Language acquisition and language change: the case of verb clusters

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Dutch between German & English

<table>
<thead>
<tr>
<th>German</th>
<th>(...) dass wir schwimmen können.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutch</td>
<td>(...) dat wij zwemmen kunnen.</td>
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<td>(...) dat wij kunnen zwemmen.</td>
</tr>
<tr>
<td>English</td>
<td>(...) that we can swim.</td>
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All: ‘(...) that we can swim’
Dutch between German & English

<table>
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<tr>
<th>GE</th>
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<tr>
<td>DU</td>
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</tr>
<tr>
<td>EN</td>
<td>(...) that we <em>swim</em> can</td>
</tr>
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All: ‘(...) that we can swim’

Note: the higher the number, the deeper the verb is embedded.
Weerman (2006)

• Sandwich is combination of early & late acquisition
  – Language contact
  – Early and late L2 acquisition
  – Change

• Claim: 2-1 orders are vulnerable
  – Monolingual Dutch children
  – Bilingual Frisian – Dutch children
  – Adult L2 German (L1 Italian, Turkish)
Patterns in Dutch (Meyer & Weerman)

<table>
<thead>
<tr>
<th>Order</th>
<th>AUX</th>
<th>MOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td><em>heeft gegeten</em> ‘has eaten’</td>
<td><em>moet eten</em> ‘must eat’</td>
</tr>
<tr>
<td>2-1</td>
<td><em>gegeten heeft</em> ‘eaten has’</td>
<td><em>eten moet</em> ‘eat must’</td>
</tr>
</tbody>
</table>

- Preschoolers:
  - No clear order preference in AUX clusters
  - Preference for **1-2 in MOD** clusters

- Kindergartners:
  - Preference for **1-2 in all conditions** in bipartite clusters
  - Preference for ascending orders in tripartite clusters

- Isn’t that a little weird?
Meyer & Weerman (cont.)

- Early 2-1 orders are not clusters, but ‘OV’
- First construction-based: 1-2 orders trigger clusterhood; starting with MOD-INF
- Then general rule: 1-2 orders are (default) clusters
- Later 2-1 orders become clusters
- Consequence:
  - Most frequent order in spoken Dutch acquired last
  - What about learners of strict 2-1 languages? (e.g. German, Frisian?)
Pattern in Frisian

• Literature:
  1-2 orders not grammatical in Frisian
  (e.g. De Haan 1997, Wurmbrand 2005)

• 1-2 orders not in the input

• ...Or are they?

• Do Frisian children produce 1-2 orders?
Items

• Pre-recorded stimuli, picture support

Beppe seit dat pake yn’e fiver moat springe
Oma zegt dat opa in de vijver moet springen
‘Grandma says that grandpa has to jump in the pond.’
Participants

• 29 kindergartners, ages 4;0-6;9 (m=5;4)
  – Heerenveen & Bolsward
  – Standard Dutch in school
• 27 children: two Frisian-speaking parents
• 2 children: one Frisian parent
Frisian children responding to verb clusters in Dutch

FRISIAN CHILDREN’S DUTCH
Responses to Dutch stimuli by verb type (Frisian children)

1-2 = heeft gegeten ‘has eat.PTCP’
2-1 = gegeten heeft ‘eat.PTCP has’
Responses to Dutch stimuli by age (Frisian children)

1-2 = heeft gegeten ‘has eat.PTCP’
2-1 = gegeten heeft ‘eat.PTCP has’

A Germanic Sandwich 2015
Responses to Dutch stimuli: Frisian vs Dutch 4-year-olds

1-2 = heeft gegeten ‘has eat.PTCP’
2-1 = gegeten heeft ‘eat.PTCP has’
Responses to Dutch stimuli: Frisian vs Dutch kindergartners

FR Dutch

1-2 = heeft gegeten 'has eat.PTCP'

2-1 = gegeten heeft 'eat.PTCP has'

NL Dutch

1-2

2-1

0% 20% 40% 60% 80% 100%

Error

Doubling Error

Reversed order

Exact repetition
Dutch - summary

• Frisian children similar to monolingual Dutch
  – Clear preference for 1-2 orders in all conditions

• BUT young Frisians might show interference:
  – More conversion errors towards 2-1
  – Fewer conversion errors towards 1-2
Frisian children responding to verb clusters in Frisian

FRISIAN CHILDREN’S FRISIAN
Responses to Frisian stimuli by cluster type

- Error
- Code switch
- Doubling Error
- Reversed order
- Exact repetition

1-2 = hat item
2-1 = item hat

A Germanic Sandwich 2015
Responses to Frisian stimuli by age group

- Error
- Code switch
- Doubling Error
- Reversed order
- Exact repetition

1-2 = hat iten 'has eat. PTCP'
2-1 = iten hat 'eat. PTCP has'

A Germanic Sandwich 2015
Frisian - summary

• Frisian children massively produce 1-2 orders (*hat iten) in Frisian
• Dutch verbs in Frisian utterances, more so with 4-year-olds
Summary: responses to 1-2 and 2-1 stimuli by Frisian children in Frisian and Dutch, compared to monolingual Dutch children.

1-2 = hat iten
2-1 = iten hat
1-2 = has eat.PTCP
2-1 = eat.PTCP has
FR Results: similar but not the same

• Frisian children acquire Dutch verb clusters similar to the way Dutch children do

• Interference of Frisian is marginal:
  – Higher scores on 2-1 stimuli in Dutch, slightly more conversions to 2-1

• Frisian children acquire Frisian clusters similarly, too

• Interference of Dutch is massive:
  – Frisian children massively produce 1-2 orders (*hat iten) in Dutch AND Frisian
  – Dutch verbs in otherwise flawless Frisian utterance

• 2-1 orders are vulnerable, 1-2 orders are embraced
ESF Corpus: Italian (VO) and Turkish (OV) learners of German
(work in progress)

ADULT L2
Italian AL2 German: non-targetlike

*SMO: in der Meer und wenn diese Schift in diese Loch eh ist gegangen alles kaputt.
*SMO: ja, ja, wenn eine <Zug> <de> kann weg laufen.

*STI: <weil isch habe nischt eh> die Etikett gesehen <eh wieviel> Grade eh eh isch kann waschen.
*STI: a wieviel Grade isch habe gewaschen.
*STI: wenn isch habe gegessen.
*STI: isch habe gesag wie isch will weggehn.
*STI: eh versteh Sie was isch will sagene?
Turkish AL2 German: target-like?

*SAB: erstmal hat er gesacht daß ich eh mit ihr nicht heiratn darf
*SAB: und dann hätte er gesacht eh gedacht daß ich nicht aufhören will
*SAB: mein Vater konnte nicht sitzen ble bleiben

*SAY: jetzt der Mann sag wenn wir gehn würden es ist besser
*SAY: ja aber isch weiß es nischt ob isch gehen kann isch will gehn
*SAY: und das der ein Arbeitsplatz bekommen kann
*SAY: dann diese Männer **hat gesagt** das is nischt esrar

*SAY: und sie hat bißchen isch weiß net vielleicht Angs gehabt
oder sie hat bißen gehda und später sie **ist weggegangen**

*SAY: er sagt ich liebe disch oder was dann er **hat vergessen** wann isch
gewe diese Zug dann da gibt ein Mann man hat **hat gemacht**

*SCE: eh erste Mal der Bus der Zug **ist gekommen**

*SCE: dann noch ein andere Chef **hat gesacht** wenn Du so wie ein
Holz **gefunden hast** dann bringst der mir dann er **hat gesucht**
AL2 German

• IT (VO) learners of German: (almost) only “1-2”
• TU (OV) learners of German: “2-1” and “1-2”
  ➔ At best Dutch situation
Conclusion: 2-1 orders are vulnerable

• Evidence from:
  – monolingual L1 acquisition
  – bilingual acquisition
  – adult L2 acquisition

• Contact situations: Loss of 2-1 orders

• Sandwich:
  combination of early & late acquisition
References


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😊

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