AN AUXILIARY/MAIN VERB DISTINCTION IN THE GRAMMAR OF FAROESE CHILDREN

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Faroese: the syntax of verb movement in transition

Faroese is a Scandinavian language spoken as a first language by the approximately 49,000 inhabitants of the Faroe Islands, a partly autonomous dependency of Denmark, and by several thousand Faroese living outside the islands, mainly in Denmark. All of the Scandinavian languages are SVO and exhibit verb-second (V2) word order in main clauses, and Faroese is not an exception. One point on which the syntax of these languages does differ, however, is that Icelandic exhibits the phenomenon sometimes knows as "V-to-I" or "V-to-T" in subordinate clauses, while in the Mainland Scandinavian languages (at least, in the standard varieties) even the finite verb remains in a low position, as diagnosed by its order with respect to negation or to sentence-medial adverbs. Thus while a simple main clause in Icelandic shows the same word order as the corresponding example in Danish (1a–b), in a subordinate clause in Icelandic the finite verb appears above negation while in Danish it appears below it (2a–b).

1. a. Elin (hefur) ekki (*hefur) lesið bréfið. Elin has NEG has read letter.DEF Elin has not read the letter. Icelandic

b. Tove (har) ikke (*har) læst brevet

Danish

2. a. Petta er bréfið sem Elin (hefur) ekki (*hefur) lesið. Icelandic that is letter.DEF that Elin has NEG has read
That is the letter that Elin has not read.

b. Dette er brevet, som Tove (*har) ikke (har) læst.

Danish

An (over)simple analysis of the pattern in (1–2) is that while in both Icelandic and Danish the finite verb moves to C in a main clause, in a subordinate clause the finite verb in Icelandic moves to T, but in Danish it remains within the VP.ⁱⁱ

One of the features of Faroese that has attracted much interest particularly since the work of Jonas 1996 is that this language has been undergoing a change from a system like Icelandic to a system like Danish. Thus Jonas reported that for some—mainly older—speakers, both orders in a subordinate clause were possible:

3. Hetta er brævið, sum Elin (%hevur) ikki (hevur) lisið. Faroese this is letter.DEF that Elin has NEG has read This is the letter that Elin has not read.

There is however considerable disagreement as to the status of V-to-T in the current population. Here we report on findings concerning the grammaticality judgments and elicited production of subordinate clauses from 5–10 year-old Faroese children. We will show that contrary to what might be expected given the direction of change away from V-to-T in Faroese, pre-school children exhibit more of this "old" order than adults do. We compare this with findings from other Scandinavian languages where a similar pattern has been observed, and draw some tentative conclusions about the cause of this difference between adults and children, and the implications for the diachronic change that has been taking place.

Adults at the end of the loss of V-to-T

Since the seminal work of Jonas 1996 there has been considerable disagreement as to the availability of a grammar with V-to-T in modern Faroese, with Vikner 1995 and Petersen 2000, for example, claiming that V-to-T is no longer part of the grammar of the vernacular, at least for speakers born after 1960; but Thráinsson 2003 arguing that V-to-T remains a (less frequent) option even for this group. Our own data on adult grammaticality judgments show that there is a strong preference for Neg-V order in subordinate clauses in contexts where embedded V2 is known to be excluded (for some initial results, see Heycock et al 2010), but there is some evidence for the marginal availability of a grammar with V-to-T.

As a background to the investigation of the children's language, we would of course like to have good data on the nature of their input from the adults. Unfortunately, because of the low frequency of the relevant contexts, and the lack of any corpus of transcribed speech, we have only a limited amount of information about the incidence of V-to-T in informal speech (in particular, input to children). As part of our project, we made video recordings of four families interacting with their children, and have transcribed to date approximately 170 minutes of speech. Within this, in the adult speech we found 18 examples of subordinate clauses with negation. The results are summarized in Table 1.

Because the data are so sparse, we supplemented this with data from the largest collection of contemporary tagged Faroese text currently available, Bick et al. We searched in the 112,000 word corpus of texts from the *Sosialurin* newspaper for all

instances of the negator ikki, and then from the results hand-selected the subordinate clauses. The results for this are given in Table 2.

Table 1: subordinate clauses with negation: adult speakers to children					
Type of clause	Verb-Neg		Neg-Verb		Total
declarative	4	67%	2	33%	6
adverbial with tí (because)	2	100%	0	0%	2
all other adverbial	1	50%	1	50%	2
indirect question	0	0%	2	100%	2
relative	0	0%	4	100%	4
conditional	0	0%	2	100%	2
Total	7	39%	. 11	61%	18

Table 2: subordinate clauses with negation: Sosialurin 2004					
Type of clause	Verb-Neg	Neg-Verb	Total		
declarative	66 41%	96 59%	162		
adverbial with tí (because)	22 96%	1 4%	23		
all other adverbial	1 4%	27 96%	28		
indirect question	0 0%	12 100%	12		
relative	0 0%	63 100%	63		
conditional	0 0%	17 100%	17		
Total	89 39%	216 71%	305		

The results from the newspaper texts are in line with the (minimal) data from the child-directed speech. There is a significant proportion of V-Neg order in subordinate declarative clauses (e.g. the complements to propositional attitude verbs) and in adverbial clauses introduced by ti 'because,' but these are both contexts in which V2 is known to be possible, so we cannot be sure that these are instances of V-to-T (Heycock et al 2010). In indirect questions, relatives, and conditionals there are no instances of V-Neg order in either the child-directed speech or in the texts. Although we would clearly want to have more data from child-directed speech in particular, it seems reasonable to conclude that in the input from adults to children there is minimal evidence for V-to-T in these contexts.

Acquisition of subordinate clause word order: background

Petersen 2000, p. 83 states that the speakers he investigated, Faroese students with an average age of 20, "do not regard [V-Neg order in relative clauses and indirect questions] as ungrammatical, but rather as belonging to written Faroese". Vikner 1995, p. 150 also suggests that V-Neg order may now be a relic associated with

the written language. This leads to the expectation that preliterate children should produce less of this order and find it less acceptable than speakers with more exposure to writing.

On the other hand, there is evidence that young children learning Scandinavian languages where V-to-T has been lost nevertheless produce subordinate clauses with "high" verb placement even where this is ungrammatical for adults.

For Swedish the evidence so far is that this "overgeneralization" of V-Neg order is lost by the time children reach 4. Håkansson & Dooley-Collberg 1994 report that a child who consistently produced V-Neg orders for auxiliaries in subordinate clauses at 2:11 in an imitation task, consistently produced Neg-V orders at age 3:6 (p. 102), and the highest age at which any of the four children in their study produced this order in spontaneous speech was 3:2. iii Waldmann 2008 is a study of four children acquiring Swedish. He concludes on the basis of his own data and that of Lundin 1987 that "even if the individual variation can be large, it seems at least that the Swedish children investigated use the correct verb placement in the majority of their subordinate clauses already when they are just over 3 years old. [At 3:3–4:0] they have the verb in the wrong position [i.e. before negation] only in exceptional cases" (Waldmann 2008, p. 236; our translation).

Westergaard & Bentzen 2007 report that sporadic recordings and diary notes from two children (2;4–8;0 and 1;8–5;9) acquiring Tromsø Norwegian show that V–Neg/Adv order in subordinate clauses is attested for these children around the age of 4–5 years; a guided elicitation experiment conducted with these two children, then aged of 5;9 and 8;0, found that the younger child used V–Neg/Adv order in 7 out of a total of 8 indirect questions produced with negation; the older child never produced this order in any of the 11 relevant environments. Thus they conclude that children exposed to Tromsø Norwegian optionally move the verb past negation and adverbs in non-V2 contexts up to the age of (at least) around 6.^{iv}

Our study of Faroese children

Against this background, we conducted both an elicitation and a judgment task with Faroese-speaking children in three age groups: 5–6 (two years before school entry); 6–7 (the year before school entry); 9–10 (two years after school entry). We gathered data from a total of 41 children, divided into these three groups.

Materials and methodology

In the **grammticality judgment task** each child saw a series of animations featuring familiar cartoon characters. They were told that the characters were learning Faroese, and sometimes made mistakes. After each mini-dialogue they

were asked whether the last character to speak spoke right or wrong. There was an initial training session with two grammatical and two ungrammatical examples. There were six examples each of V–Neg and Neg–V order in embedded questions; as fillers there were 8 grammatical and 5 ungrammatical examples.

Our methodology for the **production task** was a slight adaptation of that described in Westergaard & Bentzen 2007. Each child was read a story by the investigator, and told that an assistant had a very good memory of the story. The two pre-school groups were read the same story; a different one was used for the 9–10 year-olds. The child was then reminded of various events in the story, and told to ask the assistant if she remembered them, always beginning "Do you remember...", in order to elicit embedded questions. The question word was almost always why.

Results

Figure 1 shows the mean proportion of positive judgments of acceptability for indirect questions with V-Neg order, Neg-V order, and for the ungrammatical controls in the judgment task; and the proportion of V-Neg order produced in the production task. Visual inspection of the graph suggests that in the judgment task there is an overall preference for the Neg-V order, but that this increases with age; both because the Neg-V order becomes more acceptable (although it starts from a high point, accepted at a mean rate of 77% by the youngest group, rising to 96% in the oldest); and because the V-Neg order becomes less acceptable (falling from a mean rate of 63% in the youngest group to 26% in the oldest). These impressions are confirmed by correlation analyses. There is a significant negative correlation between age (in months) and proportion of V-Neg acceptance, r=-.449(31), p<0.01; and a significant positive correlation between age and proportion of Neg-V acceptance, r=0.352(31), p<0.05. Further, there is a significant correlation between age and the difference in proportion of V-Neg to Neg-V acceptance, r=-.506(31), p<0.01, confirming that the strength of children's preference increases with age.

In the production task, the two younger groups produced the V-Neg order at mean rates of 52% and 49%; the older group was virtually categorical in only producing Neg-V order (in a total of 99 productions of indirect questions with negation by this group, only one production from one child had V-Neg order). We ran a mixed modeling analysis of these data from the younger two groups (the older group could not be included as they were essentially categorical in their responses); the younger two groups showed no preference for either order.

100% 90% Mean acceptance/production 80% 70% 60% V-Neg order OK 50% Neg-V order OK 40% □Ungrammatical OK 30% V-Neg productions 20% 10% 0% Group 1 Group 2 Group 3

Figure 1: Children's judgments and production

The fact that the two younger groups produced V-Neg order around or above 50% of the time suggests that their relatively high rates of acceptance of this order need not be taken simply as an effect of the judgment task being too hard for them. It is also important to notice that these children overwhelmingly rejected the ungrammatical control sentences, again suggesting that they were able to perform the judgment task.

In this task we used only "main" (nonauxiliary) verbs, in order to avoid any possible confound from a difference in verb type (Håkansson & Dooley-Collberg 1994, but see also Waldmann 2008). Our prompts in the production task also involved only main verbs, but frequently the children spontaneously produced examples with auxiliaries. We therefore checked to see whether there was any effect of verb type (main vs auxiliary) on the likelihood of the verb preceding or following negation in production. We give the total Ns in Table 3 (as the oldest group was categorical they are not included here or in the analysis). The proportions for the two youngest groups taken as wholes are graphed in Figure 2

Table 3: Productions of V–Neg and Neg–V order by verb type			
	Verb-Neg	Neg-Verb	Total
Auxiliary	40	13	53
Main	60	45	105
Total	100	58	

90%
80%
70%
60%
50%
40%
30%
20%
10%
Group 1
Group 2

Figure 2: Verb-Neg production in the two youngest groups by verb type

For these data we ran a model including the factors of age, gender, and verb type (main vs auxiliary). There were no significant interactions, only a main effect of verb type: the likelihood of Verb–Neg order is higher with auxiliaries than with main verbs, as suggested by the summary data:

Fixed effects:

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	2.7883	0.9657	2.887	0.00388
fVerbtypem	-1.9239	0.6785	-2.836	0.00458

Discussion

Contrary to any expectation that pre-literate Faroese children might show the least amount of V-to-T, our results show that in fact pre-school children up to the age of 7 show higher rates of acceptance and production of this order than 9–10 year-olds. This suggests a developmental account, particularly in the light of the data from Swedish and Tromsø Norwegian. This pattern persists in Faroese children at least up to the age of 7, which is older than has been reported for either Swedish or Tromsø Norwegian (see above). As our data were gathered using different methodologies than those of either Waldmann 2008 or Håkansson & Dooley-

Collberg 1994, however, a direct comparison between Swedish children (whose input is invariant) and Faroese children (whose input may still be variable) has yet to be made.

As reported also for the Tromsø Norwegian children in Westergaard & Bentzen 2007, we found no evidence that the children were giving these embedded questions the syntax of root questions, as even the youngest children never moved the verb to the left of the subject. Thus we have children who produced indirect questions like (4), but they did not produce (5b) by analogy to (5a):

- 4. Minnist tú, um hesturin tímdi **ikki** at vera inni? remember you if horse.DEF wanted NEG to be inside Do you remember if the horse didn't want to be inside?
- 5. a. Tímdi hesturin ikki at vera inni? wanted horse.DEF NEG to be inside Didn't the horse want to be inside?
 - b. Minnist tú, um tímdi hesturin ikki at vera inni? nonoccurring remember you if wanted horse.DEF NEG to be inside Do you remember if the horse didn't want to be inside?

Like Westergaard & Bentzen, we conclude that our children were not generalizing the syntax of root questions to these indirect questions.

A second possible alternative analysis of the children's data is that the finite verb is in C, or some Topic projection, and the question word in some yet higher projection, along the lines of (6):

6. ...
$$[_{CP} \text{ if } [_{TopP} \text{ the horse}_i [_{Top}, \text{ wanted}_i [_{TP} \text{ t}_i [_{T'}]_{VP} \text{ NEG } [_{VP} \text{ t}_i]_{VP}]$$

There are two reasons to reject this analysis First, it would attribute to the children a grammar unlike that of any that we are familiar with. Even in Icelandic, which has been argued to allow V2 very freely in embedded contexts, it is never possible to embed V2 within an indirect question in this way (see e.g. Vikner 1995). Second, it would not explain the different behaviour of main verbs and auxiliaries. We know from modern English that these verb types may have different privileges of access to T, but any difference in their ability to move higher is strictly parasitic on that. It would therefore be surprising if in these children's grammars the main verb/auxiliary verb distinction was affecting direct movement into the C domain.

Having set aside these two alternatives, we conclude that the younger Faroese children do not have more generalized V2 than the adults, rather they have variable V-to-T at a rate that as far as we can tell greatly exceeds that in the input. A possible explanation for this is offered in Westergaard & Bentzen 2007 for their

Tromsø Norwegian children: in brief, in the course of acquisition children seek to adopt a grammar that minimizes the amount of movement that has to be postulated; they therefore initially analyze subject-initial root V2 structures as TPs, and hence interpret the V-Neg orders that are found in root clauses as evidence for V-to-T.

This analysis predicts this developmental path in any V2 VSO language; thus we would expect children learning standard Danish, Swedish, or Norwegian also to initially overgeneralize V-to-T. As we have seen, there is some evidence that indeed this does happen in Swedish, although the children seem to abandon this analysis earlier than in Tromsø Norwegian or Faroese. One possibility is that this difference could be attributed to the variability in the adult language in these last two cases, at least with respect to adverbs other than negation, making the acquisition task for the children particularly hard. In order to test this it would be necessary to have data of the same type for the different languages; this remains for future research.

Conclusion

We conclude this paper with a brief discussion of the implications of these findings for the diachronic change away from V-to-T that has been taking place in Faroese and that we know took place in the Mainland Scandinavian languages. Given the very scant data available in an SVO language to determine whether V-to-T is possible in the absence of V2, it might have been surmised that the diachronic change could have been caused or driven by children failing to get enough evidence for V-to-T, or underestimating its frequency in the target grammar. These finding suggest that this is an unlikely scenario, since the acquisition bias appears to be in the other direction (the children initially hypothesis more V-to-T than is warranted by the input). Indirectly, this may perhaps lend support to the hypothesis that the change must have been driven by some external factor—the most likely, but by no means the only possible culprit in this case being contact with Danish.

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ii There are many different possibilities for analyzing the various positions of the finite verb in Icelandic and in the Mainland Scandinavian languages including Danish; here we outline a relatively "conservative" analysis, without making a commitment to its adequacy.

iii It should be noted though that they only had data for the children up to 3:6, and also, conversely, that some of the examples of V–Neg order occur in clauses that are potentially interpretable as result clauses, another context in which V2 may be possible.

iv The Tromsø dialect differs from standard varieties of Norwegian (and Swedish) in allowing the finite verb even in non-V2 contexts to precede certain adverbs such as *ofte* 'often;' it is like these other varieties though in not allowing the finite verb to precede negation in these contexts (Bentzen 2005). There is some evidence that Faroese shows a similar tendency (Heycock et al to appear, Bentzen et al to appear)

^v Examples with the copula *vera* 'be' are excluded from these data and analysis as it was not clear how to categorize these cases.