Metasyntactic Awareness and Cross-linguistic influence
Cross-sectional study of school-aged French-Norwegian bilingual children

Sébastien LUCAS
DYLIS research center, University of Rouen, Normandy, France. Affiliated to MultiLing research center, University of Oslo, Norway.

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Outline

I- Theoretical framework
Metasyntactic awareness
Crosslinguistic Influence & Awareness
Syntactic transfer
French & Norwegian Syntactic typology

II- Methodology
Participants
Material/Procedure

III- Results

IV- Further research
Theoretical framework: Metasyntactic awareness

Simard et al. (2016)
multifaced & variability of definition/behaviors/measures
Conscious reflect on, analyze, or exert control over syntactic structures.
-using grammaticality judgment task

Metasyntactic ability:
Dynamically access explicit knowledge (awareness)
Theoretical framework: Metalinguistic awareness (MA)

**Sociolinguistics**

MA & Metalanguage & Social interactions

*Mertz & Yovel (2009)*

Social constructed

A mediating framework for interpretation between social & cognitive aspects.

*Squires (2016)*

raising of internal knowledge, a *continuum* of awareness, implicit to explicit

→ Sociolinguistic environment

MA↗ → metalinguistic reports ↗
Theoretical framework: Crosslinguistic influence (CLI)

Jarvis & Pavlenko (2006) CLI = TRANSFER

“The influence of a person’s knowledge of one language on that person’s knowledge or use of another language”

Complex phenomenon (up to 10 criteria!)

Activation inhibition of languages

Linguistic typology

Degree of perception/awareness
Theoretical framework: Crosslinguistic awareness (XLA)

Angelovska and Hahn (2014)
Aware of CLI
Establishing similarities and differences among the languages
→ Subtype of Metalinguistic awareness

Jessner (2006)
Multilingual Awareness = MA + XLA
→ Interaction
Theoretical framework: Syntactic Transfer

Transfer in this research
French/Norwegian
BFLA (De Houwer, 2009)
• **Linguistic**, Syntactic: word order (verb, prepositional verb construction)
• **Form**: Non verbal - Reading task (grammatical judgment task)
• **Mode**: Receptive
Link **Metasyntactic awareness & Syntactic transfer**
Interaction **between languages**
Theoretical framework: Syntactic Transfer

Syntactic transfer
Skepticism $\rightarrow$ <90’s : syntax immune to CLI

Jarvis & Pavlenko (2008)
Competition model
Grammaticality judgments are not immune to CLI effects.
CLI does affect language users’ judgments.

Foursha-Stevenson & Nicoladis (2011)
Cross-linguistic influence weakens metasyntactic awareness
Theoretical framework: Syntactic Transfer

Grammaticality judgment reading task
Early Bilinguals

Foursha-Stevenson & Nicoladis (2011)
French/English
Metasyntactic awareness develops early
Syntactic transfer English \(\rightarrow\) French

Thierry & Sanoudaki (2012)
Welsh/English (Task in English)
Both syntactic systems are coactivated
Language non selective
Syntactic transfer Welsh \(\rightarrow\) English
Declarative sentences

Main/Subordinate clause

Norwegian: V2 word order in main clause

French: S-V in both

Subordinate Clause first

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>V2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>En</td>
<td>When class is over,</td>
<td>the children</td>
<td>play</td>
<td>in the schoolyard</td>
</tr>
<tr>
<td>No</td>
<td>Når timen er ferdig</td>
<td>leker</td>
<td>barna</td>
<td>i skolegården</td>
</tr>
<tr>
<td>Fr</td>
<td>Quand la classe est terminée,</td>
<td>les enfants</td>
<td>jouent</td>
<td>dans la cour de l’école</td>
</tr>
<tr>
<td>*Fr/(No)</td>
<td>Quand la classe est terminée,</td>
<td>jouent</td>
<td>les enfants</td>
<td>dans la cour de l’école</td>
</tr>
</tbody>
</table>

Adverb in subordinate clause

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>En</td>
<td>...because</td>
<td>she</td>
<td>always</td>
<td>forgets...</td>
</tr>
<tr>
<td>No</td>
<td>...fordi</td>
<td>hun</td>
<td>alltid</td>
<td>glemmer...</td>
</tr>
<tr>
<td>Fr</td>
<td>...parce qu’</td>
<td>elle</td>
<td>oublie</td>
<td>toujours...</td>
</tr>
<tr>
<td>*Fr/(No)</td>
<td>...parce qu’</td>
<td>elle</td>
<td>toujours</td>
<td>oublie...</td>
</tr>
</tbody>
</table>
Theoretical framework: Fr/No Syntactic typology

<table>
<thead>
<tr>
<th>Preposition string</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>En</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>Fr</td>
</tr>
<tr>
<td>(*Fr)/No</td>
</tr>
</tbody>
</table>

Verbs with prepositional constructions

| Fr | demander à | écouter X | penser à |
| No | à spore X | à høre på | à tenke på |
| *Fr/(No) | demander X | écouter sur | penser sur |
Research Questions

Are there conscious syntactic transfers between both languages? If yes:

1. How are they organized?
2. To what degree are they conscious?

**H1**: Syntactic transfers occur, especially from Norwegian to French. Ungrammatical sentences will be judged correctly by French-Norwegian Children.

**H2-1**: Children show metalinguistic reflection (explicit, conscious) by describing that mistakes in sentences come from Norwegian syntax use (metasyntactic skills).

**H2-2**: Children show crosslinguistic awareness of transfer from Norwegian to French by explicitly comparing both syntax when explaining their strategies.
Methodology

Participants

- French Norwegian bilingual children (33)
  Couple – Age – French school – BFLA

- French Children (30)
  Only exposed to French
  Same sociocultural/economical environment.
Methodology
Materials:

Grammaticality judgment task

• Silent reading grammatically judgement task at school

• 14 phrases in French.
  Mistakes: Norwegian syntactic calque
  (→ 7 phrases)
Methodology
Materials:

Semi-structured
One to one, at home

1- Metalinguistic strategies during reading task/Syntactic transfers presence
   Strategies used for answering
   Bilingualism $\leftrightarrow$ children’s practices
   (usage of both language when reading)

2- Ethnographic notes
Methodology

Analyses

Silent reading grammatically judgement task (33 + 30)
Results per item coded: Excel
Descriptive/exploratory statistics: Excel
Statistical tests: R

Semi-structured interviews (14)
Transcription: Transcriber/Word
Analysis: NVivo
Error due to preposition use.

(No CI overlap).
Results

Tests

Means: Two Sample t-test
p-value = 0.3953 → p>0.05.
Per sentence: Fisher's Exact Test for Count Data
0.2<p-values<1 → p-values >0.05.

No significant difference between both groups
Results
Tests

Ungrammatical sentence judgment

% correct

Sentence number

French Norwegian  French

Sentences 14-3-5 : word order

Sentence 8 : word order related to preposition string

Sentences 2-11-13 : prepositional verb construction
Results

Tests

Means: **Two Sample t-test**

p-value = 0.211 → p>0.05.

Per sentence: **Fisher's Exact Test for Count Data**

0.1<p-values<0.34 → p-values >0.05.

No significant difference between both groups
Results

Tests

Means: **Two Sample t-test**
p-value = 4.37e-08 → p<0.001.

French Children outperformed French Norwegian Children

But...let’s look closer at each sentence...
Results

Tests

Pearson's Chi-squared test (with Yates' continuity correction)
8 : $\chi^2 = 0.23 \quad p=0.63 \quad \text{p-values}>0.05$
13: $\chi^2 = 1.94 \quad p=0.16$

No significant difference between both groups
2: $\chi^2 = 14.001 \quad p=1.8e-4 \quad \text{p-values}<0.05$
11: $\chi^2 = 16.307 \quad p=5.39e-5$

→ French Children outperformed significantly French Norwegian Children ONLY for sentence 2 and 11.
Results
Interviews: Strategies

A dominant French language mode
(*but* Norwegian consciously activated as a tool)

Hesitation/difficulties? → Norwegian
Translation, comparison to French

Strong relationship Semantics/Grammar.
(it makes sense...)

What’s “orally accepted” and what’s judged
“correctly written”

→ input impact, social environment.

Difficulties to express: perception but not noticing.
Results
Interviews: Metalinguistic discourse

Continuum of explicitness

Comments about syntax:
Word order (wrong, missing, reverse, between ...)
Comparison with Norwegian syntax

Use of metaphors
- activation/inhibition processes in languages and CLI (e.g., Park)
- transfer of knowledge between languages (e.g., Rosetta Stone)
Results
Conclusions

H1:
• Syntactic transfer occur when prepositional constructions are involved
  → preposition string
  → no preposition in Norwegian vs preposition construction in French

• Metasyntactic skills weaken.
• Explicit activation of Norwegian Language as a strategy to solve ambiguity or mistake.
H2-1 (nuances)

• Type 1: Epilingualic skills (perception, meaning, difficulties to explain)

• Type 2: Children show metasyntactic skills and awareness:
  
  Metalinguistic comments referring to/showing manipulation of syntax
  
  Children aware of syntactic typology

H2-2

• Children show XLA by comparing French & Norwegian grammar to describe and explain mistakes

  → Attests Multilingual awareness development
Discussion
Further research

• Correlation in Multilingual awareness between:
  metasyntactic awareness,
  crosslinguistic influence
  crosslinguistic awareness
  ...determinant weight?

• Sociolinguistic indicators in a sociocognitive framework to understand better those findings
Aitäh!
Merci !
Tusen takk !
Thank you !
Sources


