \end{array}  $ | $  \left[ \begin{array}{ll}  \text{PRED} & \text{‘face}<(\uparrow \text{POSS})>’ \\  \text{PERS} & 3 \\  \text{NUM} & \text{sg} \\  \text{GEND} & \text{n} \\  \text{CASE} & \text{acc} \\  \text{POSS} & \left[ \begin{array}{ll}  \text{PRED} & \text{‘PRO’} \\  \text{PERS} & 3 \\  \text{NUM} & \text{sg} \\  \text{GEND} & \text{f}  \end{array} \right]  \end{array} \right]  $ |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

<sup>8</sup>The nature of the POSS function is still a subject of debate; cf. e.g. Laczko (1997) and Chisarik and Payne (2001). The question whether the POSS function is an argument or a non-argument function is largely orthogonal to the issues discussed in this paper. I will simply assume that POSS is an argument function and that all nouns can optionally be augmented by a lexical template to subcategorize for a POSS argument; cf. also Bresnan (2001, p. 169).



### 3 The Possessive Linker Construction

One possessive construction that is frequently used with non-pronominal possessor phrases in Low Saxon consists of a full possessor DP preposed to a possessive pronoun construction; cf. example (29).

- (29) *[[de'n Jung] sien Vadder]*  
the.M.SG.ACC boy.M.SG.ACC his.M.SG father.M.SG  
“the boy’s father”

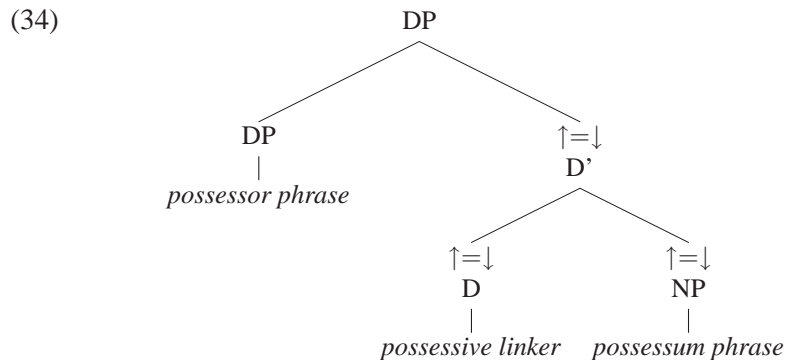
I will refer to this construction as the *possessive linker construction*. In this construction, the possessor DP has to stand in the accusative case. The possessor DP and the possessive pronoun in the possessive linker construction agree in number and gender just like a possessive pronoun in the possessive pronoun construction agrees with its antecedent; cf. (30) with a feminine possessor.

- (30) *[[Gerda] ehr Mudder]*  
Gerda.F.SG.ACC her.F.SG mother.F.SG  
“Gerda’s mother”

However, in order to analyze these examples as a nominal construction separate from the possessive pronoun construction, it has to be shown that the possessor DP, the possessive pronoun/linker, and the possessum NP form one constituent and that the possessor DP is not the usual antecedent of the possessive pronoun which occurs directly adjacent to it by chance. The evidence for this is very clear: First, as is shown in example (31), the whole construction can occur in front of the finite verb in a verb-second clause, where only one constituent is allowed. Second, when the possessor DP is a relative pronoun, the whole possessive linker construction is pied piped along to the front of the relative clause; cf. example (32). And third, a possessive linker construction can be recursively embedded in another possessive linker construction as possessor phrase; cf. example (33).

- (31) *[Wendtland sien Vadder] harr gor Fritz Reuter kennt.*  
Wendtland his father had even Fritz Reuter known.  
“Wendland’s father had even known Fritz Reuter.”
- (32) *ena [daem sien Shoobaunt] ekj nich faeich sie loos to moake*  
one who his shoe string I not able am loose to make  
“one whose shoe string I am not able to untie”
- (33) *[[Paul siene Sesta] aea Saen]*  
Paul his sister her son  
“Paul’s sister’s son”

These pieces of evidence and the fixed position of the possessor DP directly to the left of the possessive pronoun/linker suggest a c-structure for this construction in which the possessor phrase is located in the specifier of the whole DP; cf. figure (34). A structure like this has been proposed or discussed by a variety of authors for constructions similar to the Low Saxon possessive linker construction or the English s-possessive: Abney (1987), Delsing (1991), Taylor (1996), Norde (1997), Weerman and de Wit (1999), etc.



Once this structure is established, the next question is the nature of the relation between the possessor DP and the possessive pronoun/linker. Is this relation the same as the anaphoric relation of coreference between a possessive pronoun and its antecedent in the preceding context? Does the possessive pronoun in the possessive linker construction resume the referent introduced by possessor DP? An analysis along these lines is suggested for example by the name given to this type of construction by Norde (1997): *resumptive possessive pronoun construction*.

However, I would like to argue against the view that the possessive pronoun in the possessive linker construction functions as a resumptive pronoun. I have already shown that the possessive linker construction forms one constituent and thereby provided evidence against *DP-external resumption*, i.e. resumption understood as left dislocation of the possessor DP outside of the possessive construction and resumption by a possessive pronoun in an ordinary possessive pronoun construction. One further piece of evidence against *DP-external resumption* is the fact that a possessive linker construction can occur in the middle of a clause; cf. (35).

- (35) *De grugelige Bang' in [mudder ehr Ogen] seih ick noch hüt.*  
 the terrible fear in mother her eyes see I still today  
 “Even today I still see the terrible fear in mother’s eyes.”

One could also understand resumption as *DP-internal resumption*, i.e. the introduction of a referent by the possessor DP inside the possessive linker construction and subsequent resumption of this referent by the possessive pronoun. But although this account is harder to argue against because it is not entirely clear to

me what properties it would predict for the possessive linker construction, I still think that there is some evidence against it. First, the possessor phrase of the possessive linker construction can contain question words or negative possessive pronouns; cf. examples (36) and (37); which should be pragmatically odd if the possessive pronoun was a second act of reference to a discourse entity whose existence is negated or at least not asserted (see also Falk 2002); cf. the infelicitous English left-dislocation example in (38).

- (36) *[[wecke Geister] ehre Kinner]* (37) *[[niimms] siin Vadder]*  
 whose minds their children nobody his father  
 “the children of whose minds” “nobody’s father”

- (38) # Nobody<sub>i</sub>, his<sub>i</sub> father is nicer than mine.

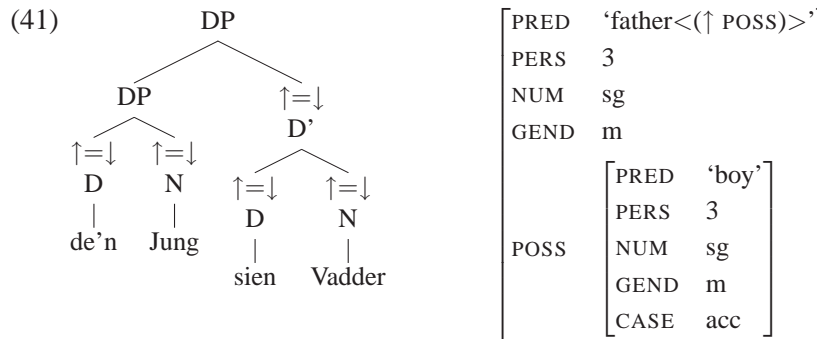
Second, although this is not particularly strong evidence, my informants also do not seem to perceive the possessive pronoun/linker as a second act of reference. Last but not least, note that the possessive pronoun/linker is always directly adjacent to the possessor DP and obligatorily “bound” by it. I would like to argue that even if there had been resumption in the beginning there would have been diachronic pressure to reanalyze the possessive pronoun as a mere possessive linker (or possessive marker) without anaphoric function, because its “antecedent” can always be found directly to the left with no need to perform anaphora resolution.

The alternative approach that I would like to propose is to regard the difference between the possessive pronoun construction with a pronominal interpretation of the possessor and the possessive linker construction with an overt possessor DP as a case of *nominal pro-drop*: When there is no overt possessor DP, the possessive pronoun/linker provides a pronominal interpretation for the possessor by projecting a pronominal PRED feature into the POSS function. It thus gives semantic content to this function and satisfies the *completeness principle*. When there is an overt possessor DP, the possessive pronoun/linker is no longer interpreted anaphorically but only agrees with the possessor in number and gender, i.e. it only projects agreement information into the POSS function but not a PRED feature. The only difference between the lexical entry of the possessive pronoun/linker in (39) and the one I proposed in (26), apart from different agreement information, is that the pronominal PRED feature for the POSS function has been made optional; cf. the standard account of verbal pro-drop in section 1.1.

- (39) sien D ( (↑ POSS PRED) = ‘PRO’ ) ← *now optional*  
 (↑ POSS PERS) = 3  
 (↑ POSS NUM) = sg  
 (↑ POSS GEND) = m  
 (↑ POSS CASE) = acc  
 (↑ NUM) = sg  
 (↑ GEND) = m

After this revision of the lexical entry, an overt possessor DP can be combined with a possessive linker and a possessum NP to model the possessive linker phrase in example (40) without incurring a violation of the *uniqueness principle*; cf. (41).

- (40) *[[de'n Jung] sien Vadder]*  
 the.M.SG.ACC boy.M.SG.ACC his.M.SG father.M.SG  
 “the boy’s father”



However, so far I have left open how the information from the possessor DP is projected into the POSS function: I did not provide a functional annotation for the possessor DP node in (41). As the possessor DP itself is not specifically marked as possessor and it occupies a fixed position in c-structure, I assume that the DP specifier node should be annotated with an appropriate functional equation. The simplest possible annotation shown in (42) would license an ungrammatical example like (43) without a possessive linker.

- (42) DP  $\rightarrow$  DP D' (↑ POSS)=↓ ↑=↓
- (43) \* *[[de'n Jung] Vadder]*  
 the boy father  
 “the boy’s father”

The presence of the possessive pronoun/linker is crucial: It acts as possessive marking and establishes the possessive relation; cf. also Plank (1980). I therefore propose to add the equation in (44) to the lexical entries of all possessive pronouns/linkers and to use the alternative c-structure annotation in (45).<sup>9</sup> The use of an overt possessor DP is now only allowed if a possessive linker is present that establishes the possessive relation by projecting the POSS MARKING feature and possibly also agreement information about the possessor. If there is no possessive linker that acts as possessive marking, the constraining equation in (45) will fail and the possessive construction is ruled out as ungrammatical.

<sup>9</sup>I originally used the implicational c-structure annotation  $(\uparrow \text{POSS}) \Rightarrow (\uparrow \text{POSS})=\downarrow$ , which yields two unconnected f-structures in case there is no possessive linker to establish the POSS function. I would like to thank Ron Kaplan for pointing out that the unconnectedness of an f-structure is not standardly taken to lead to ungrammaticality.

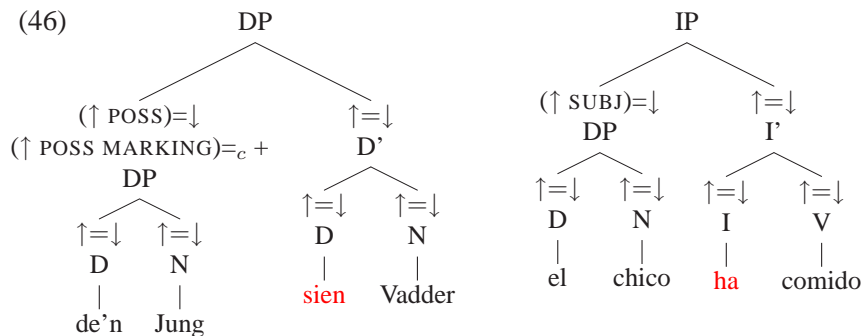
(44) sien D ...  
 (↑ POSS MARKING)=+  
 ...

(45) DP → DP D'  
 (↑ POSS)=↓ ↑=↓  
 (↑ POSS MARKING)=<sub>c</sub> +

It may seem a little unintuitive at first to call the difference between the possessive pronoun construction and the possessive linker construction *nominal pro-drop* because according to the traditional view there is still a pronominal element present when there is no overt possessor DP, namely the possessive pronoun, while in “canonical” verbal pro-drop only an affix on the verb stem is used when no overt subject is present.<sup>10</sup> This issue was also raised by an anonymous reviewer:

The terminology is slightly confusing since verbal pro-drop usually refers to a pronominal being “dropped”, but this is not the case here. The pronominal is there, but the PRED is dropped [...]

On closer look, however, my proposal is not unintuitive at all. First, I hope to have shown that what I call *nominal pro-drop* can elegantly be modelled using the same formal devices as standardly used in LFG to model verbal pro-drop. Second, the co-head as locus of agreement and pro-drop morphology is not as strange as it may seem: compare the Low Saxon possessive construction with the Spanish periphrastic perfect example, which means (“The boy has eaten.”), in (46). In the Spanish example, which could also be used without the overt subject *el chico* (“the boy”) and thus exhibits verbal pro-drop, the agreement and pro-drop information is also located on the perfective auxiliary *ha*, which is the co-head, and not on the non-finite verb *comido*.



And third, the possessive pronoun/linker is not directly comparable to a simple personal pronoun: It does not only refer to one discourse participant but contains

<sup>10</sup>I will also give a more “canonical” example of nominal pro-drop in which the possessor is expressed by an affix on the noun stem in section 7.

information on both possessor and possessum and also establishes the possessive relation. It is not so much an ordinary pronoun as a possessive marker. In the next section, I will indeed provide examples where the possessive linker construction is used with a pronominal possessor DP.

## 4 Comparing Verbal and Nominal Pro-Drop

In order to corroborate the plausibility of analyzing the Low Saxon possessive pronoun construction and possessive linker construction as a case of *nominal pro-drop*, I would like to point out parallels in the use of nominal and verbal pro-drop.

First, in case of anaphoric reference to a highly accessible referent, no overt subject DP is used in verbal pro-drop and no overt possessor DP is used in nominal pro-drop. Second, if one wants to express lexical content, in both verbal and nominal pro-drop, one has to use an overt subject or possessor DP respectively. The most interesting cases are the special contexts in which the use of overt pronominal subjects or pronominal possessors is possible. In order to see whether nominal pro-drop and verbal pro-drop put the same conditions on the use of overt pronominal subjects and possessors respectively, I devised a short questionnaire and did a small exploratory study with my informants. Specifically, I constructed some examples with contexts in which the use of an overt pronoun should be possible according to the literature on verbal pro-drop and asked them to evaluate whether it was natural to use overt pronouns in the possessive linker construction in these contexts.<sup>11</sup>

Overt subject pronouns can be used in verbal pro-drop to convey contrastive focus; cf. Larson and Lujà (1989), Cameron (1992), Bresnan (2001), Amaral and Schwenter (2005), etc. The same seems to be true for nominal pro-drop in Low Saxon; cf. example (47).

(47) *Ik heff all en moien Wogen, man [em sien Auto] is nog  
I have already a nice car but **him** his car is still  
veel beter.  
much better.*

“I already have a very nice car, but **his** car is still much better.”

Overt subject pronouns are also used in coordination; cf. Larson and Lujà (1989). The same is possible in Low Saxon nominal pro-drop; cf. example (48).

(48) *Dat sünd [[em un sien Broder] ehr Peer].  
That are **him** and his Brother their horses  
“Those are **his** and his brother’s horses.”*

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<sup>11</sup>All the examples used in this section are constructed examples that my informants judged to be “natural sounding”.

Overt subject pronouns are also used deictically for example while pointing at the intended referent. In the Low Saxon possessive linker constructions, overt pronouns can also be used in this function; cf. (49).

- (49) *Wokeen hört dei tou? – Och, dat is [em sien Wogen].*  
Who belongs that to? Well, that is **him** his car  
“Who does that one belong to? Well, that’s **his** car.”

Most importantly, an overt pronoun can be used in the Low Saxon possessive linker construction to refer to a referent that is currently not the most accessible; cf. the example in (50).

- (50) *Jan wull gern angeln gohn. He wull sien Fründ Hinnerk ok inloden.*  
“Jan wanted to go fishing. He wanted to invite his friend Hinnerk.”  
*Man [em sien Telefoon] wöör twei.*  
“But **his** phone was broken.” (i.e. Hinnerk’s phone was broken)

The overt masculine accusative pronoun *em* makes clear that the intended referent for the possessor of the phone is *Hinnerk* and not *Jan*, which has been the subject of the preceding two sentences and therefore is the most accessible referent. If no overt pronoun had been used, *Jan* would have been interpreted as the possessor of the broken phone. This function of overt pronouns has been termed *switch reference* in the literature on verbal pro-drop; cf. e.g. Cameron (1992) and Dimitriadis (1996).

I thus conclude that the pragmatic conditions on the use of verbal and nominal pro-drop seem to be entirely parallel and that this lends further plausibility to my account of the possessive constructions in Low Saxon and my use of the term *nominal pro-drop*.

## 5 Pro-Drop of the Possessum

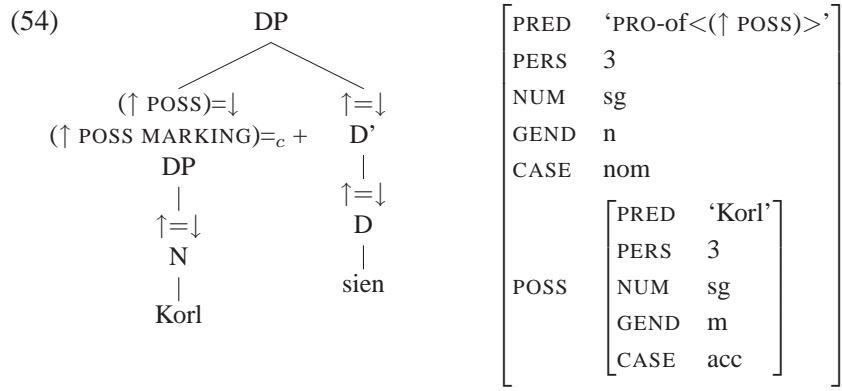
In the preceding two sections, I have established the existence of nominal pro-drop of the possessor in Low Saxon possessive constructions. I now want to argue that the dual nature of the possessive pronoun/linker also makes it plausible to analyze examples like (51) and (52) in which there is no overt possessum as cases of pro-drop of the possessum.

- (51) *säi läegt höör kop tegen [mîn]*  
she lays her head against mine  
“She leans her head against mine.”
- (52) *Mien Öller ... [Fritz sien] ... un [Korl sien] ...*  
my age Fritz his and Korl his  
“My age ... Fritz’s ... and Korl’s ...”

In the examples (51) and (52), no overt possessum NP is present in the bracketed possessive constructions (although one could have been used there) and the possessum is inferred from the context. This can be modelled by assuming that the possessive pronoun/linker does not only project agreement information about the possessum but in addition provides an optional pronominal PRED feature for the possessum in the same way as it optionally provides such a feature for the possessor. The only information that has to be added to the lexical entry of the possessive linker in (39) is shown in (53).

- (53) sien D ...  
 ((↑ PRED) = 'PRO-of<(↑ POSS)>') ← *optional*  
 ...

The possessive linker now optionally projects a pronominal semantic feature into the f-structure of the whole DP and the pronominal interpretation of the possessum is thus also modelled as a case of nominal pro-drop; cf. the structure in (54).



But why should one not treat cases of missing possessum NP as ellipsis? First of all, note that the possessive relation which is established by the possessive pronoun/linker always entails the existence of a possessum. Second, the possessive pronoun/linker has to contain information about the possessum anyway in order to model agreement. It is thus quite plausible to assume that the possibility of a pronominal interpretation for the possessum is a lexical fact stated in the lexical entry of the possessive pronoun/linker. Third, other determiners such as demonstratives can also be interpreted pronominally when they occur without a following NP and often it is not really possible to reconstruct what exactly could have been elided; cf. example (55).

- (55) *Dat kann he doch ni nich!*  
 that can he though never  
 "But he could never do that!"

The same is true for the possessive pronoun/linker; cf. example (56), in which the possessum is interpreted very abstractly as *possessions* or *belongings* but could be interpreted in a variety of ways.



- (56) *Hest du dien, de Anner sien ...*  
 have you yours the other his  
 “If you have yours and the other his, ...”

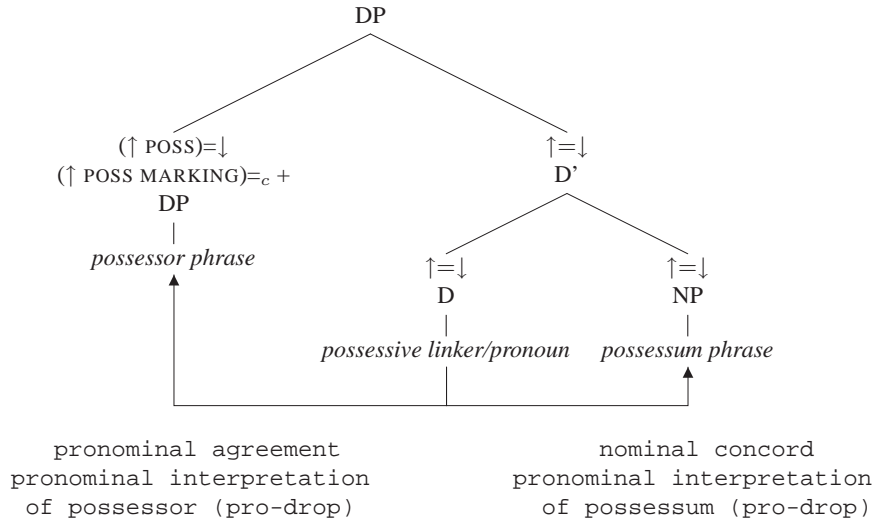
If demonstrative pronouns like the one in example (55) are treated as pronominal elements and no ellipsis is assumed, the same should apply to possessive pronouns/linkers like those in (56). Last but not least, there are forms of the possessive pronoun/linker in some dialects of Low Saxon that can be analyzed as incorporating a pronominal possessum because these forms can never occur with an overt possessum NP but always provide a pronominal interpretation for the possessum; cf. example (57) from the dialect of Groningen in the Netherlands.

- (57) *heur voader en mienent (\*voader)*  
 her father and mine father

As the standard analyses of pronoun incorporation and pro-drop are quite similar in LFG, the existence of pronoun incorporation of the possessum in Low Saxon is a further (theory-internal) argument for modelling missing possessums as pro-drop and not as some form of ellipsis.

To sum up, the structure of the Low Saxon possessive linker construction can be schematized as in figure (58).

- (58)



## 6 The S-Possessive Construction

Most dialects of Low Saxon use a third possessive construction, which I will call the *s-possessive construction*; cf. examples (59) and (60). This construction is

similar to the s-possessives in other Germanic languages, such as e.g. Dutch, German, Scandinavian, and also English. It is traditionally regarded as a possessive construction with a possessor phrase in genitive case. However, in Strunk (2004) I show that the invariant =s possessive marking, which always appears once in between the possessor DP and the possessum NP, behaves more like a clitic possessive linker than like case-marking morphology. Moreover, the =s clitic seems to occupy the same syntactic position as the possessive pronouns. Many other authors have come to similar conclusion regarding the s-possessive in other Germanic languages; cf. e.g. Janda (1980), Delsing (1991), Hudson (1995), Taylor (1996), Norde (1997), and Weerman and de Wit (1999), etc.

- (59) *[[häär ollen] =s hus]*                      (60) *[[Antje] =s Bröögam]*  
her      parents 's    house                      Antje      's    bridegroom  
“her parents’ house”                                      “Antje’s bridegroom”

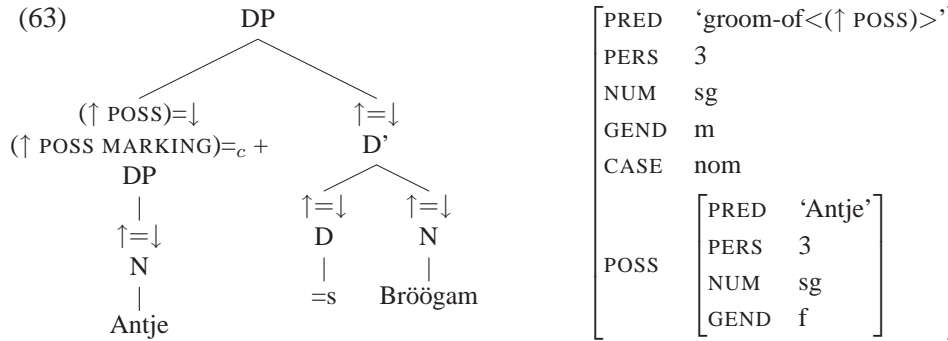
Because of the structural similarities between the s-possessive and the possessive linker construction, I would like to argue that the s-possessive in Low Saxon (and also in other Germanic languages) can be analyzed in a similar way. Like the possessive pronoun, the =s clitic functions as a possessive marker that establishes the possessive relation. However, in contrast to the possessive pronoun/linker, the =s morpheme is invariant and thus it does not project any agreement information, neither about the possessor nor about the possessum. The Low Saxon s-possessive always has to occur with an overt possessor DP, the possessum NP can be missing and is then interpreted pronominally; cf. example (61).

- (61) *Hinnerk =s Huss iss groote den Antje =s.*  
Hinnerk 's house is bigger than Antje 's  
“Hinnerk’s house is bigger than Antje’s.”

I therefore assume the lexical entry in (62) for the =s possessive linker. It acts as possessive marking so that the information from the possessor DP can be projected into the POSS function. It also contains an optional pronominal PRED feature to allow for pro-drop of the possessum.

- (62) =s D (↑ POSS MARKING) = +  
((↑ PRED) = ‘PRO-of<(↑ POSS)>’) ← *optional*

With this lexical entry, examples like (59) and (60) but also examples with a missing possessum NP like (61) can be analyzed; cf. (63).



## 7 Similar Constructions in Other Languages

Many modern Germanic languages make use of a pronominal linker construction that should be amenable to the same kind of analysis as proposed for Low Saxon: Afrikaans (64), Dutch (65), Frisian (66), colloquial German, and Norwegian (67), and West Flemish.

- |                                                                                                                                                                      |                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(64) <i>my moeder se huis</i><br/> my mother LK house<br/> “my mother’s house”</p> <p>(66) <i>heit syn hynder</i><br/> father his horse<br/> “father’s horse”</p> | <p>(65) <i>mijn moeder d'r auto</i><br/> my mother her car<br/> “my mother’s car”</p> <p>(67) <i>Per sin bil</i><br/> Per his car<br/> “Peter’s car”</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

Most Germanic languages also have an s-possessive construction: Dutch (68), English, Frisian (69), German (70), Swedish (71) (and the other Scandinavian languages), and maybe West Flemish (72).

- |                                                                                                                   |                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>(68) <i>mijn moeder =s auto</i><br/> my mother ’s car</p> <p>(70) <i>Mutter =s Auto</i><br/> mother ’s car</p> | <p>(69) <i>ús buorman =s tún</i><br/> our neighbor ’s garden</p> <p>(71) <i>Per =s bil</i><br/> Per ’s car</p> <p>(72) <i>Marie-se boek</i><br/> Mary’s book</p> |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Moreover, there are many languages in the world with similar possessive constructions that could be analyzed as cases of nominal pro-drop; cf. Koptjevskaja-Tamm (2001, p. 963) on so-called “possessor-doubling constructions”. The term *pro-drop* has also been used by Chisarik and Payne (2001) in connection with Hungarian possessive constructions and by Kathol (2001) in connection with possessives in Luiseño. Another such language is the Oceanic language Roviana

(Corston-Oliver 2002), which make use of an even more “canonical” version of nominal pro-drop in that pronominal possessors are expressed by affixes on the noun stem; cf. (73). A syntactic possessor phrase can then be combined with a noun inflected for “possessive agreement”; cf. example (74). The affix can be analyzed as establishing the possessive relation and optionally providing a pronominal PRED feature for the possessor in case there is no overt possessor phrase present.

(73)	<i>tama-na</i>	(74)	<i>[tama-na [tie hoi]]</i>
	father-3.SG		father-3.SG person that
	“his/her father”		“that person’s father”

## 8 Conclusion

I hope to have shown that the analysis standardly assumed in LFG to model agreement, pronoun incorporation, and pro-drop behavior in the verbal domain can also be used to account for the behavior of possessive constructions in modern Low Saxon, in other Germanic languages, and in many other languages from around the world. Specifically, I have argued for a nominal pro-drop analysis for so-called possessor doubling phenomena and against a resumptive pronoun approach to such constructions. Furthermore, I have extended the pro-drop analysis also to cases of “missing” possessum phrases. My analyses show that the possessive pronouns in the Germanic languages are not simple pronouns but act as a possessive marker with a dual nature that contains information about both possessor and possessum.

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