The Matching Analysis of Relative Clauses: Evidence form Upper Sorbian*

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1 Introduction

Relative clauses in Upper Sorbian are characterized by the peculiar feature that the suffix ż is obligatorily attached to the relativizer, as shown in (1).

(1) Tón hólc, kotryž tam sedźi, je mój bratr.
    the boy REL there sits is my brother
    ‘The boy who is sitting there is my brother.’

The aim of this paper is to argue that relative clauses in Upper Sorbian have the structure postulated by the Matching Analysis, and that the suffix ż is a reflex of the deletion of the head noun internal to the relative clause. According to this analysis, the relative clause in (1) has the structure shown in (2), with ż being the reflex of the deletion of the head noun hólc.

(2) Tón hólc, [kotry hólc → ż] tam t, sedźi, je mój bratr.

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The paper is structured as follows. In section 2, I give a brief overview of the relativization strategies in Upper Sorbian. I discuss previous accounts to ź-suffixation and their inadequacy in section 3. In section 4, I provide evidence that relative clauses in Upper Sorbian require the Matching Analysis structure and that ź-suffixation is a morphological reflex of this structure. I will also argue for the inadequacy of the Head External Analysis and the Raising Analyses in this section. In section 5, I discuss some consequences of this analysis.

2 Relative Clauses in Upper Sorbian

Upper Sorbian has two strategies for the formation of relative clauses (cf. Bartels & Spiess 2012 for details). The first involves a relative pronoun — usually drawn from the set of interrogative pronouns — which agrees with the head noun in φ-features, cf. (3a). The second involves an invariant relativizer, which does not agree in φ-features with the head noun, cf. (3b).

(3) a. Tón hólc, štôž/kotryž tam sedźi, je mój bratr.
   the boy REL REL there sits is my brother

b. Tón hólc, kiž tam sedźi, je mój bratr.
   the boy REL there sits is my brother
   ‘The boy who is sitting there is my brother.’

The two strategies differ from each other in that the first puts no restriction on the relativized element, whereas the second is restricted to subject and objects\(^1\). The examples in (4) show that relativization of indirect objects is impossible with kiž, the examples in (5) show that relativization of comitative adjunct is impossible with kiž either\(^2\).

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\(^1\) One sometimes reads in grammars of Upper Sorbian that kiž can be also used to relativize grammatical relations other than subject and direct object if a resumptive pronoun appears at the position of the relativized element (Bartels & Spiess 2012, pp. 230-1; Libš 1884, p. 198; Polański 1967, p. 79). It is not clear to me whether this is generally correct. My main informant rejected such sentences. It also clashes with the descriptions in grammars for both the standard language (Fasske 1981, p. 625; Šewc-Schuster 1976, p. 169) and the colloquial language (Schneider 1853, p. 104; Seiler 1830, p. 115). Moreover, the Lower Sorbian equivalent kenž is also incompatible with resumptive pronouns. I therefore stick to the restriction that kiž is only compatible with subject and object relative clauses.

\(^2\) Note that the inflected forms of štôž other than the nominative diachronically represent inflected forms of kiž.
(4) a. tón hólc, √komuž/√kotremuž ja sym tón knihu dal
   the boy REL REL I am the book given
b. tón hólc, *kiž ja sym tón knihu dal
   the boy REL I am the book given
   ‘the boy I gave the book to’

(5) a. tón hólc, √z kimž/√z kotrymž ja sym rejwał
   the boy REL REL I am danced
b. tón hólc, *kiž ja sym rejwał
   the boy REL I am danced
   ‘the boy I danced with’

Importantly, irrespective of the strategy, the suffix ż has to appear on both
types of relativizers, cf. (6)

     the boy REL there sits is my brother
b. *Tón hólc, ki tam sedźi, je mój bratr.
     the boy REL there sits is my brother
     ‘The boy who is sitting there is my brother.’

3 Previous Analyses of ż-Suffixation

There exist two approaches to ż-suffixation in Upper Sorbian. The first
treats ż as a derivational suffix that turns an interrogative pronoun into a
relative pronoun (Fasske 1981, p. 615; Polański 1967, p. 72; Šewc-

(7) relative pronoun = interrogative pronoun + ż

The second takes ż to be a variant of the Upper Sorbian subordination
marker zo (Libš 1884, p. 190; Schaarschmidt 2002, p. 34). Accordingly,
the relative clause in (1) would have the corresponding structure in (8)³.

³ A variant of this approach is formulated in Šerak 1973, p. 101. She speculates that ż is a
general subordination marker. Therefore, it also attaches to relative pronouns and adverbal
complementizers (cf. 10). However, given her broad definition of subordination, ż is
expected to occur on zo as well, which it usually doesn’t. It is moreover also expected that
ż is able to attach to wh-items in embedded questions, contrary to fact (cf. 13).
Each approach faces significant problems. The first approach runs into two problems. On the one hand, contrary to what this approach predicts, not every relativizer has an interrogative counterpart. There exists, for example, no interrogative counterpart to the relativizer \( kiž \), cf. (9).

\[
(9) \text{* Ki je to činił?}
\]

who is that done
‘Who has done that?’

On the other hand, not every element to which \( ž \) is suffixed is an interrogative element. For \( ž \) can also be suffixed to many adverbs, which operation turns them into adverbial complementizers, cf. (10).

\[
(10) \begin{align*}
\text{prjedyž} & \quad \text{‘before’} & \quad \text{prjedy} & \quad \text{‘earlier’} \\
\text{dolhož} & \quad \text{‘as long as’} & \quad \text{dolho} & \quad \text{‘long’} \\
\text{(hač)runjež} & \quad \text{‘despite’} & \quad \text{runje} & \quad \text{‘just now’} \\
\text{ručež} & \quad \text{‘as soon as’} & \quad \text{ruče} & \quad \text{‘quickly’}
\end{align*}
\]

This second problem is more severe than it appears because the suffix \( ž \) has a very restricted distribution. More specifically, it either appears on relative pronouns or on adverbial complementizers. Moreover only very few monomorphemic words in Upper Sorbian end in \( ž \) (approximately 20), which means that this restricted distribution cannot be merely accidental. Given this restricted distribution, it is a serious defect of the approach treating \( ž \) as a derivational suffix that it is not able to provide any insight into the connection between adverbial complementizers and relative pronouns (cf. section 7 for an analysis establishing such a connection).

The second approach faces even more problems. The first problem it faces is that the general subordination marker presumably underlying \( ž \) is \( zo \) in Upper Sorbian, cf. (11), which means that an unmotivated chain of changes\(^4\) is needed to get from \( zo \) to \( ž \), cf. (12).

\(^4\) This chain of changes is unmotivated because it involves two changes that are otherwise unattested, namely, first, the drop of the final vowel and, second, the change from \( z \) to \( ž \). Although the former change occurs with masculine pronouns in the accusative, turning \( joho \) into \( joh' \); it is part of a general change turning bisyllabic forms of personal pronouns into monosyllabic ones. Other instances of this change do not involve \( o \)-deletion, but
(11) Ja wèm, zo je to wopak.
I know that is that mistake
‘I know that that was a mistake.’

(12) tón hólc [CP [SpecCP štó/kotry] [C [c= zo] tam sedži]] je mój bratr
→ tón hólc [CP [SpecCP štó/kotry] [C [c= ź] tam sedži]] je mój bratr

The second problem is that contrary to what is predicted, ź does not appear in all embedded clauses, but only in relative clauses, cf. (13).

(13) Ja wèm, kotry/štó(*ź) je to činil.5
I know who who is that done
‘I know who did that.’

The last problem of the second approach is that it doesn’t capture the position of ź. As the example in (14) demonstrates, ź can appear internal to a pied-piped constituent.

(14) To je ta žona, [NP čeuž knihu] sym ja čitał.
that is the woman whose book am I read.
‘That is the woman whose book I read.’

This is unexpected because the whole NP in (14) occupies SpecCP so ź is predicted to be able to follow that whole NP; this, however, is completely ungrammatical, cf. (15b).

(15) a. To je ta žona, [CP [SpecCP [čeju knihu]] [C [c= ź] [TP t, sym ja čitał]]]
b. *To je ta žona, čeu knihuž sym ja čitał.

Also this problem is more severe than it might appear. One could argue that (14) involves an instance of Left Branch Extraction. If so, then the dropping of the first syllable (for example, jemu → mu). And although the second change is attested in many inflectional paradigms, it is reflex of palatalization in all these instances, that is, a reflex of z being followed by a front high sonorant. This context does not appear in the case at hand, so the similarity is deceptive.

5 Even though free relatives are formed with the same set of relativizers (štož/kotryž/kiž), the subordinate clause in (13) cannot be understood as a free relative because the predicate wèdzieć does not accept NP objects.
sentence does not contain the bracketed NP from (14) in SpecCP but only the relativizer čeju, followed by ž in C°, as shown in (16).

(16) To je ta žona, [CP [SpecCP čeju,] [C=[C° ž] [TP [NP tı knihu] sym ja čital]]]

Although appealing, this alternative cannot be maintained. On the one hand, Left Branch Extraction is optional in Upper Sorbian so that (15b) would still be wrongly predicted to be grammatical. On the other hand, clitic interrogative particles such as ha or da (cf. Franks & King 2000: 175 for their clitic status), which occur in the same position as the subordination marker zo, are licit in both positions, cf. (17).

(17) a. √Čeju knihu ha/da sy ty čital?
   whose book QPRT are you read
   ‘Whose book did you read?’

b. √Čeju ha/da knihu sy ty čital?
   whose QPRT book are you read
   ‘Whose book are you read?’

The data in (15) and (17) also show that ž is not a second position clitic similar to halda. For if it were one, its positional options should be identical to that of halda. But as the contrast between (17a) and (15b) shows, this is not the case.

In sum, the two previous approaches to ž-suffixation are empirically unsatisfactory.

4 A New Analysis of ž-Suffixation

4.1 ž-Suffixation as a Reflex of Ellipsis

The claim I want to put forward in this section is that ž-suffixation is the reflex of the syntactic structure of relative clauses in Upper Sorbian. As I will argue presently, the syntactic structure underlying relative clauses in Upper Sorbian is the one postulated by the Matching Analysis (Chomsky 1965, Cinque 2015, Citko 2001, Katz & Postal 1964, Salzmann 2006). The structure of the relative clause in (1) according to the Matching Analysis is shown in (18)⁶.

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⁶ Here and throughout the paper, numerical indices indicate coreference relations, whereas alphabetical subscripts indicate antecedent-trace relations.
As this structure indicates, the Matching Analysis embodies three claims about the structure of relative clauses. First, there are two instances of the head noun, one internal to the relative clause and one external to the relative clause. Second, these two instances are independently base-generated, that is, they are not related via movement to each other. Third, the instance of the head noun internal to the relative clause is elided. It is this ellipsis operation that I will argue ź-suffixation is a reflex of; cf. (19).

4.2 Advantages of the Matching Analysis

The decisive argument in favor of the Matching Analysis of relative clauses in Upper Sorbian comes from what I call special contexts. Special contexts are contexts that require lexical NPs but disallow all sorts of non-lexical NPs, including personal pronouns and indefinite pronouns. Two such contexts are illustrated in (20) and (21).

(20) Marko je na √te wašnje/*njo/*něsto rēčał.
    ‘Marko has spoken in that way (*it/*something).’

(21) To so w √tych padow /*nich /*něčim wobkedźbuje.
    ‘That was taken care of in these cases (*them/*something).’

In the remainder of this paper, I will refer to the relevant requirement imposed by special contexts as the lexicality requirement.

The reason why special contexts provide the decisive argument in favor of a Matching Analysis is because only this structure allows to correctly capture the distribution of special contexts in relative clause
structures. As mentioned above, the Matching Analysis assumes that there are two instances of the head noun — one inside the relative clause, the other external to it — that both instances are base-generated, and that the instance of the head noun internal to the relative clause is elided. These three assumptions lead to three predictions with respect to special contexts and relative clauses. First, the relative pronoun should be able to be compatible with a special context. This is predicted because a relative pronoun is a lexical NP in disguise, due to the ellipsis of its lexical noun, and as such it should be able to satisfy the lexicality requirement. Second, the head noun appearing external to the relative clause should also be compatible with a special context. This is predicted because if the head noun appears external to the relative clause, then the position it appears in is internal to the clause in which the relative clause is embedded. And if this position defines a special context, then the head noun occurring in this position can satisfy the lexicality requirement. (This prediction appears trivial but as we will see in the discussion of the Raising Structure, it is not.) Third, the relative pronoun and the head noun external to the relative clause should be able to be simultaneously compatible with special contexts. This prediction follows from the assumption that the two instances are base-generated and that they can therefore independently satisfy the lexicality requirement imposed by the special contexts. As the sentences in (22)–(24) show, all three predictions are borne out.

(22) √ Te wašnje, na kotrež je Marko rěčał, je mje překwapiło.
   ‘The way in which he spoke surprised me.’

(23) √ Marko je rěčał na wašnje, kotrež je mje překwapiło.
   ‘Marko spoke on way which is me surprised’

(24) √ Marko je rěčał na te wašnje, na kotrež je hižo
    ‘Marko spoke in the way that already his father used to speak in.’
The sentence in (22) has a relative clause in which the relativized element originates in a special context. Since the relative pronoun is in fact a lexical NP, no problem with respect to the lexicality requirement arises; cf. the structure for (22) according to the Matching Analysis in (25).

(25) te wašnje [CP [na kotre wašnje], je Marko t, rěčał] je mje překwapiło

In (23), the head noun in the clause hosting the relative clause originates in a special context. As the head noun is lexical, no problem arises in connection to the lexicality requirement; cf. the corresponding structure for (23) according to the Matching Analysis in (26).

(26) Marko je rěčał na wašnje [CP [kotre wašnje], je mje t, překwapiło]

Finally, (24) shows that both the head noun and the relative pronoun can appear in a special context. Since both items are lexical NPs, the lexicality requirement imposed by the two special contexts can be satisfied, as the structure for (24) according to the Matching Analysis in (27) illustrates.

(27) M. je rěčał na te wašnje [CP [na kotre wašnje] je hižo jeho nan t, rěčał]

In order to complete the argument for the Matching Analysis, one also needs to show that the competing alternative proposals for the structure of relative clauses are not able to capture the distribution of special contexts in Upper Sorbian. This is what I will do in the following two parts.

4.3 The Inadequacy of the Head External Analysis

The first alternative to consider is the Head External Analysis (Chomsky 1977 et seq.). It assigns a structure to a relative clause according to which the head noun originates outside the relative clause, whereas internal to the relative clause an operator-like element co-indexed with the head noun undergoes extraction; cf. the structure in (28) for the relative clause in (1).

(28) tón hólc, [CP [OP kotry], tam t, sedźi] je mój bratr
    the boy REL there sits is my brother

Under this approach, ź-suffixation is a reflex of A′-movement internal to a relative clause, as indicated in (29).
(29) Ž-suffixation according to the Head External Analysis

Base Structure: tón hólč₁ [CP tam [OP kotry₁] sedži] je mój bratr
   the boy there REL sits is my brother

A’-Movement: tón hólč₁ [CP [OP kotry₁], tam t sedži] je mój bratr

Ž-suffixation: tón hólč₁ [CP [OP kotry₁-ž], tam t, sedži] je mój bratr

This alternative account cannot be upheld because it runs into trouble with special contexts. First, it predicts that relative pronouns should be barred from special contexts. This is predicted because operators are not lexical, and therefore cannot satisfy the lexicality requirement imposed by the special contexts. One might suggest that the grammaticality of relative pronouns in special contexts is due to A’-movement. However, then one predicts A’-movement from special contexts to be generally fine. But as the ungrammaticality of (30) shows, this is not the case.

(30) * Na kotre/čo je Marko rěčał?
    on what what is Marko spoken
    ‘What did Marko speak in?’

Second, it predicts that at least A’-movement of relative pronouns is always possible from a special context. But this prediction is not borne out either, cf. (31).

(31) * Wón je so na něšto wobćežoval, na kotrež ja
    he is REFL on something complained on which I
    sym pječa rěčał.
    am allegedly spoken
    ‘He complained about something that I had allegedly spoken in.’

The ungrammaticality of (31) is unexpected under the Head External Analysis because A’-movement in relative clauses should guarantee compatibility with special contexts. However, on the assumption that the structure of relative clauses corresponds to the one postulated by the Matching Analysis, the ungrammaticality of (31) is predicted. For as shown in example (20) above, the indefinite pronoun něšto is illicit in special contexts. As něšto is also included in the relative pronoun in (31), the NP contained in the relative pronoun is not lexical enough to satisfy
the lexicality requirement imposed by the special context inside the relative clause, cf. (32)\(^7\).

(32) něšto \([_{CP} [_{na} kotre \_{šťo}]],_{ja} _{sym} _{pječa} _{t}, _{rěčař}\)

4.4 The Inadequacy of the Raising Analyses

The other alternatives to consider are Raising Analyses. They come in two varieties, the Head Raising Analysis (Kayne 1994, Bianchi 2000, Vries 2002) and the Promotion Analysis (Heycock 2014, Schachter 1973, Vergnaud 1974). Both analyses agree that the head noun originates inside the relative clause, but differ with respect to its final position. According to the Head Raising Analysis, the head noun is moved to some left peripheral position of the relative clause. It therefore remains inside the relative clause; cf. the structure in (33) for the relative clause in (1).

(33) tón \([_{CP} hólc_{k} [_{kotry} t_{k}], _{tam} _{t}, _{sędźi}] _{je} _{mój} _{bratr}\)

According to the Promotion Analysis, the head noun originates inside the relative clause and is then moved outside the relative clause into the matrix clause; cf. the structure in (34) for the relative clause in (1).

(34) tón hólc_{k} \([_{CP} [_{kotry} hólc_{k}], _{tam} _{t}, _{sędźi}] _{je} _{mój} _{bratr}\)

Under both analyses, ŏ-suffixation is a consequence of the movement the head noun, cf. (35) & (36).

(35) ŏ-SUFFIXATION ACCORDING TO THE HEAD RAISING ANALYSIS
Base Structure: tón \([_{CP} tam [_{kotry} hólc] _{sędźi}] _{je} _{mój} _{bratr}\)

A’-Movement: tón \([_{CP} [_{kotry} hólc], _{tam} _{t}, _{sędźi}] _{je} _{mój} _{bratr}\)
Head Raising: tón \([_{CP} hólc_{k} [_{kotry} t_{k}], _{tam} _{t}, _{sędźi}] _{je} _{mój} _{bratr}\)
ěšťo-
suffixation: tón \([_{CP} hólc_{k} [_{kotry-ě} t_{k}], _{tam} _{t}, _{sędźi}] _{je} _{mój} _{bratr}\)

\(^7\) The upper case šťo in (32) is used because I wish to remain agnostic at this point how precisely něšto is structurally represented inside the relative pronoun.
(36) Ž-suffixation according to the promotion analysis

Base structure: tón _ [CP tam [kotry hólć] sedźi] je mój bratr
the there REL boy sits is my brother
A’-Movement: tón _ [CP [kotry hólć], tam ti, sedźi] je mój bratr
Head raising: tón hólć [CP [kotry ti], tam ti, sedźi] je mój bratr

Either version of the raising analysis makes incorrect predictions vis-à-vis special contexts and therefore cannot be upheld.

The head raising analysis incorrectly predicts that only relative pronouns are licit in special contexts. But as shown in (23) and (24), the head noun is licit in special contexts, too. This prediction seems bizarre but it follows from a crucial ingredient of this analysis, namely that the head noun never leaves the relative clause. This means that (23) has the structure in (37).

(37) Marko je rěčał na [CP wašnje, [kotre ti], je mjje ti, překwapiło]

As indicated, wašnje is not internal to the matrix clause and can therefore not satisfy the lexicality requirement imposed by the special context in the matrix clause. Crucially, the grammaticality of sentences such as (38) cannot be explained with the help of some mechanism that makes elements in the left periphery of clauses visible to superordinate clause, cf. (38).

(38) To, kogo Maria widziała, jest tajemnićą.8
that who Maria saw is secret
‘Who Mary saw is a secret.’
= something is a secret
≠ someone is a secret

(Borsley 1997, ex. 8)

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8 It is important to stress that even though (38) is not a relative clause but a complement clause to the determiner to, it nevertheless counts as an argument against the head raising analysis. For the crucial ingredient of this analysis is that complement clauses and relative clause have the same structure, namely D° + CP. If so, overt manifestations of this structure, such as (38), are predicted to behave identically to relative clauses, contrary to fact.
As indicated in (38), the element *kogo* sitting in the left periphery of a subordinate clause is not visible in the superordinate clause. If it were, the interpretation that someone is a secret should be available, contrary to fact. The Promotion Analysis incorrectly predicts that the head noun and the relative pronoun should not be licit simultaneously in special contexts. As this seems slightly counterintuitive, let me explain. Consider the simplified structure in (39) for the crucial example (24).

(39) rěčał na wašnję, [cP [na kotre tį] je tį rěčał]

According to the promotion Analysis, a lexical NP occupies the position of the head noun (=A) and the position of the relative pronoun before movement (=B). Therefore, the Promotion Analysis seems to be able to account for the observation that both the head noun and the relative pronoun are compatible with special contexts. But this account is flawed because it ignores a crucial feature of the derivation in (39), namely that the relevant lexical NP occupies both positions *at distinct stages of the derivation*. This is of importance because special contexts are a variety of selectional restrictions. Selectional restrictions in turn are a property of some designated stage in a derivation. More specifically, selectional restrictions are either satisfied before movement or after movement. Given the Promotion Analysis, the lexical NP moves from the position of the relative pronoun (=B) to that of the head noun (=A). Therefore, either the pre- or the post-movement structure counts for selectional restrictions⁹. Consequently, either the lexical NP in A is visible for selectional restrictions, or the one in B, but not in both. The Matching Analysis faces no such problem because the lexical NP defining the head noun is base-generated in both positions and therefore visible in both positions. Importantly, the problem for the Promotion Analysis remains even if the copy theory of movement is adopted. The structure for (39) incorporating the copy theory is shown in (40) (deleted copies are set in gray).

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⁹ This argument is unaffected by the precise post-movement position. If reconstruction of the head noun is assumed, then pre- and post-movement position coincide. Nevertheless, only one of them will be available for the satisfaction of selectional restrictions, even if this is trivially B under this scenario, as pre- and post-movement position are identical.
The reason that this modification is of no help is that having multiple copies available doesn’t entail that all of them are visible. Consider in this respect the argument from Chomsky (1993) illustrating the advantage of the copy theory of movement. As Chomsky (1993: 38) observes, the sentence in (41a) has the structure in (41b), that is, one containing two copies instead of a moved element and a trace connected to it (deletion of copies at PF will be ignored here).

(41)  a. John wonders which picture of himself Bill saw.
     b. John wonders [which picture of himself] Bill saw [which picture of himself]

Importantly, despite the presence of two copies only one of them is visible, that is, only one copy is interpreted at LF. If the topmost copy is interpreted at LF, then John will bind himself, cf. (42a). If the lower copy is interpreted at LF, then Bill acts as a binder for the anaphor, cf. (42b).

(42)  a. John wonders [which x, x picture of himself] Bill saw x
     b. John wonders [which x] Bill saw [x picture of himself]

Crucially, it is impossible for both copies to be visible, that is, to be interpreted at LF. For then the two NPs John and Bill should be able to simultaneously bind himself; but such a reading is impossible for (41a). Returning to the discussion surrounding (40), it should have become clear that the presence of two copies of wašnje is of no help for an explanation of the fact that wašnje can be interpreted both in the relative clause and in the matrix clause. The reason is that also in this structure, only one copy is available to satisfy the sectional restriction. If selectional restrictions are a property of pre-movement structure, then only the lower copy of wašnje is visible for selectional restrictions. If selectional restrictions are a property of post-movement structures, then only the topmost copy of wašnje is visible10. But the option that both copies are visible is as much excluded as interpreting both copies of the moved wh-phrase in (41b).

10 If reconstruction is assumed, then again only the lower copy is visible; cf. fn. 9.
4.5 Summary
To summarize this section, I have argued that only the Matching Analysis captures the distributional properties of head nouns and relative pronouns vis-à-vis special contexts. On the basis of this demonstration, I conclude that Ž-suffixation, which so far has not received a satisfactory analysis, is the result of the ellipsis of the head noun inside the relative clause.

5 Consequences of the New Analysis of Ž-Suffixation

5.1 Benefits
The first benefit of the analysis of Ž-suffixation relying on the Matching Analysis is that it faces no problems with the position of Ž internal to an NP, cf. (14), repeated here as (43).

(43) To je ta žona, [NP čejuž knihu] sym ja čital. 
    that is the woman whose book am I read. 
    ‘That is the woman whose book I read.’

This ceases to be a problem because the instance of the head noun originates next to the possessive determiner čeju, so that consequently Ž will be attached to čeju and not to the NP pied-piped by čeju, cf. (44).

(44) to je ta žona [NP [D° [POSS čeju] žony] knihu] sym ja čital

Incidentally, the case mismatch between the nominative marked form žona and the genitive marked form žony does not preclude ellipsis as ellipsis is known to be insensitive to case specifica
tions (Citko 2001).

The second benefit of the analysis relying on the Matching Analysis is that it does not predict Ž to appear in all embedded clauses, because not all embedded clauses are relative clauses. Therefore, no stipulative change from zo to Ž is needed, let alone the stipulative restriction that it

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11 I should note here that I am in fact quite sympathetic to the idea that all subordinate clauses are in fact relative clauses (cf. Arsenijević 2009, Caponigro & Polinsky 2011). Under this view, across the board Ž-suffixation is nevertheless unexpected because subordinate clause and relative clauses proper still differ in many respects, for example with respect to the base positions of the shared head noun. It will then be these differences that Ž-suffixation is sensitive to.
applies only in relative clauses, but not in embedded clause or indirect questions.

5.2 Problems
The new analysis of ż-suffixation seems to inherit all the problems of the analysis treating ż as a derivational suffix. But as I attempt to show in this part, these problems are only apparent.

The first problem is that ki is not a determiner, as predicted by the new analysis relying on the Matching Analysis, cf. (45).

(45) a. Tón hólc, kiž tam sedźi, je mój bratr.
   = Tón hólc, [ki hólć] tam sedźi, je mój bratr.
   b. * ki hólć

The suggestion I want to make is that ki is a determiner after all, but one that puts two specific restrictions on its syntactic environment. First, it requires its nominal complement to be elided; and second, it is restricted to relative clauses12. Although both requirements seem dubious, they are attested in other languages as well. The first requirement, Sorbian shares with the German indefinite determiner welch-. This determiner can be used as an indefinite only when its nominal complement is elided, cf. (46).

(46) Wir brauchen Milch; haben Sie hier welche (*Milch)?
    we need milk have you here which milk
    ‘We need milk; do you have any?’

The second requirement, Sorbian shares with Greek, which possesses specialized determiners for interrogative (Q), relative (REL), and free relative (FR) uses, cf. (47a–c), respectively.

(47) a. Ποιος ἀρρέται;
    who.Q comes
    ‘Who is coming?’
   b. Ο άντρας ο οποίος ἀρρέται θα πάρει ένα δώρο.
    the man who.REL comes FUT take a present
    ‘The man who is coming will get a present.’

12 If Matching Analysis is universally valid, the first requirement follows from the second.
So, *ki* in Upper Sorbian is similar to a combination of *ο οποίος* or *όποιος* in being restricted to very specific uses, and like *welch-* in requiring its nominal complement to be elided.

The second problem the new analysis faces is that *ż* appears on many adverbial complementizers. The suggestion I want to make is that this is not a problem at all but in fact a desired consequence of the new analysis. The appearance of *ż* on adverbial complementizers is only a problem if one wishes to treat adverbial clauses and relative clause separately. But both past and recent research on adverbial clauses (Caponigro & Polinsky 2011, Demirdache & Uribe-Etxebarria 2004, Haegeman 2010, Geis 1970) indicate that adverbial clauses are relative clauses modifying silent nouns in the matrix clause. According to this analysis, the examples in (48) have the corresponding structures in (49) (silent nouns are set in upper case).

(48) a. Wón je domoj šol, prjedyž dało so do dešćika.
   he is home gone before gave REF to rain
   ‘He went home before it started raining.’

   b. Wón je domoj šol, hdyž dało so do dešćika.
   he is home gone when gave REF to rain
   ‘He went home when it started raining.’

(49) a. Wón je domoj šol prjedy [TIME X [[TIME X] dało so do dešćika]
   Wón je domoj šol prjedy [TIME X [ż] dało so do dešćika]
   → Wón je domoj šol [TIME X [[TIME X] dało so do dešćika]

   b. Wón je domoj šol [TIME X [[hdyTIME X] dało so do dešćika.
   → Wón je domoj šol [TIME X [[hdy-ż] dało so do dešćika.

Independent evidence for this analysis comes from the distribution of the concessive particle *-kuli* (Engl. ‘-ever’). This particle can attach to relative pronouns (cf. 50a), must not attach to interrogative pronouns (cf. 50b), but is compatible with adverbial complementizers (cf. 50c). In other words, adverbial and relative clauses form a natural class.\footnote{I should stress though that this idea needs to be worked in more detail because not all adverbial complementizers combine with *ż*, cf. Fasske 1981, chapter 9.2.}
(50) a. Ty směš jěsć, štož(kuli) ty cejš.
you are allowed eat whatever you want
‘You can eat what(ever) you want.’
b. Ja so prašam, hdyž(*kuli) ty mje zawołaš.
I REFL ask whenever you me call
‘I wonder when(*ever) you call me.’
c. Ja přińdu, hdyž(kuli) ty mje zawołaš.
I come whenever you me call
‘I come when(ever) you call me.’

The third problem (raised by a reviewer) concerns the fact that ellipsis
defines less strict identity requirements than movement, and that this is a
problem for the Matching Analysis of relative clauses. However, it seems
to me that this difference in fact supports the Matching Analysis. First,
morphological identity is not required; case mismatches are fine in relative
clause (cf. 44), similar to cases of nominal ellipsis (Citko 2001). Second,
both types of ellipsis allow identity of sense interpretations, cf. (51).

(51) a. John bought a hat, and Mary bought one, too.
b. John ordered the meal that Mary had ordered, too.

In both examples, neither the hat nor the meal are necessarily referentially
identical. Lastly, wh-movement gives rise to Principle C effects in
questions, but not in relative clauses, cf. (52). Whatever turns out to be the
exact source of this difference, it shows that movement dependencies
differ from the dependency between a head noun and a relative pronoun.

(52) a. *Which picture of John, did he, see in the article?
b. √ The picture of John, which he, saw in the article was flattering.

6 Conclusion

Based on contexts requiring lexical NPs, I argued that relative clauses in
Upper Sorbian require the Matching Analysis. I showed that this allows
for a simple analysis of ž-suffixation as a morphological reflex of the
ellipsis of the head noun inside the relative clause. I argued against altern-
native analyses of ž-suffixation as a reflex of A’-movement of the relative
pronoun or as a reflex of head raising. I finally discussed the consequences of the analysis for the syntax of determiners and adverbial clauses in Upper Sorbian. I suggested that some determiners require an elided nominal complement and that adverbial clauses are relative clauses in disguise.

References


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