

V2 all the way down

Germanic innovations in the embedded CP of German-Italian bilinguals*

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1 Introduction: acquiring the left periphery

This talk is about **overgeneralisation of Embedded V2 (EV2)** in German-Italian bilinguals, and its **implications** for the **development of the CP** more broadly.

- Overgeneralisation of EV2 reported in existing work (discussed later; Müller, 1994; Schönenberger, 2001; Julien, 2007; Westergaard & Bentzen, 2007).

↔ The **source**, **extent**, and **formal nature** of this EV2 still *contentious* plus often language/child-specific.

Theoretical and empirical **potential** of these case-studies:

- Can EV2 shed light on typology of CP?
- Range of work showing that the left periphery is more or less ‘exploited’ crosslinguistically → *crosslinguistically* and *developmentally* **variable degrees of elaboration of the CP?** (cf. Rizzi, 1997).
- Can bilinguals inform cases of *diachronic* changes in EV2? (not main focus here).

1.1 Today

Two broad aims:

- Understand overgeneralisation of EV2 from both a **formal and developmental perspective**.
 - How can it be characterised ‘synchronically’?
 - Which developmental processes lead to this overgeneralisation stage?
- Probe its potential implications for **typology and variation of the left periphery**.
 - How can the ‘structure’ of the (embedded) CP be formalised?
 - How does it compare to other (adult) systems?

Our contribution Theoretical significance of EV2 in German-Italian bilinguals: (i) a *formal* analysis of their EV2 stage, (ii) a *developmental* motivation for this stage.

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In a nutshell

Constrained overgeneralisation of EV2 in German-Italian bilinguals. Significance is *three-fold*: (1) We argue *not* parameter missetting; (2) We argue *not* transfer from Italian; (3) Instead, we argue indicative of *CP-complexification*.

- Analysis in terms of **CP differentiation**: *statically*, three projections can generate the EV2 patterns; *developmentally*, MMM rationalises their emergence.
- We argue EV2 provides a **lens into the formal development of CP**, including its parallels in **contact-induced morphosyntactic** change.

2 Background

2.1 Verb Second

Verb Second (V2) – prototypical Germanic property.

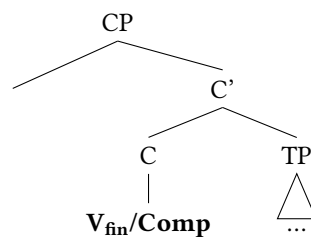
- The finite verb occupies the second (structural) position in **main clauses**, after an initial XP.

(1) German

- a. Ich **habe** heute drei Briefe geschrieben
I have.1SG today three letters written
'I have written three letters today.'
- b. Diesen Mann **kenne** ich nicht
this man know.1SG I not
'This man, I don't know him.'
- c. Ich glaube dass er ein Nickerchen **macht**
I think that he a nap make.3SG
'I think he's taking a nap.'

Contemporary analyses of V2 vary:

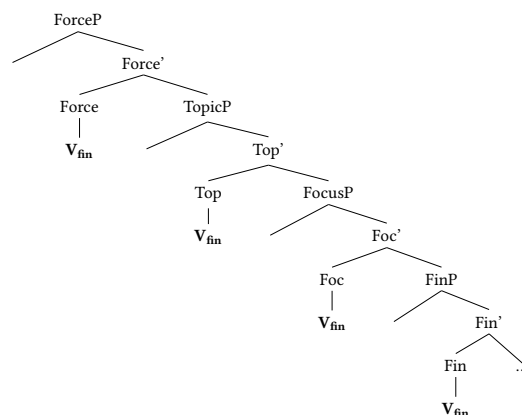
- **Classic analysis** of V2: V2 as V-to-C and XP-fronting to SpecCP ([den Besten, 1983](#)).



- Complementary distribution between finite verbs and complementisers → **V-final embedded word-order**.

- **Cartographic analyses** of V2: variation arises **as a function of height of movement** in an enriched left-periphery.

→ Allows for degrees of ‘liberality’ in linear orders observed in V2 systems.



From ‘strict’ to ‘relaxed’ V2 languages.

- Variation across V2 systems in the kinds of V3 (or V3+) structures allowed: e.g., Old Romance is more liberal than other languages (notably West Germanic) (Holmberg, 2015).

→ **Cartographic typology** (Poletto, 2002; Wolfe, 2015). **Fin-V2** (low) vs **Force-V2** (high) languages.

(2) [_{ForceP} (XP) Force [_{TopP} (XP) Top [_{FocP} (XP) Foc [_{FinP} (XP) **Fin-V_{fin}** ...]]]]

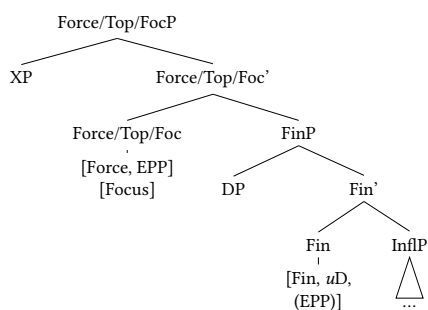
(3) [_{ForceP} (XP) **Force-V_{fin}** [_{TopP} (XP) Top [_{FocP} (XP) Foc [_{FinP} (XP) Fin ...]]]]

More **emergent** views on the microvariation in V2 (more on some of them later), often drawing on Giorgi & Pianesi (1997):

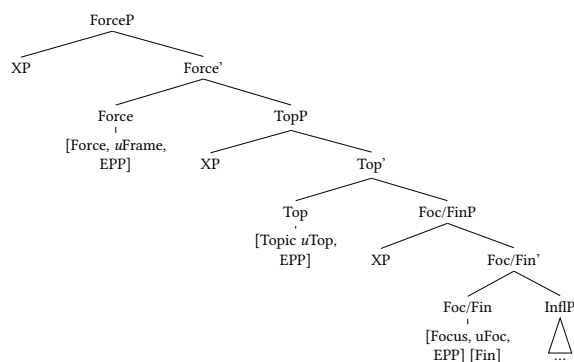
- Biberauer & Roberts (2015): left-peripheral positions are non-distinct in *strict* V2 systems; they reflect an acquisitionally ‘earlier’ stage (undifferentiated root C head).
- Walkden (2017): Kiezdeutsch systems with more V3 orders modelled as a ‘split’ (non-recursive) CP with CP₁ and CP₂ (see also Sluckin, 2025).
- Cormany (2015), Hsu (2017): variation across types of V2 systems in terms of feature scattering/bundling.
- Cournane & Klævik-Pettersen (2023): feature bundling; acquisition/diachronic bias towards more ‘bundled’ CPs.
- (See also, i.a., Soares, 2006; Larson, 2021, for non-V2-centred proposals).

→ **Key: the elaboration of the CP is crosslinguistically variable** – which in turn helps shed light on variation in V2.

(4) Old English V3



(5) Old Sicilian, Old Italian V4



(Hsu, 2017: 18, 20)

2.2 Embedded clauses and V2

Variation also in the extent to which embedded clauses are V-final or in whether V2 is also allowed. Broad (simplistic) macro-division often in terms of **symmetrical** and **asymmetrical** V2¹. More specifically (Gärtner, 2016):

- **‘Well-behaved’ V2**: V2 is strictly asymmetric and occurs only in complementiser-less clauses.
 - German, Dutch and Afrikaans.
- **Narrow embedded V2 (nEV2)**: V2 with complementisers, but in a constrained subset of contexts (e.g., linked to “assertion”).
 - Frisian and Mainland Scandinavian.
- **Broad embedded V2 (bEV2)**: V2 occurs more broadly in embedded contexts.
 - Icelandic and Yiddish.

(6) a. German

Sigrid *glaubt* **dass** Waltraud das Buch gekauft **hat**
 Sigrid thinks that Waltraud the book brought has

‘Sigrid thinks that Waltraud has bought the book.’

b. Norwegian

Jeg *oppdaget* at jeg (**hadde**) ikke (**hadde**) lest den
 I discovered that I had not had read it

‘I discovered that I hadn’t read it.’

c. Norwegian

Han *tvilte* på **at** hun (***hadde**) ikke (**hadde**) møtt denne mannen
 he doubted on that she had not had met this man

‘She doubted that she hadn’t met this man.’

d. Yiddish

Avrom *gloybt* **az** Max **shikt** avek dos bukh
 Avrom believes that Max sends away the book

‘Avrom believes that Max will send away the book.’

(Holmberg, 2015: 356, 358)

Embedded V2 (EV2) in asymmetrical languages possible in complements of so-called **bridge verbs**, in some relative clauses, among others. ‘Bridge verbs’ generally assumed to align with verb class as in (8).

(7) a. German

Maria *glaubt* Peter **geht** nach Hause
 Maria thinks Peter goes to home

‘Maria thinks that Peter is going home.’

b. Norwegian

Jeg *oppdaget* at jeg (**hadde**) ikke (**hadde**) lest den
 I discovered that I had not had read it

‘I discovered that I hadn’t read it.’

(Holmberg, 2015: 358)

¹See Biberauer (2002), Wiklund et al. (2009), i.a., for discussion of the issues in this classification.

- (8) Verb classes in [Hooper & Thompson \(1973: 473-74\)](#). Only Classes A, B and E permit EV2.
- Class A – strongly assertive** (say, claim, report)
 - Class B – weakly assertive** (suppose, believe, think)
 - Class C – non-assertive** (doubt, deny, be (im)possible)
 - Class D – factive** (resent, regret, be surprised)
 - Class E – semi-factive** (know, realise, learn)

In German (focus here), also found in adjunct clauses denoting cause (9), and, in some V2 languages, in ‘extent clauses’, often with semantico-pragmatic effects.

- (9) a. **Propositional modification** (V-final or V2)
- Die Straße ist weiß, weil es (**hat**) geschneit (**hat**).
 the road is white because it has snowed has
 ‘The road is white because it has snowed.’
- b. **Epistemic modification** (V2 only)
- Es hat einen Unfall gegeben, weil der Airbag **ist** aufgegangen.
 it has an accident given because the airbag has deployed
 ‘An accident has happened because the airbag has deployed.’
- c. **Speech act modification** (V2 only)
- Paula hat den Job übrigens bekommen. Weil das **wolltest** du doch unbedingt wissen
 Paula has the job by-the-way got because that wanted you PART absolutely know
 ‘By the way, Paula got the job. Because you absolutely wanted to know it.’

([Antomo, 2012: 32-33](#))

2.3 Acquisition of (embedded) V2

‘Basic’ V2, including *topicalisation*, reported to be **early-acquired** (i.a., [Boser et al., 1992](#); [Poeppel & Wexler, 1993](#); [van Kampen, 2010](#); [Santelmann, 1995](#); [Westergaard, 2009](#)) → plausibly some (maybe simple) representation of CP at early stages.

Acquisition of embedded word-order varies across languages and learners. Lots of work on monolinguals:

- *Monolinguals*
 - Generally **V-final** order across the board in **West Germanic**, although with some errors reported (see [Fritzenschaft et al., 1990](#), on Benny).
 - More **overgeneralisation** of Embedded V2 in **Scandinavian** languages ([Westergaard & Bentzen, 2007](#); [Heycock et al., 2013](#); [Westergaard et al., 2014](#); [Waldmann, 2014](#); [Ringstad & Kush, 2021](#); [Jensberg et al., 2024](#))
 - Fine-grained **Swiss German** study by [Schönenberger \(2001\)](#) on Lucernese Swiss German:
 - * Until age 5, the two children produce EV2 in *target-like* contexts: complements of bridge verbs, *wil*-clauses.
 - * And *non-target-like* contexts: embedded wh-V2, and other complementiser structures (e.g., *wenn* ‘if/when’, *ob* ‘whether’).
 - * Two orders found: *complementiser V_{fin}...* (**Linear V2**) and *complementiser Z V_{fin}...* (**Linear V3**)
 - Constraint: Z = pronominal subject until age 5.
- ⇒ Broader or localised pattern? Not observed to the same extent in Bernese Swiss German (e.g., [Penner, 1990](#); [Penner & Bader, 1991](#)) and Zurich German (Escudero, p.c., cited in [Schönenberger, 2001](#)).

This talk: Theoretical significance of EV2 and V-final orders in **German-Italian bilinguals**, who show over-generalisation of EV2.

- Case-study highly comparable to Müller (1994, *et seq.*) and Schönenberger (2001), but with **different theoretical results**.
 - We argue *not* a case of Yiddish-type setting (*pace* Müller, 1996).
 - We argue *not* straightforwardly a case of transfer of Italian-like syntax (*pace* Müller, 2003).
 - We argue a case of developmental complexification of the (embedded) CP.
- Supporting parallels in the diachrony and contact scenarios of V2: Afrikaans, Manenberg Kaaps and Cimbrian.
- ↪ Sheds light on **the formal development of CP**, its **crosslinguistic elaboration** and its **formal stability** in language contact driven by child language bilingualism.

3 The data

3.1 A precedent

Müller (1994, 1996, 2003) – case-study of German-French bilingual Ivar

- One of the three children studied (Ivar) often shows EV2 order, including topicalisation. Similar to German-Italian bilinguals Lisa and Giulia (Taeschner, 1983).
 - Carolina and Pascar show required V-final order throughout.
- (10) a. Ivar, 3;04.09
 Erst **wenn** wir **sind** fertig mit das
 first when we are ready with it
 ‘Not until we have finished it.’
- b. Ivar, 3;08.01
 Guck mal **wie** des **is** groß
 look once how this is big
 ‘look how big this is.’
- c. Ivar, 3;05.07
 Daß dann **sagt** er ...
 that then says he
 ‘that he says then ...’

- **High proportion of EV2** reported: 7 V-final clauses out of 167 (4%).
- EV2 attested in all of *wenn*, *dass*, *wh*-complements; frequency of each unreported.
- **Topicalisation** compatible with all complementisers (though proportion unreported).
- Relatively **little Linear V2**: ‘Does not use the order COMP-V_{fin}-Subj-XP, except for those subordinate clauses where the element introducing it (a *wh*-word or a relative pronoun) functions as the subject of the clause.’ (Müller, 1996: 1016).

Proposed explanations:

- **1994**: missetting of the V2 parameter ([+FINITE] and [WH] incorrectly assigned to different heads). Yiddish-like grammar.

- **1996:** abducting an ‘incorrect’, Yiddish-like grammar. *Not* a case of transfer.
- **2003:** *transfer* from French, as a ‘relief’ strategy in the face of ambiguous input.

Outstanding questions:

- How widespread a pattern is Ivar’s system?
 - What is the proportion of EV2 observed in other children?
 - ‘Subparameters without triggering data’? (Müller, 2003: 166)
 - Need for more in-depth data collection: are there differences in word-order patterns across embedding markers in other children? (Schönenberger, 2001).
 - Current analyses contradictory: which one is empirically more successful?
- I take Müller (1994, *et seq.*) and the finer-grained analysis in Schönenberger (2001) as points of departure, and expand on their work.

3.2 Corpus study: Methodology

Corpus study on the development of CP in 5 German-Italian (simultaneous) bilinguals. All *strongly balanced*, bar AUR (per metric in Hager & Müller, 2015).

	Files	Age	MLUw
AUR	42	1;09-4;00	1.03-4.47
CAR	70	1;08-5;07	1.0-5.20
LUC	52	1;06-4;00	1.0-4.30
LUK	63	1;07-5;00	1.0-4.70
MAR	68	1;06-5;00	1.03-4.57

Table 1: Children studied (Müller et al., 2006)

Structures studied:

- **Word-order in embedded clauses** and types of embedding markers produced.
 - V-final order, linear V2, linear V3 order, (ambiguous/other)?
 - Do all embedding markers display the same surface word-order?
 - If EV3, any restrictions on the type of subjects we observe? (Schönenberger, 2001).

3.3 Corpus study: Results

3.3.1 Broad results

Overgeneralisation of embedded V2 across 4 of the 5 children².

- (11) a. AUR, 3;09.01
- Weil ich **hab** auch (recht)
because I have too right
‘Because I’m also right.’
- b. CAR, 2;09.25
- Weiss ich nicht was **ist** das
know I now what is this

²I set AUR aside in the rest of the data presentation, but I will return to him later.

- ‘I don’t know what this is.’
- c. CAR, 2;11.23
- Ja ist weich-e, wenn wenn **war** ich umgefallen
 yes is soft-FEM if if was I fallen
- ‘Yes, it is soft when I fell.’
- d. LUC, 3;03.04
- Ich zeig dir wo der **fährt** mit ‘m oller
 I show you where he drives with the scooter
- ‘I (will) show you where he is driving with the scooter.’
- e. LUK, 2;07.15
- Der muß runter gucken auf was **ist** passiert
 he must down look at what is happened
- ‘He must look down to what happened.’
- f. MAR, 3;01.27
- Weil die hexe **hat** hier drin gesl- gemacht
 because the witch has here in gesl- made
- ‘Because the witch has made it in here.’
- g. MAR, 3;02.12
- Ich zeig dir was **is** ein schwein
 I show you what is a pig
- ‘I (will) show you what is a pig.’

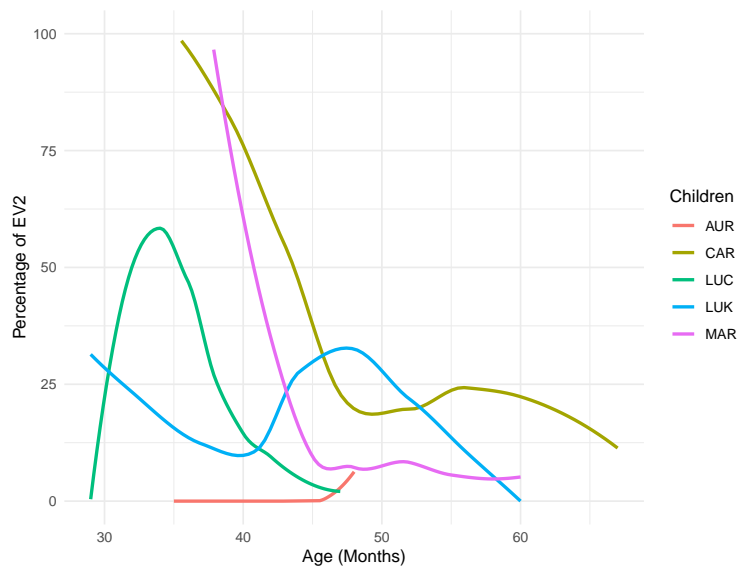


Figure 1: Proportion of EV2 by child and age

Two profiles of EV2 overgeneralisation observed:

- Children with **total** or **partial** absence of embedded V-final order.
- The following Table summarises the different proportions of EV2 per child; recall AUR does *not* exhibit overgeneralisation of EV2 to non-target-like contexts.

	EV2 start	V-final start	Proportion EV2
AUR	3;05.30	2;11.08	14.5%
CAR	2;08.21	3;04.08	54.5%
LUC	2;07.30	2;05.03	29.2%
LUK	2;07.29	2;07.15	16.5%
MAR	3;01.27	3;04.08	53.9%

Table 2: Proportion of EV2 across the four children until 4;00

Being more precise: Point of significant decrease in proportion of EV2 determined by **change-point analysis**, example below.

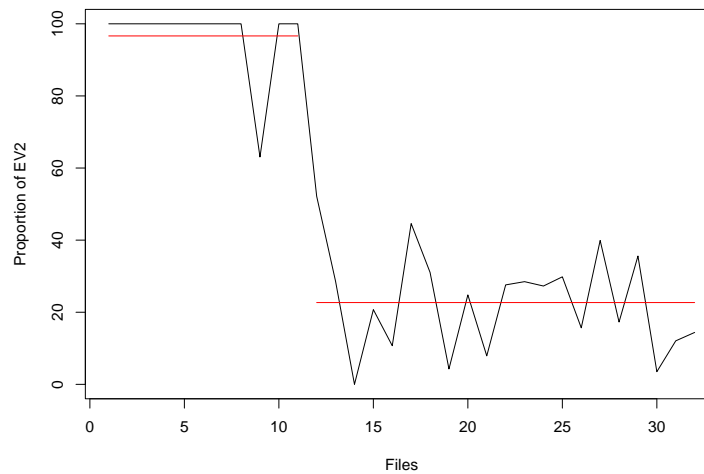


Figure 2: Change-point analysis on CAR's EV2 distribution

! Point of inflection in EV2 proportion **coincides** with significant increase in production of V-final orders. Change-point analysis on the distribution of EV2 and V-final orders (example in Figure 2) shows that their proportion decreases and increases (respectively) at similar times.

	EV2 start	EV2 decrease	V-final increase
CAR	2;08.21	3;04.08	3;07.07
LUC	2;07.30	3;01.02	3;01.02
LUK	2;07.29	2;09.18	2;10.01
MAR	3;01.27	3;06.09	3;07.12

Table 3: Rise and fall of EV2 vs V-final orders based on change-point analysis

→ **Inverse correlation** between EV2 frequency and V-final frequency → suggesting a stage of overgeneralised EV2 before it is abandoned, even if it co-exists with V-final.

	EV2 pre change-point
CAR	100%
LUC	39.59%
LUK	47.14%
MAR	96.7%

Table 4: Proportion of EV2 before change-point in all children

3.3.2 Fine-grained results

We now unpack these impressionistic results further, as follows:

- By word order (V-final, linear V2, linear V3)
- By embedding marker
 - By presence/absence of (non-default) topicalisation.
 - By type of (default) subject observed (pronominal vs phrasal).

→ **Focus on EV2 stage (pre-change-point).**

Zooming in – word order

- Like Schönenberger, we observe **two orders** in their EV2:

1. *complementiser V_{fin}...*

Linear V2

2. *complementiser XP V_{fin}...*

Linear V3

↔ Where XP generally = Subject, with exceptions to come later.

(12) a. CAR, 2;10.16

Das sind für die bonbons, wenn **hab** *ich* geburstag
this are for the chocolates if have I birthday

‘These/This are for the chocolates when I have my birthday’

b. LUC, 2;07.30

Mama (hat) gesagt von (erster) nur nich wie **soll** *man* angucken
mum has said of first only not how should one watch

‘Mama said from – from (first) – just not how you should watch.’

c. MAR, 3;05.11

Nein gle- gleich wenn *das* **is** fertig dann trinkt die
no gle- even when this is done then drink it

‘No, as soon as it is ready, drink it.’

- **Linear V2** often emerges before **Linear V3** in the four children, and these structures co-exist thereafter.

	Linear V2	<i>N</i>	Linear V3	<i>N</i>
CAR	2;08.21	16	2;11.13	19
LUC	2;07.30	2	2;10.24	3
LUK	2;07.15	1	2;08.12	3
MAR	3;02.12	18	3;01.27	13

Table 5: Emergence of Linear V2 and V3 orders and attestations during EV2 stage

- Potentially suggestive of some stage-like development from Linear EV2 > EV3 (also insinuated in Schönenberger, 2001), but too small a sample.
- Additionally, Linear EV2 most common with *wh*-V2, out of all embedding contexts. *Weil* presents EV3 only.

Zooming in – data by embedding marker

- (Non-target) EV2 with all of *weil* ‘because’, *wenn* ‘if/when’, *wh*-complements/relatives and (very rarely) *dass* ‘that’³.

³Other complementisers like *ob* ‘whether’ or *als* ‘as/when’ are late-acquired, so not produced at the stage where EV2 is predominant.

- Table 6 and Table 7 compare the proportion of EV2 with the most frequent embedding markers *before* and *after* the relevant change-point (Figure 2) in the children who show *total* absence.

Children with *total absence* – before change-point

	<i>wenn</i>	%	<i>wh</i>	%	<i>weil</i>	%	<i>dass</i>	%	All	%
CAR	0-12	100%	0-12	100%	0-11	100%	–	–	0-35	100%
MAR	1-1	50%	0-17	100%	0-12	100%	–	–	1-30	96.7%
Total	1-13	7.1%	0-29	100%	0-22	100%	–	–	1-65	98.4%

Table 6: Proportion of EV2 by embedding marker before change-point (CAR and MAR)

	<i>wenn</i>	%	<i>wh</i>	%	<i>weil</i>	%	<i>dass</i>	%	All	%
CAR	86-7	7.5%	57-0	0%	13-195	93.8%	2-0	0%	158-202	56.1%
MAR	45-3	6.3%	57-4	6.6%	33-38	53.5%	7-0	0%	142-45	24.1%
Total	131-10	7.1%	114-4	3.4%	46-233	83.5%	9-0	0%	300-247	45.2%

Table 7: Proportion of EV2 by embedding marker after change-point (CAR and MAR)

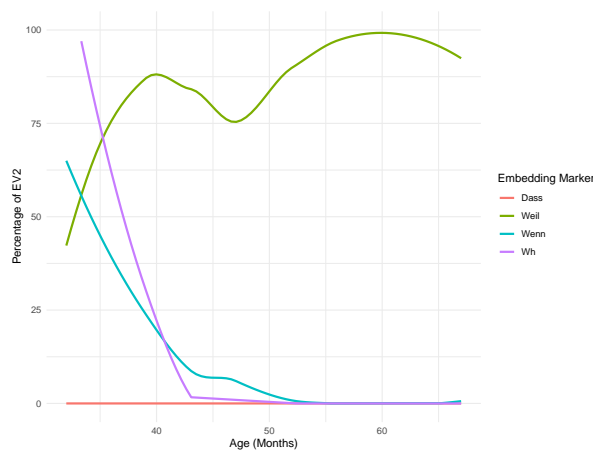


Figure 3: CAR's proportion of EV2 by embedding marker (CAR and MAR)

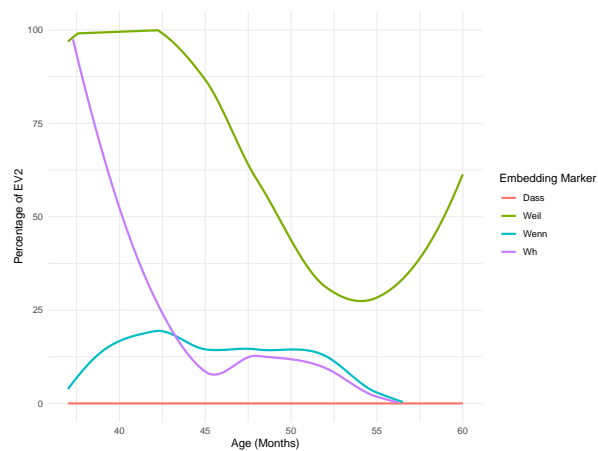


Figure 4: MAR's proportion of EV2 by embedding marker

- Table 8 displays the same data for the two children with *partial* absence; data is reported for all files, due to the comparatively lower frequency of EV2 in these children.

Children with *partial absence* – all files

	<i>wenn</i>	%	<i>wh</i>	%	<i>weil</i>	%	<i>dass</i>	%	All	%
LUC	19-1	5%	14-4	22.2%	26-24	48%	13-2	13.3%	72-31	30.1%
LUK	70-0	0%	52-5	8.8%	69-36	34.3%	16-0	0%	207-41	16.5%
Total	89-1	1.1%	66-9	12.3%	95-60	38.7%	19-2	14.3%	279-72	20.5%

Table 8: Proportion of EV2 by embedding marker (LUC and LUK)

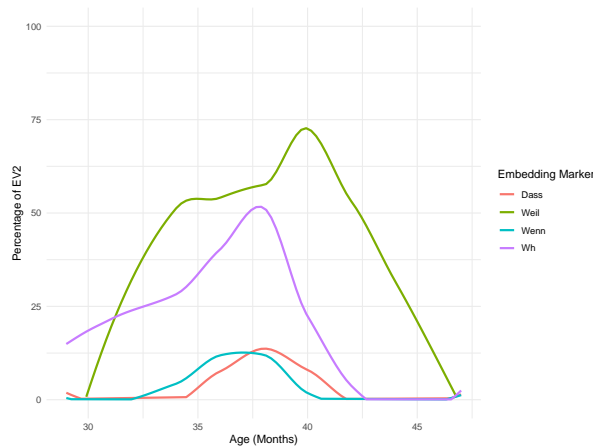


Figure 5: LUC's proportion of EV2 by embedding marker

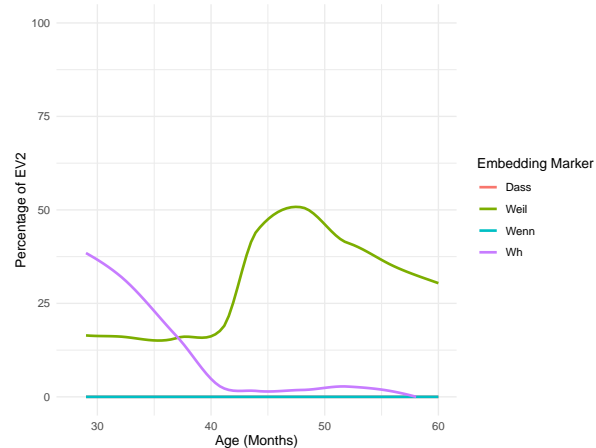


Figure 6: LUK's proportion of EV2 by embedding marker

A condensed overview of the use of EV2 with each of the embedding markers is offered below:

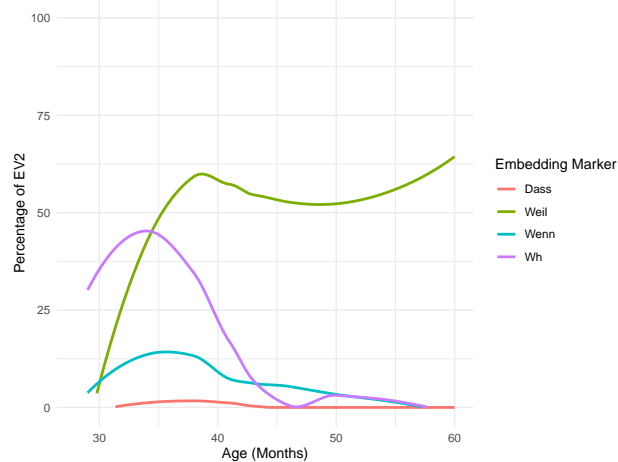


Figure 7: Proportion of EV2 by embedding marker, across all 4 children

→ **Potential additional pattern?** *Wh*-V2 appears more likely to be overgeneralised than *wenn*-V2⁴

Two noteworthy patterns exist in the dataset: these are (i) the abundance of *wh*-V2 across all children, and (ii) predominance of EV2 with *weil*, even after EV2 has been retracted from in other complementisers.

! **EV2 with *wh*-complements** → ungrammatical in almost all Germanic languages, including the most permissive (Vikner, 1995). With the exception of Afrikaans.

- Not just frequent but seemingly **generalised to predicates that generally disallow embedded *wh*-V2**: *discover*-type or 'resolutive' predicates.

↪ *gucken* ('look'), *wissen* ('know'), *hören* ('hear'), *sagen* ('say'), *erklären* ('explain').

- Some fit the characterisation of Question Predicates (McCloskey, 2006), but often **without the illocutionary force of a true question**.

(13) a. MAR, 3;05.11

Ich **erklär** wo is das wasser denn
I explain where is the water then

⁴Which I set aside here, due to the small sample.

‘I explain where the water is, then.’

b. CAR, 2;10.16

Der möchte nicht **hören** was machst du
he want not hear what do you

‘He doesn’t want to hear what you’re doing.’

! **Abundance of EV2 with *weil***, even after overall decrease in EV2.

- Generally felicitously used, though several ungrammatical structures exist, like (16a, 16c)⁵.

(14) a. MAR, 3;05.11

Kann keiner das kaputt machn **weil** da **is** klebe dran
can no-one this broken make because there is glue on.it

‘No-one can break this because there is glue on it.’

b. LUC, 3;05.00

Das kann man aber nicht rausdrücken **weil** sonst **wär** das kaputt
this can one but not push.out because otherwise would.be it broken.

‘But you can’t push it out because otherwise it would break.’

c. LUK, 4;02.28

Mother: Ja / aber guck ma das is der zweite ohne schuhe / diesn kung fu mann hier (den) (machen) wir
(auch) (noch) (weg) / ja /

Child: Ja **weil** das **is** ein räubaaa
yes because this is a robbery

‘Yes because it’s a robbery.’ (consultant note: ‘falscher Satzbau: “ist” muss am Ende stehen’)

→ This contrasts with *monolinguals*, e.g., Simone (Miller corpus), who appears to **default to V-final**.

- In her production from 1;09 to 4;00, out of 284 *weil*-clauses, only 22 present EV2 – 7.7%.

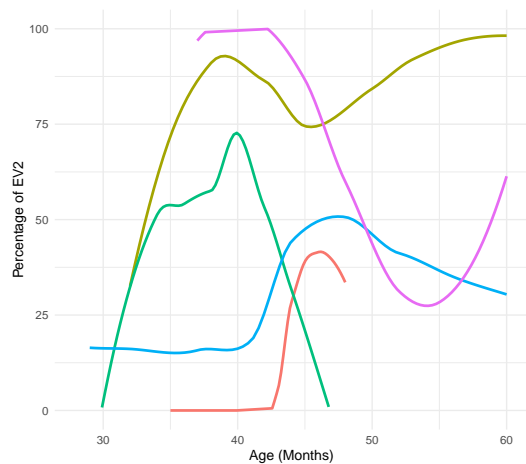


Figure 8: Proportion of EV2 with *weil* across all the children

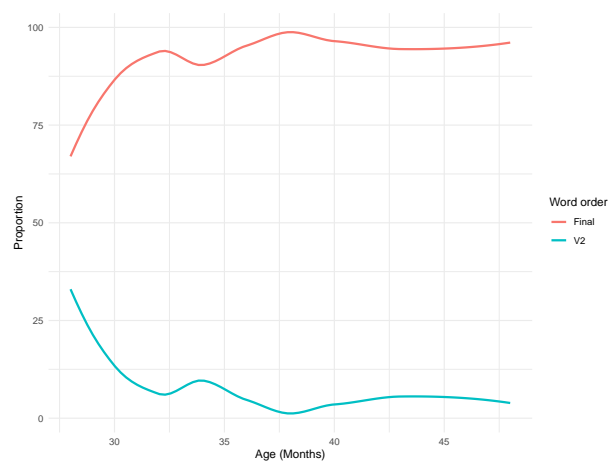


Figure 9: Proportion of EV2 with *weil* in a monolingual (Simone)

→ CAR and MAR, and to a lesser extent, LUC, **default instead to EV2**.

- Adult-like distribution of *weil* achieved significantly later.

⁵Based on native consultation with German native speakers.

	<i>damit</i>			<i>ob</i>		<i>als</i>		\emptyset	
CAR	11-0	3;04.22		18-0	4;03.09	23-0	4;01.00	20	4;02.11
LUC	4-0	3;01.12		1-0	3;10.29	2 (0)	2;11.07	1	3;04.15
LUK	3-0	3;04.25		5-0	2;11.26	5-0	4;01.20	4	3;08.03
MAR	–	–		2-0	4;08.09	–	–	3	4;10.11

Table 9: Attestations and emergence of other embedding markers

↪ **50% EV2** with *weil* in **adult corpora** (Kempen & Harbusch, 2016).

↪ Likely much *lower* in **child-directed speech**. MAR's adult input across all files (1;08-5;00) contains 62 *weil*-clauses, only 2 of which show V2 – **3.2%**.

- **Semantico-pragmatic distribution** of word order with *weil* plausibly **not acquired yet** (Antomo & Steinbach, 2010): possibly prioritising instead a structurally-based hypothesis (Gagliardi, 2012) and/or due to pragmatic difficulties (see Lewis et al., 2017, who show that children may prefer to interpret some complement clauses as assertive when they should not).
- Finally, other embedding markers found, but they are produced **late** and so with V-final order: *damit* 'so that', *ob* 'whether', *als* 'when', *obwohl* 'although'...
- Importantly, too, *Dass*-drop (' \emptyset ' below) with bridge verbs (EV2) is also rare.

Zooming in – embedding marker and topicalisation

! **Asymmetry** in which embedding markers present topicalisation with EV2.

- *Weil*-clauses with a (non-default) topic with EV2 are abundant. Very rarely, this is found with *dass*.

(15) a. CAR, 3;05.06

Weil **das** könn wir auch ziehn und das könn wir nich so schieben
because this can we also pull and this can we not so push

'Because we can pull this and we can't push that.'

b. LUC, 2;11.07

Weil **die** ham wir [s]on woanders geleg
because it have we already elsewhere put

'Because we have already put this somewhere else.'

(16) LUC, 3;02.06

Mama papa sagen dass da sind eier dinne / okay ↑
mum dad say that there are eggs in

'Mum (and) dad say that there are eggs in there.'

→ Embedded topicalisation with *wenn* and *wh*-complements is systematically **unattested** when these present EV2⁶.

Zooming in – embedding marker and type of subject

- Further, most embedding markers display an **apparent restriction on subject types**, bar *weil* (as in Schönenberger, 2001).
- Particularly true of *wenn* 'if', plausibly also *wh*-complements.
- Almost always **pronominal** subjects follow *Comp* → *Comp Subj_{pron} V_{fin}...*

	Subj _{pron}	Subj _{DP}	Topic
CAR	13 (<i>wenn</i>), 3 (<i>wh</i>), 84 (<i>weil</i>)	1 (<i>wh</i>), 26 (<i>weil</i>)	31 (<i>weil</i>)
LUC	1 (<i>wenn</i>), 1 (<i>wh</i>), 14 (<i>weil</i>)	3 (<i>weil</i>)	7 (<i>weil</i>), 2 (<i>dass</i>)
LUK	2 (<i>wh</i>), 10 (<i>weil</i>)	–	6 (<i>weil</i>)
MAR	1 (<i>wenn</i>), 1 (<i>wh</i>), 18 (<i>weil</i>)	5 (<i>weil</i>)	16 (<i>weil</i>)

Table 10: Type of subject by embedding marker during the EV2 stage

- What causes this asymmetry? Two options:

1. **Syntactic cause** – [Schönenberger \(2001\)](#): grammatical constraint on subjects and embedding markers, which follows from their structural position and the nature of pronominal items at this developmental stage.
2. **Extrasyntactic cause**: frequency? distribution of pronominal vs non-pronominal items in child speech? Alternatively, a more general grammatical constraint (not specific to EV2)?

↔ I argue against (1) → **V-final clauses show the same skew, especially at early stages, suggesting it cannot be (only) due to the syntactic derivation of EV2.**

- Even V-final *wenn* clauses display very few cases of non-pronominal subjects.
- Non-pronominal subjects emerge late, often *after* EV2 has been retracted from, and holds for children who do *not* show an EV2 stage (AUR).

	V-final <i>wenn</i>	Subj _{DP}	Start	End of EV2 stage
AUR	35	1 (2.9%)	3;09.01	No EV2
CAR	86	10 (11.6%)	4;02.25	3;04.08
LUC	19	2 (10.5%)	3;01.02	3;01.02
LUK	70	6 (8.5%)	2;10.01	2;09.18
MAR	46	3 (6.5%)	4;00.13	3;06.09

Table 11: Non-pronominal subjects with V-final *wenn*

→ Suggests a **skewed distribution** in pronominal/non-pronominal subjects of **potentially wider scope**, independent of EV2.

3.4 Interim summary: explananda

1. Total or partial absence of V-final at early stages.
2. Inverse correlation between frequency of V-final and EV2.
3. Co-existence of EV2 and EV3.
4. EV2 observed with all of *wenn*, *weil*, *wh*-complements and (rarely) *dass* – but with *differential* behaviour.
5. *Weil* (and possibly *dass*) allow topicalisation with EV2; *wenn* and *wh*-complements do *not*.

↔ Highly parallel to the description in [Schönenberger \(2001\)](#), and, partly, to [Müller \(1994, et seq.\)](#).

- However, apparent skew in subject types is a by-product of the distribution of (non-)pronominal subjects.

⁶With one exception in LUK: *Ich gucke, was da ist ist passiert* ‘I am looking at what happened there’

Next:

- We evaluate existing proposals for similar EV2 data in acquisition – Müller (1994, 1996, 2003), Schönenberger (2001).
 - Schönenberger (2001) is most successful, but it faces, nonetheless, several shortcomings – particularly *it lacks a developmental theory that explains EV2 overgeneralisation*.
- We introduce a new analysis, drawing on her ‘minimally split CP’.

4 Probing existing analyses

→ **Neither transfer, nor missetting of parameter (Yiddish-like)**

- Not Yiddish setting: *wh*-V2 predicted to be ungrammatical; Yiddish allows embedded topicalisation. Instead, patterns attested are expansions of (some) featural possibilities in German’s main clause (*pace* Müller, 1994, 1996).
- Not transfer from Italian V-to-T: I argue the **verb is moving to C** in their EV2 (*pace* Müller, 2003), and unlike some proposals for EV2 in Scandinavian children.

↔ V_{fin} systematically moves above Neg and Adv.

(17) a. MAR, 4;00.13

Weil sonst **sehn** wir es *nich*
because otherwise see we it not

‘Because otherwise we don’t see it.’

b. CAR, 2;11.13

Guck mal, was ich **konnte** *nicht*, was ich **konnte** *nich* laufen!
see once what I could not what I could not walk

‘Look what I could not – what I could not walk.’

c. LUK, 3;04.25

Nein guck ma was **ich** hol *jetzt*
no look once what I get now

‘No, look what I am getting now.’

d. CAR, 3;04.22

Ahah dann wär ich aber böse wenn du **warst** *gar* *nich* auf toilette
INTJ then would.be I but angry if you were absolutely not on toilet

‘Haha, then I would be angry if you were not on the toilet.’

↔ V_{fin} directly follows topicalised constituents

(18) a. LUC, 3;02.06

Weil *das* **hat** mama gekauft in italien
because this has mum bought in Italy

‘Because mum bought THIS in Italy.’

b. LUK, 2;10.01

Hm weil *da* **is** kein platz mehr
hm because there is no place more

‘Because there is no more space there.’

c. MAR, 3;08.27

In das auto habn wir ein bißchen geschlafn. Weil *da* **war** die nacht
 in the car have we a bit slept because there was the night

In the car, we slept a bit. Because it was (the) night there.

↪ $V_{\text{non-fin}}$ always precedes the object (OV) in complex structures with modals and auxiliaries.

(19) a. CAR, 2;11.13

Ich bin da drauf, wenn war ich, war so krank, wenn **habe** ich so viel **gesehen**
 I am there on.it if was I was so ill if have I so much seen

‘I’m on there, when I was ill or when I saw a lot.’

b. LUC, 3;03.04 Weil er **will** auch *ein*’ **haben**

because he want too one have

‘Because he also wants to have one.’

- Linear EV2/EV3 orders are found, *but* V3+ orders are unattested.

↪ Any resemblance to V2 would be accidental.

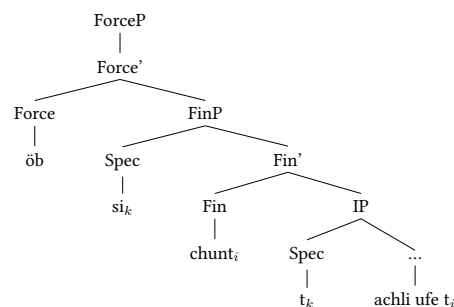
! AUR most clearly dominant in Italian, yet shows no EV2 stage → undermines transfer from Italian.

→ By implication, TP-based analysis of their V2 system also infeasible (see also [Vikner, 1995](#), for other issues).

We interpret the data as an extension of a Germanic pattern (V- and XP-movement to CP)

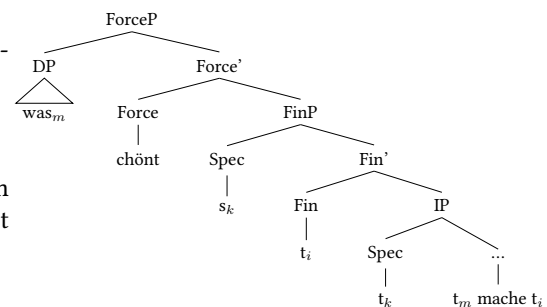
→ This leaves us with one other extant account for overgeneralised V2: [Schönenberger \(2001\)](#).

- Key proposal: ‘**minimally split CP**’, into ForceP and FinP.



([Schönenberger, 2001: 295](#))

- **Verb-movement** targets **different heads in the CP** depending on complementiser.
- Comp blocks topic movement higher than SpecFinP.
- Atonic subject pronouns move to the Wackernagel position (SpecFinP) ([Roberts, 1996](#)). Non-pronominal subjects must stay in IP.



([Schönenberger, 2001: 299](#))

- Emergent syntactic categories → Emergent cartography (or comparable structure) (i.a., [Ramchand & Svenonius, 2014](#); [Scontras et al., 2017](#); [Biberauer & Roberts, 2015](#); [Leivada & Westergaard, 2019](#); [Larson, 2021](#)).
- Supporting, *to the extent possible*, the representations assumed during development with empirical data.

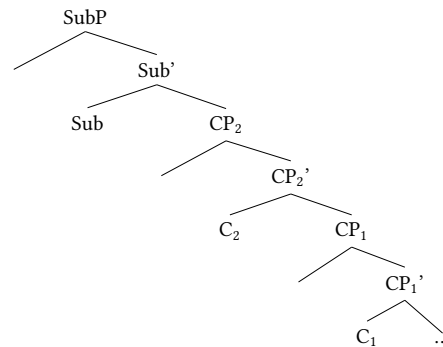
Analysis is two-part: (i) a ‘synchronic’ syntactic analysis of the EV2 stage, before (ii) motivating its potential development

Syntactic account

→ Embedded V-to-C and topic/subject movement evidence **a more richly articulated CP in the bilinguals** than in monolingual adult German.

- I tentatively propose three left-peripheral projections for the EV2 stage:

- SubP, from [Bhatt & Yoon \(1992\)](#), specific to embedded clauses.
- (Non-recursive) CP₁ and CP₂, from [Walkden \(2017\)](#)⁷.



- Draw on [Bhatt & Yoon's \(1992\)](#) two-way distinction between ‘**pure**’ (structurally higher, SubP) and ‘**modal-flavoured**’ complementisers (lower).
 - This will generate differential behaviour among complementisers + address the KRR effect.
- And a **minimally expanded CP**, analogous to [Walkden's \(2017\)](#) (non-recursive) CP₁ and CP₂ for main-clauses in monolingual German.
 - CP₁ ≈ FinP and FamP ([Frascarelli & Hinterhölzl, 2007](#)).
 - CP₂ ≈ FocusP until ForceP.

Deriving the patterns:

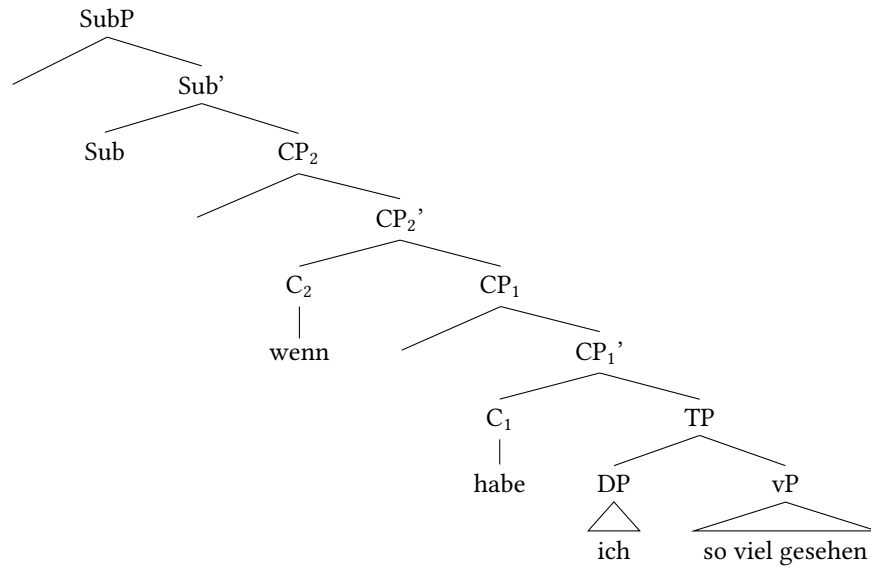
- Topicalised constituents in CP₂.
- Wh-complements/relatives and *wenn* ‘if’ in CP₂, being modal-flavoured.
- Subjects following Comp in EV3 hosted in CP₁
- In contrast, *weil* in SubP, thereby allowing topicalisation in CP₂ (see also [Antomo & Steinbach, 2010](#)).

→ Embedded topicalisation with *wh*-complements and *wenn* **ruled out**.

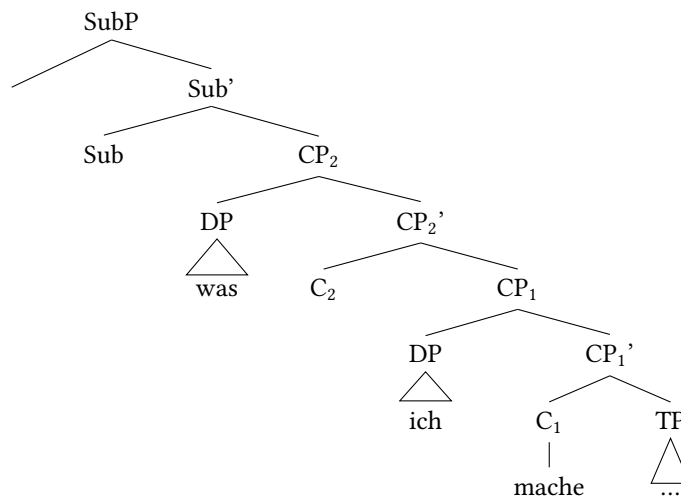
→ Existence of SubP avoids a violation of KRR, which would otherwise arise ([McCloskey, 2006](#)).

(22) Ich bin da drauf, wenn war ich, war so krank, **wenn habe ich** so viel **gesehen**

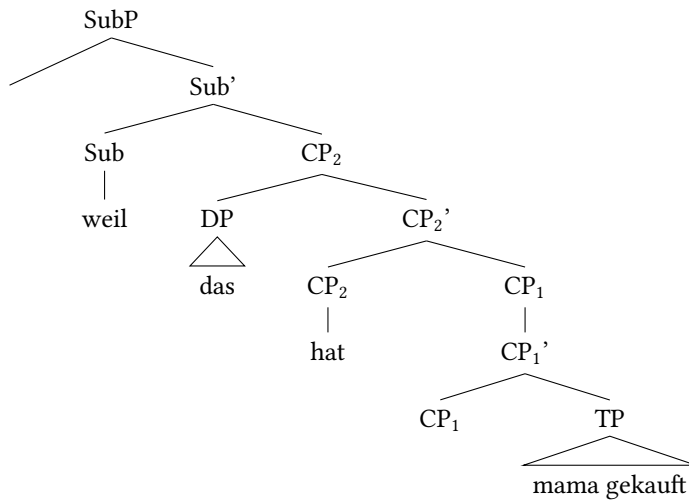
⁷cf. [Vikner \(1995\)](#) on CP recursion.



- (23) Guck ma **was** *ich* **mache** jetzt!
look once what I make now



- (24) **Weil** *das* **hat** mama gekauft in italien



- Co-existing linear EV2/3 down to **optionality in subject/topic raising** → already independently obtains in adult German (Grewendorf, 1989; Diesing, 1992; Haider, 1993) and in acquisition (van Kampen, 2010, 2020).

? What's the status of *dass* in the bilinguals? 'Pure' subordinator?

- Topicalisation allowed or not? 2 instances only in one child, but in practice *dass* emerges soon before or after retraction from EV2.
- Generating *dass* in Sub would incur KRR violation.

(Partial) developmental account

Before embedding is acquired

- First, the 'status' of the system, the CP and the knowledge in play *before* embedding is acquired.
- We assume **early development of (some form of) the CP** (like Continuity, inward maturation, i.a.) *pace* bottom-up maturation (cf. Radford, 1990, *et seq.*).
- All 5 children support this (Bosch & Biberauer, to appear): CP-structures available (and frequently produced) from earliest files.

	V2	Wh-Q	Y/N-Q	Top/Foc	Embed
HEL	1;09.11	1;09.11	1;09.11	1;11.00	2;02.18
SIM	2;02.11	2;03.11	2;03.25	2;03.11	3;01.03
AUR	2;10.10	3;05.11	2;10.10	2;10.10	2;11.18
CAR	1;10.08	1;10.08	1;10.08	1;11.12	2;08.21
LUC	2;01.19	2;05.16	2;05.16	2;02.22	2;06.13
LUK	2;03.06	2;03.06	2;03.06	2;04.09	2;05.06
MAR	2;00.16	2;04.16	2;04.16	2;04.16	3;01.27

Table 12: Emergence timings of CP-structures in their Germanic languages.

- Insofar as CP emergent, this **leaves room for subsequent refining** of the already-existing structure/features.
- We assume then that the child's starting point is a 'basic' (single-projection) CP, à la den Besten (Biberauer & Roberts, 2015). This may then be refined, subject to the left-peripheral structure required by the PLD.

Development of main clauses

- **CP is early acquired** → following Biberauer & Roberts (2015) (among several others, Soares, 2006; Roeper & de Villiers, 2011; Ramchand & Svenonius, 2014), this is initially a *basic* CP.
 - Eventually **PLD 'forces' a more expanded (main-clause) CP** → to acquire main-clause phenomena that require more CP-structure.
 - Frame setters, Contrastive Left Dislocation, Hanging Topic Left Dislocation → Haegeman & Greco (2016), particularly exploited in urban vernaculars (Walkden, 2017; Meelen et al., 2020; Sluckin, 2025).
- That these more articulated CP-structures emerge late has independent support in Germanic but, particularly, in Romance (Soares, 2006; Bosch, 2023; Bosch & Biberauer, to appear).
- We therefore propose a *parallel* CP-elaboration process in the embedded CP of these bilinguals – which does *not* obtain in German monolinguals.

Development of embedded clauses

- **Maximise Minimal Means** (Biberauer, 2019; see also Roberts, 2007): prioritise generalising structures and $[F]$ s already in the grammar.

- Conceivably on the basis of *ignorance* of more complex distinctions: e.g., semantico-pragmatic restrictions on EV2 (Hooper & Thompson, 1973)
- **Preliminary proposal:** acquirers amplify a regularity of a pattern in the input (V2/3 in main clauses), *boosted by SVO in Italian*, and extend it → integrate main-clause-like structure (expanded CP) in newly-acquired embedded clauses.
- ↪ Drives CP-internal complexification in ECs.
- **Source of SubP?** → an open question for all approaches assuming SubP in German. SubP required to account for (some) complementisers and, plausibly, to structurally distinguish main vs embedded clauses.
- Highly speculative, but makes some useful predictions/observations.
 - Link with *dass*-drop, which likewise permits embedded topicalisation.
 - Monolingual German/Germanic argued to have SubP (Julien, 2007; Antomo & Steinbach, 2010; Antomo, 2012), as well, and (a single) CP in ECs; each of which are more ‘exploited’ (exposed) in bilinguals.
 - Main ≠ Embedded Clauses structurally in both monolinguals and bilinguals (e.g., Julien, 2007; Heycock, 2017; see also Penthouse Principle).
- Eventual retraction from V-to-C and XP-movement in embedded clauses, in line with Feature Economy.
- ! Question: How does Ivar’s system (Müller, 1996) fit in this account?

Why CP-differentiation

- Provides a developmental rationale for the existence of this EV2 stage, *and* for its formal nature.
 - The ‘change’ aspect in their CP more readily amenable to neo-emergentist-type treatment, over (fully) cartographic alternatives, where, in the latter, the structure of the CP would be identical across stages.
- Connection with work supporting **crosslinguistically variable degrees of elaboration of the CP** (Biberauer & Roberts, 2015; Walkden, 2017; Hsu, 2017; Bosch, 2023; Cournane & Klævik-Pettersen, 2023).
- One case study in an (ongoing) **broader research project** → an apparently ‘disparate’ set of **acquisitional** and **diachronic** patterns, including EV2 overgeneralisation, may fall out from this ‘**categorial differentiation**’ logic.

6 Future directions in diachronic extensions of EV2

Diachronic predictions: later-acquired properties, requiring more complex input, expected to be vulnerable.

- [F]-overgeneralisation may lead to change if acquirers do not retract.
- ↪ Brief evidence from Germanic varieties influenced by Romance and/or VO languages: **Afrikaans**, **Manenberg Kaaps** and **Cimbrian**⁸.

Afrikaans (Biberauer, 2017, 2024)

- **Very contact-influenced**, predominantly by **VO languages** (Portuguese Creole, Malay, English, Bantu, etc.). No major contact language is V2.
- **Strict V2/3 system**, like standard German → resisted change in the outer periphery.
- No ‘loss’ or ‘relaxation’ of V2 observed, rather additional **innovative V2** options → more change in embedded and other V2 options.

⁸EV2 overgeneralisation also found in the history of Yiddish, and other languages. I set this aside due to time considerations.

- EV2 with *dat*-drop across *all* of Classes A-E (Hooper & Thompson, 1973).
- Embedded *wh*-V2 (unique in Germanic).
- EV2 with polar interrogatives.

(25) a. Afrikaans

Ek wonder **wat eet** hulle saans (**eet**).

I wonder what eat they evenings eat

‘I wonder what they eat in the evenings.’

b. Ek sal uitvind **hoe kom** ons by die gebou in (**kom**).

I shall out.find how come us by the building in come

‘I will find out how we (can) get into the building.’

c. Ek weet nie₁ **of sal** daar werk vir my wees nie₁.

I know not if shall there work for me be POL

‘I don’t know if there will be work for me.’

(Biberauer, 2017: 80, 91)

- **Manenberg Kaaps** shows a similar distribution (Van Rooi, 2022) – contact-influenced variety of Afrikaans spoken on the Cape Peninsula.

- Also strict V2/V3, Kiezdeustch-style non-canonical V3 is ungrammatical.
- *Dat*-drop across all verb classes, like Afrikaans.
- *Wh*-V2.

→ “Suggests a greater role for L1 speakers in shaping the grammar than sometimes acknowledged (e.g. the ‘creole’ hypothesis)” (from Biberauer, 2024).

→ “Early shift to Dutch among Khoi and (former) slave populations; L1 Dutch/Afrikaans-speaking communities more diverse than typically acknowledged” (from Biberauer, 2024).

(26) a. *NEG V*, Cimbrian

I bill **az**-to *nèt geast* ka Tria

I want that-you.CL not go to Trento

‘I do not want you to go to Trento’

b. *V NEG*

I boaz ke **du geast nèt** ka Tria

I know that you go not to Trento

‘I know you do not go to Trento’

(Bidese et al., 2014: 490)

Outstanding questions

- Why do we not appear to see (as extensive) change in the main clause?
- Range of problems to sort out: how does SubP get integrated to the structure? Which elements are exponed by SubP in bilingual vs monolingual German?
- What’s the status of the Kayne-Rizzi-Roberts effect during syntactic development?
- Which patterns are observed in Germanic-Germanic bilinguals?
- How do we understand partly divergent systems of EV2, e.g., Ivar?
- Bigger sample desirable.
- Why do these bilinguals overlap almost identically with Schönenberger (2001)?
- Why is overgeneralised EV2 also observed in monolinguals of some, but not all, Germanic languages (e.g., Swiss German)?

7 Conclusion and implications

New corpus study on 5 German-Italian bilinguals, and the significance of their overgeneralised EV2.

- **Empirical contribution:** New in-depth quantitative study on the overgeneralisation of EV2 in German-Italian bilinguals, supplementing existing work in (primarily) monolinguals, and bilinguals.
 - Linear V2 and V3 observed.
 - Constraints on EV2 in these bilinguals: Germanic pattern, pre-verbal topicalisation.
 - These do not necessarily (fully) coincide with other reported data (e.g., Ivar), but often suggestively overlap (e.g., Swiss German monolinguals).
 - Broad **theoretical question** at stake: how does the CP *change* throughout development?
- Argued the EV2 data is one example of CP-complexification in development.
- Proposed a *two-fold* analysis of the EV2 stage: (i) a *static* characterisation of the EV2 stage (à la [Schönenberger, 2001](#)); (ii) a (partial) *developmental* motivation for (i) (lesser studied bit!).
 - ↔ Consideration of (ii) arguably speaks in favour of (at least partly) emergent structure in these children, over a fully cartographic approach to V2.
 - Broader **implications:** diachronic parallels, insights on the typology of (E)V2, role of ‘economy’ principles in acquisition and change.
 - **Remaining work:**
 - Larger sample (ideally).
 - Exploring different language pairings (e.g., Germanic-Germanic bilinguals).
 - Several ‘gaps’ in the developmental account.
 - Using this data to understand of contact-induced diachronic change in V2 systems.

References

- Antomo, Mailin. 2012. Interpreting embedded verb second: Causal modifiers in German. In *Proceedings of console 17*, 27–51.
- Antomo, Merten & Markus Steinbach. 2010. Desintegration und interpretation: Weil-v2-sätze an der schnittstelle zwischen syntax, semantik und pragmatik. *Zeitschrift für Sprachwissenschaft* 29(1).
- den Besten, H. 1983. On the interaction of root transformations and lexical deletive rules. In W. Abraham (ed.), *On the formal syntax of West-Germania*, 47–131. Amsterdam: John Benjamins.
- Bhatt, Rajesh & Jin Young Yoon. 1992. On the composition of comp and parameters of v-2. In D. Bates (ed.), *Proceedings of wccfl*, vol. 10, 41–53. Stanford CSLI Publications.
- Biberauer, Theresa. 2002. Reconsidering embedded verb second: how ‘real’ is this phenomenon? *RCEAL Working Papers* 8. 25–60.
- Biberauer, Theresa. 2017. Optional v2 in modern Afrikaans: Probing a Germanic peculiarity. In B. Los & P. de Han (eds.), *Word order change in acquisition and language contact: Essays in honour of ans van kemenade*, 79–99. Amsterdam: John Benjamins.
- Biberauer, Theresa. 2019. Factors 2 and 3: Towards a principled approach. *Catalan Journal of Linguistics (Special Issue)* 45–88.
- Biberauer, Theresa. 2024. The (c)overt complexity of the Afrikaans pre-field: a closer look at V2 and V3. Talk presented at SyntaxLab (Cambridge).

- Biberauer, Theresa & Ian Roberts. 2015. Rethinking formal hierarchies: A proposed unification. *Cambridge Occasional Papers in Linguistics* 7. 1–31.
- Bidese, Ermenegildo, Andrea Padovan & Alessandra Tomaselli. 2013. Bilingual competence, complementizer selection and mood in Cimbrian. *Dialektologie in neuem Gewand: Zu Mikro-/Varietätenlinguistik, Sprachenvergleich und Universalgrammatik* 47–58.
- Bidese, Ermenegildo, Andrea Padovan & Alessandra Tomaselli. 2014. The syntax of subordination in Cimbrian and the rationale behind language contact. *STUF* 67(4). 489–510.
- Bosch, Núria. 2023. *Emergent Syntax and Maturation: a neo-emergentist approach to syntactic development*: University of Cambridge MPhil thesis.
- Bosch, Núria & Theresa Biberauer. to appear. On Another Topic, How Do Acquisition Orders Vary? The Left-Periphery and Topicalization in Bilingual and Monolingual Acquisition. In *Proceedings of bucl 49*, .
- Boser, Katherine, Barbara Lust, Lynn Santelmann & John Whitman. 1992. The Syntax of CP and V-2 in Early Child German (ECG): The Strong Continuity Hypothesis. In *Proceedings of the Northeast Linguistic Society (NELS) 22*, 51–66. University of Massachusetts, Amherst.
- Chomsky, Noam. 2005. Three factors in language design. *Linguistic Inquiry* 36(1). 1–22.
- Cormany, Ed. 2015. Changes in Friulano subject clitics: Conflation and interactions with the left periphery. In T. Biberauer & G. Walkden (eds.), *Syntax over time: Lexical, morphological, and information–structural interactions*, 249–264. Oxford: Oxford University Press.
- Cournane, Ailis & Espen Klævik-Pettersen. 2023. The role of the conservative learner in the rise and fall of verb-second. *Journal of Historical Syntax* 7(6-19). 1–48.
- Diesing, Molly. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- Frascarelli, Mara & Roland Hinterhölzl. 2007. Types of topics in German and Italian. In K. Schwabe & S. Winkler (eds.), *On information structure, meaning and form: Generalizations across languages*, 87–116. Amsterdam: John Benjamins.
- Fritzenschaft, Agnes, Ira Gawlitzek-Maiwald, Rosmarie Tracy & Susanne Winkler. 1990. Wege zur komplexen Syntax. *Zeitschrift für Sprachwissenschaft* 9. 52–134.
- Gagliardi, Ann C. 2012. *Input and intake in language acquisition*: University of Maryland, College Park dissertation.
- Giorgi, Alessandra & Fabio Pianesi. 1997. *Tense and aspect: From semantics to morphosyntax*. Oxford: Oxford University Press.
- Grewendorf, Günther. 1989. *Ergativity in German*. Berlin, Boston: De Gruyter Mouton. doi:10.1515/9783110859256.
- Grewendorf, Günther & Cecilia Poletto. 2011. Hidden verb second: The case of Cimbrian. In M. T. Putnam (ed.), *Studies on german-language islands*, vol. 123 Studies in Language Companion Series, 301–346. John Benjamins Publishing Company.
- Gärtner, Hans-Martin. 2016. A note on the Rich Agreement Hypothesis and varieties of embedded V2. *Working Papers in Scandinavian Syntax* 96. 1–13.
- Haegeman, Liliane & Ciro Greco. 2016. Frame setters and the macro variation of subject-initial V2. Ms. <https://ling.auf.net/lingbuzz/003226>.
- Hager, Malin & Natascha Müller. 2015. Ultimate attainment in bilingual first language acquisition. *Lingua* 164. 289–308.
- Haider, Hubert. 1993. *Deutsche Syntax Generativ*. Tübingen: Günter Narr.
- Heycock, Caroline. 2017. Embedded root phenomena. In M. Everaert & H. C. van Riemsdijk (eds.), *The wiley blackwell companion to syntax, second edition*, Wiley Blackwell.

- Heycock, Caroline, Antonella Sorace, Zakaris Svabo Hansen & Frances Wilson. 2013. Acquisition in variation (and vice versa): V-to-t in faroese children. *Language Acquisition* 20(1). 5–22.
- Holmberg, Anders. 2015. Verb second. In T. Kiss & A. Alexiadou (eds.), *Syntax. theory and analysis: An international handbook*, 342–383. Berlin: de Gruyter.
- Hooper, Joan & Sandra Thompson. 1973. On the applicability of root transformations. *Linguistic Inquiry* 4. 465–497.
- Hsu, Brian. 2017. Verb second and its deviations: An argument for feature scattering in the left periphery. *Glossa: a journal of general linguistics* 2(1). 35.
- Jensberg, Hanna R., Merete B. Anderssen, Terje Lohndal, Bjørn Lundquist & Marit Westergaard. 2024. Verb placement in embedded clauses in heritage Norwegian. *International Journal of Bilingualism* doi:10.1177/13670069241260250.
- Julien, Marit. 2007. Embedded V2 in Norwegian and Swedish. *Working Papers in Scandinavian Syntax* 80. 103–161.
- van Kampen, Jacqueline. 2020. Discourse-related v1 declaratives in dutch. In E. Tribushinina & M. Dingemanse (eds.), *Linguistics in the netherlands 2020*, vol. 37 Linguistics in the Netherlands, 149–164. Amsterdam: John Benjamins Publishing Company. doi:10.1075/avt.00043.kam.
- Kempen, Gerard & Karin Harbusch. 2016. Verb-second word order after German *weil* ‘because’: Psycholinguistic theory from corpus-linguistic data. *Glossa: a journal of general linguistics* 1(1). 3.1–32. doi:10.5334/gjgl.6.
- Larson, Richard K. 2021. Rethinking cartography. *Language* 97(2). 245–268.
- Leivada, Evelina & Marit Westergaard. 2019. Universal linguistic hierarchies are not innately wired. evidence from multiple adjectives. *PeerJ* 7. e7438.
- Lewis, Shevaun, Valentine Hacquard & Jeffrey Lidz. 2017. “Think” Pragmatically: Children’s Interpretation of Belief Reports. *Language Learning and Development* 13(4). 395–417.
- McCloskey, James. 2006. Questions and questioning in a local English. In E. H. Raffaella Zanuttini, Héctor Campos & P. Portner (eds.), *Crosslinguistic research in syntax and semantics: Negation, tense, and clausal architecture*, 87–126. Washington DC: Georgetown University Press.
- Meelen, Marieke, Khalid Mourigh & Lisa Lai-Shen Cheng. 2020. V3 in urban youth varieties of Dutch. In A. Bárány, T. Biberauer, J. Douglas & S. Vikner (eds.), *Syntactic architecture and its consequences II: Between syntax and morphology*, 327–355. Berlin: Language Science Press.
- Müller, Natascha. 1994. Parameters Cannot Be Reset: Evidence from the Development of COMP. In J. Meisel (ed.), *Bilingual first language acquisition: French and german grammatical development*, Amsterdam: John Benjamins.
- Müller, Natascha. 1996. V2 in first-language acquisition: early child grammars fall within the range of universal grammar. *Linguistics* 34(5). 993–1028.
- Müller, Natascha. 2003. Transfer in bilingual first language acquisition. *Bilingualism: Language and Cognition* 1(3). 151–171.
- Müller, Natascha, Tanja Kupisch, Katrin Schmitz & Katja Cantone. 2006. *Einführung in die Mehrsprachigkeitsforschung. Französisch, Italienisch*. Tübingen.
- Penner, Z. 1990. On the Acquisition of Verb Placement and Verb Projection Raising in Bernese Swiss German. In M. Rothweiler (ed.), *Spracherwerb und grammatik*, vol. 3 Linguistische Berichte, Wiesbaden: VS Verlag für Sozialwissenschaften.
- Penner, Z. & T. Bader. 1991. Main Clause Phenomena in Embedded Clauses: The Licensing of Embedded V2-Clauses in Bernese Swiss German. *The Linguistic Review* 8(1). 75–96. doi:10.1515/tlir.1991.8.1.75.
- Poeppel, David & Ken Wexler. 1993. The Full Competence Hypothesis of Clause Structure in Early German. *Language* 69(1). 1–33.

- Poletto, Cecilia. 2002. The left-periphery of V2-Rhaetoromance dialects: A new view on V2 and V3. In S. Barbiers, L. Cornips & S. van der Kleij (eds.), *Syntactic Microvariation*, 214–242. Amsterdam: Meertens Institute.
- Radford, Andrew. 1990. *Syntactic theory and the acquisition of English syntax: The nature of early child grammars of English*. Oxford: Wiley Blackwell.
- Ramchand, Gillian & Peter Svenonius. 2014. Deriving the functional hierarchy. *Language sciences* 46. 152–174.
- Ringstad, Tina & Dave Kush. 2021. Learning embedded verb placement in Norwegian: Evidence for early overgeneralization. *Language Acquisition* 28(4).
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In L. Haegeman (ed.), *Elements of grammar*, 281–337. Dordrecht: Kluwer.
- Roberts, Ian. 1996. Remarks on the Old English C-system and the Diachrony of V2. In E. Brandner & G. Ferraresi (eds.), *Language change and generative grammar* Linguistische Berichte, Sonderheft 7, 154–164. Opladen: Westdeutscher Verlag.
- Roberts, Ian. 2007. *Diachronic Syntax*. Oxford: Oxford University Press 1st edn.
- Roeper, Thomas & Jill de Villiers. 2011. The acquisition path for wh-questions. In J. de Villiers & T. Roeper (eds.), *Handbook of generative approaches to language acquisition*, vol. 41 Studies in Theoretical Psycholinguistics, Dordrecht: Springer. doi:10.1007/978-94-007-1688-9_6.
- Santelmann, Lynn. 1995. *The Acquisition of Verb Second Grammar in Child Swedish*: Cornell University dissertation.
- Schönenberger, Manuela. 2001. *Embedded V-to-C in Child Grammar: The Acquisition of Verb Placement in Swiss German*. Dordrecht: Kluwer.
- Scontras, Gregory, Judith Degen & Noah D. Goodman. 2017. Subjectivity Predicts Adjective Ordering Preferences. *Open Mind* 1(1). 53–66.
- Sluckin, Benjamin L. 2025. Revisiting the syntax and development of Kiezdeutsch V3: a new perspective. *Journal of Germanic Linguistics* Retrieved from <https://ling.auf.net/lingbuzz/007246>.
- Soares, Catarina. 2006. *La syntaxe de la périphérie gauche en portugais européen et son acquisition*. Paris: University of Paris 8 dissertation.
- Taeschner, Traute. 1983. *The sun is feminine. a study on the language acquisition in bilingual children*. Berlin: Springer.
- van Kampen, Jacqueline. 2010. Typological guidance in the acquisition of V2 Dutch. *Lingua* 120(2). 264–283.
- Van Rooi, Chevăn. 2022. *The sociosyntax of verb-second and verb-third placement in manenberg kaaps*. University of the Western Cape MA thesis.
- Vikner, Sten. 1995. *Verb movement and expletive subjects in the Germanic languages*. Oxford: Oxford University Press.
- Waldmann, Christian. 2014. The Acquisition of Neg-V and V-Neg Order in Embedded Clauses in Swedish: A Microparametric Approach. *Language Acquisition* 21(1). 45–71. <http://www.jstor.org/stable/24763806>.
- Walkden, George. 2017. Language contact and V3 in Germanic varieties new and old. *The Journal of Comparative Germanic Linguistics* 20. 49–81.
- Westergaard, Marit. 2009. *The Acquisition of Word Order*. Amsterdam: John Benjamins.
- Westergaard, Marit & Kristine Bentzen. 2007. The (non-) effect of input frequency on the acquisition of word order in Norwegian embedded clauses. In I. Gülzow & N. Gagarina (eds.), *Frequency effects in language acquisition: Defining the limits of frequency as an explanatory concept*, 271–306. Berlin, New York: De Gruyter Mouton.

- Westergaard, Marit, Antonella Sorace, Caroline Heycock & Kristine Bentzen. 2014. Variable verb placement in embedded clauses: comparing English and Norwegian children. In C. Contemore & L. D. Pozzo (eds.), *Inquiries into linguistic theory and language acquisition: Papers offered to adriana belletti*, 229–238. Siena: CISCL Press.
- Wiklund, Anna-Lena, Kristine Bentzen, Gunnar Hrafn Hrafnbjargarson & Þorbjörg Hróarsdóttir. 2009. On the distribution and illocution of v2 in scandinavian that-clauses. *Lingua* 119(12). 1914–1938. doi:10.1016/j.lingua.2009.03.008.
- Wolfe, Sam. 2015. The nature of Old Spanish verb second reconsidered. *Lingua* 164. 132–155.