

# V2 all the way down?

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

*SyntaxLab, 25 February*

**Núria Bosch**

University of Cambridge

✉ [nb611@cam.ac.uk](mailto:nb611@cam.ac.uk)

🌐 [nuria-bosch.github.io](https://nuria-bosch.github.io)









1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

1. Introduction
2. Background
3. The data
4. Probing existing analyses
5. Proposal
6. Conclusion

## 2. Background











## Background

## Verb Second

### 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.

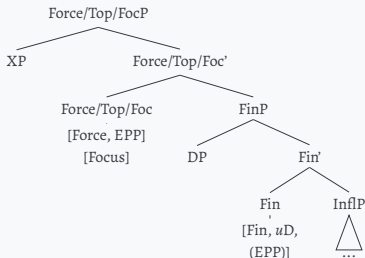
(2) [ForceP (XP) Force [TopP (XP) Top [FocP (XP) Foc [FinP (XP) **Fin-V<sub>fin</sub>** ... ] ] ] ]

(3) [<sub>ForceP</sub> (XP) **Force-V<sub>fin</sub>** [<sub>TopP</sub> (XP) Top [<sub>FocP</sub> (XP) Foc [<sub>FinP</sub> (XP) Fin ... ] ] ]

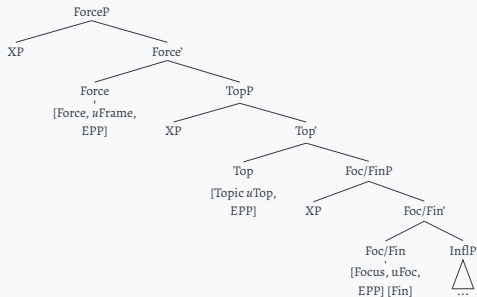




#### (4) Old English V3



(5) **Old Sicilian, Old Italian V4**



(Hsu, 2017: 18, 20)

## Background

## 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** V2<sup>1</sup>. 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.

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











## Background

## 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)



## Acquisition of (embedded) V2

- Theoretical significance of EV2 and V-final orders in **German-Italian bilinguals**, who show overgeneralisation of EV2.
- Case-study highly comparable to Müller (1994, *et seq.*) and Schönenberger (2001), but with **different theoretical results**.
  - I argue *not* a case of Yiddish-type setting (*pace* Müller, 1996).
  - I argue *not* straightforwardly a case of transfer of Italian-like syntax (*pace* Müller, 2003).
- I argue a case of developmental complexification of the (embedded) CP.
- Supporting parallels in the diachrony and contact scenarios of V2.





### 3. The data

- 3.1. A precedent
- 3.2. Corpus study: Broad results
- 3.3. Corpus study: Fine-grained results

## 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 Pascas show required V-final order throughout.

- (10) a. Erst **wenn** wir **sind** fertig mit das (3;04.09; Ivar)  
first when we are ready with it  
'Not until we have finished it.'
- b. Guck mal **wie** des **is** groß (3;08.01; Ivar)  
look once how this is big  
'look how big this is.'
- c. **Daß** dann **sagt** er ... (3;05.07; Ivar)  
that then says he  
'that he says then ...'

## 24/91

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.



## A precedent

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

- Outstanding questions
  - How widespread a pattern is Ivar's system?
  - What is the proportion of EV2 observed in other children?
  - 'Subparameters without triggering data'?
  - 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.

## The data

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

- **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).

	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)

## The data

## Broad results

- Overgeneralisation of embedded V2 across 4 of the 5 children<sup>2</sup>.
- (11) a. Weil ich **hab** auch (recht)  
because I have too right  
'Because I'm also right.' (AUR, 3;09.01)
- b. Weiss ich nicht was **ist** das  
know I now what is this  
'I don't know what this is.' (CAR 2;09.25)
- c. 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.' (CAR 2;11.23)
- d. 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.' (LUC, 3;03.04)

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



## The data

## Broad results

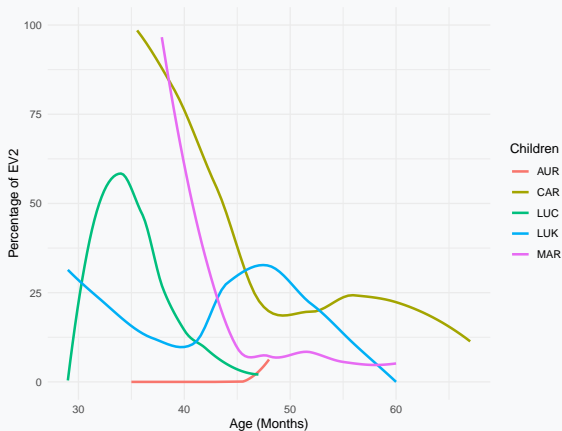
- Overgeneralisation of embedded V2 across 4 of the 5 children<sup>3</sup>.

- (12) a. Der muß runter gucken auf was **ist** passiert  
he must down look at what is happened  
'He must look down to what happened.' (LUK 2;07.15)
- b. Weil die hexe **hat** hier drin gesl- gemacht  
because the witch has here in gesl- made  
'Because the witch has made it in here.' (MAR 3;01.27)
- c. Ich zeig dir was **is** ein schwein  
I show you what is a pig  
'I (will) show you what is a pig.' (MAR 3;02.12)

<sup>3</sup>I set AUR aside in the rest of the data presentation, but I will return to him later.

## The data

## Broad results



**Figure 1:** Proportion of EV2 by child and age





# The data

## Broad results

- ! Point of inflection in EV2 proportion **coincides** with significant increase in production of V-final orders.

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

**Table 3:** Rise and fall of EV2 vs V-final orders

- **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.

# The data

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

# The data

## Finer-grained results

- 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).**

# The data

## 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.

- (13)
- 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' (CAR, 2;10.16)
  - 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.' (LUC, 2;07.30)
  - 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.' (MAR 3;05.11)





# The data

## Zooming in – word order

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

	Linear V2	N	Linear V3	N
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.

## The data

## 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’<sup>4</sup>.

### Children with *total absence* – before change-point

	wenn	%	wh	%	weil	%	dass	%	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%
<b>Total</b>	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)

<sup>4</sup>Other complementisers like *ob* 'whether' or *als* 'as/when' are late-acquired, so not produced at the stage where EV2 is predominant.

## The data

## Zooming in – data by embedding marker

- (Non-target) EV2 with all of **weil** 'because', **wenn** 'if', **wh-complements/relatives** and (very rarely) **dass** 'that'<sup>5</sup>.

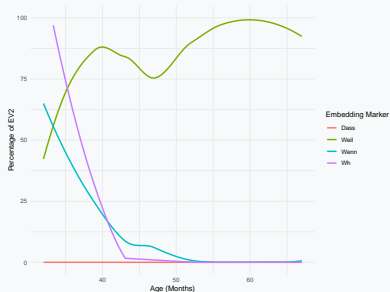
### Children with *total absence* – after change-point

	wenn	%	wh	%	weil	%	dass	%	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%
<b>Total</b>	131-10	7.1%	114-4	3.4%	46-233	83.5%	9-0	0%	300-247	45.2%

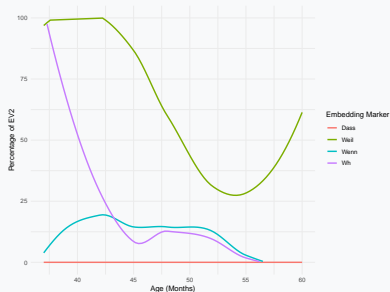
**Table 7:** Proportion of EV2 by embedding marker after change-point (CAR and MAR)

<sup>5</sup>Other complementisers like *ob* 'whether' or *als* 'as/when' are late-acquired, so not produced at the stage where EV2 is predominant.

## The data



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



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

## The data

## 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’<sup>6</sup>.

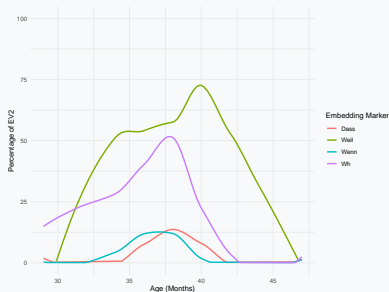
### Children with *partial absence* – all files

	wenn	%	wh	%	weil	%	dass	%	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%
<b>Total</b>	89-1	1.1%	66-9	12.3%	95-60	38.7%	19-2	14.3%	279-72	20.5%

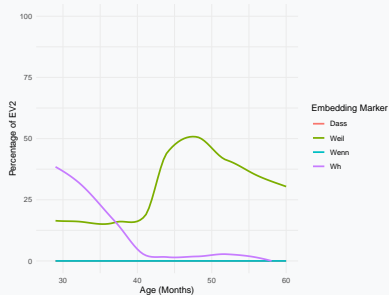
**Table 8:** Proportion of EV2 by embedding marker (LUC and LUK)

<sup>6</sup>Other complementisers like *ob* 'whether' or *als* 'as/when' are late-acquired, so not produced at the stage where EV2 is predominant.

## The data

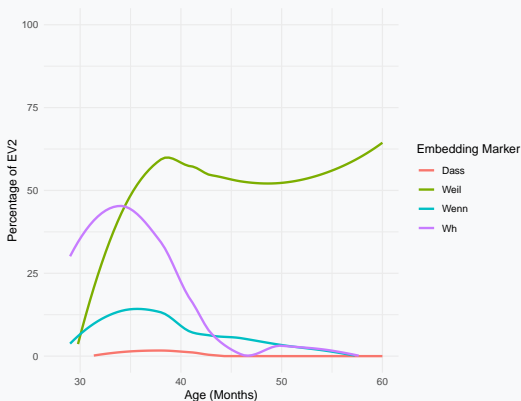


**Figure 5:** LUC's proportion of EV2 by embedding marker



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

# The data

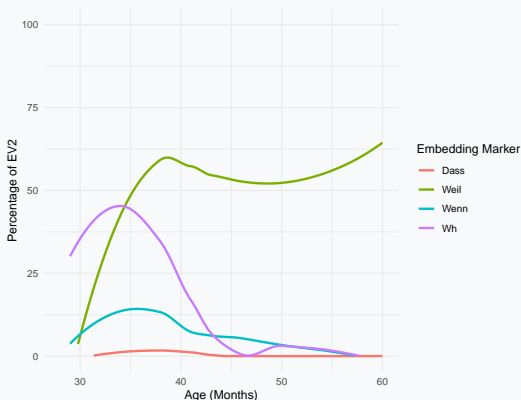


**Figure 7:** Proportion of EV2 by embedding marker, across all 4 children

<sup>7</sup>Which I set aside here, due to the small sample.



# The data



**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*-V2<sup>7</sup>**

<sup>7</sup>Which I set aside here, due to the small sample.

# The data

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

# The data

! **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**.

- (15) a. Ich **erklär** wo is das wasser denn  
I explain where is the water then  
‘I explain where the water is, then.’ (MAR 3;05.11)
- b. Der möchte nicht **hören** was machst du  
he want not hear what do you  
‘He doesn’t want to hear what you’re doing.’ (CAR, 2;10.16)

# The data

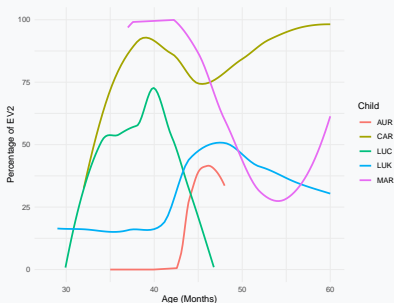
- ! Abundance of **EV2 with weil**, even after overall decrease in EV2.
- Generally felicitously used, though several ungrammatical structures exist, like (16a, 16c)<sup>8</sup>.

- (16) a. 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.' (MAR, 3;05.11)
- b. 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.' (LUC 3;05.00)
- c. 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') (LUK, 4;02.28)

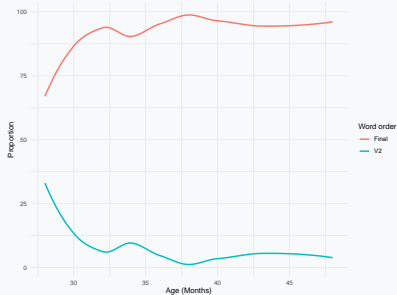
<sup>8</sup>Based on native consultation with German native speakers.

## The data

- 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)

# The data

- CAR and MAR, and to a lesser extent, LUC, **default instead to EV2**.
- Adult-like distribution of *weil* achieved significantly later
  - ↪ **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%**.

# The data

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

- Adult-like distribution of *weil* achieved significantly later
  - ↪ **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 (Lewis et al., 2017).

## The data

- 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 (‘Ø’ below) with bridge verbs (EV2) is also rare.

<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



# The data

## 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*.

- (17) a. Weil **das** könn wir auch ziehn und das könn wir nich so  
because this can we also pull and this can we not so  
schieben  
push  
'Because we can pull this and we can't push that.' (CAR, 3;05.06)
- b. Weil **die** ham wir [s]on woanders geleg  
because it have we already elsewhere put  
'Because we have already put this somewhere else.' (LUC, 2;11.07)

# The data

## 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*<sup>9</sup>.

- (18) a. 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.’ (LUC, 3;02.06)

→ Embedded topicalisation with *wenn* and *wh*-complements is systematically **unattested** when these present EV2<sup>10</sup>.

<sup>9</sup>Plausibly, the latter could simply be due to *dass* being later-acquired.

<sup>10</sup>With one exception in LUK: *Ich gucke, was da ist ist passiert* ‘I am looking at what happened there’

# The data

## 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  $Comp \rightarrow Comp\ Subj_{pron}\ V_{fin} \dots$

	Subj <sub>pron</sub>	Subj <sub>DP</sub>	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

# The data

## Zooming in – embedding marker and type of subject

- What causes this? 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?

## The data

### Zooming in – embedding marker and type of subject

- What causes this? 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?
- 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.**

# The data

- 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 <sub>DP</sub>	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.

# The data

## 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*.

# The data

## 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.











## The data vs existing analyses

- Recall *wh*-V2 unexpected, given the typology in modern Germanic. Some evidence that it's genuine V2 (in at least some children) – movement above negation and adverbs, cf. Danish examples below.

(22) Jeg ved ikke...

I know now...

a. ... hvorfor koen *altid står* inde i huset

b. \*... hvorfor koen **står** *altid* inde i huset

c. ... why cow-the (stands) always (stands) inside in house-the

(Vikner, 1995: 73)

















**Next:**

- Adopt the intuition in Schönenberger’s analysis, endorsing especially (some kind of) ‘minimally split’ CP.
- Update its implementation and its motivation.

## 5. Proposal























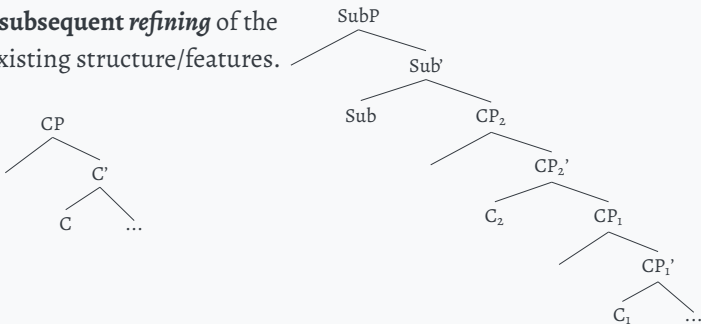




## My analysis

## Syntactic account

- Insofar as CP emergent, this **leaves room for subsequent *refining*** of the already-existing structure/features.



## My analysis

(Partial) developmental account

## 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).

























## 89/91

## Conclusion

- **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?



# Conclusion

- **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.



# Thank you!

*Acknowledgements:* Thanks a lot to Theresa Biberauer for her enthusiastic supervision and feedback, and special thanks to Natascha Müller for all the time she spared to share her bilingual corpus with us.

Work supported by an Open-Oxford-Cambridge AHRC DTP – St John's Studentship



# References I

- 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.

## References II

- 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 kernenade*, 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)over 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.

## References III

- 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 d 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 Massachussets, Amherst.
- Chomsky, Noam. 2005. Three factors in language design. *Linguistic Inquiry* 36(1). 1–22.

## References IV

- 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, Ailís & 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.

# References V

- 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.



## References VI

- 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.

## References VII

- 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.

## References VIII

- 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.

## References IX

- 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.



# References X

- 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.

## References XI

- 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.

## References XII

- 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.

## References XIII

- 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, Chevān. 2022. *The sociosyntax of verb-second and verb-third placement in manenberg kaaps*. University of the Western Cape MA thesis.



## References XIV

- 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.

## References XV

- 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.