Can 'Let <u>her open it</u>' explain *'<u>*her open it*</u>' errors?

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Children's ACC-for-NOM errors:

- *_Me_ hurting my hair. (Fraser, 2;4)
- *Where does _him_ go? (Becky, 2;5)
- *Um, _her_ wear that there. (Nicole, 2;6)
- *So, we can know where _them_ are. (Adam, 3;2)

Why do children make such errors?

" *Children regularly hear things like 'Let her open it' or 'Help her open it', and so they may just imitatively learn the end part of the sentence, 'Her open it' .* "

Tomasello, M. (2000). First steps toward a usage-based theory of language acquisition. Cognitive linguistics, 11(1/2), 61-82.

Evidence

Children's *'me* + V' errors (e.g. *'me go') are correlated with parent's *'me* + V' sequences (e.g. 'let me go') ($r = 0.55$, $n = 17$, $p = 0.02$).

Kirjavainen, M., Theakston, A., & Lieven, E. (2009). Can input explain children's me-for-I errors?. Journal of Child Language, 36(5), 1091-1114.

If children make ACC + V errors by mistakenly imitating parents....

1. Children should also make ACC+V errors with other pronouns, not just *me*
2. Children should not simultaneously produce correct ACC+V sequences (like "let me do it")

Methods

We replicate Kirjavainen et al (2009)'s method

- Use more children's data
- Examine other accusative pronouns (*her, him, them* as well as *me*)

Counted:

a. Correct ACC+V ('help <u>her find</u> it')
me/her/him/them + V

b. Incorrect ACC+V('<u>them want</u> it')
me/her/him/them + V

c. Correct NOM+V ('I want it')
I/she/he/they + V

Calculated:

1. Correct ACC + V:

   $a/(a+b+c)$

2. Incorrect ACC + V:

   $b/(a+b+c)$

PARENTS' DATA

Counted:

a. Total ACC + V - all correct

'Help <u>her find</u> it'
'Help <u>me, will</u> you?'

me/her/him/them + V

b. Correct NOM ('I want it')

I/she/he/they + V

Calculated:

Total ACC + V

a/(a+b)

Data Summary - Children

		Errors ('_me_ got it')		Correct Uses ('let _me_ go')	
	N. making error	Counts	Percent (%)	Counts	Percent (%)
_me_ + V	41	934	0.9	2588	3.5
him + V	20	94	0.7	111	0.6
her + V	27	299	7.1	114	7.0
them + V	26	92	1.3	135	1.0

Correlation - all 46 children and parents

Children's *'me go 'with parents' 'Let me go'

me + V	*him* + V	*her* + V	*them* + V
0.10	0.07	**0.38*(p = 0.01)**	0.04

Correlations with children who made more than one error

Children's *'me go 'with parents' 'Let me go'

me + V (n = 34)	*him* + V (n = 12)	*her* + V (n = 21)	*them* + V (n = 17)
0.26	0.38	0.25	0.30

Correlation between errors and correct uses of ACC+V - all 46 children

*'me go' correlated with 'let me go'

me + V	*him* + V	*her* + V	*them* + V'
0.11	-0.12	**0.31***	0.23

Correlation between errors and correct uses of ACC+V - children making > 1 error

*'me go' correlated with 'let me go'

me + V (n = 34)	*him* + V (n = 12)	*her* + V (n = 21)	*them* + V (n = 17)
0.06	0.11	0.13	0.16

Correlation between children's correct uses and parents' input - all 46 children

Children's 'Let me go' VS Parent's 'Let me go'

me + V	*him* + V	*her* + V	*them* + V
0.07	-0.25	-0.06	0.05

Correlation between children's correct uses and parents' input - children making > 1 error

Children's 'Let me go' VS Parent's 'Let me go'

me + V (n = 34)	*him* + V (n = 12)	*her* + V (n = 21)	*them* + V (n = 17)
0.06	0.04	0.22	0.15

For most pronouns, children's errors are **not correlated** **with children's correct uses or parents' input**

Do parents of children with more errors produce more 'let ACC+V' instances>

	Children with > 1 error		Children with ≤ 1 error		t-test
	N	Mean %	N	Mean %	t
'me + V'	34	9	12	8	0.51
'him + V'	12	3	34	3	0.67
'her + V'	21	6	25	7	-0.57
'them + V'	17	8	24	9	-0.56

Parents' input is not different for children who make errors and for children who don't make errors

Other evidence against input as the source of children's errors

Children also make errors like:

* Can *me* have it? (Liz, 2;6)

* When *me* fall in the swimming pool" (Nina, 2;5)

* a train *me* got (Nina, 2;5)

Summary of results

Let her open it" in parents' input <mark>cannot explain</mark> children's *"*her* open it" errors.

- There is <mark>no correlation</mark> between parents' "ACC + V" uses and children's "ACC + V" errors.
- There is <mark>no difference</mark> in parents' "ACC + V" uses between children who made errors and children who didn't make errors.
- Children are creative in their 'ACC + V' errors

Do children already know about case?

If children do not make pronoun case errors by simply imitating parents' input, perhaps they represent pronoun case correctly

Test: do parents' uses of ACC + V correlate? If so, do children's?

Correlations among PARENTS' *correct* uses of ACC + V

Parents' 'ACC + V'	*me* + V	*her* + V	*him* + V	*them* + V
me + V	1	**0.58****	**0.39****	0.07
her + V		1	**0.34***	**0.49*****
him + V			1	-0.25
them + V				1

Correlations among CHILDREN's *correct* uses of 'ACC + V' ('let me go')

Children's ACC+V	*me* + V	*her* + V	*him* + V	*them* + V
me + V	1	-0.15	0.01	0.22
her + V		1	-0.17	-0.11
him + V			1	-0.03
them + V				1

Correlations among CHILDREN's *incorrect* uses of ACC + V ('me go')

Children's ACC+V	*me* + V	*her* + V	*him* + V	*them* + V
me + V	1	-0.08	-0.11	0.16
her + V		1	**0.43****	0.07
him + V			1	0.17
them + V				1

Unlike their parents' use, children's accusative pronouns are not correlated, suggesting that they lack an adult-like representation of accusative case.

Conclusions

1. Children's pronoun case errors are not due to parents' input.
2. Children lack an adult-like representation of the pronoun case system.
3. Implication: children learn each accusative pronoun as an individual word.