

## Grammatical gender on novel nouns in child bilingual acquisition

A considerable number of recent studies have investigated the acquisition of grammatical gender in child bilinguals and adult heritage speakers. A variety of results have been reported, including target-like gender assignment as well as qualitatively different structural modifications in the gender systems (Gathercole & Thomas 2005, Montrul 2008, Polinsky 2008, Kupisch et al. 2013, Unsworth et al. 2014, Rodina & Westergaard 2015 among others). These scenarios raise a number of important research questions which are central in the present research: 1) What mechanisms do bilingual speakers use to predict gender? 2) Are they sensitive to gender cues? and 3) Do they develop a system of formal gender assignment rules?

Most previous experiments have used existing nouns, which means that target-consistent production could either be due to an internalized gender system in the children's grammar or simply to memorized forms. Therefore, the current research project uses novel nouns to investigate how bilingual Norwegian-Russian children assign gender in Russian, their minority language. Russian has a three-gender system of masculine, feminine, and neuter, where masculine is considered the grammatical default (Corbett 1991). The Russian gender system, being mostly transparent, presents relatively few challenges to learners. Masculine nouns typically end in a consonant (e.g. *stol* 'table'), feminines in a stressed *-a* (*lisa* 'fox') and neuters in a stressed *-o* (*okno* 'window'). These are the transparent gender classes, referred to as Mt, Ft and Nt respectively in Table 1. At the same time, nouns ending in a palatalized consonant (*kon*' 'horse', *sol*' 'salt') belong to either masculine or feminine gender, and nouns ending in unstressed vowels are ambiguous between feminine and neuter (*kukl/ə/* 'doll', *kresl/ə/* 'armchair'), referred to as FM and FN in Table 1. Previous studies on Russian-speaking bilingual children and adults have shown that neuter is the most vulnerable gender and that lack of exposure can cause restructuring of the gender system from masculine-feminine-neuter to masculine-feminine (Polinsky 2008) or just masculine (Rodina & Westergaard 2015).

To investigate bilingual children's sensitivity to the phonological cues in Russian, we have elicited adjectival agreement with novel nouns that were equally distributed across five experimental conditions. Our predictions for each of the experimental conditions are illustrated in Table 1. The elicitation task was adapted from Rodina & Westergaard (2015). The images representing the nonce words were adapted from the Novel Object and Unusual Name (NOUN) Database (Horst & Hout in press). Results have been obtained from fifteen Norwegian-Russian children (age 7-10) with different amounts of exposure to Russian: only Russian in the home ( $n=9$ ) or Norwegian and Russian in the home ( $n=6$ ). Figure 1, Panel A shows that our predictions are borne out for all experimental conditions and that the bilingual children behave similarly to the monolingual adult controls (Figure 1, Panel B). At the same time, some overuse of masculine is noticeable in the Ft, Nt and FN conditions. Furthermore, the results for the two subgroups of bilinguals reveal that the overuse of masculine is characteristic of the children with less exposure to Russian, i.e. 'the Norwegian and Russian in the home' group (Figures 2 and 3). To conclude, these results suggest that bilinguals at this age are sensitive to the gender cues in their minority language and have knowledge of the gender assignment rules. Yet, lack of exposure can reduce this sensitivity, causing overuse of masculine gender forms. More data is currently being collected to explore the role of exposure and to draw parallels with monolingual speakers.

Table 1. Experimental conditions and predictions.

	Feminine transparent (Ft)	Masculine transparent (Mt)	Neuter transparent (Nt)	Feminine / Neuter opaque (FN)	Feminine / Masculine opaque (FM)
Examples	<i>kluvá</i>	<i>punip</i>	<i>garpó</i>	<i>prúz/ə/</i>	<i>dron'</i>
Prediction	feminine	masculine	neuter	feminine & neuter	feminine & masculine

Figure 1. Gender marking across five experimental conditions: Bilingual children (panel A) adult controls (panel B).

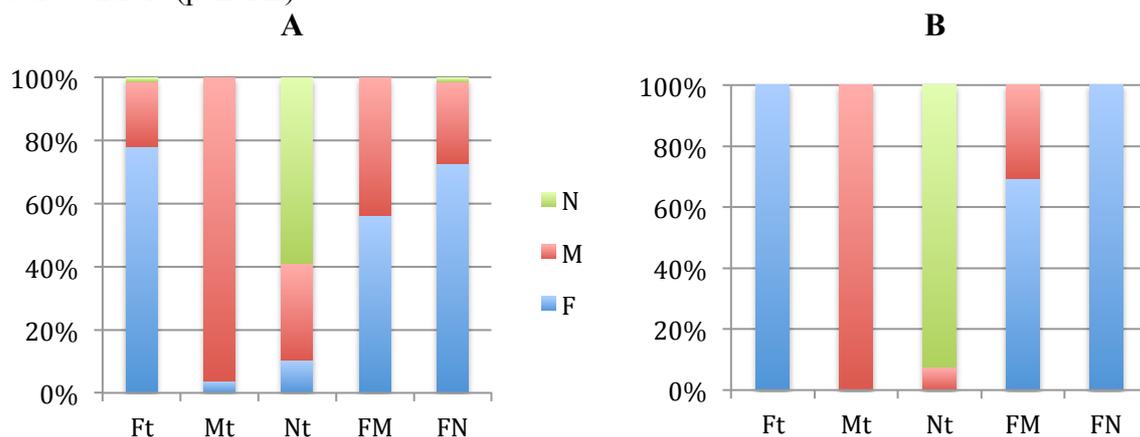


Figure 2. Norwegian & Russian in the home.

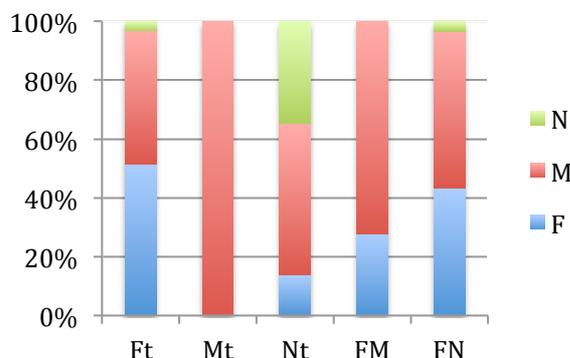
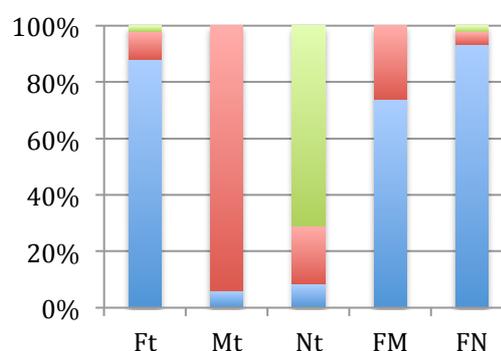


Figure 3. Only Russian in the home.



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