

## The boundaries between child L2 and (2)L1: *DO*-support in child Dutch

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### I. Introduction

Spontaneous production data monolingual Dutch children

- (1) We *gaan* allemaal *ete* (3;1) (Jordens 1990: 1433-34)  
We go/do all eat
- (2) ik *doe* ook praten (S. 3;5.2) (Van Kampen 1997: 46)  
I do also talk

Experimental data monolingual children (Zuckerman): root/non-root asymmetry

### Questions to be addressed

- Do children acquiring Dutch as 2L1/L2 go through the same stage as their monolingual peers?
- Do they show the same root/non-root asymmetry as their monolingual peers?
- If not, how can we explain these differences? (cross-linguistic influence/transfer?)

### Dutch syntax

Head final word order: SOVI

V2 in roots -> S-Vf-O-Vi / XP-Vf-S-O-Vi

- (3) a. Ik **heb** een appel **gegeten**  
I have an apple eaten
- b. Toen **heb** ik een appel **gegeten**  
then have I an apple eaten

No V2 in non-roots ->S-O-Vi-Vf

- (4) Zij zegt dat ik een appel **gegeten** **heb**  
She says that I an apple eaten have

## II. Zuckerman's (2001) experiment

### Analysis

DO-support in child language: result of realization of finite features in I [merge]

More economical than Move (in roots), but less economical than base-generation Vf (in non-roots) => Economy explains root/non-root asymmetry

### Subjects

10 (monolingual) Dutch children, age 3;0 - 3;11: 5 from Limburg (south) and 5 from Groningen (north).

14 (monolingual) Dutch children, age 4;8 - 5;0, all from Limburg

### Methodology

A sentence completion test, describing 34 picture-pairs

#### Root

(5) *Experimenter:*

Dit is de man die het brood snijdt en dit is de man die de tomaat snijdt.

Dus deze man snijdt het brood en deze man ...

[*subject:* snijdt de tomaat: VfO]

This is the man who cuts the bread and this is the man who cuts the tomato. So, this man cuts the bread and this man....

[*subject:* cuts the tomato: VfO]

#### Non-root

(6) *Experimenter:*

Deze man snijdt het brood en deze man snijdt de tomaat. Dus dit is de man die het brood snijdt en dit is de man die ...

[*subject:* de tomaat snijdt: OVf]

This man cuts the bread and this man cuts the tomato. So, this is the man who cuts the bread and this is the man who ...

[*subject:* the tomato cuts: OVf]

### Results

Table 1: The distribution of the tokens of DO-support (numerator) and all utterances (denominator), (taken from Zuckerman 2001: 127)

	Dutch L1 children N=10	Dutch L1 children N=14
Age	3;0 – 3;11	4;8 - 5;0
Language	Dutch (from Limburg and Groningen)	
Non-root	4/141      3%	0/210      0%
Root	33/145      23%	6/210      3%
Signif.	$t=2.583$ $df=18$ , $p<0.05$	--

### III. Our 2L1/L2 experiment

#### Methodology

See Zuckerman

#### Subjects

14 children, age 3;0 - 5;2 at three different schools

- **2L1/L2**, age 3;0 - 3;10

N=6	age	L2/2L1
Youssra	3;0	Moroccan Arabic/Berber
Joseph	3;2	Moroccan Arabic/berber
Romy	3;2	Sranan
Anthony	3;5	Sranan
Nicole	3;6	French
Stefano	3;10	Sranan

- **L1 Dutch**, age 3;5 - 3;9

N=2	age	monolingual
Patrick	3;5	Dutch
Joyce	3;9	Dutch

- **2L1/L2**, age 4;11 - 5;2

N =3	age	L2/2L1
Daphne	4;11	Akan/Ewe
Serwa	5;0	Akan/Ewe
Damien	5;2	Russian-Sranan

- **L1 Dutch**, age 5;2

N =3	age	monolingual
Ravian	5;2	Dutch
Thom	5;2	Dutch
Jesse	5;2	Dutch

#### Results

##### Root

(7) *Experimenter:*

En deze vrouw +...  
And this woman

*Youssra (3;0)*

++ **gaat** de sokken *aan*trekken.  
goes the socks put<sub>inf</sub> on

### Non-root

(8) *Experimenter:*

Juist dus dit is de kat +...  
 right thus this is the cat

*Nicole (3;6)*

++ die gaat die mevrouw helpen  
 that goes that madam help<sub>inf</sub>

*Table 2* : The distribution of the tokens of *DO*-insertion (numerator) and all utterances (denominator), age 3;0 - 3;10

	Dutch monolingual N=2	2L1/L2 N=6
Age	3;5 – 3;9	3;0 - 3;10
Language	Dutch	Moroccan Arabic/Berber, French, Sranan
Non-root	1/68                      1%	18/175    10%
Root	12/73                      16%	16/194    8%
Signif.	$\chi^2=9.39$ , $df=1$ , $p<.01$	----

*Table 3*: The distribution of the tokens of *DO*-insertion (numerator) and all utterances (denominator), age 4;8 - 5;2

	Dutch monolingual N=3	2L1/L2 N=3
Age	5;2	4;11 - 5;2
Language background	Dutch	Akan, Ewe / Sranan -Russian
Non-root	0/69                      0%	1/75    1%
Root	0/74                      0%	1/76    1%

### Summary

- *DO*-support only in younger kids                      => **like monolingual (and 2L1?) Dutch**
- No root/non root asymmetry
- non-Dutch word order in non-roots                      => **like (child?) L2 Dutch**

## IV. A quick look at the literature

### Bilingual first language acquisition (2L1)

#### theory

Meisel (1989), Genesee & Paradis (1995), De Houwer (1994) and many others:

- very early separation of the two grammars
- autonomous development of the two grammars, similar to monolingual L1 development

Hulk & Müller (2000), Müller & Hulk (2001):  
(syntactic) cross-linguistic influence possible if

- seemingly ambiguous input
- vulnerable domain
- syntax/pragmatics interface

#### data

Leopold (1949), Taeschner (1983), Müller (1998), Döpke (1998): data bilingual children having problems with the word order in German embedded clauses, during a certain period:

- |      |  |                 |                          |              |                          |                              |               |
|------|--|-----------------|--------------------------|--------------|--------------------------|------------------------------|---------------|
| (9)  | Ich habe ein Buch<br>I have a book     | wo<br>where     | die<br>the               | Name<br>name | <i>ist</i><br>is         | Struwelpeter<br>Struwelpeter | Hildegard 4;6 |
| (10) | Das ist eine Puppe<br>That is a doll   | die<br>who      | <i>ist</i><br>is         | wie<br>like  | Nonna Tina<br>Nonna Tina |                              | Giulia 2;8    |
| (11) | sagen wir mal dass<br>say we PART that | das<br>this     | <i>is</i><br>is          | ein<br>a     | Baum<br>book             |                              | Ivar 3;10,25  |
| (12) | Ich<br>I                               | moechte<br>want | tragen dich<br>carry you |              |                          |                              | CW 3;2        |

Gavarró (2003): ... setting of the IP as head initial by these children...

### Child L2 acquisition

- *initial transfer from L1*  
Hazdenar (1997) influence of Turkish L1 on English child L2

- (13) Investigator: Shall we play with your toys?  
Erdem: Yes, **toys play**

Unsworth (2002) influence of English L1 on Dutch child L2

- |      |                    |              |             |                 |           |                 |
|------|--------------------|--------------|-------------|-----------------|-----------|-----------------|
| (14) | Nijntje<br>Nijntje | gaat<br>goes | niet<br>not | plukken<br>pick | de<br>the | bloem<br>flower |
|------|--------------------|--------------|-------------|-----------------|-----------|-----------------|

- *no transfer*: similar to monolingual child L1 acquisition  
Weerman (2002) adjective inflection in child L2 Dutch
- Schwartz (2003):  
*morphology* similar to child L1 acquisition  
*syntax* similar to adult L2 acquisition

## Back to our data

### V. frequency *DO*-support: Nicole versus the other 2L1/L2 children

Table 4: *DO*-support (compare with Table 2)

	2L1/L2 <b>the others</b> N=5	2L1/L2 <b>Nicole</b> N=1
Age	3;0 - 3;10	3;6
Language background	Moroccan Arabic/Berber, Sranan	French
Non-root	3/144 2 %	15/31 48%
Root	6/168 3,6%	10/26 38%
Signif.	---	---

### Nicole

- Just as the monolingual children, Nicole uses *gaan*+ infinitive instead of the simple present in roots. However, she uses it more frequently (38%) than the monolingual children (Zuckerman's 23%, ours 16%)
- Contrary to the monolingual children, Nicole also frequently uses *gaan*-support in non-root sentences (48%), always with the wrong word order:

(15) *Experimenter*:

Juist dus dit is de kat +...  
right thus this is the cat

*Nicole*:

++ die **gaat** die mevrouw *helpen*  
that goes that lady help

No root/non-root asymmetry => **violation of Economy?**

**No:** deviant word order in embedded clause -> use of DO-support does not violate Economy

### The other bilingual children

- These bilingual children use *gaan*-support only in 3,6% of their root-clauses and in 2% of their non-roots.

However, they also produce it in spontaneous speech:

(16) *Experimenter:*

Dus deze jongen, dit is de jongen die de hond aait. En dit is de jongen +...

Thus this boy that is the boy who the dog strokes. And this is the boy ...

*Stefano:*

++	van	de	eh	poes.
	of	the		cat

*Experimenter*

Wat doet ie met de poes?

What does he with the cat

*Stefano:*

Die **gaat** aaien.

that one goes stroke<sub>inf</sub>

## VI. Word order problems in non-roots: all bilingual children

**Nicole** uses a non-Dutch word order in embedded clauses:

always in her sentences with *gaan* (15), (17) and frequently in embedded clauses without *gaan* (18)

### Missetting Head Parameter, IP/VP?

- IP head initial + VP head final (SIOV) + DO-support  
example (15)

-IP head initial + VP head initial (SIVO) + DO-support  
example (17)

(17) *Experimenter*  
 Juist en dit is het meisje +...  
 right and this is the girl

*Nicole:*  
 ++ die **gaat** *teken* een bloem  
 that goes draw<sub>inf</sub> a flower

Example (18) **without DO-support** is ambiguous between SIVO and SIOV:

(18) *Experimenter:*  
 Dus dit is het meisje +...  
 thus this is the girl

*Nicole:*  
 ++ die **teken** een huisje  
 that draw a house

Table 5: Nicole's distribution of the tokens of SIVO and SIOV **with DO-support** [column 1 & 2], and **without DO-support** [column 3], in non-root clauses (numerator) and all possible occurrences (denominator), age 3;6

2L1/L2 Nicole's word order			
Age 3;6			
Language background Dutch / French			
	<i>DO-support</i> <i>S-Vf-Vi-O</i>	<i>DO-support</i> <i>S-Vf-O-Vi</i>	<i>S-Vf-O</i>
Non-root	5/20 25%	7/20 35%	7/8 88%

### The other children

Both the younger **and the older ones** use a non-Dutch S-Vf-O word order in a (large) number of embedded sentences

(19) a. *Experimenter:* Juist dit is het meisje +...  
 right this is the girl

Stefano: ++ gooit de stok  
**throws the stick**

b. *Experimenter:* Dus dit is de man +...  
 so this is the man

Stefano:++ **die strijk de broek**  
 who irons the trousers

*Table 6:* The distribution of the tokens of S-Vf-O order (without DO-support) in non-root clauses (numerator) and all and all possible occurrences (O-Vf/Vf-O) (denominator), age 3;0 - 3;10 and age 4;11 - 5;2

	2L1/L2 N=5	2L1/L2 N=3
Age	3:0 - 3;10	4;11 - 5;2
Language	Moroccan Arabic/Berber, Sranan	Akan, Ewe / Sranan -Russian
Non-root	11/54 20%	7/34 21%

**Word order problems: Transfer or Interlingual Economy?**

## **VIII. Conclusion**

## IX. References

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