

## The acquisition of verb agreement in Turkish-Dutch child L2 with SLI: a data comparison

A. Orgassa, J. de Jong, N. Cavus, F. Weerman & A. Baker

(NWO-research grant 254-70-010: BISLI)

1

## Our aim is...

to locate distinct markers of bilingualism and Specific Language impairment (SLI) in the morpho-syntactic domains (Inflectional Phrase, IP & Determiner Phrase, DP) of Dutch and Turkish in a group of bilingual Turkish-Dutch children (age 6;0 – 8;0) with severe limitations in language production

2

## Rationale for investigating inflectional domains in Turkish-Dutch child L2-SLI

- cross-linguistic findings: grammatical morphology is targeted since it is affected in SLI in all languages studied so far
- selection of variables in the target languages
  - Dutch: verbal inflection is affected in monolingual Dutch SLI (De Jong 1999)
  - Turkish: morphemes that seem more difficult to acquire (as shown by error rate, stepwise learning)

3

## Outline

- focus on Dutch IP
  - accuracy in verbal inflection
  - types of morphological substitution
- data comparison
  - previous results: child L1; child L2; child L1-SLI
  - preliminary data: child L1-SLI & child L2-SLI
- preliminary data on Turkish
  - accuracy in agreement inflection

4

## Dutch typology: finite verb paradigm

context	suffix	lezen 'to read'	
1singular	stem + $\emptyset$	ik lees	'I read'
2sg	stem + t	jij leest	'you read'
3sg	stem + t	hij/zij leest	'he/she reads'
1-3plural	stem + en	wij/jullie/zij lezen	'we/you/they read'

5

## Dutch typology: word order (SOV/V2)

- **embedded clause (SOV Subject-Object-Verb)**  
 (ik wil) dat jij-subj morgen de krant-obj leest  
*(I want) that you tomorrow the newspaper read-2sg*
- **main clause (V2 Verb in second position)**  
 Ik-subj lees de krant-obj vandaag  
*I read-1sg the newspaper today*

6

## Acquisition profile of Dutch verb agreement

- unimpaired child L1 and child L2 are “quick” inflection learners (Blom 2003, 2005; Polišenská 2004)
- morphological substitutions in verbal inflection
  - similar tendency in different child populations
  - adult L2 show a different tendency in type of morphological substitutions

7

## Substitution profile of Dutch finite verbal inflection

substitutions → populations ↓	/-Ø/ in pl; 2,3sg	/-t/ in pl; 1sg	/-en/ in sg
child L1 (3;0-5;0) Polišenská (2004)	yes	yes	no
child L2 (4;0-7;0) Blom (2003; 2005)	yes	yes	no
adult L2 Blom (2003)	yes	yes	<b>yes</b>
child L1-SLI (6;0-9;0) De Jong (1999)	yes	yes	no

8

## Possible hypotheses for the substitution type used in child L2-SLI

- child L2-SLI = { child L1-SLI  
child L1  
child L2
- child L2-SLI ≠ { child L1-SLI  
child L1  
child L2
- child L2-SLI = adult L2

9

## Participants overview

Population	Language	N	Average Age
Child L1-SLI	Dutch	8	7;2
Child L2-SLI	Dutch	5	6;9

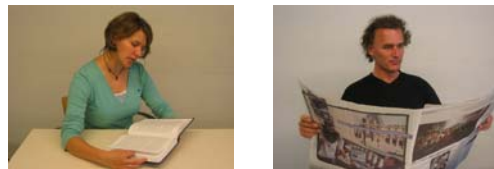
10

## Dutch elicitation: verb agreement

- Sentence completion task (in V2-order)
  - verbal inflection: 1SG, 2SG, 3SG, 1PL, 3PL
- Verbs:
  - 4 existing verbs
  - 2 nonsense verbs

11

## Elicitation of existing verb (lezen 'to read')



Antje leest een boek en Jan leest een krant  
Antje reads-3sg a book and Jan reads-3sg a newspaper

12

## Elicitation of nonsense verb (spollen)



Jan **spolt** **zijn** **hoofd** en Antje **spolt** **een** **tafel**  
*Jan spols-3sg his head and Antje spols-3sg a table*

13

## Accuracy analysis - finite lexical verbs (% correct)

	existing verbs	nonsense verbs
child L1 (N=21)	100	93
child L2 (N=10)	92	84
child L1-SLI (N=8)	78	73
child L2-SLI (N=5)	<b>66</b>	<b>50</b>

14

## Summary: accuracy analysis in existing and nonsense verbs

- in all populations but one: accuracy in both verb categories is > 70%
  - high proficiency of inflectional rules in unimpaired child L1 and child L2 population
  - child L1-SLI: lower accuracy than both unimpaired groups
- child L2-SLI (< 70% accuracy)
  - noticeable difficulty providing responses for nonsense verbs at all (**14/70!**)
    - evidence that inflectional rules are not acquired yet (inflection of nonsense verbs is key evidence)

15

## Morphological substitution analysis

- /-ø/ \* Hij-3sg lees-1sg boek  
\* *He-3sg read-1sg book*
- /-t/ \* De kinderen-3pl drinkt-sg cola  
\* *The children-3pl drink-sg cola*
- /-en/ \* Jij-2sg lezen-pl een krant  
\* *You-2sg read-pl a newspaper*

16

## Results: type of substitutions in existing & nonsense verbs

- use of /-t/ and /-ø/ in sg and pl contexts
  - no use of finite /-en/ suffix
- child L2-SLI & child L1-SLI use the same substitution types as compared to unimpaired child L1 and child L2 populations
- but differ from adult L2 population by *not* using finite /-en/

17

## Conclusions: type of morphological substitutions

- child L2-SLI = child L1-SLI  
child L2
- child L2-SLI ≠ child L1-SLI  
child L2
- child L2-SLI ≠ adult L2

18

## But ... with respect to accuracy in verbal inflection

child L2-SLI < child L1-SLI < child L1 & child L2

- child L2-SLI is the least proficient group
- child L1-SLI not as proficient as unimpaired child L1 & child L2

19

## Verb agreement morphology in Turkish

- Targeted: past/perfect forms
  - -dl (witness)
  - -mls (hearsay)
- However: children often substituted -dl for -mls. Sometimes the progressive (-iyor) was substituted

20

## Participants overview

Population	Language	N	Average Age
Child L2	Turkish	10	6;7
Child L2-SLI	Turkish	10	7;2

21

## Data distribution

child L2 /-dl/	child L2-SLI /-dl/	child L2 /-mls/	child L2-SLI /-mls/
(n=150)	(n=150)	(n=100)	(n=100)
-dl-: 138 -mls-: 7 -iyor-: 3	-dl-: 135 -mls-: 11 -iyor-: 12	-dl-: 82 -mls-: 18	-dl-: 87 -mls-: 10

22

## Accuracy analysis – verb agreement (% correct)


	child L2	child L2-SLI
-dl-	100	79
-mls-	100	53
-iyor-	100	58

23


## Conclusion

- Turkish is a language where agreement is acquired early; the -dl/-mls contrast is acquired later > preference for -dl
- The children with SLI, as a group, are lagging behind the controls, on a set of morphemes that are typically acquired early

24

- 
- Groupwise, SLI children fall short in both targeted (and typologically different) languages
  - Notice that the Dutch and Turkish data were collected from the same children

25



■ N.B. This slideshow is based on a previous presentation, at the 2006 Morphology Meeting in Budapest. If you want an updated version of the CPLOL presentation, please contact Antje Orgassa or Jan de Jong:

[orgassa@uva.nl](mailto:orgassa@uva.nl)

(<http://home.medewerker.uva.nl/a.orgassa/>)

[j.dejong1@uva.nl](mailto:j.dejong1@uva.nl)

(<http://home.medewerker.uva.nl/j.dejong1/>)

26