

### Can ‘Let her open it’ explain ‘Her open it’ error?

English-speaking children (2;0-4;0) reportedly make pronoun case errors, such as ‘him push me’, ‘her said no’ or ‘them going to sleep’, where accusative (ACC) pronouns are used in nominative (NOM) contexts (Huxley, 1970; Budwig, 1989; Schütze and Wexler, 1996; Rispoli, 1998). Parents’ input might be responsible for such errors: ‘Let her open it’ could confuse children so that they produce erroneous utterances like ‘Her open it’ (Tomasello, 2000, 2003). Supporting that explanation is a correlation between first person singular case errors (‘me-for-I’ error) and the proportion of ‘me + V’ segments in parents’ input (Kirjavainen et al., 2009). If the phenomenon is general, it should also occur with all pronouns.

We analyzed ‘ACC + V’ sequences in the longitudinal corpora<sup>1</sup> of 47 monolingual English-speaking children from ages 2 to 4 in CHILDES (MacWhinney, 2014). We extracted all children’s and parents’ utterances that contained ‘me/her/him/them + V’. Children make ‘ACC + V’ errors (e.g. ‘them want it’), but also produce correct utterances containing ‘ACC + V’ (e.g. ‘help her find it’). Table 1 shows that errors are relatively rare and vary across pronouns, ranging from 1% to 6%. We also extracted all the ‘NOM + V’ sequences in children’s and parents’ utterances in order to determine the proportion of ‘ACC + V’ sequences, calculated as follows:

- Proportion of parent’s input ‘ACC + V’ = (‘ACC + V’ count) / (‘ACC + V’ + ‘NOM + V’ counts)
- Proportion of child’s correct ‘ACC + V’ = (correct ‘ACC + V’ count) / (‘ACC + V’ + ‘NOM + V’ counts)
- Proportion of child’s error ‘ACC + V’ = (error ‘ACC + V’) / (‘ACC + V’ + ‘NOM + V’ counts)

Table 2 shows that there is no significant correlation between the proportion of ‘ACC + V’ errors in children’s utterances and the proportional use of ‘ACC + V’ sequences in parents’ input for all four accusative pronouns. Nor is the proportion of ‘ACC + V’ errors is not correlated with the proportion of correct ‘ACC + V’ uses either. Since not all the children made ‘ACC + V’ errors, we further calculated the correlations limited to children who made at least 2 ‘ACC + V’ errors for each pronoun. Even so, as Table 3 shows, there is still no significant correlation between the proportion of ‘ACC + V’ errors and the proportion of ‘ACC + V’ in parents’ input. In addition, we compared the proportion of ‘ACC + V’ in parents’ input for the children who made at least 2 errors and the children who made 1 or 0 errors. Table 4 shows that the mean of the proportion of ‘ACC + V’ in parents’ input is not different for children who made more than 1 errors and children who made 1 or 0 errors.

The results show that children’s ‘ACC + V’ errors cannot be explained by the ‘ACC + V’ segments in parents’ input. Children make some – but not many – ‘ACC + V’ errors regardless of the input frequency of ‘ACC + V’ sequences. In addition, children generally produce more correct (‘Let me do it’) than incorrect (‘me do it’) ‘ACC + V’ sequences. It is unlikely that children are confused by ‘Let her open it’ in the input, given the children’s own correct use. We consider whether there is a substantial phenomenon to be explained: most of children’s subjects are correctly cased (Table 1), regardless of whether overt tense or agreement appears on the verb and regardless of how many ‘ACC + V’ sequences parents produce.

Table 1. Summary of ‘me/her/him/them + V’ data

	No. of children making error	Child ‘ACC + V’ errors counts (‘ <u>me</u> got it’)	Child ‘ACC + V’ correct use counts (‘let <u>me</u> finish’)	Child ‘ACC + V’ error rate	Parent ‘ACC+V’ counts	Child ‘NOM + V’ counts	Parent’s Input ‘NOM + V’ counts
‘me + V’	42	934	2588	4%	5688	95817	72435
‘him + V’	21	94	111	2%	520	12325	18620
‘her + V’	28	299	114	6%	719	3760	14827
‘them + V’	27	92	135	1%	1263	6819	14090

Table 2. Correlations between parent’s input, errors, and correct uses for all children

Correlation (n = 46)	Input VS error	Input VS correct use	Error VS correct use
‘me + V’	0.10	0.07	0.11
‘him + V’	0.07	-0.25	-0.12
‘her + V’	-0.21	-0.06	0.31
‘them + V’	0.01	0.04	0.23

Table 3. Correlations between input, errors, and correct uses for children who made more than 1 errors

Correlation	N (children making >1 errors)	Input VS Error	Input VS correct use	Error VS correct use
‘me + V’	36	0.13	0.06	0.10
‘him + V’	14	0.34	0.10	0.11
‘her + V’	22	0.24	0.05	0.11
‘them + V’	18	0.02	0.22	0.15

Table 4. Comparison of the proportion of parent’s input between children with >1 errors and ≤ 1 errors

	children with >1 errors			children with ≤ 1 error			
Input Proportion	N	Mean	SD	N	Mean	SD	t
‘me + V’	11	.09	0.12	36	.10	0.16	-0.16
‘him + V’	14	.03	0.03	33	.03	0	0.47
‘them + V’	18	.09	0.04	29	.10	0.34	-0.65
‘her + V’	22	.06	0.08	25	.08	0.3	-0.6

<sup>1</sup>List of corpora: Bloom et al. (1974), Braunwald (1971), Brown (1973), Clark (1978), Demetras (1986), Henry (1995), Kuczaj (1978), Lieven et al. (2009), MacWhinney (2014), Maslen et al. (2004), Post (1993), Rowland and Fletcher (2006), Sachs (1983), Snow (1990), Suppes (1974), Theakston et al. (2001), Weist et al. (2009)