## **Upper Sorbian Genitive Pronoun with Possessive Adjective Construction**\*

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**Abstract:** Upper Sorbian carries rich inflectional morphology within its nominal phrase. Within the nP schema, this paper deals with two different possessive adjective constructions with a genitive pronoun in Upper Sorbian. Building on Cowper & Hall (2010)'s analysis for possessive adjective construction in Upper Sorbian, this paper presents three novel hypotheses to account for gender and number features of the genitive pronoun.

#### 1. Introduction

Upper Sorbian has very interesting concord phenomenon happening, especially in possessive adjective constructions with a genitive pronoun. Many studies have been made of simple possessive adjective constructions in Upper Sorbian (see Corbett 1987, 1995, 2006; Choi 2004; Toops 2008; Cowper & Hall 2010). Corbett (2006) introduces two very similar, but not identical possessive adjective constructions, shown in (1) and (2). Even though literature exists, these complex constructions have not been fully accounted yet.

- (1) PA construction normal case (Šewc-Schuster, 1976)
  w naš-eho nan-ow-ej chez-i
  in our-M.SG.GEN father(M)-POSS-F.SG.LOC house(F)-SG.LOC
  'in our father's house'
- (2) PA construction attraction (Corbett, 2006)
  w naš-ej nan-ow-ej chez-i
  in our-F.SG.LOC father(M)-POSS-F.SG.LOC house(F)-SG.LOC
  'in our father's house'

This paper presents a novel way to account for the genitive pronoun in Upper Sorbian and extends its account to an interesting phenomenon where a genitive pronoun appears within the possessive adjective construction. A brief description of agreement and concord is provided in §2. The previous analyses of possessive adjective constructions in Upper Sorbian are present-

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ed in §3. I offer a hypothesis for genitive pronouns and this interesting phenomenon is in §4, followed by a conclusion in §5.

## 2. Background

#### 2.1. Concord

Norris (2014) claims that the characteristics of concord are different from the syntactic agreement in many ways. According to Radford (2004), agreement is an operation by which the  $\Phi$  (person/number) features of the probe get assigned the same values of its goal. When a noun and a structure that contains that noun are in a semantically relevant syntactic relationship, this relationship gets realized by case. In other words, agreement and case-marking involve a relation between active probe and active goal which carry one or more uninterpretable  $\Phi$ -features or case features. If agreement is a one-to-one syntactic operation heavily dependent on case that occurs between two different extended projections resulting in agreeing elements to be seen on heads in general, Norris (2014) defines concord to be one-to-many syntactic operation that occurs between an extended projection and its members, irrelevant to morpho-syntactic case in general. This allows for the concord marker to appear in various positions such as head, specifier and even adjunct.

(3) Agreement (Faβke, 1981)
wón wjele w njej dźĕła
he-3.M.SG.NOM a.lot in 3F.SG.LOC work-3.SG
'He works in it a lot'

In example (3), there is a one-to-one subject–predicate agreement between DP  $w\acute{o}n$  and the head  $T^0$ , as the DP gets c-commanded by the head  $T^0$  and occurs in extended domain of  $T^0$ . The values of the person/number features of  $w\acute{o}n$  are copied onto  $T^0$ , so that the unvalued person and number features [u-PER, u-NUM] on  $T^0$  are assigned the values [3-PER, SG-NUM] carried by DP. Simultaneously, the unvalued feature [u-CASE] carried by the  $w\acute{o}n$  is valued as nominative by the finite  $T^0$ . Due to the result of subject-predicate agreement, the agreeing elements are represented on only the heads that underwent agreement.

Slightly different from agreement that involves features of gender, number, and person within the verbal domain, concord involves features of gender, number, and case within the nominal domain (Norris 2012). Following the concord definition made by Norris (2014), the concord marker appears in non-head position as in (4), and a one-to-many syntactic operation seems to occur as in example (5). As the data in (5) seems to involve an interesting concord phenomenon, I will provide an additional novel explanation about genitive pronoun in the usage of possession in Upper Sorbian based on the foundation of Norris (2012, 2014) in section 4.2.

(4) Concord Example 1 (Corbett, 1995) starš-eje dźowk-i elder- F.SG.GEN. daughter-GEN.SG

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'of the elder daughter'

## (5) Concord Example 2 (Corbett, 2006)

w naš-ej nan-ow-ej chez-i in our-F.SG.LOC father(M)-POSS-F.SG.GEN house(F)-SG.LOC 'in our father's house'

## 3. Possessive Construction and Types of Possession in Upper Sorbian

Upper Sorbian is one of the dialects of Sorbian, for which a majority number of speakers live in Saxony, Germany. According to Elson (1999), Slavic languages have abundant inflectional morphology showing the various feature concords within the nominal phrase, and Upper Sorbian also carries rich inflectional morphology in its nominal phrase.

Various ways exist of indicating possession in Upper Sorbian, as both Corbett (1987, 1995) and Cowper & Hall (2010) have discussed. Among three main ways to express the possession relation such as possessive adjective, adnominal genitive, and prepositional phrase, the following subsection covers possessive adjective only which is important in section 4. The fourth possibility, the genitive pronoun, which seems to have a different concord relationship, is covered in section 4.2.

## 3.1. Types of Possession

According to Corbett (1987), the possessive adjective construction is widely used in Slavic languages. Although the possessive adjective in Upper Sorbian has the most restricted condition for its usage among other ways of expressing possession relation, it is mostly preferred than the other two expressions – which are adnominal genitive and prepositional phrase structures - when they are also available<sup>1</sup>.

(6) Using Possessive Adjective (PA) Construction (Corbett, 1995)

Jan-ow-a knih-a

Jan-Poss-Nom.sg.F book-Nom.sg.F

'Jan's book'

The possessive adjective is formed by attaching the -ow- marker to noun as a suffix (Corbett, 1995). Example (6) shows the possessive adjective construction which conveys the possessive meaning by the -ow- marker attached to the target root 'Jan' of the nominal phrase's head and before the concord marker -a. Here, -a has been used as a concord marker which expresses

<sup>&</sup>lt;sup>1</sup> The usage of Possessive Adjective in Upper Sorbian is highly restricted: the possessor has to be animate and either singular or definite, or all three of them. According to Corbett (1987) and Cowper & Hall (2010), however, the adnominal genitive and the preposition phrase can be also used when possessor is animate and singular as it gets interpreted as indefinite all the time. When all three expressions are interchangeable, Possessive Adjective conveys ordinary meaning while adnominal genitive entails literary meaning and preposition phrase has colloquial and dialectal meaning.

F.SG.NOM. features on both target 'Jan' and the head 'book'. As Corbett (1987), Cowper & Hall (2010), and Faβke (1981) discuss, the possessive adjective construction is used when the referent of the possessor is animate and either singular, definite, or both. As 'Jan' in (6) is singular, animate and definite, the possessive adjective is used to convey the possession meaning. According to Corbett (1987), there are interchangeable ways of expressing possession in Upper Sorbian, especially when the possessor is either defined as a singular animate with definiteness undefined, as in (7), or is a proper name, as in (6). When the possessor is being a singular animate, speakers of Upper Sorbian perceive it as indefinite, so that they prefer to use the possessive adjective over the adnominal genitive or preposition phrase in normal speech and also in literary works (see Corbett 1987; Richter 1980). A further account for these different three usages will be provided with examples in the next paragraph.

(7) Interchangeable Case - Possessive Adjective (normal speech / literary works)
(Faβke, 1981)
wučerj-ow-α dźowk-α
teacher-PA-F.SG.NOM. daughter-F.SG.GEN.

(8) Interchangeable Case - Adnominal Genitive (normal speech) (Faβke, 1981) dźowk-α wučerj-α daughter-F. SG.NOM. teacher(M)-F.SG.GEN. 'daughter of teacher'

(9) Interchangeable Case - Preposition Phrase (dialectal & colloquial speech) (Faβke, 1981)

dźowk-α wot wučerj-α

daughter-F.SG.NOM. of teacher(M)-F.SG.GEN.

'daughter of teacher'

Different from (7) where the possessor 'teacher' is interpreted as definite by using the possessive adjective, the possessor 'teacher' in (8) is a singular animate without definiteness being determined. In this type of case, the adnominal genitive is used for its required condition. According to Corbett (1987), using the prepositional phrase form in dialectal and colloquial speech as in (9) is a normal way to express the same meaning for 'daughter of teacher' as in (8).

Beyond the case where the possessor is just singular and animate, when a proper name is the possessor, using adnominal genitive conveys a highly literary meaning. For this reason, the possessive adjective form is used more frequently than the other two forms.

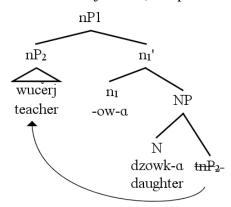
#### 3.2. Possessive Adjective Construction

'(the) teacher's daughter'

According to Cowper & Hall (2010)'s account, the fundamental difference in the structures between the adnominal genitive and the possessive adjective is the size of the possessor phrase. Unlike the adnominal adjective, whose the possessor is merged within the possessum NP inside

of KP in the complement position of possessum N, the possessor in a possessive adjective construction falls in the same position as the possessor of an adnominal adjective construction, not within a KP but as a same nP. As the possessor nP cannot get the case from the *possessive* n head without movement happening, it is raised to the specifier position of  $nP_1$  to receive the spelled-out genitive case from  $n_1$ . This raising movement happens due to the facts that head  $n_1$  1) is a special *possessive* n head and 2) contains the uninterpretable EPP features that makes it possible to attract a nominal to its specifier position as presented below in (10).

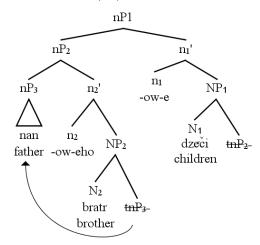
## (10) Possessive Adjective (Cowper & Hall 2010: 7)



Once the head  $n_1$  successfully attracts the nominal to its specifier position, it licenses and spells out its genitive case -ow-a onto its specifier, following Rappaport (1998)'s claim of post-syntactic concord. Cowper & Hall (2010)'s model can even account for the case in which a double possessive adjective construction appears as in (11) and (12). The double possessive adjective construction is such that possessive adjectives occur twice recursively. In other words, the same construction from (10) is repeated twice in the double possessive construction. The possessor of the entire  $nP_1$  will start out as a sister to  $N_1 \, dz \, eci$ . Once the entire  $nP_2$  moves up to the  $n_1$ 's specifier position (due to  $n_1$  containing the EPP feature which attracts nominal to its specifier position), then the possessive marker will be attached onto the entire nominal phrase [nan-ow-eho bratr]. By attaching the -ow- marker, the phrase nan-ow-eho bratr turns into an adjective, so that it is ready for concord with the head noun  $dz \, eci$ .

(11) Double Possessive Adjective (Cowper & Hall 2010)
nan-ow-eho bratr-ow-e dźĕći
father--POSS-M.GEN.SG brother-POSS-N.NOM.PL. child-PL.
'father's brother's children'

#### (12) Structure for (11)



There is, however, a challenging construction which cannot be fully accounted for by Cowper & Hall (2010)'s analysis. In Upper Sorbian, there is an interesting phenomenon in the possessive adjective construction containing a genitive pronoun. I will propose a novel analysis for the genitive pronoun in Upper Sorbian in Section 4.2., which provides a possible way to account for the interesting phenomenon mentioned above.

#### 4. The Solution for Interesting PA Construction in respect of concord

A novel account for genitive pronoun in Upper Sorbian is necessary to analyze the complicated possessive adjective construction. In section 4.1, I will walk through the interesting phenomena occurring when a genitive pronoun combines with the possessive adjective construction. In the following subsection, I will make a novel analysis in regards to the genitive pronoun, building on previous accounts about the possessive adjective. My full explanation of the puzzle will be provided in the following subsection.

#### 4.1. A Puzzle

In the beginning of this paper, I mentioned there are interesting phenomenon in regards to concord occurring in Upper Sorbian's possessive adjective construction. Within a nominal phrase, the adjuncts modifying the head noun bears concord with its head's features. Following previous literature (see Corbett 1987, 1995, 2006; Choi 2004; Toops 2008), I will refer the possessive adjective construction shown in (23) as a normal case. The possessive adjective part *nan-ow-ej* 'father's' shows concord with the features of the head noun *chez* 'house', and the genitive pronoun *naš* 'our' has concord with features of the possessive adjective *nan* 'father'.

(13) PA construction – Normal case (Šewc-Schuster, 1976) w naš-eho nan-ow-ej chez-i in our-M.SG.GEN father(M)-POSS-F.SG.LOC house(F)-SG.LOC 'in our father's house'

Both (13) and (14) show the same concord relation between the possessive adjective *nan-ow-ej* 'father's' and the nominal phrase head *chez* 'house'. However, slightly different from (13), the form of *naš* 'our' shows a concord relation with the head of the nominal phrase *chez* in (14). Corbett (2006) referred to this as 'attraction', as *naš* 'our' gets its feminine gender and singular number features all the way from the head noun *chez* 'house'.

PA construction – attraction (Corbett, 2006)
w naš-ej nan-ow-ej chez-i
in our-F.SG.LOC father(M)-POSS-F.SG.LOC house(F)-SG.LOC
'in our father's house'

A puzzle raised by the data above is why the nominal phrase head *chez* 'house' seems to allow optionality in concord to genitive pronoun when it is combined with possessive adjective. From the data, one genitive pronoun bears concord with the nominal phrase head *chez* 'house', while the other genitive pronoun bears it with the head possessor *nan* 'father'. The main difference between (13) and (14) is the genitive pronoun, which I will provide an account for in the following section.

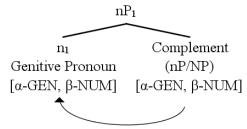
#### 4.2. An Account for the Genitive Pronoun

In this paper, I will be adopting the Bošković (2009, 2010) that there is no DP structure in Slavic languages. In adopting this analysis, I will consider that there is no DP structure for Upper Sorbian as it belongs to the West Slavic group and discuss a genitive pronoun construction, and will eventually use this analysis for the possessive adjective's complex construction that contains the genitive pronoun.

#### 4.2.1. Simple Genitive

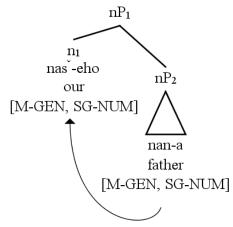
Norris (2014) argues that there is no dependency for case in concord operation compared with subject-verb agreement. In other words, assigning a particular case is not a crucial reason for concord, while it is for subject-verb agreement. Building upon this claim, I also argue that the case feature is not the same as the other two features (gender and number). Therefore, I will put an emphasis on accounting for gender and number features only. Within the nP schema, I will consider the genitive pronoun as the head of nP (15a) and assume it to have either nP or NP as its complement (15b) where the gender and number features are copied from and assigned to the head (genitive pronoun) (15c). Since my analysis is not restricted to a certain structural representational type, choosing a particular phrasal schema – either nP or DP depending on the fact that a language has a determiner or not - would not be crucial to the logic of the analysis. In other words, the properties of genitive pronoun will be; originally merging in the head position of DP (revised in (15a)), requiring the nominal complement (15b), and bearing concord by getting gender and number features from its complement (15c) within the DP schema.

- (15) Properties of Genitive Pronoun Gender & number
  - a. originally merges in the head position of nP
  - b. requires nominal complement
  - c. bears concord by getting gender and number features from its complement
- (16) Structure for Genitive Pronoun Gender & number



Starting from a simple noun phrase containing the genitive pronoun as in (15), the genitive pronoun *naš-eho* 'our' merges in the head position of nP<sub>1</sub> and has a complement *nan* 'father'. The head of nP (genitive pronoun) receives the gender ([M-GEN]) and number ([SG-NUM]) features from its complement *nan* 'father', for the concord relationship.

- (17) Simple genitive pronoun construction (Corbett, 1987)
  naš-eho nan-a
  our-GEN.SG.M father-NOM.SG.M
  'our father'
- (18) Structure for the Simple genitive pronoun construction



## 4.2.2. Combining Possessive Adjective Construction with Genitive Pronoun

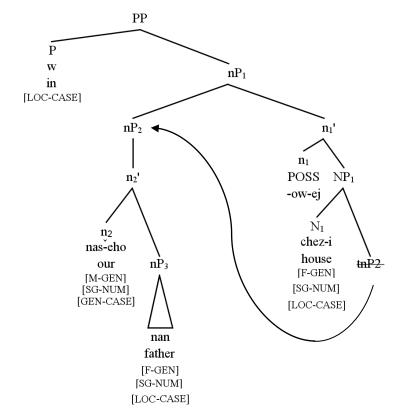
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The account for both the normal case and the attraction case of the complicated possessive adjective construction, combining genitive pronoun and possessive adjective, will be provided in this sub-section. The main difference between these two structures is simply what gender and number features the genitive pronoun expresses.

- (19) PA construction, normal case repeated from (1) w naš-eho nan-ow-ej chez-i in our-M.SG.GEN father(m)-POSS-F.SG.LOC house(f)-SG.LOC 'in our father's house'
- (20) PA construction, attraction repeated from (2) w naš-ej nan-ow-ej chez-i in our-F.SG.LOC father(M)-POSS-F.SG.LOC house(F)-SG.LOC 'in our father's house'

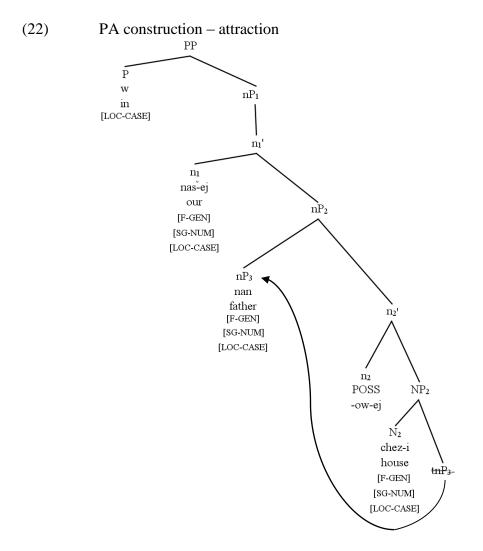
The normal possessive adjective construction in (19), is the version of (10) with (18) being a specifier of n<sub>2</sub> within nP<sub>1</sub>. Building on Cowper and Hall (2010)'s claim, this is the case where possessor *našeho nan* 'our father' merges in NP as a sister to *chezi* 'house' as in (21) below.

#### (21) PA construction – normal case



Due to  $n_1$  being a special *possessive* n head, the head attracts the nominal to its specifier position.  $nP_2$  has the genitive pronoun as its head (15a) and takes a nominal complement,  $nP_3$  (15b). As the head  $n_2$  is not a special *possessive* n head, the  $nP_3$  nan 'father' will stay in situ. Following the hypothesis in (15c), the head  $n_2$  naš will bear concord with its complement,  $nP_3$  spelling-out as naš-eho, the genitive pronoun 'our' for [F-GEN] and [SG-NUM]. As I mentioned earlier, I will be focusing on gender and number features only.

Unlike to the normal case in (19), the genitive pronoun in the attraction case (20) is the head of the entire phrase and the possessive adjective merges in  $nP_1$  as a sister to  $n_1$  as in (22).



Following the hypothesis (15a), the genitive pronoun  $na\check{s}$  'our' is the head that requires a nominal complement,  $nP_2$  (15b). Therefore, the entire possessive adjective phrase  $nP_2$  will be sister to  $n_1$ , and the same syntactic operation as in (10) will happen. Due to the fact that  $n_2$  is the special possessive n head with an EPP feature, it attracts the nominal  $nP_3$  nan 'father' to its specifier position to check its features (Cowper &Hall, 2010). As  $nP_2$ , which is the complement of  $n_1$ , has [F-

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GEN] and [SG-NUM] features,  $n_1$  will bear concord for gender and number features from  $nP_2$ , spelling-out as  $na\check{s}-ej$ , the [F-GEN] and [SG-NUM] form for the genitive pronoun 'our'.

#### 5. Conclusion

The conclusion to be drawn at this point is that the two types of possessive adjective constructions in Upper Sorbian that are quite similar have different structures. I claim three novel hypotheses to account for gender and number features of the genitive pronoun based on Bošković (2009, 2010)'s claim that there is no DP structure in Slavic.

- (23) PA construction, normal case repeated from (1) w naš-eho nan-ow-ej chez-i in our-M.SG.GEN father(M)-POSS-F.SG.LOC house(F)-SG.LOC 'in our father's house'
- PA construction, attraction repeated from (2) w naš-ej nan-ow-ej chez-i in our-F.SG.LOC father(M)-POSS-F.SG.LOC house(F)-SG.LOC 'in our father's house'

My analysis can be summarized as follows: the genitive pronoun in Upper Sorbian 1) merges in the head position of nP, 2) requires a nominal complement, 3) bears concord with its complement for gender and number features, and 4) receives case from its upper projection when it becomes the right-branching node. It would be highly interesting to use this framework to explain the features of the genitive pronoun in other Slavic languages, which have rich inflectional morphology.

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