

Complementizer-trace effects in Russian

Ekaterina Morgunova / morgunova.kate@gmail.com

Lomonosov Moscow State University / Pushkin State Russian Language Institute

Introduction

I have done an acceptability judgment experiment to test complementizer-trace effects in Russian. Besides the effect itself, in this study I also look at:

- (i) the differences between two types of finite embedded clauses: are they equally transparent for argument extraction?
- (ii) the effect of a high adverb on the complementizer-trace effect

This study also explores the effect of the context on the acceptability rates and the significance of the results for the theory of complementizer-trace effects in general.

Background

That-trace effect

- (1) a. *Who do you think [**that** ___ met Sue]?
b. Who do you think [___ met Sue]?
- (2) a. Who do you think [**that** Sue met ___]?
b. Who do you think [Sue met ___]?

Adverb obviation

- (3) I asked **what** Leslie said [that **in her opinion** ___ had made Robin give a book to Lee].

Russian data

Two types of finite embedded clauses:

- Indicative clauses with the complementizer *ehto*
- Subjunctive clauses with the complementizer *ehtoby*

Antonenko 2008, 2010: asymmetry only in subject extraction

- (4) **kto ty dumaesh' [ehto ___ vypil vsjo pivo]?*
who you think **that** drank all beer
'Who do you think that has drunk all the beer?'
- (5) ?*kto ty xoches' [ehtoby ___ napisal stat'ju]?*
who you think **that.SUBJ** wrote paper
'Who do you want to write a paper?'

Dyakonova 2009: asymmetry in object extraction (data about subject extraction is not clear)

References

Antonenko A. 2008. The nature of Russian subjunctive clauses. Qualifying paper. Stony Brook University. **Antonenko A. 2010.** Puzzles of Russian subjunctives. University of Pennsylvania Working Papers in Linguistics 16(1). **Dyakonova M. 2009.** A phase-based approach to Russian free word order. LOT Dissertation Series. Netherlands Graduate School of Linguistics. **Pesetsky D. 2019.** Exfoliation: Towards a Derivational Theory of Clause Size. Ms.

Experiment design

- 1-7 Likert scale acceptability study with a 2x3 factorial design
- 1st factor: the type of the clause (*ehto*-clause ~ *ehtoby*-clause)
- 2nd factor: the type of extracted argument (object ~ subject ~ subject in the presence of a high adverb *odnazhdy* 'once')
- 24 lexicalizations, 36 fillers (grammatical & ungrammatical)
- 6 matrix verbs: 3 verbs, that have *ehto*-clause as their CA, 3 verbs, that have *ehtoby*-clause as their CA

- Two version of the experiment: with and without context
- Context was shown before the test sentence was presented

- Participants were recruited through social media and crowd-sourcing platforms
- Experiment without context (NC): 241 participants
- Experiment with context (WC): 181 participants

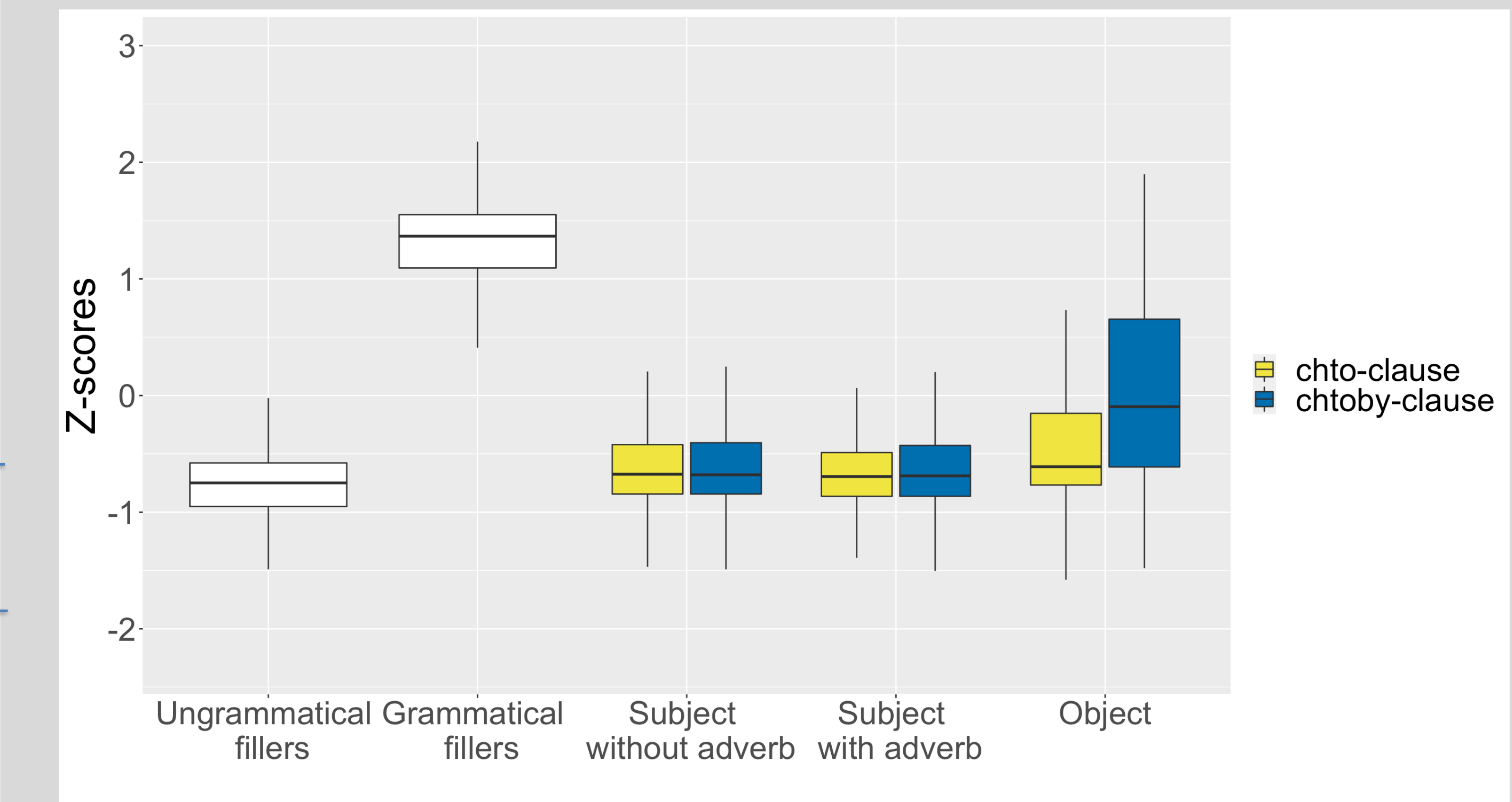
Results

- Linear mixed model with random intercepts for participants and experimental items
- Embedded clause type significant in both cases (NC: $p < .0001$, WC: $p < .0001$) → **difference between types clauses confirmed**
- Argument type significant in both cases (NC: $p < .0001$, WC: $p < .0001$) → **complementizer-trace effect confirmed**
- Main factor interaction significant in both cases (NC: $p < .0001$, WC: $p < .0001$)
- Adverb obviation: Tukey test
- The presence of an adverb is not significant (NC: $p = 1$, WC: $p = .998$) → **adverb obviation not confirmed**
- Context: Wilcoxon test
- Object extraction ($p < .0005$) and ungrammatical fillers ($p < .0005$) are rated lower in the absence of context

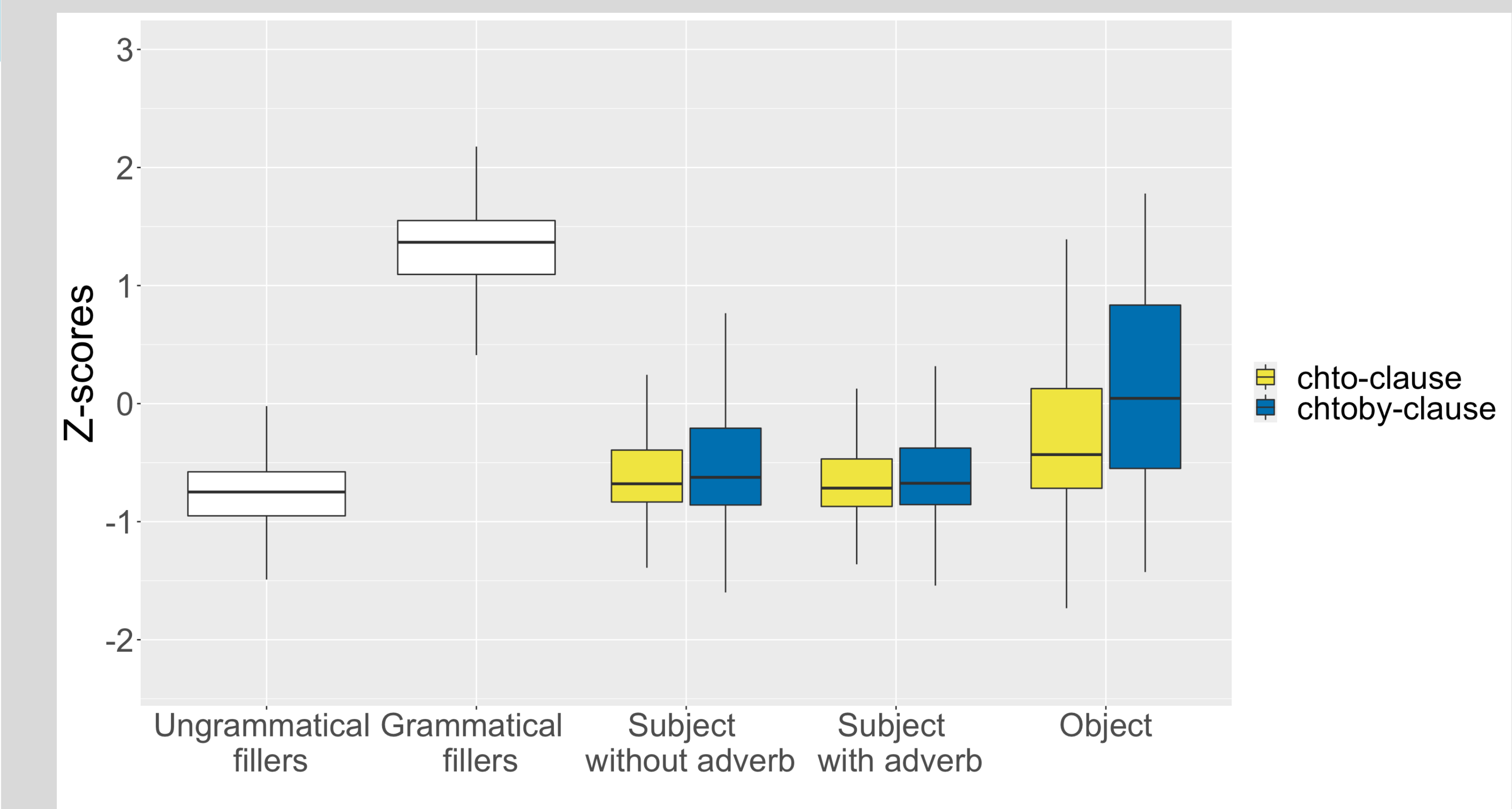
Discussion

- Russian exhibits complementizer-trace effects.
- The difference between the acceptability of subject and object extraction holds for both types of clauses.
- This contradicts the data in (Antonenko 2008, 2010).
- There is also a difference in object extraction with the regard to the type of the clause, which matches with the data in (Dyakonova, 2009)
- Context only affects the acceptability of object extraction - inconsistency across different speakers?
- It also affect the acceptability of ungrammatical fillers (Complex NP island violation)

Acceptability rating in the experiments without context



Acceptability rating in the experiments with context



- High adverb does not affect the acceptability scores of the subject extraction
- Pesetsky 2019: adverb obviation arising due to two CPs present
- (6) We know [CP **that** for all intents and purposes [CP **that** the government created a rating agency oligopoly that prevented the market from enjoying more competition]].
- (7) **my znayem eh-to fakticheski eh-to pravitel'stvo sozdalo* we know that in.fact that government created oligopoliju oligopoly 'We know that government has in fact created an oligopoly.'