

How abstract is the abstract noun?

Gender agreement in Russian restrictive relative clauses

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Outline

- 1 Predicate Agreement Hierarchy
- 2 The issue: mixed gender agreement in relative clauses with *kto* 'who' and certain modifiers
- 3 The experiment
- 4 Discussion and analysis
- 5 Possible concerns
- 6 Conclusion

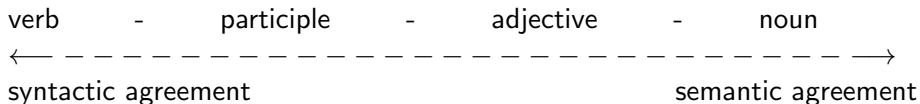
Syntactic vs. semantic agreement

- Syntactic (formal) agreement is the agreement with the formal features of the trigger
- Semantic agreement is the agreement with the semantic features of the target
- In this talk:
 - syntactic agreement is the default agreement (masculine for animates, feminine for inanimates)
 - semantic agreement is the non-default agreement

The agreement depends on the properties of the target

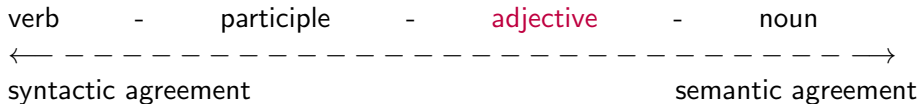
It has been claimed (for Russian as well as for other languages), that the agreement is dependent on the properties of the target: the "nounier" the target, the more probable semantic agreement.

The Predicate Hierarchy (Comrie 1975; Corbett 1979, 2006)



The agreement depends on the properties of the target

The Predicate Hierarchy



Three goddesses, Athene, Aphrodite, and Hestia, were competing.

- (2)
- a. Kto iz nix sam-aja krasiv-aja?
 who of them most-SG.F beautiful-SG.F
- b. ??Kto iz nix sam-yj krasiv-yj?
 who of them most-SG.M beautiful-SG.M
 'Who of them is the most beautiful one?'

Mixed gender agreement

- In Russian, there are contexts, where the same target can trigger both semantic and syntactic agreement
- The most famous example: mixed-gender nouns like *vrač* 'doctor'

(3) Nov-aja zubn-oj vrač priš-l-a.
 new-F dental-M doctor come-PST-F
 'The new dentist came.'

- This talk deals with another context exhibiting mixed gender agreement
- These are relative clauses with downward-entailing modifiers like 'only', 'first', superlatives etc. The target seems to be the interrogative/relative pronoun *kto* 'who'

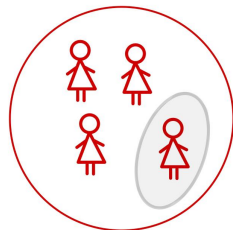
The issue

- (4)
- a. Anya – **edinstvenn-aja**, kto **reši-l-a** zadaču.
 Anya only-F who solve-PST-F problem.ACC
- b. Anya – **edinstvenn-aja**, kto **reši-l-∅** zadaču.
 Anya only-F who solve-PST-M problem.ACC
- c. ?Anya – **edinstvenn-yj**, kto **reši-l-∅** zadaču.
 Anya only-M who solve-PST-M problem.ACC
- d. *Anya – **edinstvenn-yj**, kto **reši-l-a** zadaču.
 Anya only-M who solve-PST-F problem.ACC
 'Anya is the only one who solved the problem.'

The hypothesis

Intuition and hypothesis: feminine (semantic) agreement is more likely if the relative clause quantifies over a set of female individuals

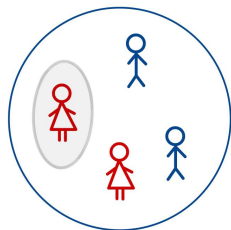
- (5) Lena – edinstvenn-aja, kto segodnja
 Lena only-F who today
rodi-l-a / ***rodi-l-∅** mal'čika.
 give.birth-PST-F give.birth-PST-M boy.ACC
 'Lena is the only one who gave birth to a boy today.'



The hypothesis

Intuition: both feminine (semantic) and masculine (syntactic) agreement are possible if the relative clause quantifies over a mixed-gender set of individuals

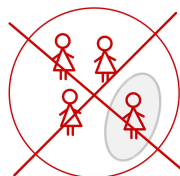
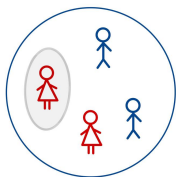
- (6) Anya – edinstvenn-aja, kto **reši-l-∅** /
 Anya only-F who solve-PST-M
reši-l-a zadaču.
 solve-PST-F problem.ACC
 'Anya is the only one who solved the problem.'



The hypothesis

Intuition: the masculine on both the RC modifier and the verb within the RC is only possible if a mixed-gender set is presupposed

- (7) Anya – **edinstvenn-yj**, kto **reš-i-l** zadaču.
 Anya only-M who solve-PST-M problem.ACC
 'Anya is the only one who solved the problem.'
- (8) *Lena – **edinstvenn-yj**, kto segodnja rodi-l- \emptyset mal'čika.
 Lena only-M who today give.birth-M boy.ACC
 ('Lena is the only one who gave birth to a boy today.')



Experimental design

- Five modifiers: *edinstvennyj* 'only', *pervyj* 'first', *samyj talantlivyj* 'the most talented', *tot* 'that', *každyj* 'every'
- Three syntactic positions
 - Predicative nominative: *Anya is the only one who solved the problem*
 - Subject nominative: *The only one who solved the problem is Anya*
 - Instrumental object of the verb 'to appear': *Anya appeared to be the only one who solved the problem*
- For each modifier, two scenarios were set up: such that the relative clause quantifies over a set of women and the one without such inference
- Grammaticality judgment task (scale from 1 to 10)
- 76 participants

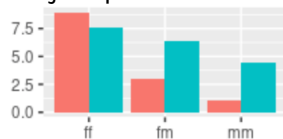
Results

- Yes, semantic (feminine) agreement is much more likely in **RC quantifying over “female” sets** than in **RC quantifying over mixed-gender sets**, but only in nominative
- Yes, both female and masculine agreement on the verb are possible in **RC quantifying over mixed-gender sets**
- Yes, only a **mixed-gender interpretation** is compatible with the masculine on the modifier of the RC, but such examples are only felicitous when RC head is a subject.

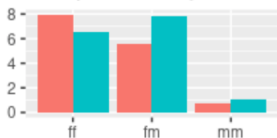
Predicative position



Subject position



Instrumental object position



Discussion

- I approach for clauses with non-matching agreement (9a) and matching agreement (9b-c) separately

- (9)
- a. **Edinstvenn-aja**, kto **reši-l-∅** zadaču, éto Anya.
 only-F who solve-PST-M problem.ACC COP Anya
- b. **Edinstvenn-aja**, kto **reši-l-a** zadaču, éto Anya.
 only-F who solve-PST-F problem.ACC COP Anya
- c. **Edinstvenn-yj**, kto **reši-l-∅** zadaču, éto Anya.
 only-M who solve-PST-M problem.ACC COP Anya
 'The only one who solved the problem is Anya.'

Matching agreement: null nominal head

It is generally assumed that Russian long adjectives in predicative position modify a null noun bearing a gender feature (Babby 1975, Bailyn 1994 ao):

- (10) Anya smel-aja \emptyset_N [+FEM,+ANIM].
 Anya brave-F female.person
 'Anya is brave.'

I assume that examples with matching agreement also involve a null nominal head:

- (11) Anya – **edinstvenn-aja** \emptyset_N [+FEM,+ANIM], kto **reši-l-a**
 Anya only-F female.person who solve-PST-F
 zadaču.
 problem.ACC
 'Anya is the only one who solved the problem.'

Matching agreement: null nominal head

- The semantics of downward-entailing modifiers contains an implicit contextual restriction:

$$(12) \quad \llbracket edinstvenn- \rrbracket^{w,g} = \lambda P. \lambda x. P(x) \ \& \ x \in \mathbb{C} \ \& \ \neg \exists y [y \neq x \ \& \ y \in \mathbb{C} \ \& \ P(y)]$$

- The appearance of the [+FEM] feature might be forced by the *Maximize Presupposition!* principle (Heim 1991)
- If 'only' quantifies over a set of entities having the same [+FEM] gender specification, feminine agreement arises, since it has stronger presuppositions

Cyclic agreement

- In Russian, there are RCs with *kto* 'who' and RCs with *kotoryj* 'which'
- *Kotoryj*-relatives show connectivity but *kto*-relatives do not
- No head raising in *kto*-relatives

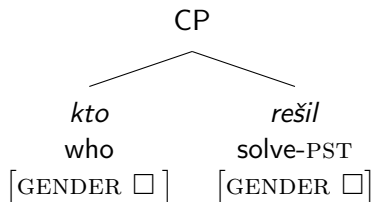
- (13)
- Éto babuška nadvoe skaza-l-a.
this granny in.half say-PST-F
'No one can know this for certain' (lit. A granny said two things).
 - babuška, kotor-aja nadvoe skaza-l-a
granny which-F in.half say-PST-F
'a thing that no one can know for certain' (lit. a granny who said two things)
 - *babuška, kto nadvoe skaza-l-a
granny who in.half say-PST-F

- How is the agreement with the head noun transmitted then?

Cyclic agreement

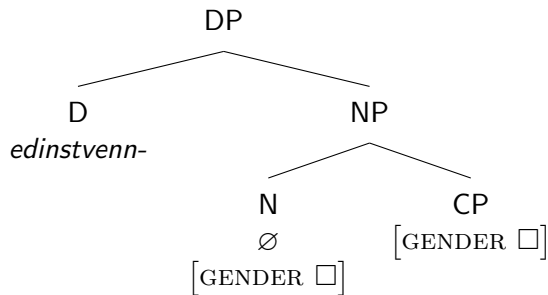
- Cyclic agreement involving feature sharing (Heck & Cuartero 2016) or delayed valuation (Preminger 2017)
 - The relative pronoun and the verb enter into a feature-sharing relation and become one syntactic object
 - The head noun shares its gender features with this bundle

Step 1.



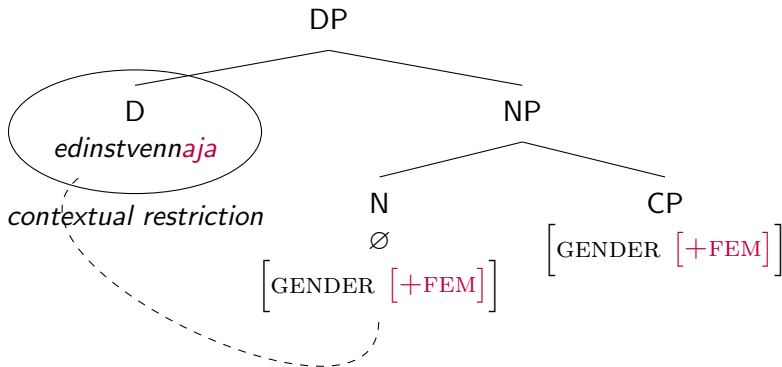
Cyclic agreement

Step 2.



Cyclic agreement

Step 3.



Non-matching agreement

(14) Anya – **edinstvenn-aja**, kto **reši-l-Ø** zadaču.
 Anya only-F who solve-PST-M problem.ACC
 ‘Anya is the only one who solved the problem.’

- What blocks the transmission of the agreement in the case of non-matching agreement?
- Two possible solutions:
 - 1 The agreement for *edinstvenn-* ‘only’ comes from the subject, the head noun is unspecified for gender and only has [+ANIM] → default masculine gender (for animates)
 - 2 There is no head noun at all (light-headed relatives), and the agreement on *edinstvenn-* ‘only’ comes from the subject
- I will argue for the **second option**

- In *kotoryj*-relatives, *kotoryj* ‘which’ bears the same adjectival morphology and never shows default agreement

- (15) a. Ona edinstvenn-aja, **kotor-aja vyzva-l-a-s'** sdelat'
 she only-F which-F volunteer-PST-F-REFL do
 éto.
 this
 ‘She’s the only one who volunteered to do this.’ (from the Internet)
- b. *Ona edinstvenn-aja, **kotor-yj vyzva-l-Ø-sja** sdelat'
 she only-F which-M volunteer-PST-M-REFL do
 éto.
 this

- Why so? Because *kotoryj* ‘which’ is an adnominal modifier that needs to agree with the head noun
- We see that this head noun always has gender features from the context!
- So maybe if there is no *kotoryj* ‘which’ and no agreement, there is no head noun

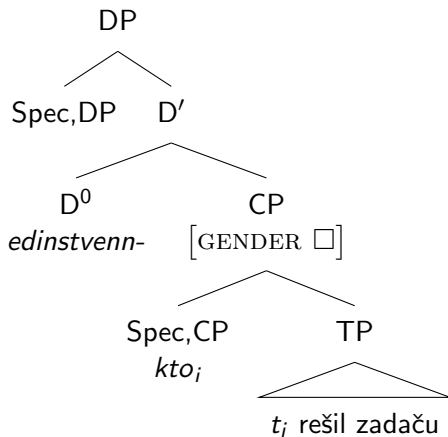
Light-headed relatives

(16) Anya – **edinstvenn-aja**, kto **reši-l-∅** zadaču.
 Anya only-F who solve-PST-F problem.ACC
 'Anya is the only one who solved the problem.'

- The determiner-like element is base-generated in D^0 and takes a CP
- Only a full-fledged N can establish agreement relations with the C of the embedded clause
- Adjectival morphology on D is only needed to carry Case morphology (Borik 2014)

Light-headed relatives

(17)



Possible concerns

- If the adjectival morphology on D is only needed for Case, why can't a short (predicative) form of the downward-entailing modifier be used?
- Because none of these modifiers have short forms! (This fact tells us something that is yet to be researched).

- (18)
- *edinstvenn-a
only-SF.F
 - *perv-a
first-SF.F
 - *sam-a talantliv-a
most-SF.F talented-SF.F

Possible concerns

- Is this extendable to predicative adjectives and participles?
- Yes

(19) Ty edinstvenn-aja, kto svoboden-Ø v étot den'.
 you only-F who available-SF.M in this day
 'You're the only one who is available on this day.' (from the
 Internet)

Possible concerns

- Is this extendable to inanimate nouns?
- Only to some extent. Only matching agreement is possible
- The head noun is [-INANIM] → neuter default agreement

- (20)
- a. *Éta jubka – édinštvěnn-aja, čto mne podoš-l-a.*
 this skirt only-F what I.DAT suit-PST-F
 'This skirt is the only one that suited me.'
- b. *Éta jubka – edinštvěnn-oe, čto mne podoš-l-o.*
 this skirt only-N what I.DAT suit-PST-N
 'This skirt is the only thing that suited me.'
- c. **Éta jubka – edinštvěnn-aja, čto mne podoš-l-o.*
 this skirt only-F what suit-PST-N

- Possible explanation: *čto*-relatives cannot be embedded by C (also because *čto*-relatives can appear with animate head nouns, such as *babuška čto menja poxvalila* 'the granny that praised me')

Conclusion

- I discussed a type of relative clauses showing mixed gender agreement. These relatives clauses are embedded by a D downward-entailing element
- There are two agreement patterns: matching agreement on the D and on the predicate within the RC vs. semantic agreement on the D and default agreement within the RC
- I proved experimentally that matching agreement is more likely to be associated with the contextual restriction of same-gender sets
- I accounted for these two patterns separately
- I argued that sentences with matching agreement involve a null nominal head that gets gender features from contextual restriction
- In contrast, sentences with non-matching agreement have no nominal head at all, hence no agreement within RC

Acknowledgements

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