

Conversational dynamics of Russian questions with razve

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Agenda: Russian polar question particle *razve* and a novel type of bias

► *Razve*: left-periphery particle used in polar questions (not discussed: its potentially unlrelated use in exceptives) ▶ Previous descriptions: a sense of incredulity/disbelief (Bulygina & Shmelev 1987; Repp & Geist forth.; Shvedova et al. 1980)

What *razve* does: epistemic conflict and attempt at conflict resolution

(Sergey Kozlov, *That kind of tree*) (1) Bear, having decided to be a tree, waves and sings, and tells Squirrel he's swaying his branches.

Belka. [...] — A pochemu ty begaesh po vsej poljane? Ty razve derevo? — udivilasj you run.2SG.PRES on all.DAT.SG.F clearing.DAT.SG you **RAZVE** tree.NOM wonder.SG.F.PST squirrel.NOM.SG but why

- chtoby derevja Razve ty kogda-nibudj videl, begali? see.sg.m.pst comp tree.nom.pl run.pl.pst **RAZVE** you ever
- ' "You are a tree?", Squirrel wondered. "But why are running all around the clearing? Have you ever seen trees run?" '
- Squirell had prior belief that Bear is not a tree $(\neg p)$ and that trees don't run $(\neg q)$
- ▶ Bear's words and actions present evidence contradicting those beliefs $(p \land q)$
- Accepting this new information will result in inconsistent beliefs $([p \land \neg p] \land [q \land \neg q])$
- Squirell asks a genuine question to resolve the conflict

Proposal

- Core intuition: *razve* signals that the speaker is in a situation with belief-revision potential
- Current approaches to question bias: not fine-grained enough to capture this behavior
- Another novel constraint: reasoning-based restrictions on razve
- ► Public evidence that supports an abductive inference (much like epistemic *must*; Mandelkern 2019; Winans 2016)
- Abductive inference: reasoning from an effect to the best explanation (NB: \neq cause) (Douven, 2021)
- ► Abductive expressions: evidentials, modals, conditionals (Cumming & Winans, 2021; Krawczyk, 2012; Winans, 2016)
- First discussion of such sensitivity for question particles/question bias

Kinds of evidence

- Evidence must be mutually available (common for markers of contextual bias, but not expressions of evidence at large)
- (11) **✓**Mutual information: *I think smoking is banned indoors, but another guest lights a cigarette.* **#Private information**: I think smoking is banned indoors, but another quest lights a cigarette (you were at the counter and did't see).

Razve zdesj mozhno kuritj? RAZVE here can.PRED smoke.INF 'Can one smoke here?'

► Central claim: *razve* conveys a special type of question bias associated with belief revision potential ▶ This novel type of bias is not discussed in, or captured by, previous accounts of biased questions

Background on polar interrogatives (Bryzgunova, 1983; King, 1994; Rudnitskaya, 2000; Schwabe, 2004)

- ① 'Unmarked' questions
- Obligatory rising intonation
- Declarative word order
- License expressions declaratives don't
- Only matrix level
- 2 Questions with the second-position focus clitic *li*
- Li's host: focus of the question, main predicate by default
- Optional in matrix questions, perceived as more formal
- Obligatory in all embedded polar questions
 - Only polar questions: incompatible with *wh*-pronouns

Neutral context: Question on a job application form / during a job interview

- po-russki? ↑ / Govorite (2) **√**Vy li vy govorite govorite po-russki? ↑ you.pol speak.2PL.PRES Russian RAZVE you.PL speak.2PL.PRES Russian / speak.2PL.PRES Q you.PL Russian 'Do you speak Russian?' \approx 'Do you really speak Russian?'
- ► Syntactic distribution of *razve*-clauses (NB: *razve* mostly clause-initial, but not always, cf. (1))
- Only matrix level: banned as embedded questions (both responsive and rogative predicates)
- Only polar interrogatives without *li*: incompatible with *wh*-pronouns as a *wh*-question
- Only interrogatives: infelicitous as declaratives, evidenced by intonation
- Licensing behavior: same as polar interrogatives, with or without li
- License nibudj-indefinites (1), which are banned in ordinary declaratives (Yanovich, 2005)
- License bare wh-infinites with an existential interepretation (as in $kto = \text{'someone'}, \neq \text{'who'}; \text{ Tretyakova 2020})$
- ► Bottom line: *razve*-clauses are interrogatives
- Likely source of incompatibility with *li*, embedded and *wh*-questions: their anti-singleton constraint clashes with the singleton requirement of *razve* (cf. Bhatt & Dayal 2020; Biezma et al. 2022 on Hindi/Urdu *kya*)

Razve and the extant typology of question bias

- Evidence must support a mutual abductive inference (notion of explanation broader than causation, as in (15); cf. Kment 2014)
- ▶ Inference must be shared: (12) and (15), but not (13)
- (12) I am over at your house in the village. l see a mouse.
 - Razve u vas net kota? **RAZVE** by you.DAT be.NEG cat.GEN.SG 'Do you not have a cat?' Background assumption (likely mutual), effect-to-cause: Absence of cats is the best explanation for presence of mice. Bias: I believe every village house to have a cat.
- (14) *Venice banned passengers of cruise ships from disembarking on* (15) You say that Masha got sick. She was negative yesterday.
 - weekdays. It's Monday and I see a huge ship stopping. **#Razve** segodnja snova budut tolpy ljudej? **RAZVE** today again be.3SG.PL crowd.PL people.GEN 'Will there will be crowds again today?' Background assumption, cause-to-effect: Ships cause crowds. Bias: I expect no crowds today.

Razve u nejo polozhiteljnyj test? **RAZVE** by she.DAT positive test 'Does she has a positive test?' Background assumption: Masha's having tested positive is the best explanation for your statement. [not causality] Bias: I expect Masha to still be negative.

▶ No anti-abductive inferences, even when mutual (14)

I ask where your cat is. You tell me you don't have one.

Background assumption (unlikely mutual), effect-to-cause:

Absence of mice is the best explanation for absence of cats.

(13) I am over at your house in the village.

'Do you not have mice?'

#Razve u vas net myshej?

RAZVE by you.DAT be.NEG mouse.GEN.PL

Bias: I believe every village house to have mice.

• Razve-clauses: polar interrogatives with a singleton constraint (|[p]| = 1) and two epistemic inferences ① The bias inference: a not-at-issue comment on the at-issue contribution

- ► Negation in negative bias not active semantically (In Russian: *razve* does not license negative *ni*-indefinites)
- Easily captured multi-dimensionally: expressive/parenthetical meaning (cf. Gutzmann & Castroviejo Miró 2011)
- ► *Razve*: no need to postulate conversational operators like FALSUM/VERUM, as they make wrong predictions about discourse effects for e.g. (8) and (9) (see also Goodhue 2022 for general criticism)
- 2 The evidential inference: constrains the input context (cf. 11, 12); treated as a presupposition

How it works: RAZVE as a propositional operator

- (16) $\llbracket \begin{bmatrix} Q \begin{bmatrix} RAZVE p \end{bmatrix} \end{bmatrix} = \llbracket \begin{bmatrix} RAZVE p \end{bmatrix} \end{bmatrix} = \{ \lambda w. p \text{ in } w \}$ (treating the denotation of a question as a singleton set; Biezma & Rawlins 2012) (i) Can be appropriately used if (use-conditional meaning):
 - $\exists t'.t' < t \land DOX_{(Sp.w,t')} \subseteq \neg p$, [note past tense in the follow-up in (10)] where t is the time of utterance and $DOX_{(Sp,w,t')}$ is speaker's belief worlds { $w' \mid w'$ compatible with what Sp believes in w at t' }.
 - [omitting the singleton constraint and presuppositions of the question operator itself] (ii) Defined if (presupposition): $\exists q \text{ such that } \Pr(K_{(Sp+Ad,w,t)} \cup q) | p > \Pr(K_{(Sp+Ad,w,t)} \cup q) | \neg p \text{ and } \neg \exists r \text{ such that } \Pr(K_{(Sp+Ad,w,t)} \cup q) | r \geq \Pr(K_{(Sp+Ad,w,t)} \cup q) | p, r \in \mathbb{R}$ where Pr is a probability measure and $K_{(Sp+Ad,w,t)}$ is joint knowledge { $p \mid p$ is known to Sp and Ad in w at t }. In words: there is a salient observation q such that p is a good-fit explanation for q and there is no other equally good alternative [omitting possible normalcy/stereotypicality requirements.] explanation for q. (formalization for abduction adopted from Krawczyk 2012, see Bjorndahl & Snider 2015; Cumming & Winans 2021 for other options)
- ► Question bias: preference for one of the answers to a polar question (Goodhue 2022; Romero 2020 a.o.)
- ► Common ways to parameterize bias (see especially Domaneschi et al. 2017)
- ► Epistemic bias: speaker's belief about *p* prior to conversation (Romero & Han, 2004)
- ► Contextual bias: mutual evidence about *p* during conversation (Büring & Gunlogson, 2000; Sudo, 2013)
- ► How razve fits into this taxonomy: (cf. similar findings in Repp & Geist forth. on razve+negation)
- Obligatory expression of negative epistemic bias and positive contextual bias
- Looks akin to English really (Romero & Han, 2004), Italian mica (Frana & Rawlins, 2019), German etwa (Xu, 2017)

3*3 classification of bias (only looking at positive questions)

Target sentence: (4) Razve ty ljubish svjoklu? RAZVE you love.2SG.PRES beet.ACC ≈ 'Do you like beets?'		Contextual: neutral	Contextual: p	Contextual: $\neg p$
	Epistemic: neutral	# (5a)	# (5b)	# (5c)
	Epistemic: p	# (5a)	# (5b)	# (5c)
	Epistemic: ¬p	# (7a)	√ (7b)	# (7c)
(5) Neutral epistemic: I meet you for the first time, we go out for lunch. (6) Positive epistemic: I'm sure you like beets.				

- (5) **Neutral epistemic:** I meet you for the first time, we go out for lunch. a. Neutral contextual: I want to check before ordering.
 - b. Positive contextual: You order beetroot hummus
 - c. Negative contextual: You avoid all beet mezzes.
- Conditions a,b,c same as in (5). (7) **Negative epistemic:** I'm sure you hate beets.
- Conditions a,b,c same as in (5).
- ► Common ways to analyze bias (see especially Goodhue 2022)
 - ▶ Common ground management devices (Frana & Rawlins, 2019; Repp, 2013; Romero & Han, 2004)
- ► Discourse commitments operators (Gunlogson, 2003; Farkas and Roelofsen, 2017; Malamud and Stephenson, 2015; Xu, 2017)
- ▶ Repp & Geist (forth.): razve \approx really, based on superficially similar behavior as in (5)-(7)
- ► How *razve* does not fit: (pace Repp & Geist forth.)
- ► Razve does not convey disbelief in a salient proposition (unlike English really or Italian mica)
- ► *Razve* conveys speaker's uncertainty, not (weak) commitment (unlike English tag questions)
- ► Repp & Geist (forth.): incorrect predictions for (8) and (9) (cf. Bill & Koev forth. on bias strength in English)

Razve \neq conversational denial / signal of disbelief

(8) My spouse says that he brought strawberries from the market. (9) I overhear a friend speaking Turkish at a store.

(17) Derivation for (1) *Ty razve derevo*? 'Are you a tree?' (you RAZVE tree.NOM)

- $[[Q [RAZVE you are a tree]]] = [[RAZVE you are a tree]]] = { <math>\lambda w$. Addressee is a tree in w }
- (i) Can be appropriately used if: $\exists t'.t' < t \land DOX_{(Sp,w,t')} \subseteq \neg p$, where p is 'that Addressee is a tree in w'
- Defined if: $[Pr(K \cup q)|p > Pr(K \cup q)|\neg p] \land \neg \exists r [Pr(K \cup q)|r \ge Pr(K \cup q)|p]$, where q is 'that Addressee is swaying branches in w' (ii)

► Together the inferences often create uncertainty: all options are live (cf. especially the follow-up with 'hope' in 10) ► Lack of *razve*-declaratives explained: (cf. Biezma et al. 2022 on *kya*)

- Assertion, even hedged, requires at least weak commitment/belief; incompatible with uncertainty
- Information-seeking questions require lack of knowledge on Sp's part; compatible with uncertainty

Razve-questions as rhetorical questions

- ► In contexts with strong speaker's conviction, *razve*-questions can be rhetorical (common with normative claims) ① Evidence for p is strong but Sp does not want to give up $\neg p$ (18)
- ⁽²⁾ Sp wants to challenge a salient idea that p (19)
- ► Rhetoricity not encoded by *razve*: basic semantics sufficient (it is possible that RhQs also differ prosodically)
- Conditions for possible belief revision are met, but in a rhetorical use, Sp actively refuses to reconsider
- ▶ In each case Sp wants to make a point, a general condition on rhetorical questions (Biezma & Rawlins, 2017)

Rhetorical uses

(18) To yet another young person in a war zone: (19) Amid pleas to somehow counteract the Red Terror during the Stalin years.

Razve mozhno detej na vojnu posylatj. RAZVE can.PRED kids.PL to war.ACC send.INF 'How can you even send kids to war?' (Vasily Grossman, *Life and Fate*) Razve moj golos ostanovit rasstrely? ...] kto menja poslushaet. **RAZVE** my voice.NOM.SG stop3SG.PRES shooting.ACC.PL who l.acc listen.3SG.PRES 'Can my voice stop mass shootings? Who will even listen.'

(Nadezhda Mandelstam, *Memoirs*)



Razve v avguste escho estj klubnika? **RAZVE** in august.PREP still be.PRES strawberry.NOM 'Do they still have strawberries in August?' \approx 'DO they have strawberries in August?' \approx 'Do they really have strawberries in August?' \approx 'Aren't last strawberries in June?'

Razve ty govorisch po-turecki? **RAZVE** you speak.2SG.PRES Turkish 'Do you speak Turkish?' ≉ 'CAN you speak Turkish?' ≉ 'Do you really speak Turkish?' ≉ 'Don't you not speak Turkish?'

Razve \neq weak commitment

- (10) Presented with infrared pictures of wolves on the slopes of a nearby mountain, I express my attitude towards the situation.
 - volki? Mne √kazalosj / #kazhetsja, chto net. / Ja √nadejusj / #dumaju, chto net. Razve v Alipax esti RAZVE in Alps be.3SG.PRES wolf.PL I.DAT SEEM.PST SEEM.PRES COMP NEG. be I hope.1SG.PRES think.1SG.PRES COMP NEG. be 'Are there wolves in the Alps? It seemed to me /#seems to me there aren't. / I hope/#think there aren't.'

► Razve-questions: belief revision potential, not agenda of disbelief (unlike other markers of negative bias) ► *Razve*: bias in a sense of speaker's attitude, not unbalanced-partition semantics ► Core contribution: Sp faces an epistemic conflict between prior belief and current abductive inference Information-seeking interpretation: Sp uncertain, willing to revise beliefs, wants an answer Rhetorical interpretation: Sp certain, unwilling to revise beliefs, wants to make a point Overall: a new type of non-canonical question, sensitivity to reasoning ▶ Belief revision \neq violated expectations: *razve* is not an expression of surprise/mirativity ► *Razve* requires peripheral belief about *p*: made salient in presence of conflicting evidence ► Expectations come with *active opinionatedness: razve* allows it (e.g. 12, 15), but does not require

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