## Prosody across sentence types\*

Maria Esipova
Bar-Ilan University

Abstract Rudin (2018) and Rudin & Rudin (2022) make a typological generalization that languages where rising declaratives comprise non-canonical yes/no questions (YNQs), like English and Bulgarian, also allow for rising imperatives, used as tentative, but invested requests or disinterested suggestions, but languages where rising declaratives comprise canonical YNQs, like Macedonian, don't allow for such rising imperatives. I look at another Slavic language, Russian, further expanding and fine-tuning the typology of how different languages realize various meaning components of different types of speech acts. While, like in Macedonian, Russian canonical YNQs are formed via an "intonation-only" strategy, said intonation doesn't involve a rising tune, but a special prosodic peak that I call the Q-Peak. I show that, despite marking canonical YNQs, the Q-Peak can also be used in friendly, but invested requests—but not in disinterested suggestions. I propose that the Q-Peak realizes an operator that asks the addressee to react to the speaker's speech act, which is appropriate in (some) questions and invested requests, but not in disinterested suggestions. The Russian Q-Peak is therefore distinct from the Englishstyle rising tune, which in Rudin (& Rudin's) terms, simply "call[s] off the speaker's commitment to their utterance". The latter can thus have a wider range of meaning effects and brings a different source/flavor of politeness/tentativeness to directives.

**Keywords:** prosody, yes/no questions, rising declaratives, imperatives, cohortatives, Russian

#### 1 Introduction

Rudin (2018) makes a typological generalization, reprised in Rudin & Rudin 2022 (hf. R&R), that languages in which rising declaratives comprise non-canonical yes/no questions (hf. YNQs) also allow rising imperatives, used as tentative requests or disinterested suggestions, but languages in which rising declaratives can be canonical YNQs disallow such rising imperatives. English exemplifies the first type:

(1) a. Did you pour me wine  $L^*H-H\%$ ? (auxiliary inversion YNQ; unmarked)

<sup>\*</sup> I would like to thank Catherine Rudin for encouraging me to work on this topic, as well as the audiences at SALT 34, 'Polar Question Meaning[s] Across Languages', FASL 33, Linguistics Research Seminars at Trinity College Dublin, and the colloquia at the Hebrew University of Jerusalem and Tel Aviv University for the many productive discussions.

- b. You poured me wine<sub>L\* H-H%</sub>? (rising declarative; non-canonical YNQ)
- c. Pour me wine<sub>L\* H-H%</sub>? (rising imperative as a tentative invested request)
- d. A: What should I do while I'm waiting for you?
  - B: I don't really care. Pour yourself wine<sub>L\* H-H%</sub>? Take a nap<sub>L\* H-H%</sub>? (rising imperatives as disinterested suggestions)

R&R specifically look at two Balkan Slavic languages, Bulgarian and Macedonian, and show that Bulgarian is like English, as shown in (2) (although they report variation across speakers regarding acceptability of cases like (2c) vs. (2d)), but Macedonian exemplifies the second type, as shown in (3). (2–3) are cited from R&R.

- (2) a. Šte xodiš li na kino?

  FUT go.2s Q-PRT to cinema

  'Are you going to the movies?' (*li* YNQ; unmarked)
  - b. Šte xodiš na kino<sub>L\* H-H%</sub>? FUT go.2s to cinema
    - 'You're going to the movies?' (rising declarative; non-canonical YNQ)
  - c. Daj mi edna sigara $_{L^*H-H\%}$ ? give.IMP me.DAT a cigarette 'Give me a cigarette?' (rising imperative as a tentative invested request)
  - d. A: 'What should I do today?'
    - B: Napiši si doklada<sub>L\* H-H%</sub>? Ela s mene na write.IMP REFL paper.DEF come.IMP with me to plaža<sub>L\* H-H%</sub>? beach.DEF
      - 'Write your paper? Come to the beach with me?' (rising imperatives as disinterested suggestions)
- (3) a. Ke odiš na kino<sub>L\* H-H%</sub>?

  FUT go.2s to cinema

  'Are you going to the movies?' (rising declarative; unmarked YNQ)
  - b. # Daj mi edna sigara<sub>L\* H-H%</sub>?
     give.IMP me.DAT a cigarette
     Intended: 'Give me a cigarette?' (no rising imperatives as tentative invested requests)
  - c. A: 'What should I do today?'
    - B: # Piši go referatot<sub>L\* H-H%</sub>? Odi na plaža<sub>L\* H-H%</sub>? write.IMP it paper.DEF go.IMP to beach.DEF Inteded: 'Write your paper? Go to the beach?' (no rising imperatives as disinterested suggestions)

A few immediate notes are in order. First, when R&R talk about the "rising tune", they say that they specifically mean the "low rising" terminal contour, i.e., L\* H-H% in ToBI (Beckman & Ayers 1997). That said, they provide no audio files or pitch contour drawings for their examples, so it is hard to assess if all their "rising tune" examples do indeed systematically have the same low rising terminal contour or if any of them might have, for instance, a high rising terminal (H\* H-H%; see Jeong 2018 on the difference between low rising vs. high rising declaratives) or even a mid-plateau one (L\* H-L%; I come back to this contour in subsection 4.3). This is not relevant for much of the rest of the paper, but a more detailed empirical picture for Balkan Slavic would be a welcome development in the future.

Second, let's clarify what is meant by "non-canonical questions". Farkas (2022) characterizes "canonical questions" by four contextual assumptions: speaker ignorance; addressee competence; addressee compliance; issue resolution goal. Suspending at least one of these assumptions would thus make a question "non-canonical". Auxiliary inversion YNQs in English constitute an "unmarked" form, which would be compatible with both canonical and non-canonical uses, but rising declaratives in English used as YNQs are necessarily non-canonical in some way. Note that R&R specifically equate "non-canonical" with "biased" (i.e., a suspension of the speaker ignorance assumption) and "canonical" with "unbiased". However, there seem to be differences between English-style rising declaratives and unmarked YNQ forms (in both English and Russian) that are orthogonal to bias, as I briefly discuss in subsection 4.2. Thus, while I might occasionally use the canonical vs. non-canonical distinction in a descriptive umbrella way, I will aim to be more specific when discussing specific examples. Note also that we could think of English-style rising imperatives as "non-canonical" as well, as at least one of the core assumptions underlying prototypical uses of imperatives is also suspended in such cases. For example, we could say that in (1c), the assumption of speaker's authority is suspended, while in (1d), it could be the assumption of speaker's preferential attitude.

Finally, R&R refer to cases like (1c)/(2c) vs. (1d)/(2d) as "tentative requests" vs. "alternative suggestions", respectively. I instead highlight the difference between the invested nature of the former (the speaker is invested in the outcome) and the disinterested nature of the latter (the speaker doesn't care if the addressee pursues their suggestion), which I believe to be crucial for explaining the Russian data. Yet, the fact that in the latter case we often have several explicitly suggested options or at least an implication that other options are possible likely correlates with their disinterested nature, and I will come back to this issue briefly in subsection 4.3.

In this paper, I look at another Slavic language, Russian, further expanding and fine-tuning the typology of how different languages realize various meaning components of different types of speech acts. While, like in Macedonian, Russian canonical YNQs are formed via an "intonation-only" strategy, said intonation doesn't involve a

rising tune, but a special prosodic peak, which I call the *Q-Peak* (section 2). I observe that despite marking canonical YNQs, the Q-Peak can also be used in friendly, but invested requests like (1c) (section 3), but not in disinterested suggestions like (1d) (section 4). Combining this observation with a brief comparison of Q-Peak-marked vs. *li* YNQs in Russian (section 5), I propose that the Q-Peak realizes an operator that asks the addressee to react to the speaker's speech act, which is appropriate in (some) questions and invested requests, but not in disinterested suggestions (section 6). The Q-Peak is therefore different from the English-style rising tune, which, in R&R's words, simply "calls off the speaker's commitment to their utterance". The latter can thus have a wider range of meaning effects and brings a different source/flavor of politeness/tentativeness to directives. Section 7 concludes.

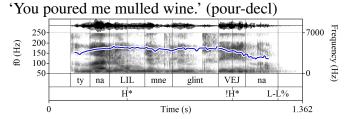
The audio, TextGrids, and pitch contour drawings for all Russian examples from this paper can be found at https://doi.org/10.17605/OSF.IO/6CVT9, with the name of the corresponding file bundle given in parentheses after each example.

## 2 Q-Peak in questions

The default strategy of forming a matrix YNQ in Russian is what I will call the *declarative string YNQ strategy*, which is to have the same segmental string one would have in a declarative sentence and to place a special prosodic peak on the focus-accented syllable, i.e., the lexically stressed syllable of the "word" that is the locus of prosodic focus marking within the semantically focused constituent. I will call this special prosodic peak the *O-Peak* and annotate it as Q in my examples.<sup>1</sup>

In (4), I provide a declarative assertion with broad, sentence-level focus, which thus has a "hat" prosodic contour, similar to what we see in English.

(4) Ty  $nalil_{H^*}$  mne  $glintvej_{!H^*}na_{L-L\%}$ . you.S/T.NOM pour.PST.S.M me.DAT mulled-wine.GEN



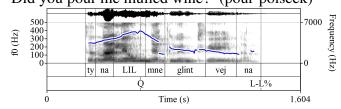
In (5), I illustrate the declarative string YNQ strategy for what Esipova & Romero

<sup>1</sup> I am using a ToBI-like notation to annotate other tones in Russian. Of course, one should keep in mind that ToBI is a labeling system specific to English and doesn't work well for Russian (nor is it intended to). Even if some of the same inventory of pitch accents and edge tones can be posited for Russian as for English, their specific realizations can differ between the two languages. However, these details do not matter for the purposes of this paper.

(2023) call *polarity-seeking YNQs*, which just evoke  $\{p, \neg p\}$  alternatives and don't signal any non-trivial parent QUD. Unlike in English, where non-contrastive semantic polarity focus in YNQs is marked as broad, sentence-level prosodic focus, in Russian, it is always marked as narrow prosodic focus—typically on the inflected verb. Thus, the Q-Peak goes on the verb both in the completely "out-of-the-blue" (5b) (to the extent any utterance can be completely out-of-the-blue), as well as the less "out-of-the-blue" (5a). Note that both fall under the "canonical question" umbrella. In (5c), I also provide a naturalistic example of a polarity-seeking YNQ from the Multimodal Russian Corpus (MURCO; https://ruscorpora.ru/new/search-murco.html).

(5) a. Context: You were meant to pour me mulled wine. I ask if you did (no bias).

Ty  $nalil_Q$  mne  $glintvejna_{L-L\%}$ ? you.S/T.NOM pour.PST.S.M me.DAT mulled-wine.GEN 'Did you pour me mulled wine?' (pour-polseek)



b. Context: Approaching a complete stranger on the street.

(Izvinite,) vy govori<sub>Q</sub>te po-italjanski<sub>L-L%</sub>? (Excuse me) you.V.NOM speak.PRS.2V by-Italian

'(Excuse me,) do you speak Italian?' (italian-polseek)

c. Context: The addressee is being interviewed about their skills.

Vy govoriQte po-russki<sub>L-L%</sub>? you.V.NOM speak.PRS.2V by-Russian

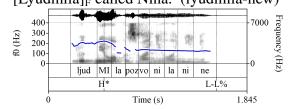
'Do you speak Russian?' (MURCO; russian-polseek)

The Q-Peak is distinct in production and perception from focus marking in assertions. While there is plenty of experimental evidence to this effect (Meyer & Mleinek 2006; Rathcke 2006; Makarova 2007, a.o.), this is also just common sense: Russian speakers aren't perpetually confused about whether a given utterance is an assertion with focus on a given item or a YNQ with focus on the same item. E.g., in (6), we have an assertion with new information focus on the subject in response to an unbiased congruent question in (6a); an assertion with corrective focus on the subject in (6b); and what is unambiguously a YNQ with focus on the subject in (6c), in which case the focus signals that this YNQ is a sub-QUD of 'Who called Nina?'.

(6) a. A: Kto pozvonil Nine? who.NOM call.PST.S.M Nina.ACC

'Who called Nina?'

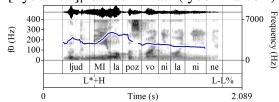
B: [Ljudmila]<sub>F</sub> pozvonila Nine. Lyudmila.NOM call.PST.S.F Nina.ACC '[Lyudmila]<sub>F</sub> called Nina.' (lyudmila-new)



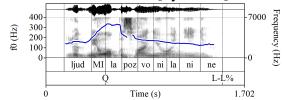
- b. A: Marina pozvonila Nine.

  Marina.NOM call.PST.S.F Nina.ACC

  'Marina called Nina.'
  - B: [Ljudmila]<sub>F</sub> pozvonila Nine! Lyudmila.NOM call.PST.S.F Nina.ACC '[Lyudmila]<sub>F</sub> called Nina!' (lyudmila-corr)



c. Kto pozvonil Nine? [Ljudmila]<sub>F</sub> pozvonila Nine? who.NOM call.PST.S.M Nina.ACC Lyudmila.NOM call.PST.S.F Nina.ACC 'Who called Nina? Did [Lyudmila]<sub>F</sub> call Nina?' (lyudmila-declq)



In all three cases, there is one accented syllable, *mi* in *Ljudmila*, the semantically focused constituent; the rest of the sentence is given and non-focused—and thus deaccented. Similarly, in all three cases, we have a falling terminal contour. While the new information focus marking in (6a) is quite ostensibly distinct from the other two cases based on the nature and position of the pitch accent, the exact difference between the corrective focus marking in (6b) and the Q-Peak in (6c) is harder to pinpoint or boil down to one single factor. It could be some combination of the peak's height and position, the nature of the pitch movement leading into it, duration and/or intensity of the accented syllable, the nature and amount of post-peak compression, etc. (see also the references above). Whatever the exact phonetic underpinnings

of the difference between focus marking in assertions and the Q-Peak are, all that matters for the purposes of this paper is that there is no ambiguity between the two.

Let me also note that there can be additional pitch accents in declarative string YNQs, including after the Q-Peak, although, due to the amount of compression after the Q-Peak, it is not always easy to tell when they are there—for instance, it is not entirely clear whether there is an additional pitch accent on *russ*- in (5c).

## 3 Q-Peak in invested requests

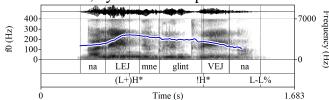
## 3.1 Q-Peak-marked imperatives

I observe that despite ostensibly being the sole surface indicator of questionhood in declarative string YNQs, which are an unmarked YNQ form (i.e., once again, compatible with canonical uses), the Q-Peak can also be used in different sentence types to mark polite/friendly, but invested requests, thus immediately contrasting with the rising tune in Macedonian-style languages. Let us look at a few cases, and let's start with the most interesting case, i.e., that of Q-Peak-marked imperatives.

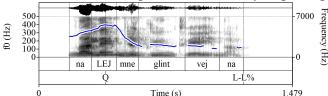
The "default" way of producing an imperative in Russian is with the same "hat" contour we see in declaratives, as shown in (7a). By default, this utterance would be interpreted as a command. It could, of course, be made more polite, e.g., by adding an adverbial like *požalujsta* ('please'), but one can turn it intro a friendly request simply by producing it with the Q-Peak on the imperative verb, as in (7b).

# (7) Nalej mne glintvejna. pour.IMP.S/T me.DAT mulled-wine.GEN

a. "Hat" contour, by default interpreted as a command (pour-imp-h)



b. Q-Peak-marked, interpreted as a friendly request (pour-imp-q)



In (8), I provide two corpus examples of such Q-Peak-marked imperatives. Note that (8b) also has an *a*? tag, which can be used in different sentence types as a way to seek engagement from the addressee and is common in Q-Peak-marked requests.

```
a. Nužno mnogo deneg. Pomogi<sub>Q</sub>te nam<sub>L-L%</sub>?
need.ADJ much money.GEN help.IMP.V us.DAT
≈ 'A lot of money is needed. Help us?' (MURCO; help-imp-q)
b. Rebjat<sub>H* L-L%</sub>, podvezi<sub>Q</sub>te menja<sub>L-L%</sub>, a<sub>L* H-H%</sub>?
guys.VOC give-a-lift.IMP.PL me.ACC PRT
≈ 'Guys, give me a lift, will you?' (MURCO; lift-imp-q)
```

Let me note that such Q-Peak-marked requests can have additional prosodic modulations to signal friendliness, such as a higher rise in the Q-Peak or perhaps a more general pitch range expansion (present in (7b), but absent in both examples in (8)), voice quality changes, etc. However, the peak we see in such requests is still recognizably a Q-Peak, and to a Russian speaker's ear such Q-Peak-marked imperatives robustly sound like "imperatives with a question-y intonation".

## 3.2 Declarative string YNQs used as requests

Now let us look at several subcases of what ostensibly looks like declarative string YNQs used as requests rather than information-seeking questions. On the face of it, this phenomenon might not seem particularly interesting, as interrogative forms can be pragmatically used as requests cross-linguistically (cf. *Could you pass me the salt?* in English). However, since the Q-Peak is the only thing that distinguishes declarative string YNQs from assertions on the surface, to understand what it does, it makes sense to look at these cases, as well. In addition, there are some idiosyncrasies that distinguish these cases from information-seeking declarative string YNQs.

In (9), we have what looks like future tense second person declarative string YNQs on the surface used as requests. Their request nature can be made obvious by adding *požalujsta* ('please'), which would be incompatible with information-seeking YNQs. Note once again that (9a) (but not (9b)) has the same extra friendliness-signalling "super-high" rise on the Q-Peak as in (7b). Note also that in such requests there appears to be a preference to have a null subject, even though there is no such preference in information-seeking declarative string YNQs. I currently have no explanation for this, but it's worth keeping track of such idiosyncrasies.

```
    (9) a. Naljëš'<sub>Q</sub> mne glintvejna(, požalujsta)<sub>L-L%</sub>? pour.FUT.2S/T me.DAT mulled-wine.GEN (please)
    ≈ 'Will you pour me mulled wine (please)?' (pour-fut2-q)
    b. Pomo<sub>Q</sub>žete te<sub>!H*</sub>lo pogruzit'<sub>L-L%</sub>? help.FUT.2PL/V body.ACC load.INF
    ≈ 'Will you help load the body [please]?' (MURCO; help-fut2-q)
```

We can also have negation in such "YNQ" requests, as in (10), which makes them even more polite.<sup>2</sup> Note that in this case there is no preference for a null subject.

```
(10) a. Ty ne naljëš'<sub>Q</sub> mne glintvejna<sub>L-L%</sub>?
you.S/T.NOM NEG pour.FUT.2S/T me.DAT mulled-wine.GEN
Lit.: 'Will you not pour me mulled wine?'
≈ 'Could you please pour me mulled wine?' (pour-fut2neg-q)
b. Prosti<sub>H*</sub>te<sub>L-L%</sub>, vy<sub>?H*</sub> ne pomo<sub>Q</sub>žete mne<sub>L-L%</sub>?
excuse-me.V you.V.NOM not help.FUT.2V me.DAT
Lit.: 'Excuse me, will you not help me?'
≈ 'Excuse me, could you please help me?' (MURCO; help-fut2neg-q)
```

One might ask why these negative requests are so polite—in contrast, e.g., to the literal English translations in (10), which sound as passive aggressive biased YNQs, conveying an expectation that the addressee should be fulfilling the prejacent. This issue is beyond the scope of this paper, but let me suggest that while such cases are clearly idiomatized by now in Russian, the original source of this effect might be that while the negative possibility goes *against* the speaker's actual preference, it imposes the least burden on the addressee and can thus be highlighted to downplay the speaker's true preference and signal a preference for the addressee's comfort.<sup>3</sup>

Declarative string YNQs (or what looks like those on the surface) can also be used as permission requests, as illustrated in (11). Typically, these would be in future tense, first person (singular or exclusive plural), but one can use the same strategy to ask for permission for a third person's actions or some state (e.g., 'May my child take this book?', 'May my car stand here for a bit?', etc.). It is obvious that the utterances in (11) are not information-seeking YNQs, because an appropriate way to react to them would be a permission-granting/denying imperative, not a FUT.2s declarative assertion. Note also that in such permission requests, the speaker assumes the permission will likely be granted. For example, in (11b), the child is already running towards the closet with the rug. An intuitive way of thinking about these cases is as essentially assertions about the future, but with the speaker giving the addressee an opportunity to object (thus, the English translations with tags are particularly apt in this case). Also, in these cases the subject seems obligatory.

(11) a. Ja nalju<sub>Q</sub> sebe glintvejna<sub>L-L%</sub>?

I.NOM pour.FUT.1S self.DAT mulled-wine.GEN

<sup>2</sup> Negation in YNQs is, of course, a notoriously complicated topic, both empirically and theoretically—and I will not even attempt to do this topic justice in this paper. For a recent discussion of various cases of negation in YNQs in Russian, see, e.g., Zanon 2023.

<sup>3</sup> See Van Rooy & Šafářová 2003 on the general idea that speakers choose the form of the prejacent in a YNQ in a way that aligns with their goals.

Lit.: 'Will I pour myself mulled wine?' ≈ 'I'll pour myself mulled wine[, OK]?' (pour-fut1sg-q)

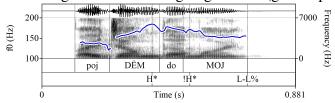
b. Mam<sub>H\* L-L%</sub>, ja voz'mu<sub>Q</sub> kov<sub>!H\*</sub>rik<sub>L-L%</sub>?
 mom.VOC I take.FUT.1S rug.ACC
 Lit.: 'Mom, will I take the rug?'
 ≈ 'Mom, I'll take the rug[, OK]?' (MURCO; take-fut1sg-q)

## 3.3 Q-Peak-marked cohortatives

Finally, in Russian, first person plural verb forms in the present or future tense<sup>4</sup> can be used as cohortatives, i.e., joint action directives. I didn't list these in subsection 3.2, because one might argue they should be treated as their own sentence type in Russian (e.g., they can't have an overt subject, and the verb forms in cohortatives can have an additional 2v/PL-marking -te affix attached to them, which doesn't happen in other sentence types). As with declarative assertions and imperatives, the "default" way to produce cohortatives is with a "hat" contour, as in (12a), in which case they are by default interpreted as commands, and as with imperatives, they can be turned into friendly requests<sup>5</sup> by producing them with the Q-Peak, as in (12b-c).

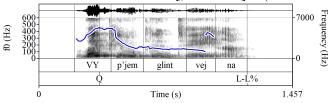
(12) a. Pojdë $m_{H^*}$  domoj $_{!H^*L-L\%}!$  go.FUT.1PL home

 $\approx$  'Let's go home! / We're going home!' (go-fut1pl-h)



b. Vy<sub>Q</sub>pjem glintvejna<sub>L-L%</sub>? drink.FUT.1PL mulled-wine.GEN

 $\approx$  'Let's drink mulled wine[, shall we]?' (drink-fut1pl-q)



<sup>4</sup> For some verbs in Russian, past tense forms can also be used to talk about immediate future in certain contexts, including cohortatives.

<sup>5</sup> Perhaps the word *suggestion* would actually be more appropriate in this case, but in this paper, I try to reserve the word *suggestion* for *disinterested suggestions*. In (12b,c), the speaker is still invested in the addressee's reaction to their request.

```
c. Pojdëm<sub>Q</sub> domoj<sub>L-L%</sub>, a<sub>L* H-H%</sub>?
go.FUT.1PL home PRT
≈ 'Let's go home, shall we?' (MURCO; go-fut1pl-q)
```

#### 4 Disinterested suggestions

## 4.1 No Q-Peak in disinterested suggestions

In all the cases in the previous section, we were dealing with *invested requests*, where the speaker is invested in how the addressee reacts to their request. As discussed in the Introduction, the English-style rising tune in imperatives is compatible both with such invested requests, as in (1c), as well as *disinterested suggestions*, as in (1d). In contrast, the Russian Q-Peak is not compatible with lack of speaker investment. Thus, B's response in (13) at best sounds like B changed their mind mid-utterance: at first they said they didn't care, but then suddenly they had the brilliant idea that the addressee should pour themself mulled wine, and now they do actually want the addressee to do so. Suggesting multiple options with Q-Peak-marked imperatives, similarly to (1d), would be even worse, as that would sound like the speaker wants the addressee to do multiple things or keeps changing their mind about what they actually want them to do—all the while seemingly soliciting a reaction from the addressee for each imperative, yet giving them no opportunity to react.

(13) A: 'What should I do while I'm waiting for you?'

B: Da mne bez raznicy. # Nalej<sub>Q</sub>
PRT-ADVERS me.DAT without difference.GEN pour.IMP.S/T
sebe glintvejna<sub>L-L%</sub>?
self.DAT mulled-wine.GEN
Intended: 'I don't care. Pour yourself mulled wine?' (pour-imp-q-self)

Note that this is not an issue of where the Q-Peak goes, i.e., what the focus is. For instance, Russian declarative string YNQs can also be produced with a sentence-level Q-Peak when they are what Esipova & Romero 2023 call *explanation-seeking*, <sup>6</sup> as in (14). These are biased YNQs, which evoke a *Why?*-type parent QUD, with their prejacent being one of the potential answers to this parent QUD. They have sentence-level semantic focus and thus broad, sentence-level prosodic focus, which in (14) means the Q-Peak goes on the linearly last lexically stressed syllable.<sup>7</sup>

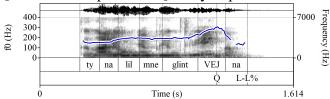
<sup>6</sup> The concept itself goes back at least to Bolinger 1978, although he doesn't use this term.

<sup>7</sup> Of course, like in English, sentence-level focus in Russian isn't always marked on the linearly last lexically stressed syllable. Also, Russian famously allows for all sorts of word order permutations (including those that do not have to have information-structure-related consequences—see, e.g.,

(14) a. Context: We're having dinner. I stepped away for a minute and come back to a glass of mulled wine next to my plate. I ask for an explanation for this.

Ty nalil mne glintvej $_Q$ na $_{L-L\%}$ ? you.S/T.NOM pour.PST.S.M me.DAT mulled-wine.GEN

'[What's the explanation?] Did you pour me mulled wine?' (pour-expl)



b. Context: An Italian tourist tells the destination to a taxi driver in Russian. The taxi driver responds:

O<sub>H\* L-L%</sub>! Vy govorite po-russ<sub>Q</sub>ki<sub>L-L%</sub>? O-INTERJ you.V.NOM speak.PRS.2V by-Russian 'Oh! Do you speak Russian?' (MURCO; russian-expl)

Yet, a sentence-level Q-Peak still can't be used in disinterested suggestions. In fact, imperatives with a sentence-level Q-Peak sound straight-up odd:

(15) # Nalej sebe glintvej<sub>Q</sub>na<sub>L-L%</sub>?
pour.IMP.S/T self.DAT mulled-wine.GEN (mulledwine-imp-q)

Unlike imperative requests, cohortative requests can sometimes have a sentence-level Q-Peak (indicating sentence-level focus, presumably signaling a 'What should we do?'-type parent QUD), as in (16), but they still have to be "invested".

(16) a. Poexali na stan<sub>Q</sub>ciju<sub>L-L%</sub>?
go.PST.PL on station.ACC
'Let's go to the station[, shall we]?' (station-past1pl-q)
b. Poidëm domoi 2

b. Pojdëm domoj<sub>Q L-L%</sub>?
 go.FUT.1PL home
 ≈ 'Let's go home[, shall we?]' (MURCO; home-fut1pl-q)

#### 4.2 Rising tune in disinterested suggestions?

At this point, one might ask if Russian makes use of the rising terminal contour at all and if it can be used in disinterested suggestions. Russian does in fact have

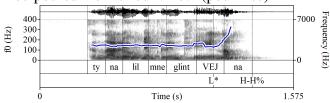
Bailyn 2023), which can further affect prosody—although they in and of themselves do not affect which syllable the Q-Peak anchors to, but they can affect the linear position of said syllable. Note also once again that in English, both polarity-seeking and explanation-seeking YNQs by default have broad, sentence-level prosodic focus and are often indistinguishable on the surface.

English-style rising declaratives, although they appear to be much more rare (they are certainly much less common in MURCO than, e.g., explanation-seeking YNQs with a sentence-level Q-Peak) and might have a more limited range of uses than in English. There's some overlap in use between Q-Peak-marked explanation-seeking YNQs like in (14) and rising declaratives like in (17), but there are also some differences—for instance, only (17a), but not (14a) can be used as an (e.g., incredulous) echo repetition in response to 'I poured you mulled wine' (same for the English translations *You poured me mulled wine*? vs. *Did you pour me mulled wine*?).

(17) a. *Context: same as* (14a).

Ty nalil mne glintvej<sub>L\*</sub>na<sub>H-H%</sub>? you.S/T.NOM pour.PST.S.M me.DAT mulled-wine.GEN

'You poured me mulled wine?' (pour-rise)



b. Context: The addressee swears in Russian.

O<sub>H\*L-L%</sub>! Vy govorite po-russ<sub>L\*</sub>ki<sub>H-H%</sub>? O-INTERJ you.V.NOM speak.PRS.2V by-Russian 'Oh! You speak Russian?' (MURCO; russian-rise)

That said, it is unclear if rising imperatives are possible at all in Russian. So far I have not found any naturalistic examples thereof, and constructed examples like (18) sound to me like Russian segmental strings produced with English intonation.

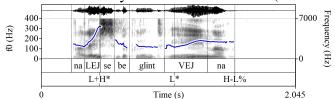
(18) ?? Nalej sebe glintvej<sub>L\*</sub>na<sub>H-H%</sub>?
pour.IMP.S/T self.DAT mulled-wine.GEN
Intended: 'Pour yourself mulled wine?' (mulledwine-imp-rise)

## 4.3 Mid-plateau in disinterested suggestions

So how can Russian speakers produce disinterested suggestions? The most natural way to do so is with a mid-plateau terminal contour (also possible in English):

- (19) a. A: 'What should I do while I'm waiting for you?'
  - B: Da mne bez raznicy. Nalej $_{L+H^*}$  PRT-ADVERS me.DAT without difference.GEN pour.IMP.S/T sebe glintvej $_{L^*}$ na $_{H-L\%}$ ... self.DAT mulled-wine.GEN

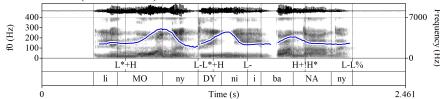
'I don't care. Pour yourself mulled wine...' (mulledwine-imp-plateau)



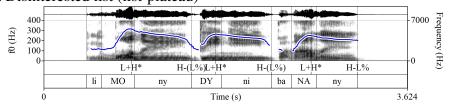
- b. Nu ty tam svari $_{L+H^*}$  kakuju-nit' ka $_{L^*}$ šu čto well you.S/T.NOM there boil.IMP.S/T some.S.F.ACC porridge.ACC WHAT li sebe $_{H-L}$ %...
  - LI self.DAT
  - $\approx$  'Well, make yourself some porridge or something...' (MURCO; porridge-imp-plateau)

Mid-plateaus are often associated with lack of speaker involvement. Thus, regular mid-plateaus can be used in "disinterested lists" in both English and Russian (a Russian example is given in (20b); see, e.g., Beckman & Ayers 1997 for English), and downstepped mid-plateaus (the "calling contour") can be used in English imperatives to signal lack of speaker involvement in the realization of their content (Jeong & Condoravdi 2017). The comparison with lists is particularly apt, because one could argue that English-style rising imperatives are open lists (at least in the case of disinterested suggestions—recall an earlier discussion in section 1). That could help explain why Russian has English-style rising declaratives as non-canonical YNQs, but arguably not rising directives, as, unlike English, Russian doesn't use the rising tune in lists. The neutral way to produce lists in Russian is with a rise-and-fall on all items (with the final item having an earlier peak), as in (20a).

- (20) Limony, dyni i banany. lemons.NOM/ACC melons.NOM/ACC and bananas.NOM/ACC
  - a. Neutral list (list-neutral)



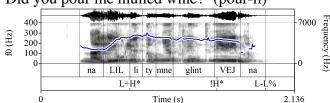
b. Disinterested list (list-plateau)



## 5 Declarative string YNQs vs. *li* YNQs

It is also possible to form matrix YNQs in Russian by fronting the focused constituent (or some part thereof) and attaching the li particle to it as a clitic, although this strategy is marked. In Esipova & Korotkova 2023, we give a detailed comparison of declarative string and li YNQs and explain how the analysis of the Q-Peak proposed here can also help account for the differences between the two. Here I will just briefly rehash two of the relevant empirical points from there. First, the fronted constituent in li YNQs bears assertion-like focus marking and cannot have the Q-Peak:

(21) Nalil<sub>L+H\*</sub> li ty mne glintvej<sub>!H\*</sub>na<sub>L-L%</sub>? pour.PST.S.M LI you.S/T.NOM me.DAT mulled-wine.GEN 'Did you pour me mulled wine?' (pour-li)



Second, *li* YNQs don't seem to necessarily require a move from the addressee, but declarative string YNQs do. One example of that is that only *li* YNQs, but not declarative string YNQs can be used as *conjectural questions* (see, e.g., Eckardt 2020 on the latter), which do not expect an answer and can even be addressee-less:

- (22) a.  $Xm_{H^*L-L\%}$ , jest'<sub>L+H\*</sub> li žizn'<sub>!H\*</sub> na drugix planetax<sub>L-L\%</sub>? hm be.PRS.3s LI life.NOM on other.PREP planets.PREP (is-li)
  - b.  $\#Xm_{H^*L-L\%}$ , na drugix planetax jest'<sub>Q</sub> žizn'<sub>L-L\%</sub>? hm on other.PREP planets.PREP be.PRS.3S life.NOM (is-q)

Bylo b neploxo uznat'<sub>H\* L-H%</sub>...

be.PST.S.N SUBJ not-bad know.INF

'Hm, is there life on other planets[, I wonder]? It would be nice to know...'

## 6 Analysis

## 6.1 What does the Q-Peak do?

In order to talk about what the Q-Peak does, let us first think about what it could in principle do. In particular, let us discuss the meaning components an utterance that we are likely to classify as a canonical matrix YNQ can have:

1. *Creating a partition/raising an issue*. This is often taken to be the core component of any interrogative. The details will vary across the many specific frameworks,

- in ways that are immaterial for our purposes. Let us just say that canonical YNQs raise an issue with respect to the partition  $\{p, \neg p\}$ , where p is their prejacent.
- 2. Asking for a move from the addressee with respect to the speaker's speech act. In canonical questions, this means asking the addressee to respond in a way that helps resolve the issue being raised. This component is optional in questions, in the sense that it can arise pragmatically without being syntactically (and thus semantically) represented and is ostensibly absent in, e.g., conjectural questions.
- 3. *Focus*. Focus, of course, is not specific to questions, but is crucial for properly interpreting them. As we have already seen, in YNQs, focus signals how the *p*? issue being raised fits into a larger discourse structure, specifically, what the parent QUD of this YNQ is (e.g., no non-trivial parent QUD in (5); 'Who called Nina?' in (6c); 'What is the explanation for the situation at hand?' in (14a); etc.).

Recall that (a) the Q-Peak can be used in invested requests, but not disinterested suggestions, and (b) declarative string YNQs, which obligatorily have the Q-Peak, always require a move from the addressee, but *li* YNQs, which do not have the Q-Peak, don't. In view of this, let me propose that the Russian Q-Peak realizes a compositionally represented component 2, i.e., asking for a move from the addressee—via the special shape of the Q-Peak itself—and component 3, i.e., focus—by virtue of being the main prominence of the utterance. The details of how to account for all the cases at hand will then vary depending on further assumptions, and I will not commit to any specific possibility, but I will list some of the options and will briefly discuss some of their consequences.

Here are three main analytical possibilities for Russian declarative string YNQs:

- (i) The Q-Peak also realizes component 1 (creating a partition/raising an issue).
- (ii) Component 1 is compositionally represented, but is not realized on the surface.
- (iii) There is no component 1, i.e., they do not raise (non-singleton) issues.

Note that option (i) allows us to straight-forwardly account for certain distributional restrictions on the Q-Peak, in particular, its incompatibility with *li* YNQs and *wh*-questions, assuming something else already realizes component 1 in those cases. Under options (ii) and (iii), we might need additional (e.g., selectional) constraints.

Note also that under option (iii), Russian declarative string YNQs would essentially be equivalent to English-style rising declaratives—at least under Rudin's (2018) story about those—in that they would only raise singleton issues, like canonical declarative assertions, but make no commitments, like canonical YNQs. And then we would need to account for any differences between declarative string YNQs and rising declaratives—at least within Russian—by appealing to the idea that Q-Peakmarked utterances explicitly ask the addressee for a move, but rising declaratives do not. Exploring to what extent this is possible is beyond the scope of this paper, but I will say that the impossibility of using declarative string YNQs as echo repetitions of some antecedent assertion, mentioned before in subsection 4.2, can be accounted

for in this way: it would be weird to ask the addressee to respond to an issue they just committed to resolving in a certain way.

Now, for the request cases discussed in subsection 3.2, which have the same form as declarative string YNQs, we could adopt the same semantic analysis as for declarative string YNQs, with differences arising only in pragmatics. However, we would still need to explain the idiosyncrasies in such requests, including the varied preferences with respect to the absence/presence of the subject.

As for Q-Peak-marked imperatives, if we want to maintain that imperatives do not raise (non-singleton) issues, we cannot then choose option (i) above, where the Q-Peak also realizes the partition-creating/issue-raising component in declarative string YNQs—unless we want to argue that the Q-Peak makes different contributions in declarative string YNQs vs. imperatives, which would be conceptually suboptimal.

Whether Q-Peak-marked cohortatives should be assimilated to YNQs or imperatives arguably depends on whether they constitute a sentence type that is closer to a declarative or an imperative—an issue I will remain agnostic on for now.

In *li* YNQs, the partition-creating/issue-raising component is presumably realized by *li* (and possibly movement), component 2 is not compositionally represented, and focus is realized via the same prosodic focus marking as in assertions (and possibly movement). Again, see Esipova & Korotkova 2023 for further discussion.

Regardless of our specific further analytical choices, the core insight above allows us to account for the conversational effect the Q-Peak has in directives (imperatives and cohortatives), as well as its incompatibility with disinterested suggestions. The Q-Peak makes directives less imposing, because it asks the addressee to react, thus highlighting that they can say no. The Q-Peak doesn't work in disinterested suggestions, because asking the addressee for a move with respect to your suggestion signals that you are, in fact, interested in whether they will pursue it.

#### 6.2 Cross-linguistic picture

Before wrapping up, let's zoom out and look at the cross-linguistic typological picture again.

In English, auxiliary inversion in unmarked YNQs likely realizes meaning component 1 (creating a partition/raising an issue). As for the rising tune, the insight from Rudin 2018, reprised in R&R, that it "call[s] off the speaker's commitment to their utterance" can be preserved as is. Thus, the rising tune can have a wider range of meaning effects than the Q-Peak and brings a different source and flavor of politeness/tentativeness to directives (you "call off the commitment" to the directive vs. you ask the addressee to react to your directive). Bulgarian is like English, except component 1 is realized by the *li* particle (just like in Russian *li* YNQs).

The rising tune presumably plays the same role in Russian rising declaratives, as

well—with the caveat that those are, once again, more rare in Russian. This could be at least partially due to the fact that Russian explanation-seeking YNQs, which overlap in use with rising declaratives, typically have a less ambiguous form than in English and are as simple in terms of their surface structure as rising declaratives.

I do also want to once again bring up the idea from subsection 4.3 that at least some cases of English-style rising imperatives might be lists—which, remember, could explain why Russian has English-style rising declaratives as non-canonical YNQs, but probably doesn't have rising directives. Further exploration of this idea, as well as whether/how the rising tune in lists is different from the "commitment-cancelling" rising tune, would be a worthy direction for future research.

It's a bit unclear how exactly R&R intended to explain the Macedonian data, but it's reasonable to suggest that the rising tune has been conventionalized in Macedonian-type languages to realize component 1, but partition-creating/issue-raising operators cannot combine with imperatives. Note that this explanation is premised on the assumption that imperatives cannot raise (non-singleton) issues, which, if maintained universally, restricts our analytical options for what the Q-Peak does in declarative string YNQs in Russian, as discussed above. Also, R&R say that "[l]i questions do also exist in Macedonian (...) but their semantics necessarily involves focus; they "emphasize a particular sentence element" (...), namely the constituent preceding li". I am not sure if by that they mean that Macedonian li YNQs necessarily have narrow prosodic focus, which is also the case in Russian li YNQs—but recall that Russian polarity-seeking YNQs, which can be as canonical as it gets, including polarity-seeking li YNQs, always have narrow prosodic focus. I don't know if that's also the case in Macedonian, but either way, I am setting this issue aside.

#### 7 Conclusion

I have argued that in Russian, we systematically realize the 'asking for a move' meaning component in unmarked matrix YNQs—unlike in English (and arguably Bulgarian and Macedonian)—and we do so via a special prosodic peak, the Q-Peak. The Q-Peak can also be used in invested requests, including in imperatives and cohortatives, making them less imposing by asking the addressee to respond to them. The Q-Peak cannot be used in disinterested suggestions, because in those, it makes no sense to ask the addressee to make a move with respect to the suggestion. The Q-Peak is thus different from the rising tune in English and Bulgarian (and to some extent, Russian), which simply "calls off the speaker's commitment to their utterance" and can thus turn declaratives into non-canonical YNQs, as well as turn directives into either tentative, but invested requests or disinterested suggestions.

<sup>8</sup> This appears to be broadly compatible with what Deniz Rudin (p.c.) thinks on the issue.

#### References

- Bailyn, John F. 2023. Head-complement order and "super-local movement" in Slavic. Talk at *Formal Approaches to Slavic Linguistics (FASL) 32*, Indiana University.
- Beckman, Mary E. & Gayle Ayers. 1997. Guidelines for ToBI labelling. Version 3.0. The Ohio State University Research Foundation.
- Bolinger, Dwight. 1978. Yes-no questions are not alternative questions. In Henry Hiż (ed.), *Questions*, 87–105. Dodrecht, Holland: D. Reidel.
- Eckardt, Regine. 2020. Conjectural questions: The case of German verb-final wohl questions. Semantics and Pragmatics 13(9). 1–54. doi:10.3765/sp.13.9.
- Esipova, Maria & Natasha Korotkova. 2023. To *li* or not to *li*. Talk at *Formal Description of Slavic Languages (FDSL) 16*, University of Graz.
- Esipova, Maria & Maribel Romero. 2023. Prejacent truth in rhetorical questions. Ms.
- Farkas, Donka F. 2022. Non-intrusive questions as a special type of non-canonical questions. *Journal of Semantics* 39(2), 295–337. doi:10.1093/jos/ffac001.
- Jeong, Sunwoo. 2018. Intonation and sentence type conventions: Two types of rising declaratives. *Journal of Semantics* 35(2). 305–356. doi:10.1093/semant/ffy001.
- Jeong, Sunwoo & Cleo Condoravdi. 2017. Imperatives with the calling contour. *Berkeley Linguistics Society (BLS)* 43. 185–209.
- Makarova, Veronika. 2007. The effect of pitch peak alignment on sentence type identification in Russian. *Language and Speech* 50(3). 385–422. doi:10.1177/00238309070500030401.
- Meyer, Roland & Ina Mleinek. 2006. How prosody signals force and focus—A study of pitch accents in Russian yes—no questions. *Journal of Pragmatics* 38(10). 1615–1635. doi:10.1016/j.pragma.2005.05.011.
- Rathcke, Tamara. 2006. A perceptual study on Russian questions and statements. *Arbeitsberichte des Instituts für Phonetik und digitale Sprachverarbeitung der Universität Kiel* 37. 51–62.
- Rudin, Catherine & Deniz Rudin. 2022. On rising intonation in Balkan Slavic. *Journal of Slavic Linguistics (FASL 29 extra issue)* 30. 1–10. http://ojs.ung.si/index.php/JSL/article/view/88.
- Rudin, Deniz. 2018. *Rising above commitment*: University of California, Santa Cruz PhD dissertation.
- Van Rooy, Robert & Marie Šafářová. 2003. On polar questions. *Semantics and Linguistic Theory (SALT)* 13. 292–309. doi:10.3765/salt.v13i0.2887.
- Zanon, Ksenia. 2023. "Expletive Negation" revisited: on some properties of negated polar interrogatives in Russian. Invited talk given at *Formal Approaches to Slavic Linguistics (FASL) 32*, Indiana University. https://fasl32.sitehost.iu.edu/

## Prosody across sentence types

# FASLabstracts/Presentations/Zanon\_FASL%202023.pdf.

Maria Esipova Department of English Literature and Linguistics Bar-Ilan University Ramat Gan, Israel mariia.esipova@biu.ac.il