Russian is the new Czech? An experimental investigation of Genitive of Negation in Russian

In Russian, the direct object of a transitive verb is canonically accusative case-marked, as in (1a). Under sentential negation, the non-oblique direct object of a verb can either be accusative or genitive case-marked, as shown in (1b). This phenomenon known as the Genitive of Negation.

(1) a. Paša kupil braslet/*-a.
Pasha buy bracelet.ACC/GEN
'Pasha bought a bracelet.'

b. Paša ne kupil braslet/-a.
Pasha NEG buy bracelet.ACC/GEN
'Pasha didn't buy a bracelet.'

The literature maintains that the case alternation is semantically motivated in Russian (e.g. Bailyn 1997, Franks & Pereltsvaig 2004, Cho 2013, Kagan 2012). This paper reports on a first large scale acceptability judgment task designed to test predictions made by competing analyses of the Genitive of Negation; specifically, it tests whether the case alternation is influenced by definiteness and/or specificity.

Semantics factors governing the case alternation. Analyses of the ACC/GEN case alternation assume that different semantic/pragmatic notions govern the distribution of the two cases. For instance, Franks & Pereltsvaig (2004) and Kagan (2012) argue that the relevant notion is existential commitment. Bailyn (1997), on the other hand, suggests that the case opposition is governed by a plethora of notions including, but not limited to, definiteness, specificity, presuppositionality. The aforementioned analyses also make different assumptions about the nature of the opposition (equipollent vs. privative). For instance, Franks & Pereltsvaig (2004) argue that ACC presupposes existence, while GEN does not. Kagan (2012) argues that GEN indicates the absence of existential commitment, while ACC is the default case. One challenge in assessing how these sometimes incompatible generalizations is the lack of information on how the data that underly the generalizations were collected. The aforementioned analyses, however, lead to the following, testable predictions: **P1:** ACC is judged to be more acceptable in specific than non-specific contexts and GEN is judged to be more acceptable in non-specific than specific contexts (compatible with Franks & Pereltsvaig 2004). **P2:** ACC is judged to be acceptable regardless of context, GEN is judged to be more acceptable in non-specific than specific contexts (compatible with Kagan 2012); **P3:** ACC is judged to be more acceptable in definite specific than other contexts, GEN is judged to be more acceptable in indefinite non-specific than other contexts (compatible with Bailyn 1997).

Acceptability rating experiment. This experiment tested the predictions of different analyses exploring the influence of definiteness (in the sense of Coppock & Beaver 2015) and the scopal specificity (in the sense of von Heusinger 2002) on the acceptability of ACC and GEN cases. *Participants:* 297 participants completed an online survey hosted on OSU Qualtrics. 181 of the participants (61%) are self-reported native speakers of Russian born in Russia. *Materials and procedure:* Target stimuli consisted of a sentence with a negated transitive verb embedded in a discourse, as shown in (2) for a version of the sentence in (1b) with a pronominal subject. 5 perfective verbs were combined with 10 inanimate, singular, masculine, countable nouns. The verbal aspect and the (lexical) semantics of the noun were controlled for since these factors have been suggested to influence the acceptability of GEN and ACC cases (e.g. Timberlake 1975). The resulting 10 target sentences were embedded in discourses that differed in definiteness and specificity of the direct object for a total of 80 target stimuli. Participants had to judge the acceptability of the target sentence within a given discourse on a 5 point Likert scale (1 = unacceptable, 5 = acceptable). The target sentence was presented with either an ACC or GEN case-marked object. Definiteness and specificity were within-participant factor and the target sentence was a between-participant factor. Every participant in total rated 10 target items (5 GEN, 5 ACC) and 4 control items. The control items were included to assess whether participants were paying attention.

(2) **Sample stimuli (presented in English here for space reasons)**

[+definite + specific] Pasha forgot to buy a birthday gift for his wife. He went to the closest jewelry store. There he saw a beautiful bracelet. He didn't buy bracelet$_{acc/gen}$. He could not afford it.

[+definite −specific] Pasha forgot to buy a birthday gift for his wife. He went to the closest jewelry store. He thought that he saw a beautiful bracelet. He didn't buy bracelet$_{acc/gen}$. It turned out that he

was mistaken and this store didn't sell any bracelets.

[-definite +specific] Pasha forgot to buy a birthday gift for his wife. He went to the closest store. He didn't buy bracelet$_{acc/gen}$, even though he was planning to. He could not afford the only bracelet that he thought was nice.

[-definite - specific] Pasha forgot to buy a birthday gift for his wife. He went to the closest store. He didn't buy bracelet$_{acc/gen}$, even though he was planning to. This store didn't sell any bracelets.

Results. The results presented in this paper are based on acceptability judgments of the 94 self-reported native speakers of Russian born in Russia that answered all controls correctly. Overall ACC was rated higher than GEN irrespective of condition (3.87 and and 2.54, respectively). As shown in Fig 1, neither specificity (top panel) nor definiteness (bottom panel) influenced the acceptability ratings for ACC or GEN contrary to the 3 predictions (P1-P3). This observation was confirmed with ordinal mixed-effects models that predicted the acceptability ratings from fixed effects of specificity (P1, P2) or definiteness (P3) or their interaction (P3), and random effects for participant, verb and object. This finding is not surprising, however, given the variability observed in the data. *By-age variability:* There is a positive correlation between the rating of GEN and age (r = .43). Older participants rated GEN as more acceptable than younger participants. *By-participant variability:* 11 participants judged all GEN as unacceptable, i.e. for these speakers ACC is the only available case under negation. The general discussion of Genitive of Negation has not yet acknowledged the fact that the case alternation is not present in the grammar of all speakers of Russian. *By-verb variability:* idiosyncratic properties of verbs influence the acceptability of GEN. GEN was considerably more acceptable with *najti* 'to find' and *uvidet* 'to see' than the other three verbs. The observation about *uvidet* 'to see' is compatible with the claim in Timberlake (1975) that perception verbs take GEN under negation more often than other verb classes. The fact that *najti* 'to find' patterns with *uvidet* 'to see' is unexpected. It could be an influence of the intensional verb *iskat* 'to seek', which allows for the GEN/ACC alternation without sentential negation. A more thorough investigation of the effect of verbal class on the case alternation is necessary. Idiosyncratic properties of verbs have been discussed as a factor influencing GEN/ACC case alternation under intensional verbs (e.g. Kagan 2012), but has been largely absent from the discussion of Genitive of Negation.

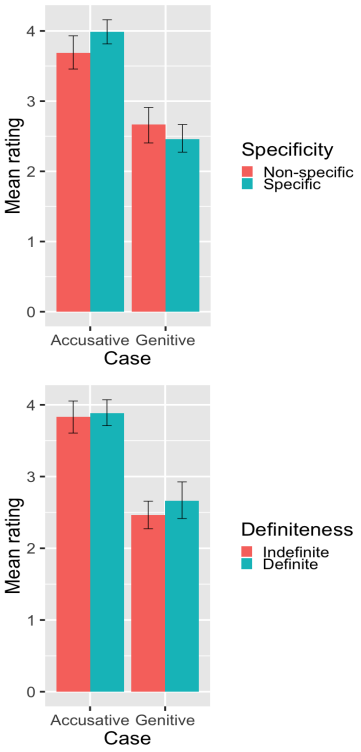

Fig. 1: Mean acceptability ratings by case. Error bars indicate 95% CIs.

Discussion: methodological and theoretical implications. The question of which semantic/pragmatic features govern the alternation remains wide open. However, this experiment highlights a number of sources of variability that must be considered in the future investigations of the case alternation: i) participant age, ii) some participants do not exhibit case alternation; iii) idiosyncratic properties of the verb. The experiment also provided empirical evidence for the ongoing language change in Russian. The study identified a subset of native speakers of Russian for whom the case alternation does not exist. This suggests that Russian is moving in the same direction as Czech, where ACC has replaced GEN as the only grammatical case under negation (e.g. Kagan 2012).

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