

Ida Larsson and Janne Bondi Johannessen

Embedded word order in Heritage Scandinavian

Abstract: This paper investigates the word order in embedded clauses in Heritage Scandinavian (American Norwegian and American Swedish). It is shown that Heritage Scandinavian has a substantial amount of verb-raising across negation in embedded clauses. Verb-raising (i. e. the order verb–negation) is found in *that*-clauses, relative clauses and embedded questions; only the first allow the order verb–adverb in European Norwegian and Swedish. It is argued that the non-standard order (from a European perspective) should not be viewed as a consequence of direct transfer from English, and not as attrition. Instead, limited or incomplete acquisition of the heritage language leads to a grammar with V-to-T movement in addition to V-to-C movement. The acquisition of the heritage languages is assumed to follow the same path as the acquisition of the European Scandinavian languages, but it is delayed due to the limited input and interrupted when the heritage speakers start school.

1 Introduction¹

Between 1820 and 1920 there was a massive emigration to North America. 1 300 000 Swedes and 800 000 Norwegians emigrated; most went to the Midwest and settled as farmers, often in communities where others from the same area of their homeland were residing. Norwegian and Swedish communities therefore kept the language from home for many years, and through several generations.

¹ We would like to thank the audience at The 11th International Conference of Nordic and General Linguistics in Freiburg, April 2012, as well as local audiences at the universities of Oslo and Uppsala for good comments. We would also like to thank two reviewers who have helped making the paper much better. We are grateful to André Lynum for helping us to calculate the significance tests in Section 4. The Swedish work (by Ida Larsson) was partly funded by The Letterstedt association, The Helge Ax:son Johnson Foundation, The Torsten Söderberg Foundation and the Norwegian fieldwork by the Norwegian Research Council. The Norwegian work (by Janne Bondi Johannessen) was partly supported by the Research Council of Norway through its Centres of Excellence funding scheme, project number 223265, and through its funding of the project NorAmDiaSyn, project number 218878, under the BILATGRUNN/FRIHUM scheme. They are hereby gratefully acknowledged.

This language was used in public life, in schools and in church, and in many local newspapers. Still today, in 2013, there are descendants of these immigrants that continue to speak Norwegian and Swedish, and who have a Scandinavian language as their first language. We use the term *heritage language* to refer to the language of the American Scandinavians who have been born in America, following Rothman's (2009: 156) definition:²

A language qualifies as a heritage language if it is a language spoken at home or otherwise readily available to young children, and crucially this language is not a dominant language of the larger (national) society. Like the acquisition of a primary language in monolingual situations and the acquisition of two or more languages in situations of societal bilingualism/multilingualism, the heritage language is acquired on the basis of an interaction with naturalistic input and whatever in-born linguistic mechanisms are at play in any instance of child language acquisition. Differently, however, there is the possibility that quantitative and qualitative differences in heritage language input and the introduction, influence of the societal majority language, and differences in literacy and formal education can result in what on the surface seems to be arrested development of the heritage language or attrition in adult bilingual knowledge.

Rothman's definition includes the possibility that the heritage variety of a language may be different from the variety that is spoken as a majority language, given its special context of use.

Heritage languages are worth studying in order to learn more about the nature of linguistic change. They represent a development of a language that often differs from that of the language of origin, and they have developed in the vicinity of a majority language, with ample possibilities of influence on the heritage language. The study of heritage languages therefore potentially reveals which factors are central in language change and which are not, which factors affect language acquisition and in what way, and they also present important data on possible individual language loss (attrition) in the situations where heritage speakers no longer use their first language (see e. g. Håkansson 1995; Montrul 2008; Johannessen and Salmons forthcoming).

In this study, we investigate word order in embedded clauses in Heritage Scandinavian, which is different from that of European Scandinavian. In Heritage Scandinavian we find a substantial amount of verb–adverb word order in

² We thus refer to Heritage Norwegian and Heritage Swedish, and to Heritage Scandinavian to cover both. Likewise, we call the languages of origin *European Norwegian* and *European Swedish*, as well as *European Scandinavian*, whenever we want to refer to both at the same time.

embedded clauses. In European Scandinavian this order is not possible, with the exception of one type of subordinate clause.

The article is organized as follows. Section 2 gives an overview of the recordings available for Heritage Scandinavian. Section 3 describes the word order of main and subordinate clauses in European Scandinavian. Section 4 then presents embedded word order in Heritage Scandinavian, including the unexpected non-standard word order. This section contains both linguistic examples and frequency counts. Section 5 argues for why this non-standard order must be seen as a change in the grammatical system rather than as something that belonged to the language of origin, and it argues against an explanation based on the idea that the new word order is a loan from the majority language, English. We also look at an explanation based on attrition, which we also reject. Finally, we try to see this new language change as a consequence of incomplete acquisition. This analysis turns out to explain our data well, and is in accordance with established knowledge of acquisition of embedded word order in the European Scandinavian languages. Section 6 sums up our findings.

2 American Scandinavian recordings

In this section, we give a short introduction to the American Norwegian and American Swedish recordings.

2.1 American Norwegian

The Norwegian language in America has been studied off and on for more than a century, first by professors of linguistics, George T. Flom (U Iowa) and Nils Flaten (St. Olaf College), at the very beginning of the 20th century (see Flom 1900–1904, 1903, 1912, 1926, 1929, 1931, and Flaten 1900–1904). The first recordings were done in 1931, when the Norwegian professors Ernst W. Selmer and Didrik Arup Seip went to the American Midwest to study the language of the Norwegians there. They left behind a collection of their recordings. Unfortunately, these phonograph rolls were fragile, and many of them could not be recovered (Haugen 1992). The rest are now available at the Text Laboratory web site at the University of Oslo (UiO). So are the recordings of Einar Haugen, the legendary Harvard professor who wrote *The Norwegian Language in America* (1953). Haugen's recordings were collected between 1936 and 1948 with a total of 207 informants and nearly 55 hours. The informants ranged from 1st to 3rd generation immigrants, and were from the Midwest. Their Norwegian background covers the major parts of southern Norway.

In the 1980–1990s, Arnstein Hjelde (1992, 1996a, 1996b) made recordings of people with a Trøndelag and Gudbrandsdalen dialect background in the Midwest. Students of Joseph Salmons at the University of Wisconsin made recordings in the 2010s. Since 2010, Janne Bondi Johannessen (with Signe Laake, Arnstein Hjelde and others) has conducted five field trips recording mainly 2nd–4th generation speakers across the northern part of the U. S. A., from the state of Washington to Wisconsin. Some studies based on these recordings are Johannessen and Laake (2011) and several articles in a special issue of *Norsk Lingvistisk Tidsskrift* on the Norwegian language in America (edited by Johannessen and Salmons in 2012), as well as in an anthology appearing soon at John Benjamins Publishing Company (edited by Johannessen and Salmons forthcoming). All recordings are available at the Text Laboratory, UiO.

2.2 American Swedish

American Swedish has also been studied previously (see in particular Hasselmo 1974). In the 1960s, Folke Hedblom and Torsten Ordéus collected a large material of American Swedish, comprising over 300 hours of recorded speech, and based on this material a few studies were published (see Hedblom 1963, 1970, 1974 1978, 1981). These recordings are available at the Institute for Language and Folklore in Uppsala. They consist of interviews of varying length (and varying degree of formality) with 1st–4th generation speakers of Swedish, with family from almost all different parts of Sweden. Many of the informants are first generation immigrants who emigrated from Sweden as children or young adults. Other informants are descendants of Swedes that emigrated during the 19th or early 20th century, and many of them grew up with Swedish as the only first language.³

In the last couple of years, new recordings of American Swedish have been made, as part of the project *Swedish in America* (see Larsson et al. to appear and Andréasson et al. 2013 for an overview). In 2011–2012, 88 informants were interviewed and recorded in Minnesota and Illinois. Most of the informants were second or third generation immigrants with parents, grandparents or great grandparents from different parts of Sweden, but a few had themselves emigrated from Sweden. Some of the American-born informants had Swedish as their only

³ There are also other older collections of American Swedish varieties. For instance, a large material of Heritage Finno-Swedish was collected in the beginning of the 1970s (see Ahlbäck et al. 1976 and Ivars 2003). Those recordings have not been used in the present study.

first language, and had learned English in school; others had English as the dominant language when they grew up, or were simultaneous bilinguals.

In this paper we focus on heritage speakers born in America. Unless otherwise noted, they have Norwegian or Swedish as their first language and are still fluent speakers. The data used are from recordings of (informal) interviews and dialogues between two or more heritage speakers.

3 Word order in Norway and Sweden

In this section we give a brief overview of main and embedded word order in European Norwegian and Swedish. We exemplify with Swedish, but the pattern is the same in Norwegian.

The Scandinavian languages in Europe and in America are all verb second (V2) languages. In declarative main clauses, the verb therefore immediately follows the first constituent, whether it is a subject, an adverbial or some other fronted phrase; cf. (1a) and (1b). *Wh*-questions also have the verb in second position (disregarding some Norwegian dialects); see (2a) and (2b).⁴

- (1) a. *Den tröjan köpte han inte.* (Swedish)
 that shirt.the bought he not
 'He didn't buy that shirt.'
- b. * *Den tröjan han köpte inte.*
 that shirt.the he bought not
- (2) a. *Vad köpte han?* (Swedish)
 what bought he
 'What did he buy?'
- b. * *Vad han köpte?*
 what he bought

Following e. g. Rizzi (1997), Westergaard and Vangsnes (2005), and others, we will assume that the verb in main clauses spells out a head in the C-domain, which determines clause type. The composition and properties of the C-domain can therefore vary depending on clause type. However, for the present purposes the simplified structures in (3) will suffice, where C, I and V are used to cover a combination of heads (lower copies are marked with strikethrough). We will assume that in V2-contexts the verb is in a position in C, and that V2 involves V-to-C movement.

⁴ Forms like *tröjan* 'shirt + definite suffix' are glossed as 'shirt.the' throughout.

- (3) a. [_{CP} [Den tröjan] köpte [_{IP} han köpte [_{NegP} inte Neg^o [_{VP} han köpte
 ‘He didn’t buy that shirt.’ (= 1a)
- b. [_{CP} vad köpte [_{IP} han köpte [_{VP} han köpte
 ‘What did he buy?’ (=2a)

In European Scandinavian, the finite verb follows both the subject and sentence adverbs in embedded clauses; see the relative clause in (4) and the embedded question in (5) (cf. among many others Holmberg and Platzack 1995; Vikner 1995):

- (4) a. *tröjan som han inte köpte* (Swedish)
 shirt.the that he not bought
 ‘the shirt that he didn’t buy’
- b. * *tröjan som han köpte inte*
 shirt.the that he bought not
- (5) a. ... *vad han inte köpte* (Swedish)
 what he not bought
 ‘what he didn’t buy’
- b. * ... *vad han köpte inte*
 what he bought not

Embedded clauses typically do not express illocutionary force, and they are often assumed to have a more restricted C-domain (which presumably still varies depending on clause type). Unlike direct questions, embedded questions do not, for instance, express interrogative force, and the interrogative head that triggers V2 in the main question can be assumed to be missing from the structure of the embedded question (see e. g. Westergaard 2006; Westergaard and Bentzen 2007 and references cited there). The finite verb will therefore remain in the verb phrase. Partial structures for (4a) and (5a) are given in (6). European Scandinavian does not have V-to-I movement.

- (6) a. [_{CP} Op_{rel} som [_{IP} han I^o [_{NegP} inte Neg^o [_{VP} han köpte
 ‘... that he didn’t buy’ (=4a)
- b. [_{CP} vad C^o [_{IP} han I^o [_{NegP} inte Neg^o [_{VP} han köpte
 ‘... what he didn’t buy’ (=5a)

In an investigation of embedded word order, it is important to treat *that*-clauses (No. and Sw. *at/att*-clauses) separately. As discussed by Heycock (2006), Julien (2007, 2009), Wiklund et al. (2009) and many others, there is variation with respect to verb placement in certain types of *that*-clauses depending on the matrix predicate. In examples such as (7), the embedded verb can optionally be placed before negation. (The brackets in (7) mark that the complementizer is optional in Swedish.)

- (7) a. *Jag tycker (att) den **passar inte** bra.* (Swedish)
 I think that it fits not well
 ‘I don’t think that it fits well.’
- b. *Jag tycker (att) den **inte passar** bra.*
 I think that it not fits well
 ‘I don’t think that it fits well.’

Examples such as (7a) are often analyzed as involving embedded V2, and as having the verb in a position in the C-domain. In examples like these, it is also possible to have topicalisation and verb–subject order:

- (8) *Jag tycker verkligen (att) den boken **ska du inte** läsa.* (Swedish)
 I think really that that book.the should you not read
 ‘I really don’t think that you should read that book.’

The precise restrictions of embedded V2 are the subject of some debate (see e.g. Julien 2007, 2009 and Wiklund et al. 2009), but it is typically restricted to asserted or semi-factive *that*-clauses in (European) Norwegian and Swedish. There is, however, considerable variation between speakers and dialects (see Bentzen 2013a for an overview). Importantly, V-to-C movement (i.e. V2) is never obligatory in *that*-clauses in Norway and Sweden, but it is not infrequent in the spoken language. On the contrary, in the Norwegian part of the Nordic Dialect Corpus (Johannessen et al. 2009), half of the *that*-clauses (474/937, 50.6 %) have the order verb-negation (Bentzen et al. 2013; cf. Julien 2008, and also Jensen and Christensen 2011, who argue that embedded V2 is more common in Danish than has generally been assumed).

With respect to other kinds of embedded clauses, there is little variation in the placement of verbs relative to negation in Mainland Scandinavian (see Bentzen 2013b for an overview of the word order in relative clauses). A small number of dialects sometimes seem to have verb movement to I, independent of clause type.⁵ This is the case in Övdalian, for instance, where V-to-I movement appears to be required in certain very restricted contexts (in clauses with null subject; see Rosenkvist 2011). Verb movement is, however, generally not obligatory in Övdalian.⁶ In spite of this word order variation in embedded clauses in

⁵ As shown by Bentzen (2007), Northern Norwegian has optional verb movement across adverbs such as *ofte* ‘often’ in e.g. embedded questions and relative clauses. The verb cannot move past negation, however.

⁶ Sandøy (2008: 189) claims that verb movement is possible in many types of embedded clauses in the dialect of Romsdal. With one exception with somewhat unclear origin, the examples he gives are all *that*-clauses. In part of the Nordic Dialect Corpus from locations in Møre og Romsdal,

European Scandinavian, what we find in Heritage Scandinavian is unexpected, as we shall see.

4 Embedded word order in Heritage Scandinavian

We have good reason to assume that the emigrants brought with them to America a grammatical system with V2 in main clauses and certain *that*-clauses but without verb movement over negation in embedded questions and relative clauses. This is the pattern found in Swedish since the 17th century (see e. g. Falk 1993; Petzell 2012 and references cited there). As mentioned in Section 3, there are isolated dialects with embedded verb–adverb order, but we have no reason to assume that the heritage speakers under discussion are influenced by rare dialects such as Övdalian through their input when growing up. In both Haugen’s and Hedblom’s recordings, first generation immigrants have the standard pattern (see section 5.2 below). In this section, we investigate the word order in Heritage Scandinavian embedded clauses.

4.1 Adverb–verb and verb–adverb order

In the American Scandinavian recordings, we find examples of the standard patterns described in Section 3, but also a striking number of embedded clauses that do not follow the European Scandinavian pattern. While we would expect there to be some variation in subordinate declaratives (typically initiated by *at/att* ‘that’), we would not expect anything other than the adverb–verb order in other subordinate clauses. However, we find many more examples with the order verb–adverb than expected with the former type, and a substantial number with the other subordinate types. This will be illustrated in this subsection.

We start by showing examples that are in accordance with the European standard.⁷ (9a) shows a subordinate declarative with the standard adverb–verb order.

we do not find any examples of relative clauses where the finite verb precedes negation. (The search included sentences with the relative complementizer *som* followed by *ikke* ‘not’, separated by up to five words.)

⁷ Most heritage language examples are represented in standard orthography. Haugen’s examples are represented in the way they are given in Haugen (1953) or in Oftedal’s transcriptions (available at the Text Laboratory, UiO). We have chosen to limit the glossing from Scandinavian to English by providing a word-by-word translation, and using punctuation when one Scandina-

(9b) shows an example of the same word order in an embedded polarity question, and (9c) in a relative clause.

- (9) a. *vi er lykkelige på den måten at vi ikke bruker*
 we are lucky on the way.the that we not use
stav eller noe slikt
 stick or something such
 ‘We are lucky that we don’t use staves or such things.’
 (Norwegian, Elnor, coon_valley_WI_02gm)
- b. *jeg kan gjøre det hvis om det ikke regner*
 I can do it if whether it not rains
 ‘I can do it if it does not rain.’
 (Norwegian, Tip, coon_valley_WI_06gm)
- c. *det er mange som ikke har slutta òg*
 there are many who not have stopped too
 ‘There are also many who have not stopped.’
 (Norwegian, Elnor, coon_valley_WI_02gm)

As in European Scandinavian, we find the order verb–adverb in subordinate declaratives; a Heritage Norwegian example is given in (10) and a Heritage Swedish example in (11).

- (10) *det er så lenge sia at jeg kommer messom ikke i hug*
 it is so long ago that I come vaguely not in memory
akkurat hvor vi var hen
 just where we were LOC
 ‘It’s so long ago that I hardly remember where exactly we were.’
 (Norwegian, Tip, coon_valley_WI_06gm)
- (11) *jag visste att han skulle inte leva mycket längs*
 I knew that he would not live much longer
 ‘I knew that he wouldn’t live much longer.’
 (Swedish, Konrad, mn11_m013)

However, in Heritage Scandinavian we also find examples of the order verb–adverb in embedded polarity questions; see (12) and (13). Examples like these are not found in European Scandinavian.

vian word has to be translated to two English words. Grammatical morphemes (other than the definiteness suffix) are not represented.

- (12) *om du finner ikke ut så*
 if you find not out then
 ‘If you don’t find out, then.’
 (Norwegian, Colleen, sunburg_MN_04gk)
- (13) *Om ja sätter inte en sten på farfars grav*
 if I put not a stone on granddad’s grave
så kommer det aldrig en sten där
 so comes there never a stone there
 ‘If I don’t put a stone on granddad’s grave there will never be a stone there.’
 (Swedish, Konrad, mn11_m013)

Relative clauses can also have the unexpected verb–adverb order; see (14)–(15). Relative clauses in European Scandinavian, by contrast, are known to have a rigid adverb–verb word order, as noted in Section 3 above.

- (14) *det var en som arbeida med dem som forstår ikke*
 there was one who worked with them who understands not
så mye norsk
 so much Norwegian
 ‘There was one who works with them who doesn’t understand much Norwegian.’
 (Norwegian, Irene, zumbrota_MN_01gk)
- (15) *hon hade [...] en äldre bror som arbeta också där oppe*
 she had an older brother that worked also there up
 ‘She had an older brother that also worked up there.’
 (Swedish, Konrad, mn11_m013)

Interestingly, there were examples of Heritage Scandinavian with the new word order as early as sixty years ago. The examples in (16) are from Haugen’s recordings.

- (16) a. *Då di kãm ti detti landi då settla dæ på en*
 when they came to this country,the then settled they on a
homstedde som e no Taon åv Farmington
 homestead that is now town of Farmington
 ‘When they came to this country, they settled in a homestead that is now the town of Farmington.’
 (Norwegian, Winfield Krostu, Waupacs co., born in Wis 1884, rec.1942)
- b. *Då me ha no blitt jipte, [...] så kjæm hornaran*
 when we have now become married so came musicians.the
 ‘When we had been married came the musicians.’
 (Norwegian, Winfield Krostu, Waupacs co., born in Wis 1884, rec.1942)

Perhaps equally interesting is the fact that the verb type in the embedded clause appears to be irrelevant. One might have thought that the order verb–adverb would be restricted to (or more common with) auxiliary verbs, but in the present section we seen examples of the equivalents of content verbs, such as ‘come’, ‘find’, ‘put’, ‘understand’ and ‘work’. This point is relevant for our discussion in 5.1, on whether it is an English pattern that is borrowed.

4.2 Corpus data

In order to understand to what extent the cases of new order are more than just idiosyncratic findings, we need to count them. For this purpose it is convenient to make use of The Corpus of American Norwegian Speech. It is a searchable corpus of recordings of eleven speakers (at the time of writing) in the American Midwest; five from Minnesota (Rushford, Sunburg and Zumbrota) and six from Wisconsin (Coon Valley). Although it is in the initial development phase, and thus small (only 50,000 words in total in March 2013), it is already a good research tool. A search for a given complementizer followed by up to 3 words and then an appropriate adverb gave us a sizeable amount of results, see Table 1.

Table 1: Results from a search in the Corpus of American Norwegian Speech

Complementizer	Adverb	Verb–Adverb	Adverb–Verb	Sum
<i>om</i> ‘whether’	<i>ikke</i> ‘not’	1	2	3
<i>som</i> ‘which/who/that’	<i>ikke</i> ‘not’	6	7	13
<i>at</i> ‘that’	<i>ikke</i> ‘not’	15	1	16
Sum		22	10	32

The result for the complementizer *om* ‘whether’, which introduces embedded polarity questions, only gave three hits. Interestingly, even with this small number, we find the order verb–adverb, which is non-existent in European Norwegian. The relative clauses (here those introduced by *som* ‘which/who/that/as’) are also worth noticing. Six out of 13, that is, approximately half, have verb–adverb order, an order that is not considered to be grammatical or existent in European Norwegian.⁸ This number is in agreement with the findings of Taranrød

⁸ We have not noted any difference between subject and object relatives (but the numbers are small).

(2011: 53).⁹ She found that out of twelve relative clauses containing an adverb, six, that is half, had verb–adverb order. She also looked at her findings in relation to the overall size of the text material. Her six non-standard word order relative clauses were found in a material of altogether 60,000 words. When searching the (European) Norwegian part of the Nordic Dialect Corpus, she found only three such clauses in a material of a total of 1.5 million words (Taranrød 2011: 64).

With respect to *that*-clauses, which in European Scandinavian can have either verb–adverb or adverb–verb word order depending on the meaning of the superordinate predicate, we find that practically all have verb–adverb word order (15 against 1). This is much more than the 50.6 % found in European Norwegian (see Section 3). With respect to *that*-clauses, then, there is also a difference between American and European Scandinavian.

We have made a closer comparison between Heritage and European Scandinavian by investigating the same clause types in the Nordic Dialect Corpus, choosing a subgroup that amounts to the same number of 49,000 words in total. This subgroup is limited to old informants from Oppland county (and from there, only from Brandbu, Brekkom, Gausdal, Jevnaker, Nordreland and Skreia), to make them maximally similar to the American informants with respect to age and place of linguistic origin. The results are presented in Table 2.

Table 2: Results for European Norwegian from a search in the Nordic Dialect Corpus

Complementizer	Adverb	Verb–Adverb	Adverb–Verb	Sum
<i>om</i> ‘whether’	<i>ikke</i> ‘not’	0	5	5
<i>som</i> ‘which/who/that’	<i>ikke</i> ‘not’	1	16	17
<i>at</i> ‘that’	<i>ikke</i> ‘not’	13	19	32
Sum		14	40	54

Table 2 shows a very different distribution of word order types, as we could have predicted based on the previous research mentioned above. In European Norwegian there is no example of verb–adverb order with the complementizer *om*, only one such order for the *som*-clauses, and the number of *that*-clauses with verb–adverb order constitutes less than half of the total number of *that*-clauses. We have calculated whether the differences between the tables for each subjunction type is significant. Using Fisher’s Exact Test, we find that the difference between Heritage and European Norwegian for *that*-clauses and *som*-clauses is highly sig-

⁹ It should be mentioned that there is a partial overlap between her informants and those in the Corpus of American Norwegian Speech.

nificant, with p-values of $p < 0.0005$ and $p < 0.03$, respectively. The numbers for *om* are too low to count.

Although we have a great deal of Swedish data, we do not have any that are transcribed at this point, so a similar count is difficult to do. There is, however, no reason to assume that Heritage Swedish should be different from Norwegian, and it is easy to find examples of the verb–adverb order. Indeed, our impression from listening to recordings is that verb–adverb order is more common than adverb–verb order, and examples with adverb–verb order are rather difficult to find in the new American Swedish recordings. Despite the fact that the numbers are small (even for Norwegian), the data clearly point to a qualitative (grammatical) difference between Heritage and European Scandinavian embedded questions and relative clauses, and (at least) a quantitative difference with respect to *that*-clauses. As we will see in section 5.3, our results are also supported by acquisitional data from European Scandinavian.

To sum up, where European Norwegian cannot have the order verb–adverb, Heritage Norwegian has this order half the time, and where European Norwegian can have both word orders, Heritage Norwegian nearly always has the verb–adverb order. We return to this in Section 5.1 below.

5 Grammatical change and its possible explanations

In the previous section, we saw that both Heritage Norwegian and Heritage Swedish differ from European Norwegian and Swedish with regard to verb placement: Unlike the European languages, Heritage Scandinavian has (optional) verb movement across negation in embedded clauses. In this section, we will argue that this is a consequence of a change in the grammar of Heritage Scandinavian, and we will look at different possible explanations relating to language contact, attrition, and acquisition.

5.1 Language contact and a change in Heritage grammar

As noted in Section 4 above, finite verbs can move across negation in Heritage Scandinavian, but they apparently do not move across the subject, as in main clauses (like the non-subject *wh*-question in 2a above). We have no examples where the verb precedes the subject in embedded questions. Consider the examples below:

- (17) a. *Jag skrev till han och fråga om jag kunne bo med han*
 I wrote to him and asked if I could stay with him
 ‘I wrote to him and asked if I could stay with him.’
 (Swedish, Konrad, mn11_m013)
- b. *Och vi frågade hur vi skulle komma till Björklunds matta*
 and we asked how we should come to Björklund’s rug
 ‘And we asked how we could get to Björklund’s rug.’
 (Swedish, Theodor, mn11_m018)
- (18) *vi kan figure ut messom hva de sier*
 we can figure out about what they say
 ‘We can figure out approximately what they say.’
 (Norwegian, Eleanor, coon_valley_WI_07gk)

The fact that embedded questions never have the order question word–verb–subject (the general wh-question V2 main clause order in both Heritage and European Scandinavian) means that the verb–adverb order we find in Heritage Scandinavian, e. g. in embedded questions, should not be understood as a pure generalization of V2 from main clauses and certain *that*-clauses. Main and embedded clauses are kept apart (both structurally and superficially) in Heritage Scandinavian. We conclude that the verb is in a lower position in embedded clauses than in V2-contexts, and we take it to be in a position in the I-domain. In other words, Heritage Norwegian and Swedish differ from European Norwegian and Swedish by having (optional) V-to-I movement; see the structures in (19) (for the examples in (14) and (12) above). V-to-I movement can account for the fact that verb–adverb order is more common in Heritage Scandinavian *that*-clauses than in European Scandinavian: In European Scandinavian, verb–adverb order is always due to V-to-C movement, whereas in Heritage Scandinavian it can also be a consequence of V-to-I movement.

- (19) a. [_{CP} Op_{rel} som [_{IP} Op_{rel} forstår [_{NegP} ikke Neg^o [_{VP} Op_{rel} forstår
 ,who doesn’t understand’ (= 14)
- b. [_{CP} Q om [_{IP} du finner [_{NegP} ikke Neg^o [_{VP} du finner ut
 ‘if you don’t find out’ (= 12)

In section 3 above, we noted that there is some variation with respect to embedded word order in Norway and Sweden, and V-to-I movement is known from isolated areas in Sweden, e. g. from Övdalian. As mentioned, we have, however, no reason to assume that these dialects have affected the languages spoken in America. First, only a very small group of the American Norwegian and Swedish emigrants spoke these dialects, and there is no evidence that other features from e. g. Övdalian have spread in the heritage language (see Johannessen and Laake 2011, 2012a, 2012b and Larsson et al. to appear for a discussion of dialect features

in Heritage Scandinavian). The large majority of emigrants clearly had a system without V-to-I movement. Importantly, this is what we find in the old recordings of first generation speakers. In Haugen's and Hedblom's recordings, the verb apparently follows an adverb in embedded clauses, except for certain *that*-clauses (that have embedded V2). Examples with adverb–verb order are given in (20) and (21), and *that*-clauses with V2 are given in (22). (In (22), the complementizer is omitted, which has no known effect syntactically or semantically; cf (7) above.)

- (20) a. *om han **inte var** säker på att jag skulle komma den dagen*
 if he not was sure on that I would come that day.the
 'If he wasn't sure that I would come that day.'
 (Mrs Friesendahl, Am 117A, born in Ångermanland, Sweden, in 1878, emigrated in 1898, recorded by Folke Hedblom)
- b. *jag kommer ihåg det gamla språket bara för*
 I remember the old language.the just because
*att jag **inte talar** det*
 that I not speak it
 'I remember the old language just because I don't speak it.'
 (Mr Hagstrom, AM 4A, born in Västergötland, Sweden, in 1890, emigrated in 1909, recorded by Folke Hedblom)
- (21) *viss du **inkje har** riktig goe sement så dett an sund.*
 if you not have really good cement then falls he apart
 'If you don't have really good cement, it falls apart'
 (Jacob Seljestad, born in Hardanger, Norway, in 1866, emigrated in 1887, recorded by Einar Haugen in 1942, transcribed by Magne Oftedal)
- (22) a. *han tyckte han **passa inte** riktigt bra*
 he thought he fit not really well
 'He didn't think that it fit really well.'
 (Mrs Friesendahl, Am 117A, born in Ångermanland, Sweden, in 1878, emigrated in 1898, recorded by Folke Hedblom)
- b. *snøen va så dyp at me **kunne ikkje** gå*
 the.snow was so deep that we could not walk
 'The snow was so deep that we could not.'
 (Jacob Seljestad, born in Hardanger, Norway, in 1866, emigrated in 1887, recorded by Einar Haugen in 1942, transcribed by Magne Oftedal)

We conclude that V-to-I movement has been introduced in later generations, in the grammars of the American Scandinavian heritage language speakers.

There are several possible explanations for this change. One is influence from English. As shown by e.g. Haugen (1953), Hasselmo (1974), Johannessen and Laake (2011, 2012b) and Larsson et al. (to appear), Heritage Scandinavian has

several features that have been borrowed from English. As expected, this is particularly clear in the lexicon. There are, however, several reasons why the change in word order should not be viewed as a direct consequence of influence from English. Most evidently, English does not move main verbs to I. That is, main verbs obligatorily follow negation and other sentence adverbs:

- (23) a. *The man {*works} actually {works} up there.*
 b. *Does the man {*work} actually {work} up there?*
 c. *a man who {*worked} actually {worked} up there*

If word order in Heritage Scandinavian were affected by English word order, we would rather expect an *absence* of verb movement where European Scandinavian has verb movement. We therefore have no reason to assume a reanalysis towards English structure here.

Notice further that English has *do*-support with negation of main verbs, but not with auxiliaries. The latter can precede negation, but not the former:

- (24) *a man who didn't/couldn't work up there*

Heritage Scandinavian might have had something similar if it had adopted this feature from English, but there is no evidence for *do*-support in Heritage Scandinavian (cf. Hasselmo 1974: 228), and as we saw in Section 4.1, main verbs can precede negation.

We conclude that V-to-I movement is an innovation in Heritage Scandinavian (and not inherited from dialects like Övdalian), but that it is not due to direct influence from English. In the following we consider two other possibilities, attrition (i. e. language loss in the individual) and acquisition, where influence from English is indirect, but where the bilingualism of the heritage speakers is still of importance.

5.2 Language attrition

Håkansson (1995) investigates the language of five expatriate Swedish speakers, who have not spoken Swedish since childhood, but who, unlike the American Heritage speakers under discussion, attempt to learn Swedish again as a second language (L2). Håkansson observes changes in e. g. noun phrase morphology, but word order appears to be intact. Unlike L2-learners, the speakers in Håkansson's study have few or no examples of V2-violations, and the dominant language does not appear to have affected word order.

In the American heritage recordings, there are some speakers who show clear signs of attrition. These speakers have lexical retrieval delays, and, much like the speakers in Håkansson's study, they show loss of gender and agreement (see Johannessen to appear, Johannessen and Larsson 2013). However, there are also changes in word order; see (25) and (26) below, which have XSV-order for expected XVS-order; in (25a) a direct object is topicalized, and in (25b) a subordinate clause is in the first position. In both cases the subject, not the expected verb, follows these topicalized elements.

- (25) a. *Surströmming jag skulle lika att pröva igen*
 fermented.herring I would like to try again
 'Fermented herring, I would not like to try again.'
 (Swedish, Arthur, mn11_m005)
- b. *de sa när du är hemma du kan inte tala engelska*
 they said when you are home you can not talk English
men min mor och far /.../ språkade mycket svenska
 but my mother and father spoke much Swedish
so that's how I kept up with it
 so that't how I kept up with it
 'They said that when you are home, you cannot speak English, but my mother and father spoke a lot Swedish so that't how I kept up with it.'
 (Swedish, Vaughn, mn11_m019; the speaker code-switches at the end of the utterance)
- (26) a. *Etter krigen kom, så mannen min og jeg fikk en apartment.*
 after the.war came so the.husband my and I got an apartment
 After the war came, then my husband and I got an apartment
 (Norwegian, Daisy, Chicago_IL_01gk)
- b. *Når alle norskene kom i sammen, dem bestandig snakke norsk.*
 when all the.Norwegians come in together they always talked Norwegian
 'When all the Norwegians came together, they always spoke Norwegian.'
 (Norwegian, Daisy, Chicago_IL_01gk)
- c. *I Norge dem ville aldri møte*
 in Norway they would never meet
 'In Norway, they would never meet.'
 (Norwegian, Daisy, Chicago_IL_01gk)

Arthur in example (25a) grew up with his grandparents, who hardly spoke any English, and he reports that he preferred Swedish even in the 5th grade. Yet, he has several examples of V2-violations in his production, here exemplified with a sentence-initial, topicalized object followed by the subject rather than the finite verb. Vaughn also grew up speaking Swedish at home, but he has V2-violations such as (25b), where a sentence-initial adverbial clause is followed by the subject

rather than the verb. Daisy, aged 90, had not spoken Norwegian since her father died 15 years earlier. She was charming, bright and alert, so whatever attrited features she displays are not due to mental decline. We only have one recording with her, but during that recording she grows gradually more confident linguistically, her speech increases in speed and the sentences become longer. She displays many features of attrition, such as delays in lexical retrieval, deviant gender assignment on nouns, lack of morpho-syntactic (gender, number, definiteness) agreement in the noun phrase, and in word order. She does have V2 in main clauses, but only with a few light adverbs. Otherwise there is no V2, as can be witnessed in (26a–c), which shows a sentence-initial PP (headed by the preposition *etter* ‘after’), an adverbial clause, and a PP (headed by *i* ‘in’), respectively, all followed by the subject, not the finite verb.

These attrited speakers typically use simple sentences, and we have not found any examples of embedded clauses with adverbs in their production. With respect to V2, they differ from the fluent heritage speakers discussed in section 4 above. The fluent speakers have few or no clear examples of V2-violations.¹⁰ Examples of the correct V2-order are given in (27) and (28).

- (27) a. *Her kom du*
 here came you
 ‘Here you came’
 (Norwegian, Howard, Westby_WI_02gm)
- b. *Så stoppa han, så søkk trucken ned littegrann*
 then stopped he then sank the.truck down little.bit
 ‘Then he stopped, then the truck sank down a bit.’
 (Norwegian, Howard, Westby_WI_02gm)
- (28) a. *Då börja han att supa*
 then started he to drink
 ‘Then he started to drink.’
 (Swedish, Konrad, mn11_m013)
- b. *När vi har varit gift i 25 år ska vi till Sverige*
 when we have been married for 25 years will we to Sweden
 ‘When we have been married for 25 years, we will go to Sweden.’
 (Swedish, Konrad, mn11_m013)

¹⁰ Konrad has one clear example of a V2-violation:

- (i) *Dom aldrig vet var han ligger*
 they never know where he lies
 ‘They will never know where he lies.’
 (Swedish, Konrad, mn11_m013)

Florence, who speaks a dialect with V3 in certain *wh*-questions, has the correct order in examples such as (29a), but correctly does not generalize V3 to other contexts, (29b) (see Eide and Hjelde 2012 for a discussion of V2 in Heritage Norwegian).

- (29) a. *Hå e ska seia*
 what I should say
 ‘What was I going to say?’
 (Norwegian, Florence, Westby_WI_03gk)
- b. *Nå fær dom fremmend i frå Minneapolis*
 now get they visitors in from Minneapolis
 ‘Now they get visitors from Minneapolis.’
 (Norwegian, Florence, Westby_WI_03gk)

It is sometimes said that attrition affects morphology but not ‘core syntax’ (see e.g. Montrul 2008). If syntax is affected, change is expected to be L2-induced and towards the stronger language (English in the case of Heritage Scandinavian in America). This could be argued to be the case when V2 is lost in attrition: Heritage Scandinavian loses general V-to-C movement in main clauses, since English only has V2-order in a restricted set of contexts. The reason that the heritage speakers in Håkansson’s (1995) study do not show any word order changes would then be due to the fact that morphology is affected before syntax in attrition, and that the attrited American heritage speakers are more affected by attrition than the speakers in Håkansson’s study. This seems reasonable: the attrited American Scandinavian speakers are typically over 80 years old, and they often have hardly used their L1 (Norwegian or Swedish) since their parents passed away (cf. Daisy above). The speakers in Håkansson’s study have recently returned to Sweden at the age of around 20, and were fully exposed to Swedish from then on.

If the introduction of V-to-I movement in the heritage grammar were due to attrition, we would expect it to relate to how much the speaker uses the heritage language. This does not appear to be the case, however. Moreover, fluent speakers who have V-to-I movement do not otherwise show any clear signs of attrition. It seems highly unlikely that embedded word order would be affected by attrition before morphology and V2, and without concomitant lexical retrieval delays (to any considerable extent). Moreover, the change in Heritage Scandinavian is not towards a simpler system, or a system more like English: verb movement is introduced into the grammar, not lost.

We conclude that V-to-I movement in Heritage Scandinavian is not a consequence of attrition, and instead suggest that it is due to the fact that the heritage speakers have not fully acquired the Norwegian and Swedish system, and that they therefore retain V-to-I movement.

5.3 Language acquisition

It is well known that embedded word order is difficult for L2-learners of Swedish and Norwegian (see e. g. Pienemann and Håkansson 1999 and references there). L2-learners and simultaneous bilinguals in the American Swedish recordings show the same variation as the L1 heritage speakers and as L2-learners in Sweden, and optionally move the verb past negation in embedded clauses; see the examples in (30), which are produced by a speaker with a Swedish mother and American father.

- (30) a. *Det är nånting särskilt att man eh när när man **inte jobbar** längre*
 it is something special that one when when one not works anymore
 ‘It is something special, that you, when you don’t work anymore.’
 (Swedish, Nancy, mn11_f019)
- b. *våra grannar häromkring som **är inte** svenskar*
 our neighbors around here who are not Swedes
 ‘Our neighbors around here who aren’t Swedes.’
 (Swedish, Nancy, mn11_f019)

As shown by e. g. Håkansson and Dooley Collberg (1994), Westergaard and Bentzen (2007), and Waldmann (2008), embedded word order is acquired rather late even in L1-acquisition. European Norwegian and Swedish monolingual children have optional verb movement, just like L2-learners and heritage speakers. Examples are given in (31).

- (31) a. *Æ skal bare gjøre sånn som du **har aldri** gjort før*
 I shall only do such that you have never done before
 ‘I’m just gonna do something that you have never done before.’
 (Iver, 4;5.0, Northern No.; from Bentzen 2003: 586)
- b. *då får ni säj bn dopp om ni **höve inte** m nån både*
 then can you say bn stop if you need not m some boards
 ‘Then you can say stop if you don’t need any boards.’
 (Harry 3:0.26, Swedish; from Waldmann 2008: 229)

In other words, non-target V-to-I movement is a feature that L1-learners, L2-learners and heritage speakers have in common. The question is why.

The fact that there is ample evidence for verb movement in Scandinavian main clauses might be of some importance: Both subject-initial declaratives with verb–adverb order (32a) and clauses with object–verb–subject order (32b) are cues for children to acquire a V2-grammar, but the former are also compatible with a grammar with V-to-I and without V-to-C. *That*-clauses with embedded V2 and subject-verb order are also compatible with either V-to-I or V-to-C.

- (32) a. *Hon **läser inte** den boken.* (V-to-I or V-to-C)
 she reads not that the.book
 ‘She doesn’t read that book.’
- b. *Den boken **läser** hon **inte**.* (V-to-C)
 that the.book reads she not
 ‘She doesn’t read that book.’

Westergaard and Bentzen (2007) suggest that V-to-I movement is a consequence of V2 in combination with economy principles for language acquisition. By their account, children will assume V-to-I movement rather than V-to-C movement at an early stage in the acquisition of V2, based on examples such as (32a) in their input. V-to-C movement is assumed to be less economical, but based on input such as (32b) (i. e. verb–subject order in non-subject initial declaratives, *wh*-questions and polarity questions), at a second stage children will move the verb to C (depending on clause-type). This yields a grammar with both V-to-I movement and V-to-C movement, i. e. the grammar that we find in young children, in L2-speakers, and in heritage speakers.

European Norwegian and Swedish L1-learners appear to retain a grammar with V-to-I movement for some time, and acquisition of embedded word order appears to take longer than has sometimes been assumed. All four children in Waldmann’s (2008) study have both adverb–verb and non-target verb–adverb order in embedded clauses throughout the investigated period (2;3–4;0). Westergaard and Bentzen (2007: 285) show that even older children sometimes retain V-to-I movement. In their study, Iver (5; 9.18) produces non-target verb–adverb order in 7 out of 8 embedded questions during an elicitation task; see (33). Like the heritage speakers, he never moves the verb across the subject.

- (33) *huske du koffer han Karsten **var ikke** i barnehagen?*
 remember you why he Karsten was not in the.kindergarten
 ‘Do you remember why Karsten wasn’t in kindergarten?’
 (Iver 5;9.18, Northern Norwegian; from Westergaard and Bentzen 2007:285)

With the analysis suggested by Westergaard and Bentzen (2007), children will have to reset the V-to-I parameter, so to speak, in order to acquire the target grammar with V-to-C but without V-to-I. For this, they need evidence for the *absence* of V-to-I movement in their input. That is, they need to hear embedded clauses with adverb–verb order. However, the frequency of embedded clauses with adverbs is considerably lower than e. g. the frequency of main clauses with subject-verb inversion (see Westergaard and Bentzen 2007, Table 3), and this (in combination with the complexity of the structures) leads to slower acquisition.

The evidence for adverb–verb order is even weaker in the input of the heritage speakers. For one thing, relative clauses are less frequent. Karstadt (2003: 105)

notes that American Swedes (L1-speakers) recorded in the 1960s have a lower frequency of relative clauses (0.89/minute in interviews) than European Swedes (1.25/min). Examples with adverbs are also considerably less frequent. Taranrød (2011: 53) shows that relative clauses with adverbs are infrequent in both groups, but almost twice as frequent in European Norwegian as in Heritage Norwegian (an average of 0.9 against 0.5 per informant).

If frequency affects the rate of acquisition (but not the acquisitional path), heritage speakers are expected to retain V-to-I movement longer than children in Norway and Sweden, and possibly even up until school age. At the age of 6, the heritage speakers start school and become bilinguals, and typically English will rather quickly become the stronger language. It is therefore possible that the target grammar without V-to-I movement is never fully acquired, and that embedded clauses with verb–adverb order in adult heritage speakers are a consequence of incomplete acquisition (cf. e. g. Montrul 2008).¹¹ This explains why we see a difference between the fluent heritage speakers of Norwegian and Swedish and European Norwegian and Swedish speakers with respect to embedded word order, but not necessarily with respect to morphology and V2: Morphology and V2 are acquired earlier and have therefore been fully acquired in the heritage language.

6 Conclusion

In this study we have shown that the varieties of the Scandinavian languages Norwegian and Swedish as spoken in the American Midwest have in common an interesting syntactic feature that they do not share with European Norwegian and Swedish. This concerns the word order in embedded clauses. We have shown that there is a substantial amount of verb–adverb order in all such clauses in American Heritage Scandinavian (exemplified here by subordinate declaratives, embedded questions, and relative clauses); this word order is not grammatical in embedded questions and relative clauses in European Scandinavian. Even with respect to *that*-clauses, which allow the order verb–adverb in European Scandinavian, too, there is a difference: the order verb–adverb is considerably more common in Heritage Scandinavian. We have also calculated the difference sta-

¹¹ Incomplete acquisition explains the grammatical change, and it applies to the first generation that has the new linguistic pattern. Subsequent generations of Heritage Scandinavian might simply have acquired V-to-I movement as part of the target grammar.

tistically and found the difference between the two language varieties is highly significant.

The extent to which this word order is actually a feature of Heritage Scandinavian is supported by the fact that it is found in old recordings of these two languages from as far back as the 1940s (for Heritage Norwegian) and the 1960s (for Heritage Swedish), as well as in modern recordings from the 2010s.

After having presented the recordings and the data with frequency counts, and compared with European Scandinavian, we have argued that this non-standard order must be seen as a change in the grammar rather than as something that belonged in the language of origin, and we have argued against an analysis of this new order as a loan from English. We have also tested an explanation based on attrition, but rejected it. Finally, we have discussed the possibility that the change is a consequence of incomplete acquisition. This analysis explains our data well, and is in accordance with established knowledge on acquisition of embedded word order in the European Scandinavian languages.

References

- Ahlbäck, Ragna, Marianne Blomquist, Lars Hulden, Ann-Mari Ivars, and Mikael Reuter (eds.) (1976): *Amerikatrunken: Emigranter berättar om sig själva*. Helsingfors: Schildts.
- Andréasson, Maia, Ida Larsson, Benjamin Lyngfelt, Jenny Nilsson, and Sofia Tingsell (2013): I jakt på amerikansvenskan. In: Björn Bihl, Jessica Eriksson, Peter Andersson, and Lena Lötmarker (eds.), *Svenskans beskrivning 32. Förhandlingar vid trettioandra sammankomsten för svenskans beskrivning. Karlstad den 13–14 oktober 2011*, 83–93. Karlstad: Karlstads universitet.
- Bentzen, Kristine (2003): V-to-I movement in the absence of morphological cues: Evidence from adult and child Northern Norwegian. *Nordlyd: Proceedings from the 19th Scandinavian Conference of Linguistics* 31: 573–588.
- Bentzen, Kristine (2007): Order and Structure in Embedded Clauses in Northern Norwegian. Ph.D. thesis, University of Tromsø.
- Bentzen, Kristine (2013a): Embedded Verb Second (V2). In: Kristine Bentzen, Janne Bondi Johannessen, Piotr Garbacz, Ida Larsson, Björn Lundquist, Øystein Alexander Vangsnes, and Christine Østbø, *Nordic Atlas of Language Structure* (NALS).
- Bentzen, Kristine (2013b): Verb placement in relative clauses. In: Kristine Bentzen, Janne Bondi Johannessen, Piotr Garbacz, Ida Larsson, Björn Lundquist, Øystein Alexander Vangsnes, and Christine Østbø, *Nordic Atlas of Language Structure* (NALS).
- Bentzen, Kristine, Piotr Garbacz, Ida Larsson, and Björn Lundquist (2013): Dialektstudier: en topplista. Talk at the Dialect Seminar, University of Oslo, 11 Januar 2013.
- Eide, Kristin Melum and Arnstein Hjelde (2012): V2 and morphological paradigms in Norwegian varieties spoken in the American Midwest. Talk at the *Third Workshop of Immigrant Languages in America*, September 2012, Penn State University.
- Falk, Cecilia (1993): Non-Referential Subjects in the History of Swedish. Diss. Lund, Institutionen för nordiska språk.

- Flaten, Nils (1900–04): Notes on American-Norwegian with Vocabulary. *Dialect Notes* 2: 115–126.
- Flom, George T. (1900–04): English Elements in Norse Dialects of Utica, Wisconsin. *Dialect Notes* 2: 257–268.
- Flom, George T. (1903): The Gender of Norse Loan-Nouns in Norse Dialects in America. *The Journal of Germanic Philology* 5: 1–31.
- Flom, George T. (1912): Det norske sprogs bruk og utvikling i Amerika. *Nordmands-Forbundet* 4: 233–250.
- Flom, George T. (1926): English Loanwords in American Norwegian. As spoken in the Koshkonong settlement, Wisconsin. *American Speech* 1: 541–558.
- Flom, George T. (1929): On the Phonology of English Loanwords in the Norwegian Dialects of Koshkonong in Wisconsin. *Arkiv for Nordisk Filologi* supplement to volume XL: 178–189.
- Flom, George T. (1931): Um det norske målet i Amerika. *Norsk aarbok*: 113–124.
- Håkansson, Gisela (1995): Syntax and morphology in language attrition: a study of five bilingual expatriate Swedes. *International Journal of Applied Linguistics* 5: 153–171.
- Håkansson, Gisela and Sheila Dooley Collberg (1994): The preference for Modal + Neg: an L2 perspective applied to Swedish L1 children. *Second Language Research* 10: 95–124.
- Hasselmo, Nils (1974): *Amerikasvenska. En bok om språkutvecklingen i Svensk-Amerika*. Stockholm: Esselte stadium.
- Haugen, Einar (1969) [1953]: *The Norwegian Language in America*. Philadelphia: University of Pennsylvania Press.
- Haugen, Einar (1992): A Language Survey That Failed: Seip and Selmer. *American Speech* 67(3): 330–336.
- Hedblom, Folke (1963): Om svenska folkmål i Amerika. Från Landsmåls- och Folkminnesarkivets bandinspelningsexpedition 1962. *Svenska landsmål och svenskt folkliv* 1962: 113–152.
- Hedblom, Folke (1970): Amerikasvenska texter i fonogram, Volume 1. Hälsingland. Bergsjömmål. Utskrift och kommentar. *Svenska landsmål och svenskt folkliv* 1969: 1–52.
- Hedblom, Folke (1974): Svenska dialekter i Amerika. Några erfarenheter och problem. *Kungl. Humanistiska Vetenskaps-Samfundet i Uppsala. Årsbok 1973–1974*, 34–62.
- Hedblom, Folke (1978): Hälsingemål i Amerika. *Svenska landsmål och svenskt folkliv* 1977.
- Hedblom, Folke (1981): Swedish Dialects in the Midwest: Notes from Field Research. *Svenska landsmål och svenskt folkliv* 1981: 7–26.
- Heycock, Caroline (2006): Embedded root phenomena. In: Martin Everaert and Henk van Riemsdijk (eds.), *The Blackwell Companion to Syntax*, Volume II, 174–209. Oxford: Blackwell.
- Hjelde, Arnstein (1992): *Trøndsk talemål i Amerika*. Trondheim: Tapir.
- Hjelde, Arnstein (1996a): The gender of English nouns used in American Norwegian. In: Per Sture Ureland and Iain Clarkson (eds.), *Language Contact across the North Atlantic*, 297–312. Tübingen: Niemeyer.
- Hjelde, Arnstein (1996b): Some phonological changes in a Norwegian dialect in America. In: Per Sture Ureland and Iain Clarkson (eds.), *Language Contact across the North Atlantic*, 283–296. Tübingen: Niemeyer.
- Holmberg, Anders and Christer Platzack (1995): *The Role of Inflection in Scandinavian Syntax*. New York and Oxford: Oxford University Press.
- Ivars, Ann-Marie (2003): Hur talar våra emigranter i Amerika? In: Ann-Marie Ivars (ed.), *Namn och språk i när och fjärran. Hyllningsskrift till Marianne Blomqvist den 24 september 2002*, 67–76. Helsingfors: Helsingfors universitet.

- Jensen, Torben Juel and Tanya Karoli Christensen (2011): V2 word order in subordinate clauses in spoken Danish. Talk presented at Main/embedded clause asymmetries in the Scandinavian languages (MECAS), April 14–15, 2011, Lund.
- Johannessen, Janne Bondi (to appear): Attrition in an American Norwegian Heritage speaker. In: Janne Bondi Johannessen and Joseph Salmons (eds.), *Germanic Heritage Language in America*. Amsterdam: John Benjamins.
- Johannessen, Janne Bondi, Joel Priestley, Kristin Hagen, Tor Anders Åfarli, and Øystein Alexander Vangsnes (2009): The Nordic Dialect Corpus – an Advanced Research Tool. In: Kristiina Jokinen and Eckhard Bick (eds.), *Proceedings of the 17th Nordic Conference of Computational Linguistics NODALIDA 2009*, 73–80.
- Johannessen, Janne Bondi and Signe Laake (2011): Den amerikansk-norske dialekten i Midtvesten. In: *Studier i dialektologi och sociolingvistik. Föredrag vid Nionde nordiska dialektologkonferensen i Uppsala 18–20 augusti 2010*, 177–186. Uppsala: Kungl. Gustav Adolfs Akademien för svensk folkkultur.
- Johannessen, Janne Bondi and Signe Laake (2012a): To myter om det norske språket i Amerika: Er det gammeldags? Nærmer det seg en bokmålsstandard? *Norsk Lingvistisk Tidsskrift* 30(2): 204–228.
- Johannessen, Janne Bondi and Signe Laake (2012b): Østnorsk som norsk fellesdialekt i Midtvesten. *Norsk Lingvistisk Tidsskrift* 30(2): 365–380.
- Johannessen, Janne Bondi and Ida Larsson (2013): Nominal agreement in Attrition. Talk presented at the 4th annual workshop on Immigrant Language in the Americas, Reykjavík, September 19–21, 2013.
- Johannessen, Janne Bondi and Joe Salmons (forthcoming): *Germanic Heritage Language in America*. Amsterdam: John Benjamins.
- Julien, Marit (2007): Embedded V2 in Norwegian and Swedish. *Working Papers in Scandinavian Syntax* 80.
- Julien, Marit (2008): Så vanleg at det kan ikkje avfeiast: om V2 i innføydde setningar. In: J. Bondi Johannessen and Kristin Hagen (eds.), *Språk i Oslo. Ny forskning omkring talespråk*, 159–171. Oslo: Novus Forlag.
- Julien, Marit (2009): The force of the argument. *Working Papers in Scandinavian Syntax* 84: 225–232.
- Karstadt, Angela (2003): *Tracking Swedish-American English. A Longitudinal Study of Linguistic Variation and Identity*. Uppsala: Acta Universitatis Upsaliensis.
- Larsson, Ida, Sofia Tingsell, and Maia Andréasson (to appear): Variation and Change in American Swedish. In: Janne Bondi Johannessen and Joseph Salmons (eds.), *Germanic Heritage Language in America*. Amsterdam: John Benjamins.
- Montrul, Silvina (2008): *Incomplete Acquisition in Bilingualism. Re-examining the Age Factor*. Amsterdam: John Benjamins.
- Norsk Lingvistisk Tidsskrift* 2 (2012): Special issue on the Norwegian language in America.
- Petzell, Erik Magnusson (2012): OV-ordföljd i svenskans historia. *Arkiv för Nordisk filologi* 126: 141–191.
- Pienemann, Manfred and Gisela Håkansson (1999): A unified approach toward the development of Swedish as L2. *Studies in Second Language Acquisition* 21: 383–420.
- Rizzi, Luigi (1997): The Fine Structure of the Left Periphery. In: Liliane Haegeman (ed.), *Elements of Grammar*, 281–337. Dordrecht: Kluwer.
- Rosenkvist, Henrik (2011): Verb Raising and Referential Null Subjects in Övdalian. *Working Papers in Scandinavian Syntax* 88: 1–20.

- Rothman, Jason (2009): Understanding the nature and outcomes of early bilingualism: Romance languages as heritage languages. *International Journal of Bilingualism* 13(2): 155–163.
- Sandøy, Helge (2008): Norske syntaktiske “avvik” i norsk. In: Cecilie Carlsen, Eli Moe, Reidun Oanæs Andersen, and Kari Tenfjord (eds.), *Banebryter og brobyggeri andrespråksfeltet – En samling artikler i anledning Jon Erik Hagens 60-årsdag*. Oslo: Novus.
- Taranrød, Beate (2011): Leddstillingen i relativsetninger i amerikanskansk. M. A. Thesis, Universitetet i Oslo.
- Vikner, Sten (1995): *Verb Movement and Expletive Subjects in the Germanic Languages*. New York and Oxford: Oxford University Press.
- Waldmann, Christian (2008): Input and Output. Ordfølgd i svenska barns huvudsatser och bisatser. Ph.D. Thesis, Lunds universitet.
- Westergaard, Marit (2006): Triggering V2: The Amount of Input Needed for Parameter Setting in a Split-CP Model of Clause Structure. In: Adriana Belletti, Elisa Bennati, Cristiano Chesi, Elisa DiDomenico, and Ida Ferrari (eds.), *Language Acquisition and Development: Proceedings of GALA 2005*, 658–671. Cambridge: Cambridge Scholars Press.
- Westergaard, Marit and Øystein Vangsnes (2005): *Wh*-questions, V2, and the left periphery of three Norwegian dialects. *Journal of Comparative Germanic Linguistics* 8: 117–158.
- Westergaard, Marit and Kristine Bentzen (2007): The (non-)effect of input frequency on the acquisition of word order in Norwegian embedded clauses. In: Insa Gülzow and Natalia Gagarina (eds.), *Frequency Effects in Language Acquisition. Defining the limits of frequency as an Explanatory Concept*, 271–306. Berlin and New York: Mouton de Gruyter.
- Wiklund, Anna-Lena, Kristine Bentzen, Gunnar Hrafn Hrafnbjargarson, and Þorbjörg Hróarsdóttir (2009): On the distribution and illocution of V2 in Scandinavian *that*-clauses. *Lingua* 119: 1914–1938.

Websites

Corpus of American Norwegian Speech: <http://www.tekstlab.uio.no/nota/NorAmDiaSyn/english/index.html> (accessed June 4, 2014).

Nordic Dialect Corpus: <http://www.tekstlab.uio.no/nota/scandiasyn/> (accessed June 4, 2014).