

Chapter 7

Agreement inflection and word order in Viskadalian Swedish

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In this article, I investigate the varying morphosyntax of 20th century Viskadalian Swedish. Viskadalian verbs are inflected for both person and number. The Rich Agreement Hypothesis (RAH) posits an interdependence between such rich agreement and movement of the finite verb from V to I. However, only in the central parts of the Viskadalian dialect area (CV) is V-to-I an option; in Southern Viskadalian (SV), V must remain in situ (in VP). This lack of V-to-I in SV certainly appears to falsify the RAH. I argue, however, that it follows from SV and CV agreement being categorically different. Although both are semantically rich, only CV agreement is morphologically distinct, crucially triggering V-to-I. By contrast, in SV, agreement is embedded under tense.

Keywords: Viskadalian Swedish, Rich Agreement Hypothesis, morphosyntactic change, Person-Number Universal, morphosyntactic variation, V-to-I movement, inflectional categories, morphological reanalysis, syntactic grammaticalization

1 Introduction

In this paper, I address the morphosyntax of the Swedish dialect of Viskadalen (lit. ‘the valley of the River Viskan’). This dialect, which I call Viskadalian (following Petzell 2017), was once spoken all around the lower reaches of the River Viskan and down south to the parishes surrounding the town of Varberg; see Figure 1 (where this part of the river is blue). Today, it is only in the south, more specifically in the fishing village of Träslövsläge, that the traditional dialect is largely intact.



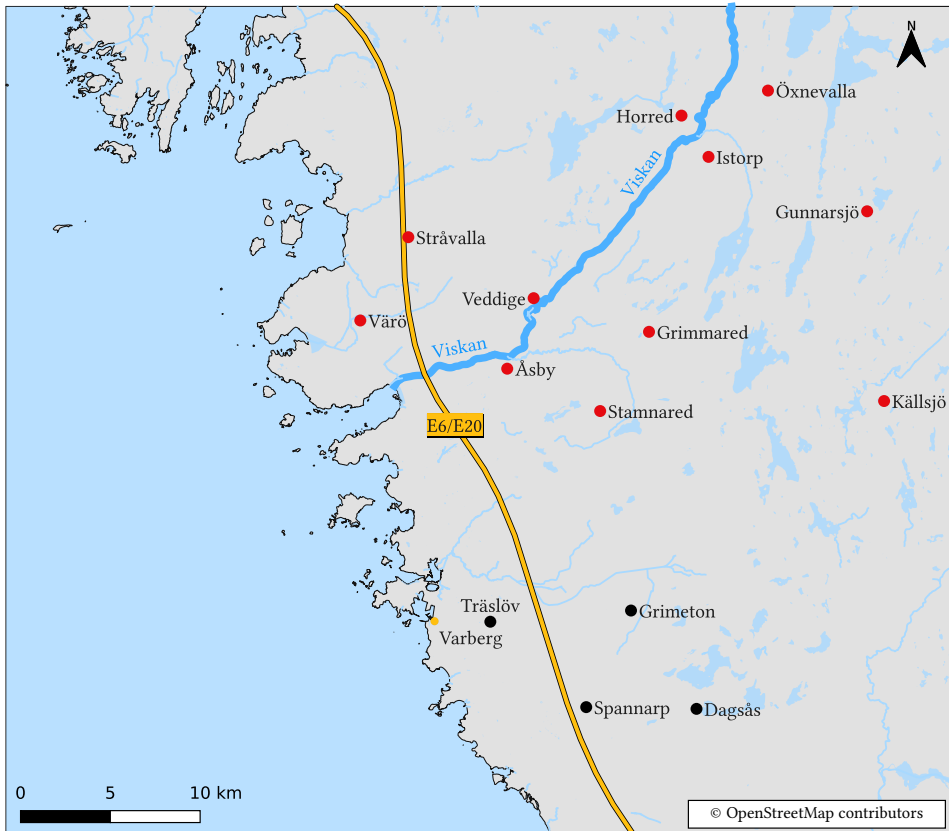


Figure 1: Parishes in central (red) and southern (black) Viskadalen and lower reaches of the River Viskan. Varberg is marked in yellow.

Unlike present-day Standard Swedish, but like Old Swedish, Viskadalian exhibits verbal inflection for both person and number. For instance, the weak verb ‘read’ has four forms in the present tense: *läser* (SG), *läsom* (1PL), *läsen* (2PL), *läsa* (3PL), strikingly reminiscent of the corresponding Old Swedish forms *läsir*, *läsum*, *läsin*, *läsa*. Present-day Standard Swedish has but one form across the board: *läser*. Now, the so-called Rich Agreement Hypothesis (RAH) predicts that richly inflected verbs move to the I-domain. This means that they should precede sentence adverbials in subordinate clauses. On the other hand, uninflected verbs are predicted to remain in situ (in VP), following sentence adverbials. Both present-day Standard Swedish (PDS) and Old Swedish (OS) behave as expected, given the RAH: they display the order Adverbial-Finite verb (AF) and Finite verb-Adverbial (FA) respectively, as shown in (1a–b).

- (1) a. *huset där vi gärna ville bo* AF (PDS)
 house.DEF where we gladly want.PST live.INF
 ‘the house where we would gladly live’
- b. *ther the mågho äy aff gånga* FA (OS)
 where they may.3PL not off go.INF
 ‘from where they must not deviate’ (K-styr)

By contrast, present-day Viskadalian appears to falsify the RAH: all speakers accept the AF order, whereas the FA order is judged completely ungrammatical; see (2a–b).¹

- (2) a. *De e båga som vi inte håmm lässt* AF
 it be.PRS.SG/3PL book.DEF that we not have.PRS.1PL read.PTCP
 fär.
 before
- b. **De e båga som vi håmm inte lässt* *FA
 it be.PRS.SG/3PL book.DEF that we have.PRS.1PL not read.PTCP
 fär.
 before
 ‘it is the book that we have not read before’

Going back some generations, however, the FA order was indeed a common subordinate clause word order in the more central parts of Viskadalen, closer to the river and further from the coast; see (3a). However, the AF order was the dominant type (see 3b).

- (3) a. *mänsker som vella gärna pruta* FA
 people.PL that want.PRS.3PL gladly bargain.INF
 ‘people that would like to bargain’ (Horr)²
- b. *de da inte kunna använna* AF
 that they not can.PRS.3PL use.INF
 ‘what they cannot use’ (Värö2)

¹I have one main informant from Träslövsläge (a man, born in 1955), whom I have consulted on several occasions between 2016 and 2017. In order to verify his own grammaticality judgements, he checked many examples (including the two word orders in (2)) with other fluent dialect speakers (in his view).

²The label within parentheses that accompanies dialect examples is an abbreviation of the name of the parish (or in some cases the hundred) where the example was collected. A full description of all sources is given in the Appendix.

We know that historically, the AF order of today (see 1a) is an innovation that started spreading over the Scandinavian mainland from the late Middle Ages onwards. By the end of the 17th century, AF had become the dominant order in written Danish (Sundquist 2003) and Swedish (Falk 1993; Håkansson 2011); Norwegian also seems to follow this pattern (Christoffersen 1997; Vittersø 2004).³ Clearly, the AF order has now spread to present-day southern Viskadalian, completely marginalizing the original FA variant (see 2). But very recently, the old FA order was still in use in central Viskadalian (see 3a), representing a lingering remnant of a slowly dying medieval speech pattern.

In order to better understand this puzzling variation between FA and AF in Viskadalen, I have conducted a detailed scrutiny of verbal agreement in the different Viskadalian varieties. There are three important differences between the central and the southern varieties, henceforth labelled CV and SV respectively. Two of them concern the expression of second person: the 2SG morpheme *-(s)t* still exists as an affix in CV but has evolved into a pronoun in SV; 2PL always ends in *-n* in SV, but in CV, the *n* is often missing. Third, the past tense stem of the highly frequent verbs *få* 'get' and *gå* 'go' is the same in the entire paradigm in the south (*fick-*, *gick-*), but varies with number in the central variety (SG: *fick-*, *gick-*; PL: *fing-*, *ging-*).

I will argue that this morphological variation in Viskadalian can be neatly accounted for and linked to the word order difference, once we adopt a more fine-grained definition of agreement richness than hitherto proposed in the literature. My idea is that we need to keep semantic richness and morphological distinctiveness separate. Given these two parameters, we can distinguish between 4 types of agreement: type 1 (both semantically rich and morphologically distinct), type 2 (semantically rich but not morphologically distinct), type 3 (morphologically distinct but not semantically rich), and type 4 (neither semantically rich nor morphologically distinct). I propose that only type 1 agreement triggers V-to-I.

Although central and southern Viskadalian verbs express more or less the same semantic distinctions, it is only in the central variety that agreement is morphologically distinct (i.e. type 1); in the south, agreement instead appears to have been reanalysed as part of tense (i.e. developed into type 2). In syntax, this makes all the difference, if one assumes (with Bobaljik & Thráinsson 1998) that distinctiveness is a necessary condition for syntactically active agreement, triggering movement of finite verbs into the I-domain. The analysis also predicts

³The diachronic development of Early Modern Norwegian is harder to follow than the corresponding development of Swedish and Danish. Due to Danish rule and linguistic domination, texts in Norwegian occur only sporadically up until the 19th century (see Indrebø 2001: 177–192).

the southern development of *(s)t* from affix to pronoun, as well as the loss of number-based stem alternations.

Moreover, it leaves the ground open for parallel grammars in CV, resulting in AF/FA variation (see 3). Although agreement is always morphologically distinct in CV (i.e. type 1 or 3), it is not necessarily semantically rich. With both an *n*-less 2PL and a more sporadic use of *-s(t)*-inflection, agreement turns to type 3 and ceases to be syntactically relevant (excluding V-to-I).

The paper is organized as follows. §2 and §3 constitute the empirical bulk of the paper: in §2, I present my investigation of FA/AF in Viskadalian; in §3, I describe the variation in its verbal morphology, briefly also glancing at the poorer agreement found in other varieties in the region. Sections 4–5 are more theoretical: in §4, I discuss the RAH in general and the notion of richness in particular; then, in §5, I address the interface between morphology and syntax, and more specifically the syntactic role of tense and agreement inflection. The paper ends with some concluding remarks and remaining questions in §6.

2 Subordinate clause word order in Viskadalian

In this section, I investigate the distribution of FA and AF word order in Viskadalian subordinate clauses. The section starts with some preliminaries (in §2.1) followed by some notational and methodological points (in §§2.2–2.3), before I present the actual results in §2.4. The findings are summarized and related to the word order in present day Träslövsläge in §2.5.

2.1 Viskadalen: Area and dialect

For my investigation of subordinate clause word order in Viskadalian, I have compiled a corpus of audio recordings from the 1940s, 1950s, and 1960s. The recordings were made by regional dialect archives in Lund and Uppsala. Today, they are part of the collections of the Institute for Language and Folklore. To be included in the sample, the informants on tape are required to inflect their finite verbs for both person and number consistently throughout the session. I have come across 19 such informants, and this verbal usage is the primary linguistic basis for identifying Viskadalen as a dialect area in its own right. In no other variety on the Scandinavian mainland except in north-western Dalecarlian (see Levander 1928; Garbacz 2010, and §6 below) do we find archaic morphology of this sort.

Viskadalen stretches over two provinces (Sw. *landskap*), namely Halland and Westergothia (Sw. *Västergötland*), which is probably why there are surprisingly

few attempts to address the variety within traditional dialectology; here, the dialect of each province has instead typically been the main objective. Still, from the historical evidence, it is quite clear that Viskadalen has formed an economic unit at least since the Middle Ages, based on the hinterland of the town of Varberg: this is where Viskadalian peasants have always traded their agricultural produce (Grill 1954: 679; Linge 1969: 75–76).

I move on now to the division of Viskadalian into two sub-varieties, one central and one southern. In (4) below, I have specified the names of the parishes within each variety, as well as the number of informants and the total length of the recordings. In Figure 1, I have marked the location of all parishes. As is evident, the two parts of the corpus are neither equally large nor distributed over an equal number of places (or informants). The reason for this is trivial: there are simply no more relevant recordings from the area to include. Nevertheless, the corpora representing the two sub-varieties are sufficiently similar for my present purposes, that is, to investigate the use of AF and FA word order.

- (4) a. Central Viskadalian – just over 11 hours of recorded speech, 12 informants from 11 parishes (Värö, Stråvalla, Veddige, Åsby, Stamnared, Grimmared, Istorp, Öxnevalla, Gunnarsjö, Källsjö, Horred).
- b. Southern Viskadalian – almost 10 hours of recorded speech, 7 informants from 4 parishes (Träslöv, Grimeton, Dagsås, Spannarp).

There are both syntactic and morphological reasons for the division of Viskadalian into a central and a southern variety. In §2.4, we direct our attention towards the syntactic differences; the morphological differences are the topic of §3.

2.2 The basic structure of AF and FA order

Since the late 1980s, the standard analysis of the difference between AF and FA in Scandinavian subordinate clauses is that FA reflects movement of the finite verb (F) out of VP to a position to the left of sentence adverbials (A), whereas AF indicates the absence of such movement. What specific position the verb ends up in need not concern us yet; for now, I will simply refer to it as I, indicating that it is somewhere in the I-domain, at least higher in the syntactic tree than sentence adverbials, which are assumed to reside directly to the left of VP.⁴ The difference between AF and FA is shown in (5a–b).

⁴Similarly, I take “V in situ” to mean that V is somewhere in the V-domain.

- (5) a. [IP F_V [AdvP A [VP t_V]]] V-to-I (FA order)
 b. [AdvP A [VP F]] V in situ (AF order)

As is well known, all Scandinavian languages are V2 languages. This means that the finite verb always moves to C in main clauses, where it is preceded only by whatever phrase ends up in spec-CP. If the subject is clause initial, we get FA order, as I show with the Standard Swedish example in (6a). When something else is topicalized, the subject instead remains in the I-domain, thus intervening between F and A (see 6b).

- (6) a. [CP Han $ville_V$ [IP $gärna$ t_V äta den]] V-to-C (FA)
 he want.PST gladly eat.INF it
 'he would gladly eat it'
 b. [CP Den $ville_V$ [IP han $gärna$ t_V äta]] V-to-C (XFSA)
 it want.PST he gladly eat.INF
 'he would gladly eat it'

Normally, V-to-C movement does not occur in subordinate clauses, where C instead hosts a complementizer; see (7a) below. Since V-to-I is not an option, FA order is out, as can be seen in (7b).

- (7) a. Den mat [CP som [IP han $gärna$ [VP $ville$ äta]]] fick vi
 the food that he gladly want.PST eat.INF get.PST we
 kasta. V in situ (AF)
 throw.INF
 'The food that he would gladly eat, we had to throw away'
 b. *Den mat [CP som [IP han $ville_V$ $gärna$ [VP t_V äta]]] fick vi
 the food that he want.PST gladly eat.INF get.PST we
 kasta. *V-to-I (FA)
 throw.INF

However, in certain contexts, an entire CP may be embedded under the complementizer *att*, 'that'.⁵ Consequently, both word orders occurring in main clause CPs (i.e. FA in (6a) and XFSA in (6b)) sometimes occur in embedded contexts; see (8a–d). As in main clauses, the high position of the finite verb is a result of V-to-C movement.

⁵Unlike English *that*, Swedish *att* never introduces relative clauses. Here, the complementizer is instead *som* (as in 7).

- (8) a. Då sa hon [CP att [CP han emb. V-to-C (FA)
 then say.PST she that he
ville_v [IP gärna t_v äta den.]]]
 want.PST gladly eat.INF it
 ‘Then she said that he would gladly eat it.’
- b. De meddelade [CP att [CP den emb. V-to-C (XFSA)
 they report.PST that it
ville_v [IP han gärna t_v äta.]]]
 want.PST he gladly eat.INF
 ‘They reported that he would gladly eat it.’
- c. Poängen är [CP att [CP han emb. V-to-C (FA)
 point.DEF is that he
ska_v [IP alltså t_v ha den.]]]
 shall thus have.INF it
 ‘The point is that he is supposed to have it, you know.’
- d. Vi drog slutsatsen [CP att [CP den emb. V-to-C (XFSA)
 we draw.PST conclusion.DEF that it
fick_v [IP vi nog t_v ta hand om sedan.]]]
 get.PST we probably take.INF hand about later
 ‘We came to the conclusion that we would probably have to
 deal with that later.’

Embedded V-to-C is possible when the content of the embedded clause can be interpreted as asserted by the speaker (Andersson 1975: 21). This means either the actual speaker as in (8c–d), where it is the person uttering the sentences who asserts the content of the embedded clause, or that there is an implicit speaker as in (8a–b), where the third person subject of the matrix verb (*hon* ‘she’ in (8a) and *de* ‘they’ in (8b)) is reported as having asserted the content of the embedded clause. Julien (2015: 164–167) notes that it is not always possible to determine whether the embedded assertion is direct or indirect. However, the crucial point remains the same: speaker assertion (of some sort) appears to be a prerequisite for embedded V-to-C.

Typically, embedded assertions are the complement of some sort of *verbum dicendi* (see ‘say’ and ‘report’ in (8a–b)) or of a semantically equivalent predicate (such as ‘the point is’ in (8c) and ‘we came to the conclusion’ in (8d)). As argued by Julien (2009), the latter type may come in a variety of guises. Minimally, the matrix predicate consists of a single word, for instance the predicative adjective in an elliptic copular construction (see 9a below), the additive adverbial *plus* (9b),

or even an isolated conjunction, such as the adversative *men* in (9c) (see Lyngfelt 2003 for more examples).

- (9) a. (Det är) klart [_{CP} att [_{CP} då *blir*_v emb. V-to-C (XFSA)
it be.PRS clear that then become.PRS
[_{IP} man *ju* t_v ledsen.]]]
one of_course sad.
'Of course, then you become sad.'
- b. Valparna är för små emb. V-to-C (FA)
puppy.PL.DEF be.PRS too small
för transport. Plus [_{CP} att [_{CP} de är_v [_{IP} *knappast* t_v
for transport. plus that they be.PRS hardly
rumsrena än.]]]
housebroken yet
'The puppies are too small to be transported.
Also, they are hardly housebroken yet.'
- c. Jag har köpt ett halsband emb. V-to-C (FA)
I have.PRS buy.PTCP a necklace
till Kalle. Men [_{CP} att [_{CP} jag *vet*_v [_{IP} *inte* t_v om han
to K but that I know.PRS not whether he
gillar det.]]]
like.PRS it
'I have bought Kalle a necklace. However, I do not
know if he will like it.'

Furthermore, embedded assertions can also occur in *att* clauses expressing causal, consecutive, or causative meaning (Julien 2015: 166–167). This is shown in the examples in (10).⁶

⁶Teleman et al. (1999: 467) claim that concessive clauses introduced by *fast(än) att* belong to this group as well. However, according to my native intuitions, *fast att* can only introduce a clause displaying main clause word order when it has adversative meaning. Consequently, to me, the second sentence in (ia) is parallel with the second sentence in (9c). Conversely, in (ib), the AF order forces a concessive meaning, which is infelicitous in this context (hence the #), since it implies that my lack of knowledge of his preferences is expected to have an impact on his inclination towards pursuing higher education.

- (i) a. Han pluggar på universitetet. Fast att jag *vet* *inte* om han
he study.PRS on university.DEF although that I know.PRS not whether he
gillar det.
like.PRS it
'He studies at university. However, I do not know if he likes it.'
- b. # Han pluggar på universitet, fast att jag *inte vet* om han gillar det.

- (10) a. Anna gick hem emb. V-to-C (XFSA)
 Anna went home
 [CP därför att [CP så ville_v [IP hon inte t_v bli
 because that so want.PST she not become.INF
 behandlad.]]]
 treat.PTCP
 ‘Anna went home, because she did not want
 to be treated like that.’
- b. Hon blev så arg [CP att [CP hon emb. V-to-C (FA)
 she become.PST so angry that she
 skällde_v [IP helt enkelt t_v ut honom.]]]
 scold.PST whole simple out him
 ‘She was so angry that she simply scolded him.’
- c. Det innebar till slut emb. V-to-C (FA)
 it mean.PST to end
 [CP att [CP jag blev_v [IP faktiskt t_v instängd.]]]
 that I become.PST actually trap.PTCP
 ‘In the end, I was actually trapped.’

In sum, subordinate clauses with FA order are possible in Standard Swedish, but only as instances of embedded V-to-C (see 8a,c, 9b–c, 10b–c). This is possible in *att* clauses, where the content can be interpreted as asserted by the speaker (actual or implicit). In other subordinate clauses, the complementizer does not take a CP complement. Consequently, the FA order is ungrammatical, since the syntactic operation creating FA below C, namely V-to-I movement, is not available (see 7b).

2.3 The word order categories AF and FA

Before proceeding to the distribution of AF and FA in the corpus, a brief methodological point is in order. I have only counted an example as a case of AF if there is an explicit subject preceding this string (i.e. SAF). Without a subject, it is difficult to exclude that the A of the AF string is, in fact, in the higher position for adverbials that we have in examples like (11) below. Here, A precedes the subject (S), which means that A can tell us nothing of the position of the finite verb.

- (11) naur *inte vi* fiskam AS
 when not we fish.PST.1PL
 ‘when we were not fishing’ (Träsl1)

As for the FA category, the presence or absence of a subject is irrelevant. However, what follows the FA string can be of relevance; see (12), where A is followed by a non-finite verb.

- (12) om ja *hade* *bare* hört FA
 if I have.PST.SG/3PL only hear.PTCP
 ‘if only I had been a hearing person’ (Grimm)

If the non-finite verb marks the left edge of the VP, A must be to the left of VP and the finite verb, in turn, must have moved out of VP. As will be evident shortly, however, this diagnostic is valid in Viskadalian only for sentence adverbials.

2.4 Results

Let us now consider the use of AF and FA in the corpus. In Table 1, I give the numbers for SV in the first row and the numbers for CV in the second row. Although the total number of relevant examples is much greater in CV, the overall tendency is quite clear: AF order occurs in both varieties; FA, on the other hand is common in CV, but strikingly marginal in SV.

Table 1: AF and FA order in Viskadalian subordinate clauses

	AF	AF%	FA	FA%	Total
SV	16	80%	4	20%	20
CV	42	55%	34	45%	76

Table 2: Type of FA order

	FA-OK	*FA1	*FA2
SV	2	0	2
CV	17	13	4

The difference between the varieties regarding FA becomes even clearer when we consider the nature of the FA cases in more detail; see Table 2. Here, I have divided all FA examples into three groups. The first group contains FA examples that would be acceptable in Standard Swedish as cases of embedded V-to-C (see (8–10) above; hence the label FA-OK). These are introduced by *att* ‘that’, and they

can all be interpreted as asserted by the speaker (actual or implicit). All but one of the FA-OK examples are embedded under a *verbum dicendi* or a similar matrix; see (13a–b) below; cf. the examples in (8) above. The remaining one is the causal example given in (13c); cf. (10a).

- (13) a. ja glömde å tala om att garnet FA-OK
 I forget.PST to speak.INF of that yarn.DEF
 skulle ju spelltas
 shall.PST.SG/3PL of_course coil.INF.PASS
 ‘I forgot to tell you that the yarn should of course be coiled’ (Värö3)
- b. de kôm skrivelse ifrå kunglia majestät FA-OK
 it come.PST.SG decree from royal majesty
 att da få aldri ta=t
 that they must.PRS.3PL never take.INF=it
 ‘there came a royal decree stating that they must never take it’ (Öxn)
- c. för de att da kunne ente manövrera FA-OK
 for that that they can.PST.SG/3PL not navigate.INF
 ‘because they could not navigate’ (Träsl1)

The two other FA groups, on the other hand, both contain examples that would be ungrammatical in Standard Swedish (hence the *; the numbers following it will be explained shortly). These include restrictive relative clauses (see 14a below) and various adverbial clauses (e.g. temporal as in (14b) and conditional as in (14c)).

- (14) a. da som vöre då lite försiktiare *FA2
 they that be.PST.3PL then slightly cautious.COMP
 ‘those who were then a bit more cautious’ (Vedd)
- b. då svina kômme väl bört *FA1
 when pig.PL.DEF come.PST.3PL expectedly away
 ‘once the pigs got away’ (Värö3)
- c. om ja finge bara kômme dit *FA1
 if I get.PST.SBJV.SG/3PL only come.INF there
 ‘if only I would get to come there’ (Ist)

Three of the *FA examples are introduced by *att*; see (15) below. However, they cannot be interpreted as CPs conveying an embedded assertion: in (15a), the *att* clause is the complement of a non-assertive matrix verb (‘not remember’), and in (15b) the semantics of the clause (expressing a purpose) is incompatible

with assertion. Finally, in (15c), the *att* clause is certainly the complement of the verb ‘say’, just like many of the FA-OK examples. Still, the FA order in (15c) hardly reflects V-to-C movement. The reason for this is that the object of the verb *gör*, ‘do.PRS.SG’, (i.e. *de*, ‘that’) has been extracted from the embedded clause and topicalized in the matrix clause. At least since Holmberg (1986), we have known that this sort of extraction is incompatible with embedded V-to-C, as shown in (16a) below; cf. the AF order in (16b) where extraction works fine. In effect, the FA order in (15c) cannot be the result of V-to-C.

- (15) a. *de hugar ja inte att vi* *FA1
 that remember.PRS.SG I not that we
ådem särskilt gröd
 eat.PST.1PL particularly porridge
 ‘I cannot remember that there was a particular tradition for us to have porridge’ (Strå)
- b. *för att de skulle säkert vara värme nock* *FA1
 for that it shall.PST.SG/3PL surely be.INF heat enough
 ‘in order for it to be sufficiently hot for sure’ (Strå)
- c. *de_i sa ja att ja gör inte t_i* *FA1
 that say.PST.SG I that I do.PRS.SG not
 ‘I said that I will not do that’ (Ist)
- (16) a. **Den_i trodde jag att du hade faktiskt* emb. V-to-C (FA)
 that think.PST I that you have.PST actually
sett t_i
 seen
- b. *Den_i trodde jag att du faktiskt hade sett t_i* V in situ (AF)
 that think.PST I that you actually have.PST seen
 ‘I thought that you had actually seen it’

I move on now to the difference between *FA1 and *FA2, which regards the nature of A. In the former group, the A is a sentence adverbial (including negation); see (17a–b) below (as well as (14b–c) and (15) above).⁷ By contrast, the *FA2 adverbials are all temporal, as in (17c–d) (see also 14a).

⁷These are the particular adverbials that occur in the 13 *FA1 examples: 3 *la* ‘presumably’, 2 *inte* ‘not’, 2 *bara* ‘just’, 1 *gärna* ‘gladly’, 1 *eventuellt* ‘possibly’, 1 *säkert* ‘surely’, 1 *särskilt* ‘particularly’, 1 *väl* ‘expectedly’, 1 *kanske* ‘maybe’.

- (17) a. den förlusta vi *skullem* *eventuellt* lia *FA1
the loss.DEF we shall.PST.1PL possibly suffer.INF
‘the loss we would possibly suffer’ (Ås)
- b. de va en gang som ja *åkte* *inte* te gästis *FA1
it be.PST.SG a time that I travel.PST.SG/3PL not to inn
‘it was a time that I did not go to the inn’ (Ist)
- c. om de *va* *nu* laom tört *FA2
if it be.PRS.SG now just dry
‘if it was dry enough now’ (Spann)
- d. när da *hade* *då* slått=et *FA2
when they have.PST.SG/3PL then beat.PTCP=it
‘when they had then beaten it (i.e. the hay)’ (Vedd)

Temporal adverbials may certainly occur in the same position as sentence adverbials, directly to the left of VP, as can be seen in the AF example in (18a) below. However, in Viskadalian, temporal adverbials could also reside in a medial VP position, after the finite verb but before complements of the verb. We see this in (18b). Here, the finite verb is clearly in situ, since it is preceded by the sentence adverbial *liaväl*. The PP *om viskepels* is an adverbial argument occupying a complement position somewhere below V⁰. Consequently, the intervening *nu* must be somewhere in VP.

- (18) a. när da *då* *komme* ain bit AF
when they then come.PST.3PL a piece
‘when they then made some progress’ (Värö3)
- b. eftersom vi *liaväl* *pratam* *nu* om viskepels AFA
since we anyway talk.PST.1PL now about superstition.PL
‘since we were just talking about superstitions anyway’ (Träsl2)

Given that temporal adverbials can appear within VP (as in 18b), we cannot exclude that the A has precisely that position in FA examples like (14a) and (17c–d). In that case, the reason that these examples are bad in Standard Swedish is that Standard Swedish is not as liberal when it comes to VP-medial placement of temporal adverbials as Viskadalian is. For the *FA1-type, on the other hand, such an explanation is not available, since sentence adverbials never appear as the

second adverbial in AFA strings like (18b).⁸ Consequently, the only reasonable way to explain the 13 instances of *FA1 order in CV is to conclude that V-to-I was indeed possible in this variety.⁹

As pointed out, FA-OK could be the result of V-to-C movement. However, on such an account, it is hard to understand why FA-OK is so much more common in CV than it is in SV. If we instead assume that it is the possibility of applying V-to-I in CV that is responsible for the frequent use of FA-OK, the difference between the varieties follows straightforwardly. See Falk (1993) and Sundquist (2003) for a similar approach to FA-OK in historical Swedish and Danish.

Still, it is evident that V-to-I is not mandatory in CV. AF order not only occurs in CV, it in fact outnumbers the FA variant. The simplest (and most probable) analysis of AF is that V is in situ, as in (5b) above. How to account for this variation in CV is the topic of §5.3 below.

2.5 Summary

As shown in the introduction (see example 2), present day speakers of SV (in Träslövsläge) find the FA order derived by V-to-I highly ungrammatical. Now, adding the results from the investigation of 20th century Viskadalian (south and central), the judgements of the modern speakers are hardly surprising: there was no V-to-I in SV a couple of generations back either. In the recordings from CV, on the other hand, V-to-I and V in situ occurred side by side.

⁸One reviewer suggests that the lack of examples where the lower adverbial is a sentence adverbial might be because the sentence adverbial needs to take scope over the higher adverbial. If this were the case, we would expect the restriction to be at work also when both adverbials precede the finite verb, which they do in Standard Swedish. However, both orders are possible in the standard equivalent to (18b); see (ia–b). In fact, the one where the sentence adverbial (*ändå*) does not take scope over the temporal (*nu*) adverbial feels more natural than the alternative order (as indicated by the single question mark in (ib)). This strongly suggests that the lack of post-finite sentence adverbials in clauses with AFA word order has a syntactic rather than a semantic explanation.

- (i) a. eftersom vi *nu ändå* pratade om vidskepelser
 since we now anyway talk.PST about superstition.PL
 b. ? eftersom vi *ändå nu* pratade om vidskepelser
 ‘since we were just talking about superstitions anyway’

⁹Many scholars in the past have claimed that only FA clauses with sentential negation are unambiguous indicators of V-to-I movement, since sentential negation (unlike other adverbials) has to appear above VP (Falk 1993: 171–172; Wiklund et al. 2007: 222–223; Koeneman & Zeijlstra 2014: 586; Heycock & Sundquist 2017: 177–178). However, such rigidity is hardly called for in my Viskadalian sample. Here, all sentence adverbials refuse to appear as the second adverbial in AFA contexts, indicating that they are all unable to reside in VP and thereby – when appearing to the right of the finite verb (i.e. FA) – constitute solid indicators of verb movement out of VP.

3 Verbal morphology in Viskadalian and beyond

The main aim of this section is to describe the various forms of (indicative) finite verbs in traditional Viskadalian; this description is given in §3.1. In §3.2, I broaden the perspective, addressing the less differentiated inflectional systems in the neighbouring dialects. §3.3 is a summary.

3.1 Agreement inflection in traditional Viskadalian

My primary source for the Viskadalian inflectional paradigm is the same collection of audio recordings used in the word order investigation (see §2.1 above). In addition, I have consulted a number of descriptions of the dialect of specific parts of Viskadalen. These include (in chronological order): von Möller (1858); Belfrage (1871); Andersson (1922); Kalén (1923); Lindberg (1927); Götlind & Landtmanson (1950).

To exemplify the full array of varying forms, I use both disyllabic and monosyllabic verbs, both strong verbs and weak verbs, and, finally, both verbs in the present tense and verbs in the past tense. I give all the present tense forms in Table 3 and all the past tense forms in Table 4. The hyphen (-) marks the boundary between stem and ending.

Table 3: Viskadalian present tense inflection

	'read'		'begin'		'get'		'have'	
	CV	SV	CV	SV	CV	SV	CV	SV
1SG	läs-er	läs-er	börja-r	börja-r	få-r	få-r	ha-r	ha-r
2SG	läs-er	läs-er	börja-r	börja-r	få-r	få-r	ha-r/st	ha-r
3SG	läs-er	läs-er	börja-r	börja-r	få-r	få-r	ha-r	ha-r
1PL	läs-om	läs-om	börj-om	börj-om	få-m	få-m	ha-m	ha-m
2PL	läs-e(n)	läs-en	börj-e(n)	börj-en	få-(n)	få-n	ha-(n)	ha-n
3PL	läs-a	läs-a	börj-a	börj-a	få	få	ha	ha

Let us first address some general issues, starting with the vowel in endings expressing 1PL: the system given in the tables, where there is an *e* in the past tense and an *o* in the present tense, is the most common in actual speech. There is some variation: *o* appears on occasion in the past tense as well, all over Viskadalen, and the pronunciation of *o* is often more *u*-like in the Westrogothian part of CV. What does not exist, however, is the use of *e* in 1PL endings in the present tense

Table 4: Viskadalian past tense inflection

	‘read’		‘begin’		‘get’		‘have’	
	CV	SV	CV	SV	CV	SV	CV	SV
1SG	läs-te	läs-te	börja	börja	fick	fick	ha-de	ha-de
2SG	läs-te(st)	läs-te	börja-(st)	börja	fick-(st)	fick	ha-de(st)	ha-de
3SG	läs-te	läs-te	börja	börja	fick	fick	ha-de	ha-de
1PL	läs-tem	läs-tem	börja-m	börja-m	fing-em	fick-em	ha-dem	ha-dem
2PL	läs-te(n)	läs-ten	börja-(n)	börja-n	fing-e(n)	fick-en	ha-de(n)	ha-den
3PL	läs-te	läs-te	börja	börja	fing-e	fick-e	ha-de	ha-de

(*läsem).¹⁰ Another general point regards weak verbs of the *börja* type. Originally, there was a dental affix there as well (*börja-de-m*), but this is all gone, as can be seen. There is a lingering effect of this affix, though: the final vowel of the past tense stem is more robust than the final vowel of the present tense stem. Although superficially identical (*börja*), the *a* vowel is intact across the paradigm in the past tense, but deleted in the present tense when the agreement affix starts with a vowel.

Now, there are some important morphological differences between CV and SV. First, the two varieties differ with respect to the expression of second person, both in the plural and the singular. In CV, we still find the old *-(s)t* ending for 2SG.¹¹ This ending never co-occurs with the *-r*-ending, which means that it is more common in the past than in the present tense. As we can see in Table 1, most verbs have the *-r* ending across the singular, ‘have’ being the only exception; with this verb, there is variation between *-r* and *-st* in 2SG. This sort of variation is quite uncommon, and there are only a few similar verbs (e.g. *sist* ‘see.PRS.2SG’, which varies with *sir* ‘see.PRS.SG’, and *äst* ‘be.PRS.2SG’, which varies with *är* ‘be.PRS.SG’).

Nevertheless, *-(s)t* is by no means banned from the present tense, it is only incompatible with *-r*, which, in turn, is restricted to the present tense. There are so-called preterite-present verbs that never have the *-r*-ending; consequently, *-(s)t*

¹⁰In present-day Träslövsläge, the vowel in 1PL is always *o*; this is a recent development that I will not address here.

¹¹In Old Swedish, the *s* occurred only when the verb stem ended in *t/d* (*bad-st*, ‘pray.PST.SG-2SG’), but during the early modern era, most notably in the Bible from 1541, the *s* was used more generally, including with other stem endings (*gaf-st*, *tok-st*, ‘give.PST.SG-2SG, take.PST-2SG’). With stems ending in *l* or *n*, the *s* is never part of the affix, neither in historical texts nor in Viskadalian. In the latter case, the stem-final consonant is sometimes suppressed in these contexts, for instance *skal-t* → *ska-t* ‘shall.PRS.SG-2SG’.

works fine: *kant* ‘can.PRS.2SG’, *skat* ‘shall.PRS.2SG’, *vaist* ‘know.PRS.2SG’. Furthermore, this affix is more versatile in CV than it ever was in Old Swedish, most notably since it occurs in the past tense of weak verbs (see *lästest*, *hadest* in the table).

Both the *-(s)t* ending and the *-n* ending for 2PL are somewhat unstable in CV. They are attested all over the area, but they may be inconsistently represented even within the system of a single informant; this motivates the parentheses surrounding them in the table. By contrast, in SV, the *-n* ending is robust, whereas the *-(s)t* ending is completely absent.

Second, the stem in the past tense of the highly frequent verbs *få* ‘get’, and *gå* ‘go’ varies with number in CV, but not in SV. This can be seen with the verb *få* in Table 4, where SV has the stem *fick-* across the board but CV has *fick-* only with singular subjects and *fing-* with plural subjects.

There are some additional differences between CV and SV regarding pronouns, most of which are simply irrelevant for the issues at hand.¹² One pronominal difference, however, is crucial for our understanding of the agreement system in general. It concerns the expression of second person singular and is clearly related to the difference regarding second person inflection described above. In CV, the 2SG clitic is always *ä*; see (19). By contrast, in SV the 2SG clitic is either *tä* or *stä*, as shown in (20).

- (19) a. *töcker=ä*
think.PRS.SG=*ä* (Fag)
- b. *skat=ä*
shall.PRS.2SG=*ä* (G-sjö)
- c. *vaist=ä*
know.PRS.2SG=*ä* (Värö1)
- (20) a. *töcker=tä*
think.PRS.SG=*you.sg.cl* (Himl)
- b. *kan=tä*
kan.PRS.SG=*you.sg.cl* (from Andersson 1922)
- c. *hade=stä*
have.PST.SG/3PL=*you.sg.cl* (Dags)

¹²These include, for instance, the form of the free 3PL pronoun, which is *dai* in SV and *da* in CV, and the form of the 1SG clitic, which is *ik* in CV but *ja* in SV (in the latter case coinciding with the free pronoun). For a thorough description and discussion of the Viskadalian pronominal system, see Petzell (2017).

Consider, first, the (a) examples, where the verb forms are identical (*töcker*), straightforwardly distinguishing the CV clitic *ä* from the SV clitic *tä*. However, from the forms in the (b) and (c) examples alone we cannot determine where the verb ends and the clitic starts. To be able to conclude that the SV clitic is indeed *(s)tä*, we need to rely on the inflection paradigm. Seeing that there is never any inflection for 2SG with subject-verb word order in SV (**du kant*, **du hadest*), the *(s)t* sequences in (20b–c) can hardly be affixes; consequently, they have to belong to the enclitic pronoun. As for CV, on the other hand, *(s)t* does function as an affix (e.g. *du skat*, *du vaist*); thus, we have strong reason to assume that the clitic is *ä*, not only in (19a), but also in (19b–c).

Now, disregarding second person singular, the enclitic *ä* is by no means restricted to CV. In SV, it occurs both in 1PL and in 2PL, as can be seen in (21a–b). In CV, the usage of *ä* is less consistent in the plural: in 2PL, it only occurs together with the *-n* ending; without it, the inverted subject is the free pronoun; see (22a–a′). However, in 1PL, the *ä* is as robust as in SV (see 22b).

- (21) a. *ficken=ä*
get.PST.2PL=*ä* (Träsl1)
- b. *vävom=ä*
weave.PRS.1PL=*ä* (Träsl1)
- (22) a. *fengen=ä*
get.PST.2PL=*ä* (Värö1)
- a′ *skräppe i*
boast.PRS.2PL you.PL (from Lindberg 1927)
- b. *gjordem=ä*
do.PST.1PL=*ä* (Strå)

It may seem tempting to analyse the *ä* as some sort of dummy pronoun, licensed by semantically rich agreement: it does occur when the reference of the subject is explicitly expressed in the ending, as in (19b–c), (21), and (22a, b), but it does not occur in 2PL when there is no *-n* (as in 22a′). The absence of *ä* in (22a′) could possibly be linked to the fact that the remaining ending *-e* does not unambiguously point to a 2PL referent (as further explicated in §4.2 below). Such an analysis does not hold, however, when we include examples like (19a), where *ä* follows the *-r* ending, which only marks the singular. Furthermore, the *ä* is not compatible with *-a*, although this ending is unique to 3PL.

3.2 Less richly inflected verbs further to the southeast

In other places to the south and southeast of Viskadalen, the traditional dialects inflect their finite verbs to a varying extent (see Horn 2015, 2017 for details). There are no varieties where there is a distinction between all three persons (as in Viskadalian). But south of Viskadalen, we find varieties which make a distinction between 1/2PL on the one hand (expressed with the original *-n* ending for 2PL) and 3PL, as shown in (23a) below with the verb *få* ‘get’, in the past tense. Even further to the south, primarily in the province of Skåne, the *-n* form lived on as a designated 2PL form together with a common 1/3PL ending (originally used for 3PL); see (23b). Note that the number-based stem alternation found in central (but not southern) Viskadalian is productive in these less richly inflecting varieties as well.

- | | | | | | | | |
|------|----|-------|----------------|--|----|-------|----------------|
| (23) | a. | SG | <i>fick</i> | | b. | SG | <i>fick</i> |
| | | 1/2PL | <i>fing-en</i> | | | 1/3PL | <i>fing-e</i> |
| | | 3PL | <i>fing-e</i> | | | 2PL | <i>fing-en</i> |

The most widespread verbal inflection in the Swedish southwest, at least when we reach the middle of the 20th century, is inflection for number only; see (24a) below, where the ending for 3PL is generalized to all plural persons. We find this system in the traditional dialects of a vast area, including southern Halland, as well as parts of the provinces of Skåne, Blekinge, and Småland. In a small area in the southeast of Småland (in the parish of Södra Sandsjö, which is outside of Figure 1), there appear to have existed varieties where the original 2PL ending had developed into a general plural; see (24b).¹³

- | | | | | | |
|------|----|-----|---------------|-----|----------------|
| (24) | a. | SG: | <i>fick</i> ; | PL: | <i>fing-e</i> |
| | b. | SG: | <i>fick</i> ; | PL: | <i>fing-en</i> |

As can be seen, the stem alternation is intact even in the dialects with inflection only for number.

3.3 Summary

This section contains a detailed description of verbal agreement in Viskadalian, with a specific focus on the differences between the central (CV) and the southern (SV) varieties. In CV, we find both the *-(s)t* affix for 2SG and *-en* for 2PL, but neither

¹³I have not come across the system in (24b) in any audio recording, nor is it mentioned by Horn (2015, 2017); the only source of it is Granström (1915).

of them is used consistently. In SV, by contrast, the *-en* is robust and the *-(s)t* non-existent. There is, however, a remnant of the *-(s)t* affix in the 2SG clitic, which is *(s)tä* in SV, not *ä* as in CV. Furthermore, the past tense stem form of *få/gå* varies with number in CV, but not in SV. Such stem variation is also found in neighbouring dialects where verbs are less richly inflected than in Viskadalen.

4 The Rich Agreement Hypothesis

This section starts with an overview of the RAH in §4.1, from its birth in the 1980s to its present day status. Then, in §4.2, I present my two-dimensional definition of rich agreement. In §4.3, I address the difference between CV and SV, and propose a way to derive it diachronically. §4.4 is a summary.

4.1 The history of the Rich Agreement Hypothesis: Birth, life, death, and resurrection

At least since the mid-1980s, the empirical correlation between agreement and the position of finite verbs in the Scandinavian languages has fascinated researchers. Kosmeijer (1986) set the ball in motion by drawing attention to the word order difference in subordinate clauses between Icelandic (FA order) and Mainland Scandinavian (AF order), proposing that this difference was grammatically linked to the presence (Icelandic) and absence (Mainland Scandinavian) of verbal agreement. Although this presumed link, later labelled the Rich Agreement Hypothesis (RAH), was explored early on in the history of Swedish as well by Platzack (1988), the early to mid-1990s were the prime era for the RAH. It inspired many of the (now classic) monographs on Germanic morphosyntax that were published during this period (e.g. Falk 1993; Rohrbacher 1994; Vikner 1994; Holmberg & Platzack 1995).

However, by the turn of the new millennium, the RAH appears to have lost its appeal: more and more exceptions turned up, forcing the formulation of a weaker (and less interesting) hypothesis (see Bobaljik & Thráinsson 1998 and Sundquist 2003 for discussion). Some even suggested that the RAH be abandoned altogether (Wiklund et al. 2007). Still, the RAH did not die. A few years ago, it was defended by Koenenman & Zeijlstra (2014), who argue that it should be rehabilitated in its strongest form (having rejected all known counter-evidence). And even more recently, in 2017, Tvica entered the scene with his dissertation (Tvica 2017), in which, unlike previous studies of rich agreement and word order, he tests the RAH on a typologically balanced sample. Hitherto, the empirical

scope has been limited to Germanic, with few exceptions, and to Indo-European with no exceptions (to my knowledge). In contrast, Tvica's sample consists of 24 languages that are neither related to each other nor belong to the Indo-European family. Given that the RAH has never been tested this thoroughly before, the outcome of Tvica's study will, no doubt, be a natural starting point for all future testing of the hypothesis.

Among Tvica's 24 languages, there are 17 that corroborate the RAH. These either have richly inflected verbs that move out of VP (leading to obligatory FA order as in Finnish, exemplified in (25a) below from Tvica 2017: 189–190), or they lack both agreement and verb movement (leading to mandatory AF order as in Haitian, shown in (25b) from *ibid.*: 120–121).

- | | | | |
|------|-----|--------------------------------------|-----|
| (25) | a. | Minä <i>luin</i> <i>usein</i> kirjan | FA |
| | | I read.PST.1SG often book.ACC | |
| | a': | *Minä <i>usein luin</i> kirjan | *AF |
| | | I often read.PST.1SG book.ACC | |
| | | ‘I often read the book’ | |
| | b. | Boukinét <i>preéske kite</i> Bouki | AF |
| | | B. almost leave B. | |
| | b': | *Boukinét <i>kite preéske</i> Bouki | *FA |
| | | B. leave almost B. | |
| | | ‘Boukinét almost left Bouki.’ | |

The remaining 7 languages can neither corroborate nor falsify the RAH. The reasons for this vary. In some languages, there is no way to tell where the left edge of VP is, since adverbs are clause-final (e.g. Lango, Tvica 2017: 240–241, and Hmong Njua, *ibid.*: 162–163). Other languages always move the verb out of VP for independent reasons, which makes it impossible to determine whether there is agreement-triggered V-to-I going on or not (e.g. Quicgolani Zapotec, *ibid.*: 168–171, and Moro, *ibid.*: 242–244).

In sum, none of the 24 languages in Tvica's (2017) typological test of the RAH can falsify the hypothesis. In other words, the RAH is not only rehabilitated (to use the words of Koenenman & Zeijlstra 2014), it is, in fact stronger than ever. However, one solid counter-example would of course be enough to kill the hypothesis – such is the constant nature of the testing of hypotheses. Nevertheless, we cannot get around the fact that a groundbreaking effort such as Tvica's study will have effects on how we assess the solidity of proposed counter-examples. After all, in a world without Tvica (2017), one would certainly be more prone to

regard the subordinate clause word order in present-day southern Viskadalian as a piece of quite strong evidence against the RAH (see example (2) in the introduction). On the other hand, when we now know that the RAH is strikingly robust in a broad typological perspective, we are, naturally, more inclined to place the data from Träslövsläge in a bigger context before jumping to conclusions. In that way, the present study of Viskadalian variation can be seen as building on the strengthening of the RAH through Tvica (2017).

4.2 What is richness?

The precise formulation of richness of agreement has been debated for as long as the hypothesis has been around (see Vikner 1997; Rohrbacher 1999 for overview and discussion). Here, I will adopt the semantics of Tvica's (2017) definition, but the morphological criterion for richness proposed by Bobaljik & Thráinsson (1998). According to Tvica, all human languages have a system of nominal reference that makes use of at least the following distinctions: first, second, and third person and number.¹⁴ When this so-called Person-Number Universal (PNU) is expressed as a verbal ending, we have a case of rich agreement (Tvica 2017: 32). However, why the semantic richness of the ending would trigger V-to-I is far from evident. I think that there has to be an additional dimension to syntactically active agreement: it needs to be morphologically distinct in the sense of Bobaljik & Thráinsson (1998). This means that agreement forms a grammatical category that is distinct from other such categories (such as tense). My proposal is that in order to trigger V-to-I, agreement needs to be both semantically rich and morphologically distinct. I will return to the details of the syntactic analysis of V-to-I-movement in §5.

If we thus measure agreement richness on both a semantic and a morphological scale, we expect there to exist a total of 4 grades of richness. Besides the doubly rich, as it were, which triggers V-to-I (and which I will call type 1), there is the semantically rich but morphologically indistinct (type 2), and the semantically poor but morphologically distinct (type 3); finally, there is type 4, which entails neither semantic richness nor morphological distinctiveness. Languages with no verbal agreement morphology at all (such as Standard Swedish) would count as type 4. The four types are schematized in Table 5.

¹⁴Koenenman & Zeijlstra (2014: 573–574) describe this as “the most minimal pronominal system”, which is a bit unfortunate. Although many languages certainly express the PNU with pronouns, this strategy is not mandatory. As shown by Harbour (2016), languages can indeed have a pronominal system with fewer distinctions (e.g. Hocak, described by Lipkind (1945), where there are only two personal pronouns, *nee* and *ee*, which distinguish first/second person from third person but nothing more).

Table 5: Four types of agreement

	semantically rich	morphologically distinct
Type 1	✓	✓
Type 2	✓	-
Type 3	-	✓
Type 4	-	-

In the following, I will argue that all of the types 1–3 are or have been present in Viskadalen.

4.3 The rich, the poor, and the in-between

In §4.3.1, I readdress the difference regarding inflectional endings between CV and SV described in §3.1 above in the light of the four-graded definition of richness of agreement that I propose in §4.2. In §§ 4.3.2–4.3.3, I derive the difference diachronically. In §4.3.3, I account for the distribution of number-based stem alternation in Viskadalian and beyond.

4.3.1 The critical difference between CV and SV

When we go about establishing the level of semantic richness in a paradigm of inflectional endings, it may seem like a trivial task. Given Tvica's (2017) PNU-based definition of richness, we should be able to just count semantic distinctions: thus, if a system contains distinctions between first, second, and third person, as well as a number distinction, it is a semantically rich system. However, such counting is, I believe, too blunt an instrument. In fact, a semantic distinction may come about in various ways. Some finite endings are unique to a particular person and number (I will call this uniquely rich). Other endings may not be unique in that sense, although they are in contrast with all other forms within a particular paradigm.

Among the Viskadalian endings, there are four uniquely rich endings (or segments within endings): *-m* (for 1PL), *-n* (for 2PL), *-a* (for 3PL) and *-(s)t* (for 2SG). When the *-n* is missing in 2PL, as it sometimes is in CV, it is only in the present tense of disyllabic verbs that the form for 2PL, which is then stem-*e*, differs from 1PL (stem-*om*) and 3PL (stem-*a*). However, although this *-e* ending thus distinguishes second person from first and third in this particular context, it is not uniquely rich, since it also occurs with 3PL in the past tense of strong verbs (e.g.

da finge ‘they got’).¹⁵ I propose that in order for inflection to count as semantically rich it needs to express the PNU on V with uniquely rich endings.

Let us now turn to the issue of morphological distinctiveness. Given that the Viskadalian agreement endings are always adjacent either to the stem or to the dental tense affix (-*te/-de*), acquirers of the language face at least two possible interpretations of the morphological status of agreement. It could be analysed as a distinct category added directly to the stem, or, on occasion, to a tense affix; see (26a) below. Alternatively, the entire ending could be interpreted as a tense affix containing additional (and secondary) information about person and number; see (26b). I exemplify both possibilities in (27) with the 1PL form of ‘read’ in both the present (*läsom*) and the past tense (*lästem*).

- (26) a. stem-([tense])-[agr]
 b. stem-[tense_{agr}]
- (27) a. stem-([tense])-[agr] → *läs-om, läs-te-(e)m*
 b. stem-[tense_{agr}] → *läs-om, läs-tem*

Given the formulation of the RAH in §4.2, organising agreement as in (26a) is – together with semantic richness – a prerequisite for a syntax with V-to-I. As shown in §2.4, V-to-I occurs in CV but never in SV. Based on this syntactic evidence, *läsom* and *lästem* in CV should have the structure in (27a) (type 1 richness) and the corresponding forms in SV should instead have the structure in (27b) (type 2 richness). However, for this to be more than just an ad hoc solution to salvage the RAH, we require independent evidence that the agreement systems do indeed differ as the syntactic evidence leads us to believe.

4.3.2 From agreement to tense

Clearly, type 1 agreement is the original one, seeing that Old Swedish had V-to-I. At some point then, the output of (26a) must have been reanalysed as (26b). But why was the interpretation in (26b) favoured in SV but not in CV? In order to reconstruct the split into southern and central Viskadalian we need to assume the presence of a common paradigm, pre-dating both SV and CV and containing all the endings occurring in Tables 3–4.

In the common Viskadalian paradigm, there is a strict correspondence between certain person endings and certain tenses: *-om* and *-a* occur only in the present tense, whereas *-em* and *-e* occur only in the past tense. Based on this distribution,

¹⁵Petzell (2017) suggests that the *-e* ending is a general plural marker, in which case the distinguishing force of *-e* in parts of the present tense paradigm is a mere bi-effect of *-e* being unspecified for person (unlike *-om* and *-a*).

acquirers of the variety can interpret them as tense affixes, containing additional information about person and number; see (28a–b) below. Given such an interpretation, we expect *-em* and *-e* to be associated with the dental past tense marker, together forming a group of past tense affixes where the *e* is constant, and the dental and *m* vary depending on the type of verb (dental only with certain conjugations or classes) and the type of subject (*m* with 1PL subjects). These extended past tense affixes are given in (28c), where the dental (which can in practice be either *d* or *t* depending on the stem ending) is represented by *t*.

- (28) a. present tense only: *-om*, *-a* → PRS_{1PL}, PRS_{3PL}
 b. past tense only: *-em*, *-e* → PST_{1PL}, PST_{3PL}
 c. past tense affixes: *-(t)em*, *-(t)e*

Both *-(s)t* and *-en* are different, however, occurring both in the present and the past tense: *du äst*, *vast*, ‘you.SG be.PRS.2SG, be.PST.2SG’; *i läsen*, *fingen*, ‘you.PL read.PRS.2PL, get.PST.2PL’ The fact that these endings are not restricted to any particular tense provides evidence for new acquirers that agreement is indeed a category of its own. As a consequence, the correspondence between tense and the other endings (e.g. present tense *-om* vs. past tense *-em*) could be deemed coincidental and grammatically irrelevant. In that case, distinct agreement lives on.

However, there is an important difference between *-(s)t* and *-en*. The latter contains an *e*, which means that it could be associated with a varying dental in the past tense, just like *-em* and *-e* in (28c). Thus, we still end up with two different 2PL morphemes in the two tenses: *-en* and *-(t)en*. Adding it all up, and also including the singular endings *-er* and *-te*, we get four distinct pairs of present and past tense affixes, as shown in (29).

- | | | |
|------|------------|---------------|
| (29) | PRS | PST |
| | <i>-er</i> | <i>-te</i> |
| | <i>-om</i> | <i>-(t)em</i> |
| | <i>-en</i> | <i>-(t)en</i> |
| | <i>-a</i> | <i>-(t)e</i> |

As for *-(s)t*, on the other hand, it does not fit into this binary system. First, the past tense marker would be *-(te)st* rather than *-(t)est*, since the *e* accompanies the dental (*lästest* read.PST.2SG) but is absent when the past tense stem ends in a consonant (cf. *feckst* ‘get.PST.2SG’). This would exclude it from the well-ordered group of past tense suffixes with a varying dental and a constant *e*, where all the other former person agreement endings have found their place (viz. *-(t)em*, *-(t)en*,

-(t)e). Second, there would be no strict correspondence between one past tense form and one present tense form, since -(t)st would sometimes correspond to -er (e.g. *läs-er* ‘read-PRS_{SG}’ vs. *läs-test* ‘read-PST_{2SG}’) and sometimes to -(s)t (e.g. *vai-st*, ‘know-PRS_{2SG}’ vs. *vess-test* ‘know-PST_{2SG}’). In other words, in order to preserve the neat system in (29), the -(s)t affix would have to be excluded. Still, just getting rid of an ending that is present in the input because it does not behave as expected is hardly feasible. On the contrary, children apparently strive to create a mental grammar that generates the same strings as they hear around them.

To be able to stick to the system in (29) without having to give up the (s)t sequence, the younger generation of southern Viskadaliens seems to have incorporated (s)t in another guise, as part of the pronominal system. Recall the ambiguous nature of strings such as *kantä* and *hadestä* discussed in §3.1 above. If (s)t is analysed as part of the enclitic *ä*, forming the new clitic (s)tä, there is a minimum of mismatch between the parental output (generated by the system in (26a)) and the output of the child (generated by the system in (26b)). To be more precise, it is only with subject-verb order and 2SG reference, predominantly in the past tense, that the grammars in (26a) and (26b) would create different outputs: *du hadest* vs. *du hade*. However, in all contexts with verb-subject order, including direct questions and declaratives introduced by non-subjects, the transition from affix (*kant=ä*, *hadest=ä*) to pronoun (*kan=tä*, *hade=stä*) would be seamless.

4.3.3 Promoting the reanalysis (or resisting it)

What, then, triggered the reanalysis of the inflectional paradigm in SV? And how could the old system survive in CV? Let us start with the first question. As noted in the introduction, the modern AF order of subordinate clauses started spreading over the Scandinavian mainland during the 15th and 16th centuries. We can follow the spread in historical texts from both Sweden (see Falk 1993) and Denmark (see Sundquist 2003); both Copenhagen and Stockholm appear to have been major spreading centres. At some point, the AF order must have reached Viskadalen, presumably as it gradually gained ground from the south along the Hallandian coast. As shown by Petzell (2018), the AF order is fully established as the normal subordinate clause word order in a collection of folk tales that was written down in the traditional dialect of the parishes just south of the town of Falkenberg in 1871.¹⁶

¹⁶This collection, published by Bondeson in 1880, is unique. Certainly, there are dialectal fragments from the region in texts from the 18th and 19th centuries, but nothing nearly as long as Bondeson’s tales (126 pages); see Petzell (2018) for more details. It is worth noting that the agreement system of the tales is more or less identical with the system in SV. Apparently, the poorer system mentioned above (in §3.2), where the -n ending is used for both 1PL and 2PL, had not yet been established as the general pattern in these parts of Halland when Bondeson collected his dialectal material.

What happened, then, when children growing up with the Viskadalian morphology around them were exposed to the increasing usage of subordinate AF order? Judging from previous studies of acquisition, they would have acquired the syntax before they acquired the full inflectional paradigm. Waldmann (2014) shows that children acquiring Standard Swedish start realizing as early as the age of 3 that finite verbs are in situ in subordinate clauses, correctly producing the target AF order.¹⁷ The acquisition of the inflection of finite verbs comes later, or even much later, depending on the morphological complexity of the verb forms. Thus, Ragnarsdóttir et al. (1999) report that Norwegian children (being exposed to finite verbs without agreement) produce adult-like finite verbs from the age of four, whereas Icelandic children (being exposed to agreeing verbs) reach the equivalent adult-like level around the age of six.

We now return to Viskadalian. Once the AF order became dominant enough, children would have already created a V in situ grammar by the time they started mastering the inflectional system. With a grammar in place where there is no movement of V to the I-domain, the children will not be expecting any distinct agreement in the paradigm they are acquiring. Consequently, the tense correspondence in the inflectional system is quite naturally interpreted as primary and the phi-features merely as embedded under tense (or part of the enclitic pronoun, as in the case of *(s)t*).

How did CV manage to resist going through the same development? First, there is the obvious issue of geography. Southern Viskadalen is simply more likely to be affected by such linguistic novelties as the AF order than the more remote parts of Viskadalen further to the northeast. Thus, speakers of SV are both closer to the main spreading centre in the Scandinavian southwest (i.e. Copenhagen) and to the urban environment of Varberg, which would have served as a secondary centre of spread in the area.

Second, there is a morphological difference between SV and CV that is predicted to make the tense interpretation of the inflectional endings less probable in CV than in SV. As noted in §3.1, the *-n* ending for 2PL is not as robust in CV as it is in SV. Given that the tense reanalysis (see 29) is promoted by the fact that the endings are different in the present and past tense respectively, the lack of an *-n* in 2PL removes some of the basis for reanalysis. Without the *-n*, single *-e* becomes a much more common ending: crucially, the *-e* cannot be interpreted as

¹⁷Before the age of three, however, they misinterpret subject-initial main clauses (see 6a above) as IP structures where the verb has moved out of VP. They take this to indicate a general V-to-I rule, producing non target-like FA order in subordinate clauses (see 7b). According to Waldmann, this over-usage of verb movement is due to the fact that children do not yet comprehend that the I-domain may be different in subordinate and main clauses (2014: 62–65).

a past tense affix, since it occurs both in the present (e.g. *läs-e*) and in the past tense (*fing-e*).

Nevertheless, the CV system is indeed vulnerable as well. Without the *-n*, the crucial prerequisite for upholding a semantically rich agreement is that *-(s)t* is preserved as an affix. As we know, however, the *-(s)t* affix is quite unstable too. If both are absent, agreement is semantically too poor to be syntactically active, since there is no uniquely rich ending for second person (only for first and third). I will get back to the syntactic effects of the varying second person morphology in CV in §5.3 below.

4.3.4 Number-based stem alternation

If agreement is a distinct category in CV but embedded under tense in SV, the difference between the varieties regarding number-based stem alternation in the past tense of *få/gå* follows straightforwardly. To be more precise, the stem alternation is indicative of distinct (unembedded) agreement. Furthermore, it is clear that it is the distinctiveness that is important here. In the semantically much poorer varieties with agreement inflection to the southeast, the stem alternation is intact, as we saw in §3.2 above. Our fine-grained analysis of richness enables us to predict precisely this sort of micro-variation. Even if agreement is semantically poor, it can still be morphologically distinct (i.e. type 3); such a combination is expected to have morphological effects (the stem alternation), but we do not expect it to trigger V-to-I.¹⁸ On the assumption that semantic richness is the only relevant factor, the observed variation in stem alternation would be incomprehensible.

4.4 Summary

In this section, I argue that richness of agreement has a semantic as well as a morphological dimension. When agreement is both semantically rich (in the sense of Tvica 2017) and morphologically distinct (in the sense of Bobaljik & Thráinsson 1998), it triggers V-to-I. CV has preserved such doubly rich agreement morphology, but in SV, the distinctiveness has been lost; here, the agreement features are instead embedded in the category of tense. This change was brought about by an increasing frequency of AF order in the input of children (indicating a

¹⁸Although I have not conducted any quantitative investigation of the subordinate clause word order in these dialects, my general impression is that AF is the unmarked order. This makes them parallel to the traditional dialect of Hallingdalen in Norway, where there is number agreement and stem alternation but no V-to-I (Trosterud 1989).

syntax without V-to-I), and it was facilitated by the ambiguous nature of the inflectional paradigm. In CV, however, the paradigm offered less ambiguity, and geographically, the area was better protected from the AF invasion coming from the south. The assumption that agreement was reanalysed as part of tense in SV felicitously predicts the development of the *-(s)t* ending for 2SG into a pronoun; *-(s)t* is the only ending that is not distributed symmetrically across the tenses. The loss of number-based stem alternation is also expected. Nevertheless, the two-dimensional analysis of agreement leaves the ground open for stem alternation in the semantically less rich dialects to the southeast. Here, agreement is distinct (as indicated by the stem alternation), but too poor (semantically) to be syntactically active.

5 Morphology in syntax

In this section, I address the issue of verb raising to I. In §5.1, I argue that the precise target for verb movement is T^0 and that this movement is motivated by the phonological dependence of the agreement affix, merged in Arg^0 . In §5.2, I return to the proposed reanalysis of agreement as part of tense in SV, showing that this represents a well-known form of syntactic grammaticalization. In §5.3, I address the AF/FA variation in CV and argue that the two variants are generated by separate grammars.

5.1 What is V-to-I?

As we have seen, there is an empirical correspondence between distinct and semantically rich agreement and movement of V out of VP. How to understand this correlation in grammatical terms is the topic of this subsection. Here, I will adopt an analysis of V-to-I that builds on the analysis proposed by Koeneman & Zeijlstra (2014). Their idea is that when agreement is sufficiently rich, it counts as an argument of the verb; it therefore triggers the projection of an Argument Phrase,¹⁹ where it is subsequently merged in its head. ArgP is in the I-domain above the position for sentence adverbials (AdvP); see (30).

(30) [ArgP *agr* [AdvP [VP]]]

¹⁹Although superficially similar to an AgrP (as proposed by e.g. Chomsky 1995), ArgP is fundamentally different. According to Koeneman & Zeijlstra (2014: 600), it is an argument feature (motivated by rich agreement) that is semantically relevant (thereby projecting a phrase) in the extended projection of V; the agreement features, on the other hand, are semantically relevant only in the extended projection of N.

The question, then, is how this leads to FA word order. In (30), *agr* precedes any sentence adverbial in AdvP, but how does the verb end up to the left of AdvP as well? Following Rohrbacher (1999) in spirit, Koeneman & Zeijlstra (2014: 601) propose that since *agr* is an affix, it needs to attach to a verb, and for that to happen, the verb has to move out of VP to Arg⁰. In effect, the finite verb form (F) precedes adverbials (A) in AdvP.

However, why the verb has to move to the head of ArgP to bind the affix is not entirely clear. As pointed out by Koeneman & Zeijlstra (2014), the lack of independence on the part of *agr* is a matter of phonology. Consequently, what is crucial is that *agr* ends up to the right of the verb stem in PF. In fact, the most straightforward way to accomplish that would be to move the verb to the closest head above ArgP. My suggestion is that this head is T⁰. Note that there is nothing in T⁰ itself that attracts the tensed verb: in languages like Standard Swedish where tense is clearly a distinct category (projecting a TP), the verb can remain in situ (in VP) in subordinate clauses.²⁰ Nevertheless, V-to-T may still occur in PF, if there is a phonologically dependent *agr* in ArgP that is in need of an adjacent verb to its left.

On the present account, the category of tense ([tense]) is the same in SV and CV: it combines with the verb stem, forming a tensed verb (*verb-tense*) which is merged in V⁰, where it remains throughout the syntactic derivation. In SV, *tense* may contain additional information about what sort of subject the verb agrees with (*tense_{agr}*). This sort of agreement is part of the category of [tense] and has no impact on the structure of the I-domain; see (31a) below. In CV, on the other hand, agreement is a distinct category ([agr]) merged as a single morpheme (*agr*) in Arg⁰ (see 31b). Since *agr* is an affix, it requires phonological support; this requirement is met in PF by moving the verb to T⁰; see (31b').²¹

- (31) a. [TP e [AdvP [VP *verb-tense_{agr}*]]]
 b. [TP e [ArgP *agr* [AdvP [VP *verb-tense*]]]]
 b' in PF → [TP *verb-tense_v* [ArgP *agr* [AdvP [VP t_v]]]]

In sum, my analysis of V-to-I is that it comprises a form of phonological rescue operation.

²⁰For a semantic explanation of the lack of V-to-T in languages like Swedish, see Zeijlstra (2012).

²¹In main clauses, where the finite verb raises to C before spell-out, *agr* would be incorporated in V as V moves head by head up the tree (the standard analysis of syntactic head movement, at least since Chomsky 2001). In other words, when the verb thus leaves the VP for independent reasons, there is no naked affix in PF that requires verbal support.

5.2 Aiming higher without climbing

Let us now return to the reanalysis of *tense-agr* as *tense_{agr}*, as proposed in §4.2 above. Adding the more fine-grained IP outlined in §5.1, we can describe the reanalysis in syntactic terms as follows: the head of ArgP, *agr*, is associated with the head of TP, *verb-tense*, which is higher in the tree. This tendency for elements to strive upwards, as it were, in the syntactic tree is well attested and has been analysed as a form of syntactic grammaticalization (see Roberts & Roussou 1999, 2003). Although most examples of such “tree-climbing” involve elements in the nominal and verbal domains, it is clearly a more general phenomenon (for adjectival examples, see Oxford 2017 and Delsing 2022 [this volume]).

Still, “climbing” is a metaphor that can be a bit misleading, since the association with a higher head does not necessarily lead to a higher syntactic position. In the case at hand, what happens is that the complex string *verbtenseagr* is interpreted as having the structure *verb-tense_{agr}*, rather than *verb-tense-agr*. Indirectly, such a reanalysis may certainly have syntactic consequences, depending on how it affects the inventory of morphological categories and, in turn, the functional structure of the clause. But there is no guarantee that there will be any climbing. On the contrary, when the *verb-tense-agr* generated by the parental grammar is reanalysed by children as *verb-tense_{agr}*, this places the tensed verb in a lower position, since embedding *agr* in [tense] removes the very motive for V-to-T (namely to bind the distinct *agr* in Arg⁰); see (32a–b).

- (32) a. [TP *verb-tense_v* [ArgP *agr* [VP *t_v*]]]
 b. → [TP *e* [VP *verb-tense_{agr}*]]

Intriguingly, there is a connected development in SV that also involves the association of agreement with TP, namely the pronominalization of the *-(s)t* affix. First, recall the complex forms like *hadestä* (‘had you’) discussed in §3.1 and §4.3.2 above. In SV, such forms were interpreted as consisting of a verb (*hade*) plus a referring clitic (*stä*) rather than a richly inflected verb (*hadest*) plus a general clitic (*ä*). Syntactically, this reanalysis can be described as in (33) below; in (33a), *st* is an affix of the verb, in (33b), *st* is instead part of the post-verbal subject.

- (33) a. [CP *ha-de-st* [TP *ä*]]
 b. → [CP *ha-de* [TP *stä*]]

What is originally a part of C (in 33a) becomes part of spec-TP (in 33b). At first glance, this may seem like the opposite of tree climbing: TP is lower in the tree than CP. But this hierarchical order is irrelevant. After all, it is not C that

is interpreted as T, but in fact the agreement affix *-st*, which happens to be in C, that is interpreted as part of the subject (i.e. *ä*) in spec-TP. It is important that agreement is adjacent to TP, which it is in both (32) and (33), since adjacency, on either side of TP, is a prerequisite for reanalysis. What is theoretically interesting, however, is that in both (32) and (33), a morpheme that is linked to ArgP in the parental grammar (*agr* in (32), *st* in (33)) is instead interpreted as being part of a morpheme that is linked to TP (*verb-tense* in (32) and *ä* in (33)), which is a higher functional projection.

5.3 Two grammars at once in CV

If agreement is syntactically active but phonologically dependent in CV, this crucially explains all the V-to-I derived FA orders that we find in the corpus (see Table 2). However, we have yet to account for how such a FA order can co-occur with the AF order (see Table 1). I can think of two possible explanations. There could be two grammars in use at the same time, one with V-to-I (generating FA) and one without V-to-I (generating AF). Alternatively, there is only one grammar with V-to-I but with an additional and higher position for adverbs, which makes the AF order a possible outcome even when the verb has moved out of VP. The latter option has been invoked to account for AF order in Icelandic. Here, AF is highly marked (compared to FA) and restricted in a number of ways (see Bobaljik & Thráinsson 1998; Thráinsson 2007, 2010). However, AF in central Viskadalian is neither marked nor restricted. To treat it as an exceptional case (on a par with Icelandic AF) is therefore hardly called for.

By contrast, to assume parallel grammars is morphologically motivated. Recall that both *-n* and *-(s)t* are only occasionally present in the area. Now, disregarding both at the same time demotes the agreement system to type 3, since the only uniquely rich endings are 1PL *-om/-em* and 3PL *-a*; see the second column of Table 6. However, by upholding only one of them, the paradigm gains precisely what it needs to count as rich (i.e. type 1): a unique marker of second person, be it the singular *-(s)t* or the plural *-n*; see the last two columns of the table.

In other words, the morphological variation that we can observe in CV balances on the border between categorically different systems: type 1 and type 3 agreement. The parallel usage of FA and AF in CV is thus expected, seeing that type 1 agreement triggers V-to-I, and type 3 does not.

Table 6: Possible types of morphologically distinct agreement in CV (rich endings in italics)

		Type 1	
Type 3		possibility 1	possibility 2
1SG	-er	-er	-er
2SG	-er	-er/(s)t	-er
3SG	-er	-er	-er
1PL	<i>-om/-em</i>	<i>-om/-em</i>	<i>-om/-em</i>
2PL	-e	-e	<i>-en</i>
3PL	<i>-a/-e</i>	<i>-a/-e</i>	<i>-a/-e</i>

6 Concluding remarks and future tasks

The development of Viskadalian is certainly a linguistic history in its own right. However, it is also a piece in a larger puzzle, enriching our knowledge of the history of Scandinavian in general. In this paper, I have studied the differences between central and southern Viskadalian. It seems likely that this dialect split began as early as the early 1800s; at any rate, it is observable in recordings from the middle of the 20th century. From a macro perspective, we can consider the varying morphosyntax within Viskadalian as the last step in the diachronic transition of mainland Scandinavian from a richly inflecting FA variety to a poorly inflecting AF variety that started many centuries ago.

Nevertheless, the puzzle is not complete. We have yet to address the fascinating continuum of traditional Dalecarlian varieties spoken north and northwest of Lake Siljan. This is the only dialect area in Scandinavia besides Viskadalen where verbal inflection for both person and number has been preserved. Here too, there was a great deal of inflectional variation at the beginning of the 20th century, as shown by Levander (1928: 163–165). Unfortunately, apart from the most archaic variety in Älvdalen, where V-to-I was obligatory in the early 1900s (Levander 1909: 124) but is quite marginal today (Garbacz 2010: 131–132), we know very little of Dalecarlian word order. In light of the recent revitalization of the Rich Agreement Hypothesis, filling this empirical lapse stands out as a future task of utmost importance.

Acknowledgements

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Abbreviations

AF	Adverbial-Finite verb word order	PDS	present-day Swedish
CV	Central Viskadalian	PNU	The Person Number Universal
FA	Finite verb-Adverbial word order	RAH	The Rich Agreement Hypothesis
OS	Old Swedish	SV	Southern Viskadalian

Written sources

All entries containing an accession number are part of the collections of the Institute for Language and Folklore (Isof). However, at the time of collection, different local dialect archives were responsible for different regions of Sweden. The different prefixes of the accession numbers reflect this original division. DAL stands for ‘the Dialect Archive in Lund’, ULMA for ‘Uppsala Dialect (Sw. *LandsMål*) Archive, and DAG for ‘the Dialect Archive in Gothenburg’. Place names refer to the parish if nothing else is stated.

Himl: [Dialect texts from the hundred of Himle.] In *Svenskt folksmål* [Swedish dialect], pp. 72–75. Edited by Waldemar Hallin. Stockholm: Folket i Bilds Förlag, 1948.

K-styr: Moberg, Lennart (ed.). 1964. En nyttigh bok om konnunga styrilse och höfdinga. [A useful book on the royal rule]. Facsimile of edition from 1634 by Johannes Bureus. Uppsala. Original from the early 14th century. Available through FTB/Korp.

Fag: [Dialect texts from Fagered.] Isof Accession Number (A. No): DAG269F:II. Manuscript from the 1890s.

Värö1: [Dialect texts from Värö.] A. No: DAL8362. Manuscript from the 1960s.

Audio recordings

All recordings in the list are included in the investigation of word order (in §2), but only those recordings that are quoted in the text are preceded by an abbreviation (namely the one used in the text in connection to the quote).

Ås: Ås, a. No: DAL4227–4236; recorded in 1967 [67 min.]. Male informant (MI), time of birth unknown.

Dags: Dagsås, a. No: DAL2911–2917; recorded in 1962 [52 min.]. MI born in 1883.

Grimeton, a. No: DAL1931–1937; recorded in 1957 [48 min.]. Female informant (FI) born in 1867.

Grimm: Grimmared, a. No: ULMA226B, 227; recorded in 1956 [43 min.]. MI born in 1869.

G-sjö: Gunnarsjö, a. No: ULMA1036–1038; recorded in 1960 [64 min.]. Brother and sister born in 1883 and 1871, resp.

Horr: Horred, a. No: ULMA6211; recorded in 1948 [26 min.]. FI born in 1872.

Ist: Istorp, a. No: ULMA6212–6214; recorded in 1948 [71 min.]. FI born in 1860.

Källsjö, a. No: DAL350B; time of recording unknown [33 min.]. MI born in 1890.

Öxn: Öxnevalla, a. No: ULMA6804–6806; recorded in 1956 [36 min.]. FI born in 1870.

Spann: Spannarp, a. No: DAL:2048–2054; recorded in 1958. [64 min.]. MI born in 1889.

Stamnared, a. No: DAL2591–2592; 3439–3442; recorded in 1960 [28 min.]. MI born in 1894.

Strå: Stråvalla, a. No: DAL224A–B; recorded in 1966 [125 min.]. MI born in 1902.

Träslöv, a. No: DAL392–398; recorded in 1948 [67 min.]. MI born in 1868.

Träslöv, a. No: DAL359A–B; recorded in 1957 [66 min.]. MI born in 1900.

Träsl1: Träslöv, a. No: DAL457A–B, 457A1, 401–402, 510A–B; recorded in 1966 [231 min.]. MI born in 1905.

Träsl2: Träslöv, a. No: DAL458A2, 458B; recorded in 1966 [61 min.]. FI born in 1905.

Vedd: Veddige, a. No: DAL2057–2066; recorded in 1958 [68 min.]. MI born in 1899.

Värö2: Värö, a. No: DAL402–408; recorded in 1962 [60 min.]. MI born in 1884.

Värö3: Värö, a. No: DAL245A–B; recorded in 1967 [64 min.]. FI born in 1895.

Electronic corpora

FTB: Fornsvenska textbanken [The text bank of Old Swedish]: <https://project2.sol.lu.se/fornsvenska>

Korp: https://spraakbanken.gu.se/korp/?mode=all_hist

References

- Andersson, Albert. 1922. *Descriptiv grammatik över folkmålet i Träslövs kyrkoby* [*Descriptive grammar of the dialect of the village of Träslöv*]. Ms. Isof a. No: DAL634.
- Andersson, Lars-Gunnar. 1975. *Form and function of subordinate clauses*. Gothenburg: University of Gothenburg. (Doctoral dissertation).
- Belfrage, Åke Gustaf Leonard. 1871. *Om verbet i Vestgötamålet* [*On the verb in the dialect of Westrogothia*]. Lund: Lund University. (Doctoral dissertation).
- Bobaljik, Jonathan David & Höskuldur Thráinsson. 1998. Two heads aren't always better than one. *Syntax* 1(1). 37–71. DOI: 10.1111/1467-9612.00003.
- Chomsky, Noam. 1995. *The Minimalist program*. Cambridge, MA.: The MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale: A life in language*, 1–51. Cambridge, MA.: The MIT Press. DOI: 10.7551/mitpress/4056.001.0001.
- Christoffersen, Marit. 1997. Saken er BIFF! Negasjonens plass i leddsetninga i eldre og nyere norsk [The thing is BIFF! The place of negation in subordinate clauses in older and more recent Norwegian]. In Jarle Bondevik, Egil Pettersen & Magnus Rindal (eds.), *Språket er målet. Festskrift til Egil Pettersen på 75-årsdagen 4. Mars 1997*, 44–52. Bergen: Alma mater.

- Delsing, Lars-Olof. 2022. From ‘big’ to ‘much’: On the grammaticalization of two gradable adjectives in Swedish. In Ida Larsson & Erik M. Petzell (eds.), *Morphosyntactic change in Late Modern Swedish*, 319–337. Berlin: Language Science Press. DOI: 10.5281/zenodo.5792965.
- Falk, Cecilia. 1993. *Non-referential subjects in the history of Swedish*. Lund: Department of Scandinavian Languages, University of Lund. (Doctoral dissertation).
- Garbacz, Piotr. 2010. *Word order in Övdalian: A study in variation and change*. Lund: Centre for Languages & Literature, Lund University. (Doctoral dissertation).
- Götling, Johan & Samuel Landtmanson. 1950. *Västergötlands folkmål D. 4 Formläran. Text och kartor [The dialects of Westrogothia 4. Morphology. Text and maps]*. Uppsala: Kungl. Gustav Adolfs Akademien för svensk folklivsforskning.
- Granström, Magni. 1915. Jo, på den tiden. Uppteckningar från S. Sandjö i Konga hd. (Småland) [Well, in those days. Records from Södra Sandsjö in the hundred of Konga (Småland)]. *Svenska landsmål och svenskt folkliv* 1915(1). 5–16.
- Grill, Erik. 1954. Hallands städer [The towns of Halland]. In Curt Weibull, Holger Arbman, Albert Sandklef & Einar Restad (eds.), *Hallands historia 1, Från äldsta tid till freden i Brömsebro 1645*, 643–767. Halmstad: Hallands läns landsting.
- Håkansson, David. 2011. Bisatsledföljden i äldre svenska: Variation eller förändring? [Subordinate clause word order in older Swedish: Variation or change?] *Arkiv för nordisk filologi* 126. 93–140.
- Harbour, Daniel. 2016. Parameters of poor pronoun systems. *Linguistic Inquiry* 47(4). 706–722. DOI: 10.1162/LING_a_00228.
- Heycock, Caroline & John D. Sundquist. 2017. Don’t rush to rehabilitate: A remark on Koenenman and Zeijlstra 2014. *Linguistic Inquiry* 48(1). 173–179. DOI: 10.1162/LING_a_00239.
- Holmberg, Anders. 1986. *Word order and syntactic features in the Scandinavian languages and English*. Stockholm: Stockholm University. (Doctoral dissertation).
- Holmberg, Anders & Christer Platzack. 1995. *The role of inflection in Scandinavian syntax*. Oxford; New York: Oxford University Press.
- Horn, Adam af Åminne. 2015. Viljen I veta? *Om verbens pluralböjning i sydvästsvenska dialekter [Do you want to know? On verbal number inflection in Swedish dialects in the South-West]*. Uppsala: Uppsala University. (MA thesis).
- Horn, Adam af Åminne. 2017. Verbal kongruensböjning i sydvästsvenska kongruensdialekter [Verbal agreement inflection in Swedish agreement dialects in the south-west]. *Svenska landsmål och svenskt folkliv* 2016. 73–89.

- Indrebø, Gustav. 2001. *Norsk målsoga [Norwegian language history]*. 2. utg., auka og umvølt. Bergen: Norsk bokreidingslag.
- Julien, Marit. 2009. *Plus(s) at(t)* i skandinaviska: En minimal matris [*Plus(s) at(t)* in Scandinavian: A minimal matrix]. *Språk och stil* 19. 124–141.
- Julien, Marit. 2015. The force of V2 revisited. *The Journal of Comparative Germanic Linguistics* 18(2). 139–181. DOI: 10.1007/s10828-015-9073-2.
- Kalén, Johan. 1923. *Ordbok över Fageredsmålet [Dictionary of the dialect of Fagered]*. Gothenburg: Elanders boktryckeri aktiebolag.
- Koeneman, Olaf & Hedde Zeijlstra. 2014. The Rich Agreement Hypothesis rehabilitated. *Linguistic Inquiry* 45(4). 571–615. DOI: 10.1162/LING_a_00167.
- Kosmeijer, Wim. 1986. The status of the finite inflection in Icelandic and Swedish. *Working Papers in Scandinavian Syntax* 26. 1–41.
- Levander, Lars. 1909. *Älvdalsmålet i Dalarna: Ordböjning ock syntax [The dialect of Älvdalen in Dalecarlia]*. Uppsala: Uppsala University. (Doctoral dissertation).
- Levander, Lars. 1928. *Dalmålet: Beskrivning och historia [The dialect of Dalecarlia] II*. Uppsala.
- Lindberg, Gunnar. 1927. *Anteckningar om personböjning, omvänd ordföljd m. m. [Notes on person inflection, inverted word order etc.]* Isot, A. No.: ULMA1604:01, 04.
- Linge, Lars. 1969. *Gränshandeln i svensk politik under äldre Vasatid [The border trade in Swedish politics during the late 16th century]*. Lund: Lund University. (Doctoral dissertation).
- Lipkind, William. 1945. *Winnebago grammar*. New York: King's Crown Press.
- Lyngfelt, Benjamin. 2003. Samordnande *att*: En talspråklig sambandsmarkör sedd från ett syntaktiskt perspektiv [Coordinating *att*: A colloquial coherence marker seen from a syntactic perspective]. In Hans Landqvist, Sven-Göran Malmgren, Kerstin Norén, Lena Rogström & Barbro Wallgren Hemlin (eds.), *Texten framför allt: Festschrift till Aina Lundquist på 65-årsdagen den 11 september 2003*, 139–149. Gothenburg: Department of Swedish, University of Gothenburg.
- Oxford, Will. 2017. Variation and change in the Degree Phrase. *Linguistic Variation. Special issue: Syntactic variation and change* 17(1). 98–110. DOI: 10.1075/lv.17.1.05oxf.
- Petzell, Erik M. 2017. Enclitic subjects and agreement inflection in Viskadalian Swedish. *Nordic Atlas of Language Structures (NALS) Journal* 2(1). 1–39. DOI: 10.5617/nals.5360.
- Petzell, Erik M. 2018. Verbböjning och ordföljd i Viskadalen [Verbal inflection and word order in Viskadalen]. *Svenska landsmål och svenskt folkliv* 2017. 89–125.

- Platzack, Christer. 1988. The emergence of a word order difference in Scandinavian subordinate clauses. *McGill Working Papers in Linguistics* 6. 215–238.
- Ragnarsdóttir, Hrafnhildur, Hanne Gram Simonsen & Kim Plunkett. 1999. The acquisition of past tense morphology in Icelandic and Norwegian children: an experimental study. *Journal of Child Language* 26(3). 577–618. DOI: 10.1017/S0305000999003918.
- Roberts, Ian & Anna Roussou. 1999. A formal approach to “grammaticalization”. *Linguistics* 37(6). DOI: 10.1515/ling.37.6.1011.
- Roberts, Ian & Anna Roussou. 2003. *Syntactic change: A Minimalist approach to grammaticalization*. Cambridge: Cambridge University Press.
- Rohrbacher, Bernhard Wolfgang. 1994. *The Germanic VO languages and the full paradigm: A theory of V to I raising*. Amherst: University of Massachusetts at Amherst. (Doctoral dissertation).
- Rohrbacher, Bernhard Wolfgang. 1999. *Morphology-driven syntax: A theory of V to I raising and pro-drop*. Amsterdam: John Benjamins.
- Sundquist, John D. 2003. The Rich Agreement Hypothesis and Early Modern Danish embedded-clause word order. *Nordic Journal of Linguistics* 26(2). 233–258. DOI: 10.1017/S0332586503001094.
- Teleman, Ulf, Staffan Hellberg, Erik Andersson & Lisa Holm. 1999. *Svenska akademiens grammatik [The grammar of the Swedish Academy]*. 1st edn. Stockholm: Svenska Akademien.
- Thráinsson, Höskuldur. 2007. *The syntax of Icelandic*. Cambridge: Cambridge University Press.
- Thráinsson, Höskuldur. 2010. Predictable and unpredictable sources of variable verb and adverb placement in Scandinavian. *Lingua* 120(5). 1062–1088. DOI: 10.1016/j.lingua.2009.04.003.
- Trosterud, Trond. 1989. The null subject parameter and the new Mainland Scandinavian word order: A possible counterexample from a Norwegian dialect. In Jussi Niemi (ed.), *Papers from the Eleventh Scandinavian Conference of Linguistics* (Kielitieteellisiä tutkimuksia [Studies in languages] 14–15), 87–100. Joensuu: University of Joensuu, Faculty of Arts.
- Tvica, Seid. 2017. *Agreement and verb movement. The Rich Agreement Hypothesis from a typological perspective* (LOT 446). Amsterdam: LOT.
- Vikner, Sten. 1994. *Verb movement and expletive subjects in the Germanic languages*. Oxford; New York: Oxford University Press.
- Vikner, Sten. 1997. V to I movement and inflection for person in all tenses. In Liliane M. V. Haegeman (ed.), *The new comparative syntax* (Longman linguistics library), 189–213. London, New York: Longman.

- Vittersø, Gro. 2004. *Fra sva til sav: Stabilitet og endring i norske leddsetninger 1200–1875* [From sva word order to sav word order: Stability and change in Norwegian subordinate clauses 1200–1875]. Oslo: University of Oslo. (Doctoral dissertation).
- von Möller, Peter. 1858. *Ordbok öfver halländska landskaps-målet* [Dictionary of the dialect of the province of Halland]. Lund: Berlingska tryckeriet.
- Waldmann, Christian. 2014. The acquisition of neg-V and V-neg order in embedded clauses in Swedish: A microparametric approach. *Language Acquisition* 21(1). 45–71. DOI: 10.1080/10489223.2013.855217.
- Wiklund, Anna-Lena, Gunnar Hrafn Hrafnbjargarson, Kristine Bentzen & Þorbjörg Hróarsdóttir. 2007. Rethinking Scandinavian verb movement. *The Journal of Comparative Germanic Linguistics* 10(3). 203–233. DOI: 10.1007/s10828-007-9014-9.
- Zeijlstra, Hedde. 2012. There is only one way to agree. *The Linguistic Review* 29(3). DOI: 10.1515/tlr-2012-0017.

