

## Object Scrambling and Specificity in Bilingual Ukrainian/English Acquisition

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Previous studies established the effect of specificity on scrambling (Schaeffer 2000, Krämer 2000, Avrutin & Brun 2001, Unsworth 2005, *i.a.*). For instance, in adult Dutch, scrambling of the specific direct object is obligatory (over negation), but in child Dutch, the object scrambles only optionally. Importantly, theoretical explanations for these facts diverge. Schaeffer (2000) argues that optionality of scrambling in child language is due to pragmatic deficit (lack of shared knowledge). Unsworth (2005) points out inadequacy of the pragmatic analysis and suggests a syntactic-semantic approach. This paper provides novel evidence for the latter view on optional scrambling by children, using new experimental data from Ukrainian/English bilingual children.

The base structure of Ukrainian is SVO, and it has object scrambling over the verb. Similarly to Dutch, Ukrainian allows object scrambling only when it is specific (1). Unlike Dutch, in-situ object in Ukrainian can be specific or non-specific, as in (2). Adults, however, strongly prefer a non-specific reading for in-situ objects.

Assuming Full Access to UG (Schwartz 2003), we hypothesize that Ukrainian bilingual children have access to the specificity feature in UG, but that they may have difficulty in mapping the [+specific] feature with syntactic movement. We predict then that:

- (3) a. Ukrainian children will allow specific object both in scrambled and in-situ position, just like adults.
- b. Ukrainian children will allow greater variability in scrambling due to the unstable mapping between [+specific] feature and scrambled position, unlike adults.
- c. Crucially, however, children will disallow non-specific object in scrambled preverbal position. Once they use scrambling, they will do it correctly with [+specific] object.

To test the hypotheses, we conducted an elicited production task (slightly modified from Schaeffer 2000) with 41 Ukrainian/English bilingual children (age 2;10-7;11) and a control group of 4 adult Ukrainian speakers. Four conditions were used: definite specific, indefinite specific, indefinite non-specific and definite pronominal.

The results show that scrambling occurs optionally, but not randomly. The rate of object scrambling in non-specific condition was very low (9%) in comparison to definite specific (45%), definite pronominal (45.45%) and indefinite specific (65%) conditions, as predicted. The ANOVAs show that there is a significant main effect of specificity ( $p < .0001$ ), and the difference between indefinite specific and indefinite non-specific condition is highly significant ( $p < .0001$ ). The difference between definite specific and indefinite non-specific condition was also significant ( $p = .001$ ) as well as the difference between definite pronominal and indefinite non-specific condition ( $p = .001$ ). There was no significant difference between definite specific and indefinite specific conditions ( $p = .065$ ). This suggests that specificity contributes more to object scrambling than definiteness. Overall, children show less scrambling than adults (41% vs. 50.78%).

Our findings suggest that Ukrainian/English bilingual children have access to the specificity feature in UG and try to resolve the semantic ambiguity of SVO structure by syntactic movement. Optional scrambling does not occur across-the-board, contrary to what is expected under the pragmatic approach. This result thus further supports the syntactic-semantic approach to optional scrambling in child grammar.

- (1) Winnie                     $\sqrt{\text{jabluko}_i \quad \text{jist}' \quad t_i}$   
*Winnie apple* <sub>[+specific]</sub>                    *eats*  
 ‘Winnie is eating a specific apple’
- (2) Winnie                    *jist'*                    **jabluko**  
*Winnie*                    *eats*                    *apple* <sub>[-specific]/[+specific]</sub>  
 ‘Winnie is eating any/a specific apple’

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