

The Role of Aspect During the Acquisition of Verb Morphology in Russian: From Item-Specificity to Proficient Use

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Usage-based accounts of language acquisition propose an item-specific stage during which grammatical forms and syntactic constructions appear with a limited number of lexical items (e.g. Lieven et al. 1997; Tomasello 2003). The Aspect Hypothesis (as formulated in Shirai & Andersen 1995) posits that early aspect use is characterized by a strong correlation between aspect and tense. Children preferably use imperfective aspect with present tense and perfective aspect with past tense (e.g. Li & Shirai 2000); these correlations are also present in adults, but to a lesser degree. This was shown to hold for the acquisition of verbal morphology in numerous languages. Here, we analyze the development of the verb system in Russian in preschoolers. In Russian, aspect is a central feature of the verb system; each verb is obligatorily either imperfective or perfective. Perfective verbs typically express nuanced lexical meanings, while imperfectives are lexically less specific. Verbs of both aspects have the same grammatical markers for the other categories (tense, person, number, mode). The goal of this study is to (i) establish phases in the development of verb use and (ii) compare the lexical and grammatical flexibility of verb forms in the two aspects during these phases.

Our **data** stem from a longitudinal corpus of weekly recordings (1h) of four Russian children (recorded for 24-36 months, aged 1;3-1;11 at the start of recordings). The corpus contains 2 million morphologically annotated words from the target children and surrounding speakers.

In **analysis 1**, we establish phases in acquisition by conducting a segmented regression on the growth curves of the verb form increase in each child's inventory. The analysis of the form use in the individual phases reveals that during the earliest phase (phase 1), children use forms item-specifically and the forms correspond to the predictions made in the Aspect Hypothesis. Perfective verbs tend to occur in the past and as imperatives, while imperfectives occur mostly with non-past and infinitive morphology.

In **analysis 2**, we focus on the development during phase 2 by computing the entropy of lexical items and grammatical markers used with verbs of both aspects over time. This allows us to evaluate how quickly children approach the flexibility of use displayed by surrounding adults. For verb forms of both aspects we see a quick increase in entropy towards the level of surrounding adults and a rapid development of form use across the entire paradigm, implying that the children in our sample start using verbs of both aspects with a variety of forms early during phase 2 and rapidly abandon the item specific tendencies of their early production of phase 1.

Results of this study confirm earlier findings of a strong association between aspect and tense in the earliest phase of language acquisition (Stoll & Gries 2009). At the same time, we also show that Russian children display a high degree of flexibility of combinations of stem and morphemes across the entire paradigm early on and are by no means restricted to the use certain forms with a specific aspect. The Aspect Hypothesis holds only for the earliest form use and might not reflect the greater saliency of the combination of *perfective+past* or *imperfective+present*, but instead merely mirror adult input distributions. They quickly converge towards the distributions found in adult input. We discuss whether this can be analysed as the effect of semantic saliency or merely of distributional clues.

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