

Acquisition in Variation (and vice versa)

Caroline Heycock, University of Edinburgh
Antonella Sorace, University of Edinburgh &
 University of Tromsø
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"Verb movement in contemporary Faroese"


The work has been carried out in collaboration with **Antonella Sorace** and **Zakaris Svabo Hansen** with assistance from **Frances Wilson**



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Outline

- Investigation: Children's verb placement in Faroese
- Background
 - Variation in adult speech as part of a syntactic change
 - Variation in children's speech in other varieties of Scandinavian
- Results of our investigation
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 - Phenomena in adult speech
 - Possible sources of misanalysis
- Conclusion




Children's verb placement in Faroese

- **V-to-T** (Verb–Neg order in a non-V2 context):
 Minnist tú, hví man *skal* *ikki* nema gólvið?
remember you why one shall neg touch floor-def
 Do you remember why you shouldn't touch the floor?
- **V-in-situ** (Neg-Verb order in a non-V2 context):
 Minnist tú, hví tey *ikki* *kundu* nema gólvið?
remember you why they not could touch floor-def
 Do you remember why they couldn't touch the floor?




Variation and Change in Faroese

- Widely agreed that variation in the position of the finite verb in subordinate clauses in contemporary Faroese is part of a diachronic change, which also shows up as variation in other syntactic phenomena (e.g. the distribution of overt expletives, the availability of stylistic fronting).
- Apparently similar changes have been studied in the historical records for Swedish (Falk 1993) and Danish (Sundquist 2002).
- Acquisition data of interest here for three reasons:
 - Children may provide evidence for the vernacular, with less influence from formal registers / written language.
 - How do children acquire a language when they are exposed to variable data (Henry 1998)?
 - Is there an acquisition bias in children that can explain the direction of the change?



Variation in child language in Scandinavian

- Acquiring the syntax of verb movement in Scandinavian an *a priori* problem for any theory of "Degree Zero" learnability
- Variation in the placement of the finite verb in subordinate clauses in Swedish-acquiring children was first noted by Håkansson & Dooley-Collberg (1994).
- The acquisition of verb placement in subordinate clauses in Swedish has been more extensively studied by Waldmann 2008, who also observed variation.
- Variation in the process of acquisition of verb placement in Tromsø Norwegian has been studied by Westergaard & Bentzen (2007)



Swedish: Håkansson & Dooley-Collberg 1994

- Claim: children acquiring Swedish go through a short stage in which they place finite verbs above negation in subordinate clauses.
- This non-targetlike high placement affects only **auxiliaries**.
- Children's placement of even auxiliaries is target-like by **3:6**.
- One concern: a large number of the cases of nontargetlike placement might be analyzable as instances of **V2**:
 - Embla (2:9–3:1): Correct placement 15: Incorrect placement 4

*smutsigt bröd som man kan inte äta
för att jag kan ju inte vara hemma
därför att hon har inte sett mitt rum
så att han kan inte säga miao*

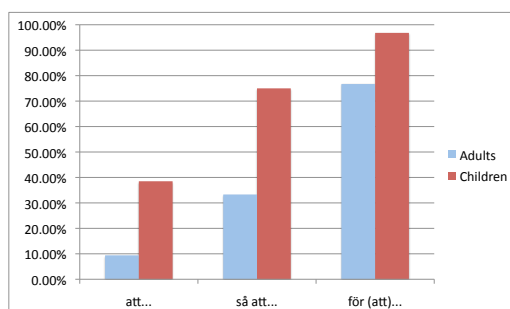


Swedish: Waldmann 2008

- Waldmann investigated the speech of 4 Swedish speaking children from the CHILDES database, aged 1:3–4:0, and also the input to these children from their caregivers.
- He found evidence of nontargetlike verb placement in contexts where **V2 is excluded** in the adult language: there were 25 relevant examples, of which 10 had the nontargetlike high verb placement (**40%**). Waldmann argues that this pattern is essentially absent from 3:6
- In contexts in which the adult grammar **allows Embedded V2**, the frequency of the verb–negation order was **consistently higher** in the speech of the children than in the speech of their caregivers. There was no detectable difference between main verbs and **auxiliaries**. This pattern remains constant up to the end of the stage that Waldmann examined (4:0).



“Overuse” of EV2 (Waldmann 2008)



Tromsø Norwegian: Westergaard & Bentzen 2007

- An investigation of the acquisition of children acquiring Tromsø Norwegian, a dialect in which the finite verb may—but need not—occur to the left of certain adverbs, including *ofte* ‘often’ and *allerede* ‘already,’ but not negation.
- In the recordings of 3 children aged 1:9–3:3, 13 subordinate clauses with negation:
 - 4 had targetlike Neg–Verb order
 - 5 had Verb–Neg order in the complement of an EV2-permitting verb: *han sa han ville ikke spise <han>*
 - 4 had high verb placement in contexts where this is excluded in adult language (*også* is not one of the adverbs that can follow the verb) *det er ho mamma som har også tegna*



Tromsø Norwegian: Westergaard & Bentzen 2007

- Sporadic recordings and diary notes from two older children also show instances of intermittent nontargetlike verb placement at around 4–5.
- In a guided production experiment with these children at the ages of 5:9 and 8:0
 - The 8-year old produced targetlike Neg/Adv–Verb order in **11** out of **11** embedded questions
 - The 5-year old produced **nontargetlike** Verb–Neg/Adv order in **7** out of **8** embedded questions.
- Nontargetlike behaviour seems to be persisting much later in the speech of these children than is reported in either of the Swedish studies.



Investigating the acquisition of verb movement

- In total we gathered data from **41** children, divided into three groups:
 - two years before school entry (approx **5–6**),
 - one year before school entry (approx **6–7**)
 - two years after school entry (approx **9–10**)
- We elicited both **production** and **judgment** data



Methodology: Judgments

- Task adapted from Serratrice et al 2009; Sorace et al 2009.
- The children 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 6 examples each of **V-Neg** and **Neg-V** order in embedded questions, 4 examples with **overt expletives**, 3 examples with **low subjects** but no expletives, and 5 straightforwardly ungrammatical cases.



Methodology: Production

Our methodology for elicited production is a slight variant on that described in Westergaard & Bentzen 2007.

- The child was read a story, and told that an assistant had a very good memory of the story.
- The child was then reminded of various events and facts in the story, and told to ask the assistant if she remembered them, always beginning "Do you remember ...". So we were able to elicit embedded questions (the question word was always *why*).
- There were 8 contexts for embedded questions with negation, and 6 fillers.

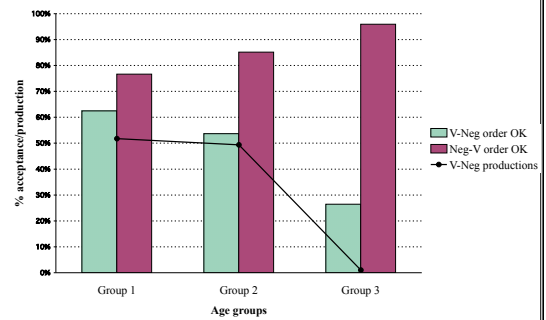


Methodology: Production

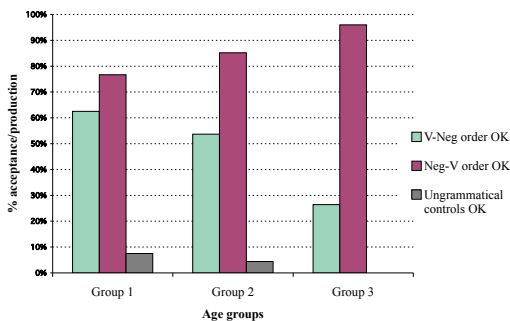
INV: Nilli, minnst tú, hvør tað er? Tað er tann lítla apan, ha? Hon hjálpir Pippi at baka síropskukur, sært tú? Men hesturin sleppur ikki at hjálpa til, tí at hann býr úti á altanini, hann tímir ikki at vera inni. Tað minnst vit, men heldur tú, at Gudny minnst hvi? Hvi, hvi sleppur hesturin ikki at hjálpa til? Spyr Gudny! Minnst tú, hvi...
CHILD: Minnst tú, hvi hesturin ikki sleppur inn?



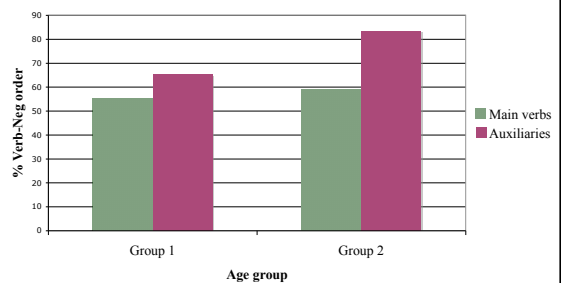
Children's judgments and production: verb/negation order in indirect questions



Children's judgments: verb/negation order and ungrammatical controls




% Verb-Neg production




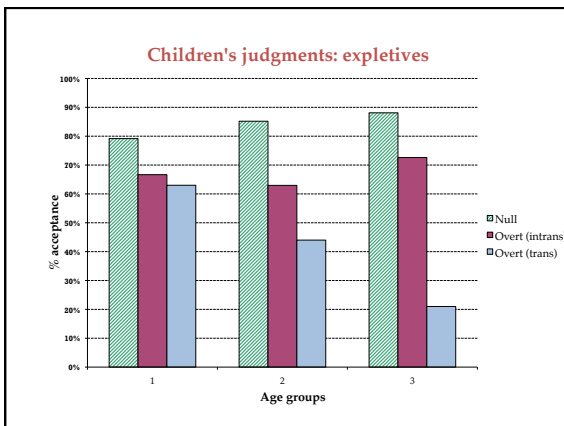
Children's judgments of expletives

- Overt, intransitive:
 1. Nei, men um hon dettur, so dettur **tað** kanska okkurt
no but if she falls so falls expl perhaps something
úr lummanum hjá henni
out pocket.def of her
 2. Nú regnar **tað** bara so illa, **tað** er einki annað!
now rains expl only so badly expl is nothing else
 3. Já! Í trænum er **tað** kanska eitt fuglareiður!
yes in tree.def is expl perhaps a nest
- Overt, transitive
 4. Beint nú hefur **tað** ein vespa stungið hann í tummilin.
just now has expl a wasp stung him in thumb.def




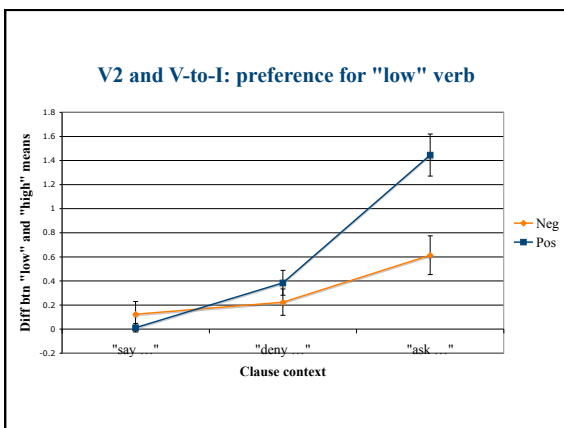
Children's judgments of expletives

- Low subject, no expletive
 1. Nei! Í gjár sang **eisini** onkur ein sang uttan fyri kirkjuna.
no yesterday sang also someone a song outside church.def
 2. Her eru **altíð** so nógvir summardáar at henta.
here are always so many daisies to pick
 3. Í dag er **kanska** føðingardagur heima hjá teimum
today is perhaps birthday party at home of them





Evidence for V-to-T in adult judgments

- 1.a. Janus noktaði, at hann **hevði ikki** sitið ibundin á baksetrinum
Janus denied that he had neg sat belted-up on back-seat-def
Janus denied that he hadn't belted up in the back seat
- b. Handilskvinnan noktaði, at hon **ikki hevði** læst handilin í gjárkvöldið
shopwoman denied that she neg had locked shop-def last night
The shop assistant denied that she hadn't locked up last night.
- 2.a. Jákup noktaði, at í gjárkvöldið **hevði hann** verið á vertshúsinum
Jákup denied that last night had be been to pub-def
Jákup denied that last night he had been to the pub.
- b. Teir ákaerdu noktaðu, at **teir høvdu** smuglað rúsevni inn í landið
the accused denied that they had smuggled drugs into country-def
by-sea
The accused denied that they had smuggled drugs into the country by sea.

But judgments aren't input...



How much variation is there in the input?

Subordinate clauses with *ikki*:
Adults in conversation with children

Type of clause	Verb-Neg	Neg-Verb	Total
"that"/O-clause	4 67%	2 33%	6
Adverbial with <i>ti</i> "because"	2 100%	0 0%	2
Purpose or result	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

Data from project

How much variation is there in the input?

Subordinate clauses with *ikki*:
Adults in conversation with adult interviewer

Type of clause	Verb-Neg	Neg-Verb	Total
Declarative clause (<i>at</i> and <i>O</i>)	84 45%	104 55%	188
Adverbial with <i>ti</i> "because"	69 68%	33 32%	102
Result clause (<i>so</i> (<i>at</i>) ...)	8 89%	1 11%	9
"Extent" clause (<i>so X at</i> ...)	8 80%	2 20%	10
Adverbial (excl. <i>ti</i> "because")	1 2%	55 98%	56
Indirect question	1 13%	7 88%	8
Relative	3 2%	147 98%	150
Conditional	3 2%	142 98%	145
Total	177 26%	491 74%	668

Data from interviews conducted and transcribed by Jógvan í Lon Jacobsen

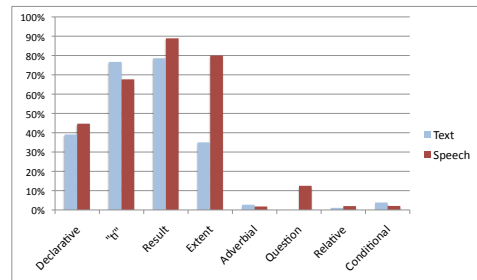
How much variation is there in the input?

Subordinate clauses with *ikki*:
Newspaper and wikipedia texts (CorpusEye corpus)

Type of clause	Verb-Neg	Neg-Verb	Total
Declarative clause (<i>at</i> and <i>O</i>)	77 39%	120 61%	197
Adverbial with <i>ti</i> "because"	23 77%	7 23%	30
Result clause (<i>so</i> (<i>at</i>) ...)	11 79%	3 21%	14
"Extent" clause (<i>so X at</i> ...)	7 35%	13 65%	20
Adverbial (excl. <i>ti</i> "because")	1 3%	36 97%	37
Indirect question	0 0%	14 100%	14
Relative	1 1%	91 99%	92
Conditional	1 4%	25 96%	26
Total	121 28%	309 72%	430

How much variation is there in the input?

Subordinate clauses with *ikki*:
Comparison of spoken and written data



Comparison with Danish

Subordinate clauses with *ikke*:
Information newspaper (CorpusEye corpus)

Type of clause	Verb-Neg	Neg-Verb	Total
Declarative clause (<i>at</i> and <i>O</i>)	1 1%	105 99%	106
Adverbial with <i>for</i> "because"	4 100%	0 0%	4
Adverbial with <i>fordi</i> "because"	0 0%	18 100%	18
Result clause (<i>so</i> (<i>at</i>) ...)	2 100%	0 0%	2
"Extent" clause (<i>so X at</i> ...)	0 0%	4 100%	4
Adverbial (excl. <i>for</i> "because")	0 0%	50 100%	50
Indirect question	0 0%	4 100%	4
Relative	0 0%	96 100%	96
Conditional	0 0%	32 100%	32
Total	7 2%	309 98%	316

Comparison with Danish

Subordinate clauses with *ikke*:
BySoc corpus of spoken data (from Garbacz)

Type of clause	Verb-Neg	Neg-Verb	Total
<i>at</i> clause	40 27%	107 73%	147
Adverbial with <i>fordi</i> "because"	174 69%	78 31%	252
Relative	0 0%	66 100%	66
Conditional	2 1%	158 99%	160
Total	7 2%	291 98%	298

Less standardization wrt EV2?

- It seems possible that the late development of a written standard for Faroese has contributed to a less normative attitude to EV2 than in the Mainland Scandinavian languages (but note that there is in many other respects a wide divergence between the written and the spoken language).
- This might contribute to more variation in the input than in e.g. Swedish or Danish—but according to these data, with respect to EV2 rather than V-to-T.



One very specific source of variation

- The classic collection of fairy stories was translated into Faroese by three different authors (collectively): one was Heðin Brú, well-known to for his propensity to use V-to-T; this is reflected in the collection:

Type of clause	Verb-Neg	Neg-Verb	Total
Declarative clause (<i>at</i> and \emptyset)	8 73%	3 27%	11
Adverbial with <i>ti</i> "because"	7 78%	2 22%	9
Result clause (<i>so</i> (<i>at</i>) ...)	3 100%	0 0%	3
"Extent" clause (<i>so</i> <i>X</i> <i>at</i> ...)	7 100%	0 0%	7
Adverbial (excl. <i>ti</i> "because")	6 60%	4 40%	10
Relative	0 0%	4 100%	4
Conditional	3 50%	3 50%	6
Total	34 68%	16 32%	50



What about the main verb/auxiliary distinction?



Is the Aux/Main distinction in the input?

Judgment data from Bentzen *et al* 2009

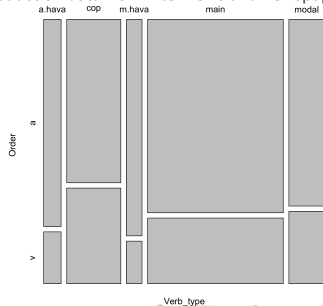
V-Adv orders in Relatives
(median judgments; 31 responses)

	<i>ofta</i>	<i>aldri</i>	<i>ongantið</i>	<i>ivaleyst</i>	<i>ikki</i>
Main verb	4	2	2	1	1
hava	4	3	3	3	2
Modal	3	3	3	3	3



Is the Aux/Main distinction in the input?

Production data from interviews and newspaper texts



Possible accounts

- ~~Children overgeneralize root clause word order because it is the most frequent in the input.~~
- Westergaard & Bentzen 2007 on similar data from Tromsø Norwegian: Because of a principle of economy, children initially analyse subject-initial root-clauses as TPs, and so conclude that the language has V-to-T (Westergaard & Bentzen 2007).
- But note that these children are older than expected for such a misanalysis.



Possible accounts

- Children first assume that the complementizer *at* is maximal in what it lexicalizes; they therefore conclude that their target grammar has *variable* V-to-T. This is reinforced by intermittent exposure to adult V-to-T in other contexts. The scarcity of crucial data mean that the process of adjusting the grammatical settings in the course of acquisition is lengthy.
- Of the 15 children for whom we have production data in the two youngest groups, 7 were variable in their production (even in the small number of tokens that we were able to gather)

Minnist tú, hví Pippi **kann ikki** brúka koppin sum ein hatt,
remember you why can neg use cup.def as a hat
tá ið hann **ikki er** tómur?
when that it neg is empty (A: 5;9)



Implications for diachronic change

- Clearly, the initial bias in the children's acquisition is in the direction *away* from the loss of V-to-T.
- Of course it is possible that they then "overcompensate" in some way.
- But the possibility that the motor for change is an initial underlying bias against movement—which might seem a plausible hypothesis—is shown to be false. This makes also it unlikely that difficulties in first language acquisition could be the source of the original variation (but the acquisition pattern of Icelandic children would be a better source of evidence for that).

Related future work

- Collaboration with Marit Westergaard, Kristine Bentzen, and Christian Waldmann to make a more direct comparison of the persistence of overgeneralized verb movement in the acquisition of Faroese, Norwegian, and Swedish.
 - Do Swedish/Southern Norwegian children really withdraw their overgeneralization earlier? If so, what does this tell us about the input?
 - Can the auxiliary/main verb distinction that we found in the Faroese children be detected also in Swedish and Southern Norwegian?
- Further investigation of the adult variability in Faroese, including judgments on expletives and on main verbs vs. auxiliaries in embedded contexts.



Conclusion

- Children acquiring Faroese initially "overgeneralize" V-to-T, but show considerable intra- as well as inter-speaker variation up to at least 7.
- This overgeneralization appears to persist longer than it does in Swedish (but we await comparable data).
- This pattern is only indirectly related to variability in the adult data (but may tell us more about it)
- This initial tendency for children to "overproduce" V-to-T further sharpens the problem posed by the historical loss of V-to-T in this and other varieties.



Thank you!

Caroline Heycock: heycock@ling.ed.ac.uk
Antonella Sorace: antonell@ling.ed.ac.uk
Zakaris Svabo Hansen: zakarish@setur.fo

<http://www.lel.ed.ac.uk/~heycock/faroese-project.shtml>

