Anaphoric potential of Russian 'small nominals'
in obligatory-control environment[*]

Maria Berkovich, Higher School of Economics
Pavel Rudnev, Higher School of Economics

Keywords: small nominals, agreement, control

Background. [Pereltsvaig 2006] proposes that in Russian, there is a dedicated class of nominals not projecting a DP, i.e., small nominals, which lack some syntactic properties that full DPs have. In the subject position, such nominals cannot control agreement on the predicate. Moreover, small nominals cannot serve as controllers of PRO. On this view, sentences with small nominals in the position of the antecedent of PRO are expected to be strictly ungrammatical. This claim has been contested in subsequent works, e.g., [Matushansky, Ruys 2015; Rudnev 2024], based on introspective judgements and corpus data. This experimental study investigates the ability of Russian small nominals to serve as PRO controllers.

Design. Our online acceptability judgement study used a 2×2×2 experimental design: the first variable is SG vs PL agreement on the predicate; the second variable is the presence vs absence of a (subject) control predicate (chosen based on [Rudnev, Shikunova 2022]); the third variable is the presence vs absence of a QP-modifier (e.g., *okolo* 'about', *bolee* 'more than'), see a partial paradigm for the (+MODIFIER) condition below.

(1)   (PL; –CONTROL; +MODIFIER)

Okolo	sta	učenikov	učastvujut	v	konkurse.
about	hundred	students	participate.PL	in	competition

'About one hundred students take part in the competition.'

(2)   (SG; –CONTROL; +MODIFIER)

Okolo	sta	učenikov	učastvujet	v	konkurse.
about	hundred	students	participate.SG	in	competition

'About one hundred students take part in the competition.'

(3)   (PL; +CONTROL; +MODIFIER)

Okolo	sta	učenikov	rešili	učastvovat'	v
about	hundred	students	decided.PL	participate	in

konkurse.
competition

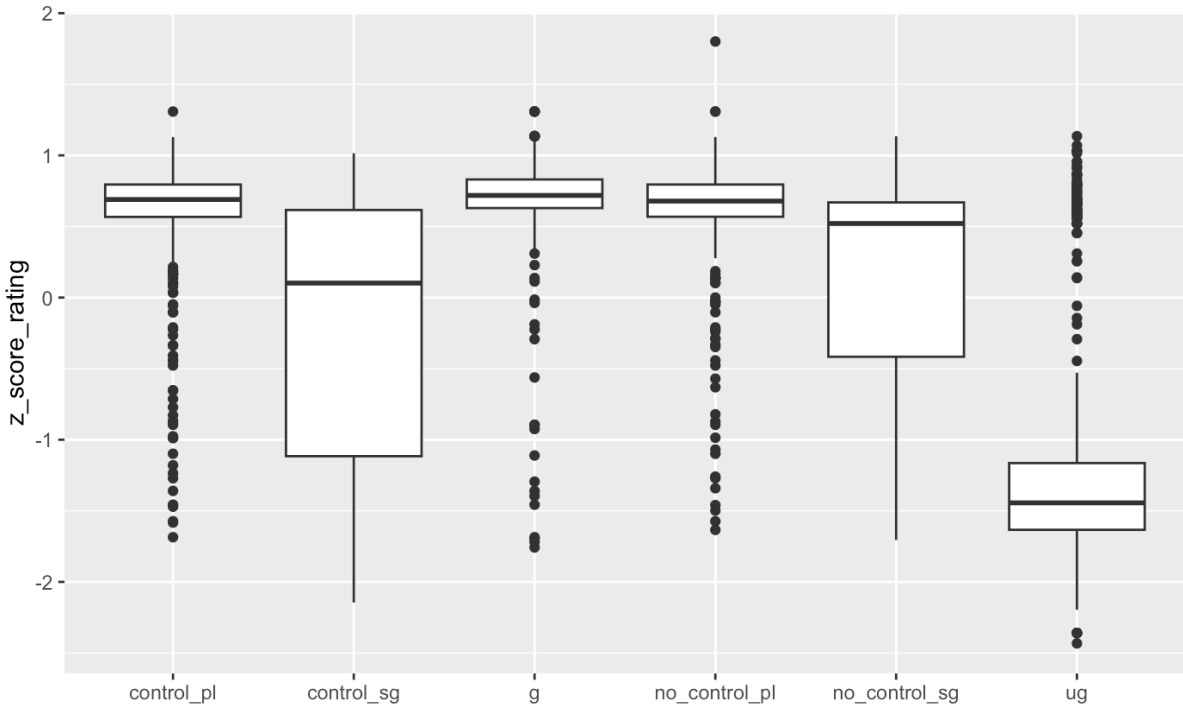'About one hundred students decided to take part in the competition.'

(4)   (SG; +CONTROL; +MODIFIER)

Okolo	sta	učenikov	rešilo	učastvovat'	v
about	hundred	students	decided.SG	participate	in

konkurse.
competition

'About one hundred students decided to take part in the competition.'

The occurrence of the about-modifier is meant to highlight the 'small-nominal' interpretation. Given that [Pereltsvaig 2006] postulates a categorial distinction between 'full DPs' and 'small nominals' and ties the absence of the D-layer to a reduced anaphoric potential, it predicts that the (SG; +CONTROL) stimuli should display comparable scores with ungrammatical fillers.

Experimental setup. The experimental lists had a 1:1 filler-to-stimulus ratio, each containing 16 filler sentences and 16 stimulus sentences (thus, each participant encountered each experimental condition twice). The experiment was implemented via the web-based software PCIbex. Sentences were presented one at a time. The participants were asked to score each sentence's acceptability on a 1–7 Likert scale. 130 participants (all native speakers of Russian) were recruited online using the Yandex.Tasks crowd-sourcing platform.

Results. The ratings by each participant were z-score transformed to eliminate potential scale bias. Grammatical fillers have a mean z-score of $z = 0.703$, while ungrammatical fillers have a mean z-score of $z = -1.202$. Figure 1 reflects the distribution of the z-score ratings for the (SG; PL) and (±CONTROL) variables relative to grammatical fillers (g) and ungrammatical fillers (ug). We observe that the ratings in the SG condition pattern with neither the grammatical nor the ungrammatical fillers, with the mean z-score rating for the (+SG; –CONTROL) condition of $z = 0.084$, and a z-score of $z = -0.219$ in the (SG; +CONTROL) condition. A linear mixed-effects model fitted to the data with the three factors as fixed effects and participant and sentence as random effects reveals the significance of SG (coefficient estimate = −0.601, standard error = 0.07, $z < 0.001$). Neither ±CONTROL (coefficient estimate = −0.036, standard error = 0.07, $z = 0.6$) nor ±MODIFIER (coefficient estimate = −0.071, standard error = 0.07, $z = 0.3$) is significant when considered separately. The interaction of (±CONTROL) with (SG, PL) is mildly significant (coefficient estimate = −0.223, standard error = 0.099, $0.01 < z < 0.05$), as is the interaction of (SG, PL) with ±MODIFIER (coefficient estimate = 0.197, standard error = 0.099, $0.01 < z < 0.05$). No other interactions are significant.

Figure 1. z-score ratings

Discussion. The mean and median scores in the (SG; +CONTROL) condition do not pattern with the ungrammatical fillers, contrary to the predictions of [Pereltsvaig 2006]. A preliminary conclusion is that the strong version of the 'small-nominal' hypothesis is to be rejected.

References

Matushansky, Ruys 2015 — Matushansky O., Ruys E. Measure for measure. *Slavic grammar from a formal perspective: The 10th anniversary FDSL conference*. Zybatow G., Biskup P., Guhl M., Hurtig C., Mueller-Reichau O., Yastrebova M. (eds.). Frankfurt-am-Main: Peter Lang, 2015. Pp. 317–330.

Pereltsvaig 2006 — Pereltsvaig A. Small nominals. *Natural Language and Linguistic Theory*. 2006. Vol. 24. No. 2. Pp. 433–500.

Rudnev 2024 — Rudnev P. Categorial selection and functional structure in the noun phrase: Revisiting Russian Small Nominals. *Russian Linguistics*. 2024. Vol. 48. Article No. 1.

Rudnev, Shikunova 2022 — Rudnev P., Shikunova A. Idioms, NP position, and control: Evidence from Russian. *Typology of Morphosyntactic Parameters*. 2022. Vol. 5. No. 1. Pp. 91–106.