V-to-I movement in the absence of morphological cues: Evidence from adult and child Northern Norwegian*

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1. Introduction

Several people have pointed out that there seems to be a close correlation between inflectional morphology and verb movement (see e.g. Kosmeijer 1986, Holmberg & Platzack 1988). The nature of this correlation has been claimed to go in both directions. Vikner (1994, 1995) and Rohrbacher (1999) have both suggested that the verb can only move to an inflectional head if the morphology is rich enough. Bobaljik (1995), Thráinsson (1996), and Bobaljik & Thráinsson (1998), on the other hand, argue that the correlation goes in the other direction, i.e. that rich inflection is a reflection of verb movement, rather than the cause for it.

A correlation between morphology and verb movement has also been suggested in first language acquisition (Santelmann 1995 on Swedish, Clahsen et al. 1996 on German, Déprez & Pierce 1993, and Meisel 1994 on French). Several of these studies indicate that children use inflectional morphology as a cue for verb movement in the acquisition process, and that they employ verb movement as soon as they acquire verbal inflection.

In this paper I will present new data from a dialect of Northern Norwegian which challenge the strong correlation between verb movement and inflectional morphology in both the adult language and in the acquisition of this dialect. More specifically, this dialect appears to have optional independent V-to-I movement despite the fact that the inflectional morphology is very poor. With respect to the acquisition of this dialect, preliminary data from one subject seem to indicate that children to some extent overgeneralise this verb movement pattern into constructions where adult speakers would not allow it.

Section 2 discusses the correlation between inflectional morphology and verb movement with respect to the Scandinavian languages. In section 3 I present new data from (adult) Northern Norwegian challenging a close correlation between morphology and movement. Section 4 discusses the implications of this for first language acquisition, and some preliminary

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data from a child acquiring this dialect are presented. Section 5 concludes the paper.

2. Verb movement in Scandinavian

With respect to verb movement, the Scandinavian languages split into two groups. All the languages are verb second (V2), which means that they all have verb movement to C in finite main clauses. However, Icelandic appears to be the only language which has independent V-to-I movement. This syntactic difference within the Scandinavian languages has been connected to the morphological differences found in verbal inflection. In this section I will present the relevant data and briefly discuss some of the proposed analyses for these observations.

2.1. V to C (V2)

All the Scadinavian languages are V2, which means that the tensed verb always moves to C (via I) in main clauses.

(1) Igår *var* guttene overhodet ikke uenige. (Norwegian) *yesterday were boys.the at-all not disagreed* 'Yesterday the boys were not at all disagreeing'

In subordinate clauses, on the other hand, the verb generally does not move to C, as this position is filled by the complementizer. However, if such embedded clauses are topicalised, embedded V2 is sometimes possible. For Icelandic this is true for all topicalised embedded clauses, whereas for Norwegian (and the other Mainland Scandinavian languages), this is only an option in embedded clauses that are complements of so-called *bridge verbs* (verbs which allow complements that are like main clauses, e.g. *think, say*, etc.). This is illustrated in (2) and (3), where (2b) shows the ungrammaticality of embedded V2 in a complement of a non-bridge verb in Norwegian. (The Icelandic examples are based on Vikner 1994, 1995a):

(2)a. það var óvænt, að þessa bók *skyldi* Helgi oft hafa lesið. (Ice)
b. *Det var uventet at denne boka *skulle* Helge ofte ha lest. (No) *it was unexpected that this book should Helge often have read*

(3)a. Ég veit að þessum hring *lofaði* Olafur Maríu. (Ice)
b. Jeg vet at denne ringen *lovte* Olaf til Maria. (No)
I know that this ring promised Olaf (to) Maria

Embedded V2 has been analysed in different ways. In this paper I will follow Vikner (1994, 1995) in assuming that embedded V2 should be

analysed as CP recursion. This means that the complementizer in C selects a new CP as its complement, so that the embedded clause contains two CPs. The complementizer then sits in the upper C and the tensed verb has undergone V2 movement to the lower C:

(4) Èg veit [_{CP}að [_{CP}bessum hring_i lofaði_i [_{IP}Olafur t_i Maríu t_i]]]

2.2. V to I

Turning to verb movement to I in the Scandinavian languages, it is generally assumed that only Icelandic has independent V-to-I movement, whereas in the Mainland Scandinavian languages the verb only moves to I on its way to C, as part of V2. According to Vikner (1994:118) '... independent V°-to-I° movement ... as opposed to V°-to-I° movement as part of V2 ... does not occur in the Scandinavian languages, except in Icelandic embedded questions.' Thus, he uses exactly these constructions to illustrate independent V-to-I movement in Icelandic. Embedded questions in Icelandic do not allow topicalisation, so they are arguably not embedded V2 constructions with verb movement to a lower C. Still, the tensed verb appears to the left of the adverbial, indicating that it has moved out of V (to I) ((5a) is taken from Vikner 1994:127). In the corresponding Norwegian sentence, the tensed verb remains in V as indicated by its position to the right of the adverbial (5c):

(5)a. Ég spurði af hverju Helgi he	ði oft lesið þessa bók (Ice)
b. *Jeg spurte hvorfor Helge had	de ofte lest denne boka (No)
c. Jeg spurte hvorfor Helge	ofte hadde lest denne boka
I asked why Helge {ha	d} often {had} read this book

As mentioned in the beginning of this section, the syntactic differences between Icelandic and Mainland Scandinavian concerning V-to-I movement has generally been related to the fact that the former has a much richer verbal morphology than the latter. This can be illustrated by the following verbal inflection paradigms for Norwegian and Icelandic in the present and past tense:

(-)					
a. Icelandic: heyra		b. Norwegian: <i>høre</i>		c. English: <i>hear</i>	
Present	<u>Past</u>	Present	<u>Past</u>	Present	Past
ég heyr -i	heyr -ði	jeg hør -er	hør -te	I hear	hear-d
þú heyr -ir	heyr -ði-r	du hør -er	hør -te	you hear	hear-d
hann heyr -ir	heyr -ði	han hør -er	hør -te	he hear-s	hear-d
við heyr -um	heyr -ðu-m	vi hør -er	hør -te	we hear	hear-d
þið heyr -ið	heyr-ðu-ð	dere hør -er	hør -te	you hear	hear-d
þeir heyr -a	heyr -ðu	de hør -er	hør -te	they hear	hear-d

(6) Paradigms for verbal agreement on the verb 'hear' (based on Bobaljik 2001a):

As (6a-b) show, Icelandic has a much richer inflectional morphology than Norwegian. It shows both person and number differences in both tenses, whereas in Norwegian, the ending is the same in all persons and both numbers within one tense. I have included the corresponding paradigm from English as an example of a language with some person agreement (third person singular in the present tense), but still no independent V-to-I movement. The nature of this correlation has been extensively discussed during the last decade or so. In the following sections I will briefly sum up the two main opposing analyses proposed.

2.2.1. A strong two-way implication

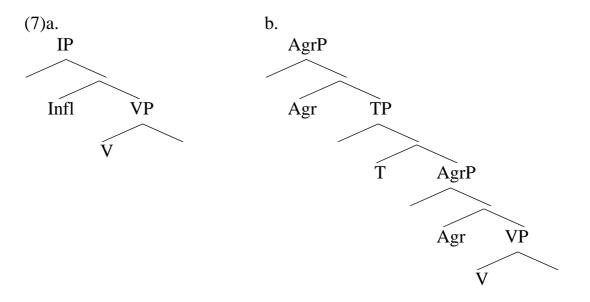
Vikner (1994, 1995) and Rohrbacher (1999) have both suggested that V-to-I movement is motivated by morphological richness, and that the verbal paradigm of a given language is relevant in determining what counts as 'rich enough' morphology. They argue that only languages with a certain minimum of inflectional morphology may have V-to-I movement. Apparently, this minimum must be more than just marking agreement on one person, as this does not seem to be sufficient to trigger V-to-I movement in English. Based on Germanic VO-languages, Vikner (1995b:14) suggests that '[a]n SVO-language has V°-to-I° movement if and only if ... person morphology in all tenses.' In languages which do not show person morphology in all tenses the verb cannot move independently to I. Thus English, although showing person morphology in the present tense, does not allow V-to-I movement, as this person agreement is not found in the past tense.

Rohrbacher (1999) adopts a slightly different approach. He claims that Vikner's analysis is not compatible with data from first language acquisition of e.g. French. According to Pierce (1992), children acquiring French seem to correctly move the verb to I at a stage where they have not yet acquired the 'core' tenses. Thus, Rohrbacher suggests that the morphological requirement for V-to-I movement is that 1st and 2nd person are distinctively marked in at least one number of one tense.

Both Vikner's and Rohrbacher's accounts indicate a strong two-way correlation between morphology and movement, in that both claim that verb movement occurs if and only if the inflectional morphology is sufficiently rich. As we will see in section 3, data from Northern Norwegian pose a significant challenge to both these analyses of V-to-I movement.

2.2.2. A weaker one-way implication

A quite different view is advocated by among others Bobaljik (1995), Thráinsson (1996), and Bobaljik & Thráinsson (1998). They propose a weaker one-way correlation between morphology and V-to-I movement than Vikner and Rohrbacher. More specifically, they claim that if a language has two or more inflectional verbal morphemes, the verb must have moved out of the VP. Separate inflectional morphemes for e.g. tense and agreement imply separate inflectional heads (T, Agr). Thus, languages with multiple inflectional morphemes, such as Icelandic, have more functional projections between VP and CP than languages with only one (or no) verbal morpheme, such as Mainland Scandinavian. This is illustrated in (7) below.



Assuming that feature checking can occur within sisterhood relations, a verb with two inflectional morphemes must have moved at least one step up the tree in order to enter into a proper checking relation. A verb with only one morpheme can be in a proper checking relation with the simple IP and can thus have its features checked inside the VP.

According to Bobaljik & Thráinsson (1998) this is related to a bigger parameter, the Split Infl Parameter (SIP; first suggested by Thráinsson 1996). They also discuss other features that follow from the SIP, such as multiple subject and object positions. I will come back to this after having presented the data from Northern Norwegian. Importantly, this analysis only implies a one-way correlation, in that it only requires that languages with multiple inflectional morphemes must have verb movement. In languages with fewer than two verbal morphemes, the verb may either stay in situ, as in Norwegian, or it may move. As we will see shortly, Northern Norwegian seems to be an example of the latter.

Closing this section, it seems that both of the above approaches can explain the main difference between Icelandic and Standard Norwegian. Icelandic has person morphology in both tenses, different forms for 1st and 2nd person, and multiple inflectional morphemes (at least in the past tense), and this language shows obligatory V-to-I movement in non-V2 contexts. Norwegian (and the other Mainland Scandinavian languages, as well as English) has none of these features, and thus no independent V-to-I movement either. However, the dialect(s) of Norwegian spoken in Northern Norway¹ seem(s) to behave differently.

3. Northern Norwegian – a counter-example

Both approaches discussed in the previous section suggest a correlation between independent V-to-I movement and inflectional morphology. The contrast between Icelandic, which allows such movement, and Standard Norwegian (henceforth EN for Eastern Norwegian), which does not, was illustrated with embedded *wh*-questions in (5a-b). However, Northern Norwegian (henceforth NN) apparently allows optional independent V-to-I movement in exactly such constructions, despite the lack of inflectional morphology. (8) below shows the verbal paradigm for NN:

<u>(i) hoppe</u> 'jum	<u>ıp'</u>	<u>(ii) spise</u> 'eat'	-	<u>(iii) bo 'live'</u>	
Present:	Past:	Present:	Past:	Present:	Past:
æ hoppe	hoppa	æ spis	spiste	æ bor	bodde
du hoppe	hoppa	du spis	spiste	du bor	bodde
han hoppe	hoppa	han spis	spiste	han bor	bodde
vi hoppe	hoppa	vi spis	spiste	vi bor	bodde
dokker hoppe	hoppa	dokker spis	spiste	dokker bor	bodde
dem hoppe	hoppa	dem spis	spiste	dem bor	bodde

(8) The present and past tense verbal paradigm in Northern Norwegian:

¹ In the previous literature on verb movement this dialect is generally referred to as the Tromsø dialect (c.f. Vikner 1995b). All my informants on Northern Norwegian currently live in Tromsø, but all but one are originally from other places in Northern Norway, thus I chose to label the dialect as Northern Norwegian rather than Tromsø. As the different varieties of my informants seem to be very similar in all relevant respects, I have chosen to treat them as one dialect for the current purposes.

In the present tense, there are three main classes of verbal conjugation in NN^2 . Verbs in class (i) roughly correspond to the large weak conjugational class. These verbs have identical forms in the infinitive and the present tense. Verbs in class (ii) roughly correspond to the small weak class, and the present tense of these verbs consists of only the stem. Class (iii) consists of verbs ending in a stressed vowel, and these verbs get an -r added to the stem in the present tense. Most verbs in NN belong to class (i), and thus have identical forms in the infinitive and the present tense. In addition, just like EN, NN does not show any person or number distinctions in either of the tenses. Inflectional morphology in NN is thus arguably even poorer than that of EN. According to Vikner and Rohrbacher, V-to-I movement only occurs in languages with sufficiently rich morphology. Still, NN appears to show optional independent verb movement in several constructions which cannot be analysed as V-to-C.

3.1. Embedded V2 in non-bridge contexts

In the previous literature the following example from Iversen (1918:83-4) has frequently been cited (by e.g. Vikner 1995b) as an indication of independent V-to-I movement in the Tromsø dialect/NN:

(9) Vi va bare tre støkka før det at han Nilsen kom ikkje we were only three people because that he Nilsen came not

However, this is an ambiguous example, as embedded topicalisation is possible in this construction, yielding (10).

(10) Vi va bare tre støkka før det at igår kom han Nilsen ikkje. we were only three people because that yesterday came he Nilsen not

Assuming that embedded topicalisation is CP recursion entails that the verb has moved to a lower C-position, rather than to I in both (9) and (10). In fact, it seems that NN is very similar to Icelandic with respect to embedded V2. In EN, embedded V2 is only possible in complements of bridge verbs (cf. (2)-(3)). In NN, on the other hand, embedded V2 is an option in complements of both bridge verbs (11) and non-bridge verbs (12), as well as in some adverbial clauses, as already illustrated in (10):

(11) Han sa at igår var guttan overhodet ikke uenig. *he said that yesterday were boys.the at all not disagreed*

² The same three classes are found in SN, only with a slightly different morphology.

(12) Han bekrefta at igår var guttan overhodet ikke uenig. *he confirmed that yesterday were boys.the at all not disagreed*

Assuming that such constructions are instantiations of CP recursion, these are not necessarily indications of independent V-to-I movement in NN. In the following two subsections, I will present five constructions that are more unambiguous with respect to verb movement.

3.2. Verb movement to an inflectional position

To find examples of unambiguous V-to-I movement we need to look at constructions where topicalisation (and hence V2) is impossible. The position of the verb in relation to other elements, specifically adverbials, in these constructions indicates whether the verb has moved out of the VP or not. I am assuming the adverb hierarchy proposed by Cinque (1999) and adapted to Norwegian by Nilsen (1998). The data suggest that NN has (at least) two optional landing sites for verbs between VP and CP.

First, verb movement to a higher inflectional position is found in adverbial clauses introduced by subjunctions such as *siden* 'as,' *til tross for* 'despite,' *ettersom* 'as,' *selv om*'even though' (13), and in non-inverted *wh*-questions (14).³

- (13)a. *Han e mistenkt siden igår tok han med sæ alle pengan. *he is suspect as yesterday took he with REFL all money.the*b. Han e mistenkt siden han tok sannsynligvis med sæ alle pengan.
 - he is suspect as he took probably with REFL all money.the
 - c. Han e mistenkt siden han tok vanligvis med sæ alle pengan. he is suspect as he took usually with REFL all money.the
- (14)a. *Kem igår lånte han penga til? who yesterday lent he money to

³ A note is probably appropriate here about non-inverted *wh*-questions in Northern Norwegian. Whereas *wh*-questions are always V2 in EN, NN allows both inverted and non-inverted *wh*-questions with the *wh*-words *kem* 'who,' *ka* 'what,' *kor* 'where.' With the *wh*-words *koffer* 'why,' *korsn* 'how,' and *katid* 'when' only the inverted form is possible:

(1)a. Kor	bor	du?		(2)a. Koffe	r går	du?	
b. Kor		du	bor?	b. *Kof	fer	du	går?
Where	e live	you]	ive	why	leave	you	leave

See Taraldsen (1986), Rice & Svenonius (1998), and Westergaard (2002) for further discussion of this phenomenon.

b. Kem han lånte sannsynligvis pengan til? who he lent probably money to
c. Kem han lånte vanligvis pengan til? who he lent usually money to

The (a) examples above show that topicalisation is not an option in these constructions. The (b) and (c) examples both show verb movement. Assuming along with Cinque (1999) and Nilsen (1998) that *sannsynligvis* 'probably' is a relatively high adverb and *vanligvis* 'usually' is a relatively low adverb, the (b) examples indicate that the verb can move to a relatively high inflectional position.

Secondly, verb movement to a lower inflectional head is found in adverbial clauses introduced by *dersom* 'if,' *hvis* 'if,' *med mindre* 'unless' (15), in relative clauses (16), as well as in embedded wh-questions (17):

- (15)a. *Ho kan ha nøkkelen med mindre for tida rote ho bort sånt. she can have key.the with less for time.the loses she away such
 b. *Ho kan ha nøkkelen med mindre ho rote sannsynligvis bort sånt. she can have key.the with less she loses probably away such
 c. Ho kan ha nøkkelen med mindre ho rote vanligvis bort sånt. she can have key.the with less she loses usually away such
 'She can keep the key unless she usually loses such things'
- (16)a. *Plassen som igår krangla han til sæ, va opptatt idag. place.the that yesterday quarreled he to REFL was occupied today
 - b. *Plassen som han krangla angivelig til sæ, va på første rad. place.the that he quarreled allegedly to REFL was on first row
 - c. Plassen som han krangle vanligvis til sæ, va opptatt idag. place.the that he quarreled usually to REFL was occupied today
- (17)a. *Vi lurte på kem igår lånte han penga til. *we wondered on who yesterday lend he money to*
 - b. *Vi lurte på kem han lånte sannsynligvis penga til. we wondered on who he lend probably money to
 - c. Vi lurte på kem han lånte vanligvis penga til. we wondered on who he lend usually money to

Again, the (a) examples show that topicalisation is impossible in these constructions. However, the (b) examples show that movement to a high inflectional position is also prohibited, as the verb cannot precede the high adverbial *sannsynligvis*. The (c) examples show that the verb can still move out of the VP, presumably to a low inflectional position. Note that in all the

examples in (13)-(17), the verb may also remain inside the VP. In fact, this seems to be the preferred option in most cases. However, my informants accepted the moved variants above as well.

Can the two approaches outlined in section 2 account for verb placement in NN? I argue that the data above provide counter-examples to the generalisations proposed by Vikner (1994, 1995) and Rohrbacher (1999). All the examples in (13)-(17) indicate that NN indeed has optional independent V-to-I movement despite the lack of sufficiently rich morphology. Vikner (2001, pc) argues out that the data from Tromsø/NN (as well as the Swedish dialect of Kronoby) are different from the data from e.g. Icelandic as movement is not obligatory (and in some cases not even preferred). He also bases this statement on the assumption that V-to-I movement is impossible in contexts such as embedded questions (as well as relative clauses in Kronoby). But as illustrated in (17) (and (16)), this does not seem to be the case. It is true that the optionality of verb movement in NN distinguishes it from the obligatory verb movement in languages such as Icelandic, but if this is V-to-I movement as analysed here, it challenges a strong two-way correlation between inflectional morphology and movement.

The data from NN seem to be more compatible with the approach proposed by Bobaljik and Thráinsson (1998). They do not rule out the possibility that a language may have verb movement even though it does not have multiple inflectional morphemes. However, they claim that there is no motivation for verb movement in a language with a simple IP structure, as the features of the verb can be checked without the verb leaving the VP. As movement is not required, it is prohibited by Last Resort. According to this reasoning, NN must optionally have a complex IP in the cases where optional verb movement is allowed. Bobaljik & Thráinsson (1998) suggest that in addition to multiple morphemes and verb movement, several other phenomena are consequences of a positive setting of the SIP. The complex IP not only provides several head positions for the verb to move into; it also provides multiple specifier positions. Thus, languages with a complex IP have more subject and object positions available than languages with a simple IP. This, they claim, accounts for the possibility of transitive expletive construction (18) and multiple subject (19) and object (20) positions in Icelandic. As the (b) examples in (18)-(20) show, these constructions are impossible in NN, just as they are in EN:⁴

⁴ Examples (18) and (19) are from Bobaljik & Thráinsson (1998:55-56). Example (20) is from Bobaljik & Jonas (1996:195).

(18)a. Það hefur einhver köttur étið mýsnar.	(Ice)
b. *Det har ei katt spist musen.	(NN)
EXPL has some cat eaten mice.the	
(19)a. Það hefur einhver köttur verið í eldhúsinu.	(Ice)
b. *Det har ei katt vært på kjøkkenet	(NN)
EXPL has some cat been in kitchen.the	
(20)a. Jólasveinarnir borðuðu búðinginni ekki ti	(Ice)
b. *Julenissan spiste desserteni ikke ti	(NN)
the Christmas Trolls ate the pudding not	

However, according to Bobaljik & Thráinsson (1998) the correlation is much stronger between a complex IP and verb movement, than between the IP architecture and the other phenomena within the parameter. Hence, their approach could presumably account for NN. This dialect would group with Icelandic rather than the Mainland Scandinavian languages with respect to the SIP, although it only shows the verb movement feature of this parameter.

Due to space limits, alternative analyses of the NN data will not be discussed here. It will be assumed that NN indeed has optional independent V-to-I movement, and that this movement cannot be motivated by inflectional morphology. In the next section, I will show that this seems to hold for language acquisition of this dialect as well.

4. The acquisition of V to I movement

In this section I will first briefly discuss what the two approaches to verb movement presented in section 2 would imply for first language acquisition in general. Then, section 4.2 presents some preliminary data from one child acquiring NN which indicate that V-to-I movement is acquired based on syntactic, rather than morphological cues.

4.1. Implications for first language acquisition

Although neither of the approaches reviewed in section 2 claim to be theories of acquisition, one can make predictions about how children may acquire V-to-I movement under either of the two. First, assuming the strong two-way correlation between verbal morphology and verb movement, we would expect inflection to function as a trigger for movement. Under this assumption, children will move the verb to I (or to C) as soon as they acquire the relevant morphology. For Rohrbacher (1999) this would be the distinctive 1st and 2nd person marking in at least one number in at least one tense. He cites findings from Pierce (1992) to support this view. Pierce's data show that children acquiring French from a very early stage place finite verbs to the left of negation (indicating movement to I), but leave non-finite verbs inside the VP. English-speaking children on the other hand, rarely move the main verb past the negation.

However, I believe the consequences of Rohrbacher's approach are implausible for several reasons. First of all, Meisel (1994) points out that the first inflectional morpheme to be acquired in French is 3rd person. Thus, assuming that the distinction between 1st and 2nd person is crucial for verb movement, we would expect French-speaking children to go through an initial period in which they mark third person agreement but do not move the verb. This is not what the data from Pierce (1992) suggest. Secondly, the distinction between 1st and 2nd person may be problematic, at least for French. In the singular, the 1st and 2nd verb forms are phonologically (though not orthographically) identical in both present (21a) and imperfective tenses (21b) (based on Rohrbacher 1999:217):

(21)a. je mang-e [-Ø]	'I eat'	nous mang-ons [õ] 'we eat'
tu mang-es [-Ø]	'you eat'	vous mang-ez [e] 'you eat'
b. je mang-eais [-ε]	'I ate'	nous mang-i-ons [õ] 'we ate'
tu mang-eais [-ε]	'you ate'	vous mang-i-ez [e] 'you ate'
c. je mang-er-ai [-ε]	'I will eat'	nous mang-er-ons [õ] 'we will eat'
tu mang-er-as [-a]	'you will eat	'vous mang-er-ez [e] 'you will eat'

This means that children will only apply verb movement after having acquired the plural 1st and 2nd person. Assuming that singular forms are acquired before plural ones, we would again expect children to go through an initial period in which they leave the finite verb in V. Finally, if verb movement can only be triggered by sufficiently rich morphology (however defined), then NN would be practically unlearnable. Vikner (1995b) points this out himself on page 24: "Languages which have (obligatory or optional) V°-to-I° movement but no strong inflection thus pose a problem to both approaches."

Bobaljik (1995, 2001b) and Bobaljik & Thráinsson (1998), on the other hand, claim that morphology does not drive verb movement, but rather reflects it. Bobaljik (2001b) specifically emphasises that this claim is based on synchronic grammar. He does not rule out the possibility that children may use morphology as one of several potential cues for verb movement. More interestingly, he opens up for the possibility that children acquiring dialects such as Kronoby and Tromsø/NN may rely on syntactic cues for verb movement, whereas Icelandic children may use morphological cues. If this is the case, children acquiring Icelandic would arguably have more (both syntactic and morphological) cues for verb movement than NN children. As this verb movement in addition is only

optional in NN we would expect V-to-I movement to be acquired later in NN than in Icelandic. Unfortunately, sufficient data from the acquisition of NN to make such a comparison is not available at this point. However, in the next section I will present some preliminary data from child NN indicating that they indeed employ V-to-I movement.

4.2. Data from acquisition of Northern Norwegian

Assuming Vikner's (1994, 1995) and Rohrbacher's (1999) accounts for verb movement, we would not only expect independent V-to-I movement to be absent in adult NN, but this would also be practically unlearnable in a dialect without the appropriate inflectional morphology. On Bobaljik's (1995, 2001b) and Bobaljik & Thráinsson's (1998) account we could predict that independent V-to-I movement would be acquired later in languages with poor morphology than in languages with rich morphology as the morphological cues are absent in the former. However, my preliminary data from one child acquiring NN does not meet this prediction.

The example in (22) shows that this child correctly employs the option of embedded V2 in complements of bridge verbs:

(22) Æ vet at æ har ikke gjort det (4;8.13) *I know that I have not done that*'I know that I haven't done that'

In addition, he also produces V-to-I movement in adverbial clauses (23), relative clauses (24), and *wh*-questions (25). In fact, he overgeneralises V-to-I movement into constructions where adult NN would not allow it. Although V-to-I movement is sometimes possible in these constructions in adult NN, the examples below are not acceptable in adult NN⁵:

(23) Når han Iver e ikke her, så kan æ ta med den store skjeia (4;6.27) when he Iver is not here, then can I take with the big spoon.the Adult form Når han Iver ikke e her, så kan æ ta med den store skjeia.
'When Iver is not here, I can use the big spoon'

⁵ The reason for the ungrammaticality of (23) and (25) in adult NN is that the verb has moved past the negation. Verb movement past negation is rarely allowed in NN in non-V2 contexts. In (24) the verb has moved past the adverbial *aldri* and again, this is not an option in adult NN.

- (24) Æ skal bare gjøre sånn som du har aldri gjort før (4;5.0) *I shall only do such that you have never done before*Adult form: Æ skal bare gjøre sånn som du aldri har gjort før
 'I'm just gonna do something that you have never done before'
- (25) Kem som va ikke helt i form? (4;5.0) who that was not totally in shape Adult form: Kem som ikke va helt i form?'Who wasn't feeling very well?'

However, it does not seem to be the case that he simply always moves the verb to I. The child also produces constructions where the verb is correctly unmoved:

(26)a. [Det e] fordi at han ikke har sneplogen	(4;10.7)
it is because that he not has snowplow.the	
'It's because he hasn't got the snow plow'	
b. Det e nokka som du aldri har sett før	(4;8.0)
it is something that you never have seen before	
'It's something that you have never seen before'	

The above constructions are quite complex and involve adverbial clauses, relative clauses, and embedded wh-questions. In addition, they need to contain an adverbial or negation in order to unambiguously indicate verb placement. Thus, I assume that these construction will appear relatively late in acquisition in general. Based on that assumption, this child indeed seems to exploit optional independent V-to-I movement as soon as such constructions are used. In fact, the child does not even seem to treat verb movement as a marked option, as can be seen from the overgeneralisation in (23)-(25). Although there are not enough data currently available from the acquisition of NN to make any conclusions on this point, the examples above indicate that NN children acquire V-to-I movement (presumably with no delay) in the absence of sufficiently rich (or any!) inflectional morphology. Rather, they make use of some other strong cues, presumably of a syntactic nature. As NN does not exploit the multiple specifier positions made available in the complex IP, verb placement itself must provide the strong cues for V-to-I movement in acquisition.

5. Conclusion

In this paper, it has been argued that contrary to the claims made by Vikner (1994, 1995) and Rohrbacher (1999), verb movement to an inflectional position is possible in the absence of rich inflectional morphology. To

support this, I have presented data from a dialect of Norwegian which show optional independent V-to-I movement in several constructions despite the fact that this dialect has very scarce inflectional morphology. The analysis proposed by Bobaljik (1995, 2001b) and Bobaljik & Thráinsson (1998) does not make any specific predictions about languages such as NN and Kronoby. However, their analysis does not rule out the possibility of their existence.

It has also been shown that first language acquisition of V-to-I movement in NN must be triggered by something other than morphological cues, as it would otherwise be unlearnable. I suggested that syntactic cues, possibly constructions with the verb in I themselves, must provide the relevant cues for verb movement in NN. Presumably these cues must be fairly strong, as optional independent V-to-I movement is acquired relatively early in NN, and also seems to be overgeneralised to some extent.

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