SYNTACTIC ABILITIES OF BILINGUAL AND MONOLINGUAL CHILDREN WITH SLI - LONG DISTANCE RELATIONS

Challenges to Language Acquisition: Bilingual Specific Language Impairment
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Syntactic complexity

- Subjects: 60 Hebrew speaking children aged 2;2-3;10: 21 children aged 2;2-2;9, 19 children aged 2;10-3;2, and 20 children aged 3;3-3;10.
- Task: SR - 80 sentences (8 categories by syntactic complexity), 4 words.

Basic SV order: A-S-V unergative-PP  yesterday the-boy jumped in-the-garden
A-S-V transitive-O  yesterday the-boy built tower
A movement: A-S-V unaccusative-PP  yesterday the-girl fell in-the-garden
Wh movement: Topicalization O-S-V-A  ACC-the-tower the-boy built yesterday
Subject relatives  (I)-saw ACC-the-girl that-kissed ACC-grandma
Object relatives  (I)-saw ACC-the-girl that-grandma kissed
V-C movement: A-V unergative-S-PP  yesterday jumped the-boy in-the-garden
A-V transitive-S-O  yesterday built the-boy tower


No correlation was found between repetition of any of the movement types and age (P<0.22 for all the sentences with movement), and no significant difference in repetition was detected between the three age groups: For example, a 2;3 year old girl succeeded in repeating all the V-C sentences, whereas a 3;10 boy failed in them. Two girls aged 2;5 succeeded in repeating Wh sentences, whereas 4 children aged 3;7 failed in them.* (p. 214)

Questions in English

- Yes/no questions are marked only by subject-auxiliary inversion, i.e., an overt syntactic change in word order in which the auxiliary is raised into C. Do-support operates when there is no auxiliary in the declarative.
- [Spec, CP] is the target for overt Wh-movement both in matrix and embedded clauses, with subject-auxiliary inversion in matrix clauses, but not in embedded clause. Do-support operates when there is no auxiliary in the declarative.
  a. What did the child see?
  b. The teacher wondered what the child saw.


- Longitudinal study of 12 children in CHILDES.
- Who and what are acquired almost simultaneously, around age 2;5. Object questions are acquired at the same age or earlier than subject questions.
- All children asked at least one long distance object question (mean age 2;10), but only one child asked a long distance subject question (at 5:0).

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By the age of 2;6

- TD children use wh-movement properly
- TD children do not show problem with wh-non-local dependency
- TD children have no problem with theta-government

Wh-Questions in Leonard Corpus of Children with SLI

1. Which one I can do? (C 'Which one can I do?)
2. What Kent’s gonna play with? (C 'What’s Kent gonna play with?)
3. How you knowed? (E 'How did you know?')
4. What he did? (F 'What did he do?')
5. What you doing? (E 'What are you doing?')
6. What this for? (G 'What is this for?')
7. How much we got to do? (J 'How much have we got to do?')
8. How you get this out? (A 'How d’you get this out?')
9. What this do? (A 'What’s this do?')
10. How open it up? (B 'How d’you open it up?')
11. What say? (B 'What d’you say?')
12. Where go on? (B 'Where’s it go on/Where does it go on?')
13. How much longer’s gonna be? (A 'How much longer’s it gonna be?')
14. These do? (C 'What do these do?')
15. What this is? (H 'What is this?')

Representational Deficit For Dependent Relations (RDDR)


- “SLI children have problems in handling non-local dependencies (between pairs of constituents which are not immediately adjacent) such as those involved in tense marking (which involves a T-V dependency both in the agreement-based analysis of Adger 2003 and in the Affix Hopping analysis of Radford 2004), agreement (which involves a subject-verb dependency), determining pronominal reference (which involves a pronoun-antecedent dependency), and movement (which involves a dependency between two constituents, one of which attracts the other).”

Summary of findings

- SLI subjects have far more problems with the syntax of wh-questions than language-matched TD controls.
- The pattern of errors made by the SLI subjects differs from the pattern of errors made by the TD subjects:
  - Most SLI subjects have problems with both auxiliaries and wh-expressions
  - Most TD subjects have problems with neither, or only with auxiliary inversion.

Deficit in Computational Grammatical Complexity (CGC)

"The CGC Hypothesis claims that the core deficit in some but not all forms of SLI is in the representation and/or mechanisms underlying the construction of hierarchical grammatical structures. For G-SLI children their grammar is characterized by Grammatical Structural Economy in syntax, morphology and for most phonology too. Thus, the least complex structure will surface. Within the syntactic component, the core deficit is in computing syntactic dependencies between constituents. Within Chomsky’s Minimalist Program (Chomsky 1995), this can be implemented as optionality of the operation Move, which is not ‘automatic’ and ‘compulsory’. Further, complexity is defined as the number of movement operations, thus subject questions are predicted to be less problematic than object questions because the former has one less movement operation (van der Lely and Battell 2003). van der Lely and colleagues demonstrated that the CGC hypothesis accounts for a wide range of phenomena in English G-SLI children."

Comprehension of questions


- Reham

From Singleton to Exhaustive: the Acquisition of Wh-questions

- Single wh-question: Who has a ball?
- Paired wh-questions: Who sits on what?
- Triple wh-questions: Who gave what to whom?


Nicholle


Roula
Exhaustivity as a measure of typical development in the L2 of Russian-Hebrew children

- Sharon Armon-Lotem, Sharon Garner, Irena Shnaiderman, & Natalia Meir
- Krakow, May 2013

Subjects

- 42 Russian-Hebrew bilingual children were tested:
  - 34 with typical language development (TLD) 12 ages 4;4-5;0 (younger), 24 ages 5;1-6;3 (older)
  - 8 with SLI matched with the older group (ages 5;2-6;4).

Bilinguals

Type of errors – single WH

BISLI

Type of error – triple WH