# TWO INDIRECT QUESTION CONSTRUCTIONS IN RUSSIAN: ACCEPTABILITY JUDGMENTS

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# RUSSIAN

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Indo-European>Slavic>East
150 million speakers (2012)
Why?
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- Feasibility
- Research gap

# INDIRECT QUESTION CONSTRUCTIONS

```
On prid<sup>j</sup>-ot
He come-3sg.prs
He will come.
```

```
Ja sprəsi-l-ə prid<sup>j</sup>-ot li on I ask-pst-fem come-3sg.prs Q he. I asked whether he will come.
```

```
Ja sprəsi-l-ə jesli on prid<sup>j</sup>-ot
I ask-pst-fem if he come-3sg.prs
I asked whether he will come.
```

# ACCEPTABILITY JUDGMENT STUDIES

Method of linguistic knowledge elicitation

The task: to judge if a given structure is grammatical

Judgment tasks (Plonsky, 2019):

- slimuli modality: written or oral
- structures: isolated or in context
- response condition: timed or untimed
- additions: confidence rating; response basis

# THE PRESENT STUDY

#### Corpus Pre-Study

Does the jesli construction exist in the corpora?

#### 2. Experiment (including pilot)

Is there a difference between speakers of different ages and status (heritage/native) in acceptability of each type of the indirect question construction?

1. Russian National Corpus

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(http://ruscorpora.ru/)
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2. ruTenTen: Corpus of the Russian Web (https://www.sketchengine.eu/rutenten-russian-corpus)

3. RLC - Russian Learning Corpus

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(http://web-corpora.net/RLC)
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 Stories of dreams and other oral speech corpora (Kibrik et al., 2009)

Table 1. Number of indirect question constructions with 'jesli' found in different corpora using a search query 'jesli' and using a search query 'jesli' together with specified context (sprosit' - to ask, pomnit' - to remember, znat' - to know, soobshit' - to inform, proverit' - to check, zabit' - to forget, utochnit' - to specify)

corpus	query - 'jesli'	specified context
Russian National Corpus (main) (http://ruscorpora.ru/)	0 of 200	2 of 100
Russian National Corpus (spoken) (http://ruscorpora.ru/)	0 of 200	2 of 74
Russian Web 2011 (ruTenTen11) (https://www.sketchengine.eu/rutenten-russian-corpus)	0 of 200	21 of 214
Russian Learning Corpus (http://web-corpora.net/RLC)	0 of 200	35 of 40

```
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```
izvin-i ne pomnj-u jesli ti uze
forgive-IMP NEG remember-1sg.prs if you already
```

gəvəri-l-ə

say-pst-fem

Sorry, I don't remember whether you've said it already.

(2004.03. 31 10: 58. [Nashi deti: Malishi do goda (forum) (2004)]. Russian National Corpus. url: http://ruscorpora.ru/)

# EXPERIMENT

#### Independent variables:

- age (younger vs older)
- speaker status (heritage vs non-heritage)
- li vs. jesli construction

#### Dependent variable:

acceptability judgement



# PARTICIPANTS

Distribution of participants									
Heritageness	Age group	N	Female	Mean age	Age range	Mean education years			
no	old	5	3	50.8	42-74	16.3			
no	young	15	12	22.3	18-31	15.6			
yes	old	12	5	50.2	42-69	18.1			
yes	young	5	1	24.4	20-29	13.9			

# PARTICIPANTS

Heritage speakers length of residency in the US								
age_group	count		mean		min		max	
old		12		22		10		39
young		5		11.6		4		22

# PARTICIPANTS

Languages known by participants										
heritag e- ness	age group	count	french	ukraini an	chines e	itali an	japanes e	hebrew	german	georgian
no	old	5	1	0	0	1	0	0	1	0
no	young	15	2	0	1	Θ	1	0	3	0
yes	old	12	4	2	1	0	0	1	2	1
yes	young	5	3	0	0	0	0	0	1	0

# STIMULI

#### ♥ DISTRACTOR

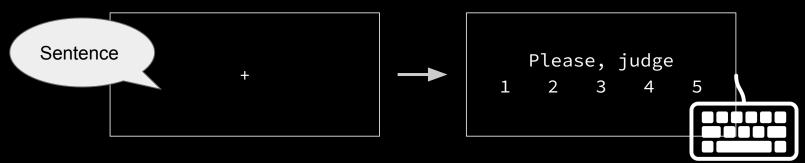
Ja bud-u rad-a jesli on prid<sup>j</sup>-ot

I be-1SG.FUT glad-sg.fem if he come-3sg.fut

I will be glad if he comes.

### MATERIALS

- ★ Software: OpenSesame
- ★ Stimuli: audio (native speaker of standard Russian)
- ★ Response collection: keyboard numbers
- ★ Likert scale (1-5)
- ★ Instructions: written (Rus) + clarification by experimenters



### PROCEDURE

Timed response

Informal post-interview

★ Informed consent

★ Questionnaire: LEAP-Q (Marian, Blumenfeld, & Kaushanskaya, 2007)

★ Instructions on screen

★ Practice trials = 3 (1 per condition)

★ Task clarification

★ Experimental trials

○ 2 pseudorandomized lists

○ 9 stimuli per condition

# ANALYSIS

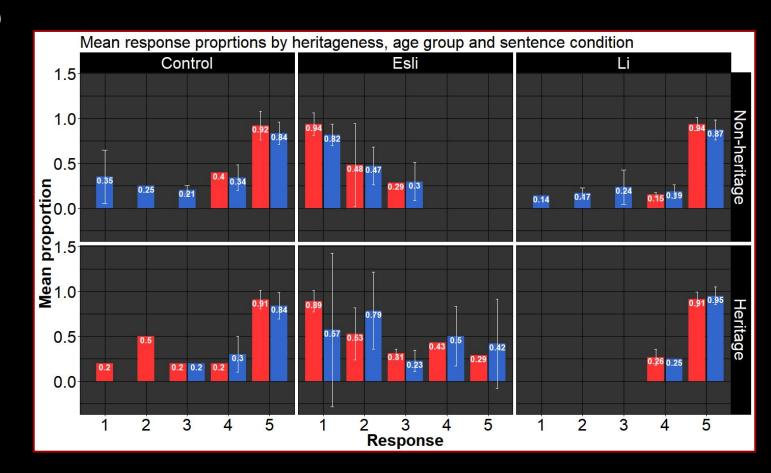
```
R (R Core Team, 2017)

Implicit vs explicit knowledge response

• up to 20% from median (Loewen, 2009)
```

=> cut off by RTs

# ANALYSIS



Age group
Older
Younger

### ANALYSIS

Ordinal logistic regression with random effects

Fixed effects: condition, age group, heritageness Random effects: participant, item ID

# RESULTS

	Res	ponse		
Fixed effects	β	SE	Z	р
Absolutely unacceptable   Mostly	-6.79	1.029	-6.6	<.001***
unacceptable				
Mostly unacceptable   Indefinite	4.84	.995	4.86	<.001***
Indefinite   Mostly acceptable	4	.979	4.08	<.001***
Mostly acceptable   Absolutely	-2.88	.962	-2.99	<.01**
acceptable				

The ordinal logistic regression model results

3 3	Re			
Fixed effects	в	SE	Z	р
Condition (esli)	-8.44	1.03	-8.17	< .001***
Condition (li)	.258	1.09	.237	.813
Age group (young)	-1.2	1.08	-1.13	.264
Heritageness (yes)	367	1.12	327	.744
Condition (esli) x Age group (young)	1.74	1.06	1.64	.101
Condition (li) x Age group (young)	.580	1.2	.482	.630
Condition (esli) x Heritageness (yes)	1.4	1.1	1.27	.205
Condition (li) x Heritageness (yes)	.108	1.28	.085	.933
Age group (young) x Heritageness (yes)	.495	1.47	.338	.735
Condition (eslli) x Age group (young) x	1.647	1.4	1.17	.241
Heritageness (yes)				
Condition (li) x Age group (young) x	.250	1.67	.150	.881
Heritageness (yes)				

<sup>\*</sup>p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

# DISCUSSION: BEFORE

What are the factors influencing the difference in grammaticality judgments?

How to measure language proficiency? Origin of heritage speakers?

What about other possible languages?

Can we conclude anything about the influence of English?

# What are your thoughts??

# SUMMARY

So far, no factors influence the grammaticality judgements.

Speaker proficiency was self-evaluated. Origin of heritage speakers was uniform, with most being from Moscow.

Other possible languages were noted, effect is yet to be checked.

English does not seem to have an effect on grammaticality judgment, but the experiment is still being carried out on more participants.

# ACKNOWLEDGEMENTS

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# REFERENCES

Bogdanova-Beglarian, N., Martynenko, G., and Sherstinova, T. (2015). The "one day of speech" corpus: Phonetic and syntactic studies of everyday spoken russian. In 17th International Conference on Speech and Computer, SPECOM 2015, volume 9319 of LNAI, pages 429–437. Springer.

Christensen, R. H. B. (2015). Regression Models for Ordinal Data via Cumulative Link (Mixed) Models.

Dunn, J. A., & Khairov, S. (2009). Modern Russian Grammar: a practical guide. Routledge.

Kibrik, A. et al., editors. (2009). Rasskazy o snovidenijakh. Korpusnoe issledovanie ustnogo russkogo diskursa. Jazyki slavyanskoj kultury.http://www.mpi.nl/corpus/html/elan/index.html.

Loewen, S. (2009). Grammaticality judgment tests and the measurement of implicit and explicit L2 knowledge. *Implicit and Explicit Knowledge in Second Language Learning, Testing and Teaching*, 94–112.

R Core Team. (2017). R: A Language and Environment for Statistical Computing. R Foundation for Statistical Computing. Vienna. Retrieved from https://www.r-project.org/

### REFERENCES

Marian, Blumenfeld, & Kaushanskaya (2007). The Language Experience and Proficiency Questionnaire (LEAP-Q): Assessing language profiles in bilinguals and multilinguals. Journal of Speech Language and Hearing Research, 50 (4), 940-967. Translated into Russian by Belkina, Borodkin, Iukalo, & Goral, Lehman College, City University of New York (2014)

Shvedova, N. Y., Arutyunova, N. D., Bondarko, A. V., Ivanov, V. V., Lopatin, V. V., Uluhanov, I. S., & Filin, F. P. (Eds.). (1980). Russkaya grammatika. T. 2. Sintaksis [Russian grammar. V.2. Syntax]. Moskva: Nauka.

Plungyan, V. A. (2003). Obshchaya morfologiya: vvedenie v problematiku [General morphology: An introduction] (2nd ed.). Moskva: Editorial USSR.

Plonsky, L., Marsden, E., Crowther, D., & Dinner, P. (2019). A methodological synthesis and meta-analysis of judgment tasks in second language research. Second Language Research. https://doi.org/10.1177/0267658319828413

Selegey V., Belikov V., Sharoff S. (2012). General Internet Corpus of Russian. www.webcorpora.ru/en

Russian National Corpus <a href="http://ruscorpora.ru/">http://ruscorpora.ru/</a>

