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Fewer Words, Broader Categories: Animal Naming in Heritage Russian

We categorise the world to make it understandable. Yet categories are not fixed containers: they have centres, margins, and culturally shaped boundaries (Rosch 1978; Rosch and Mervis 1975). This abstract examines one such category: Russian *zhivotnye* ‘animals’ among Russian heritage speakers in Germany.

Main finding: Heritage speakers produced fewer animal names than their parents and grandparents but distributed them more broadly across animal subcategories.

The data come from the DFG-funded project *Russian in Germany across Generations* (RuGGe). The sample includes 86 participants from 20 Russian-speaking families in Germany: 22 grandparents, 35 parents, and 29 children. Grandparents represent a Russian-dominant first immigrant generation, parents an intermediate contact generation, and children a German-dominant heritage generation.

Participants completed a semantic verbal fluency task in Russian and were asked to name as many animals as possible within 60 seconds. Responses were transcribed, cleaned, lemmatised, and assigned to fourteen animal subcategories, including mammalian groups such as pets, farm animals, and wild mammals, as well as birds, fish, insects, reptiles, amphibians, and invertebrates. The analysis combines lexical productivity with the internal distribution of animal names.

The generation comparison was tested statistically in R. Lexical productivity was analysed with a two-way ANOVA with *Generation* and *Task* as fixed factors. The distribution of animal subcategories was tested with a chi-square test using Monte Carlo simulation, followed by standardised residuals to identify over- and underrepresented subcategories.

The results first show a clear quantitative difference: children used fewer words overall than both adult generations. In the animal task, grandparents produced on average 19.7 words, parents 21.0, and children 16.1. The two-way ANOVA confirmed a significant main effect of *Generation*, $F(2,235) = 35.20$, $p < .001$; post-hoc comparisons showed that children were significantly less productive than both adult groups.

The central result, however, is qualitative. Children did not simply produce a smaller version of the adult pattern; their fewer words were distributed differently across animal subcategories. The association between generation and subcategory was highly significant, chi-square = 118.13, $p < .0001$. Grandparents overproduced farm animals and underproduced several non-mammalian groups, reflecting a more mammal-centred organisation of Russian *zhivotnye*. Parents occupied an intermediate position.

Children, by contrast, underproduced farm animals and wild mammals, but overproduced insects, fish, reptiles, birds, amphibians, and invertebrates.

These findings suggest that children (heritage speakers) do not merely have reduced lexical access in Russian. They reorganise the category itself. While the adult generations keep *zhivotnye* closer to a mammal-centred prototype, children distribute category membership more broadly across animal classes. Under sustained contact with German *Tiere*, Russian *zhivotnye* becomes less narrowly centred on mammalian prototypes and more evenly spread across the wider animal domain (Wierzbicka 1997; Polinsky 2018). Heritage-language change is therefore not only about how many words speakers know, but also about how categories are internally reorganised.

Sources

Polinsky, Maria. 2018. *Heritage Languages and Their Speakers*. Cambridge: Cambridge University Press.

Rosch, Eleanor. 1978. "Principles of Categorization." In Eleanor Rosch and Barbara B. Lloyd (eds.), *Cognition and Categorization*, 27-48. Hillsdale, NJ: Lawrence Erlbaum.

Rosch, Eleanor, and Carolyn B. Mervis. 1975. "Family resemblances: Studies in the internal structure of categories." *Cognitive Psychology* 7(4): 573-605.

Troyer, Angela K., Morris Moscovitch, and Gordon Winocur. 1997. "Clustering and switching as two components of verbal fluency: Evidence from younger and older healthy adults." *Neuropsychology* 11(1): 138-146.

Wierzbicka, Anna. 1997. *Understanding Cultures through Their Key Words: English, Russian, Polish, German, and Japanese*. New York: Oxford University Press.