Patterns of prominence in Russian yes–no questions

Roland Meyer
Universität Regensburg
Institut für Slavistik
Russian yes-no questions

1. marked by complementizer/particle *li*
   - intonation not described

2. marked by “question intonation”
   - superficially indistinguishable from declarative
   - “IK-3” contour (Bryzgunova 1977): rising from mid to very high, then falling to low
   - located on finite verb (“general question”) or other constituent (“special question”)
   - problematic:
     - IK-3 has more functions (“non-terminativity” etc.)
     - Can intonation determine sentence types?
Overview

1. Introduction

2. *li*-YNQs
   - Accent
   - Focus

3. “Intonationally marked” YNQs
   - focus x mood experiment
   - results for production and perception tasks
   - mood or sentence type marker?

4. [Q] and focus in Russian
   - VERUM focus
   - [Q] as a focus particle

5. Conclusions
Sources of evidence (1)

- Radio Mayak (*radio lighthouse*) corpus
  - unofficial source, collected from www; recordings & transcripts of radio interviews/discussions
  - annotation: approximate time anchors and POS/morphosyntactic tags
  - query: *ad hoc* cgi-access to CWB (cqp) using Stefan Evert’s Perl-CWB libraries
  - (semi-)automatic replay and dumping to Praat
  - size: ca. 565.400 tokens, 53.900 types (of forms), ca. 68 hours of recorded material
Sources of evidence (2)

- experimental data (*Meyer/Mleinek to app.*)
  - reading task: constructed examples in systematically varied context conditions (*focus x force*)
  - measuring differences in pitch maximum and pitch-to-syllable alignment on a relative time scale
  - perception task on part of the reading data (*force*)
- judgments from literature, some interview data
li-YNQs

King (1994), Schwabe (2003):

- $[_{CP} [_{C} V+li \ldots : no focus
  - King (1994): allow for (contrastive) foci later in the sentence
  - Schwabe (2003): set of propositions (unstructured)
- $[_{CP} XP [_{C} li \ldots : XP=focus
  - Schwabe (2003): set of propositions with focus (structured propositions $<\lambda y.p(y), XP>$ or propositions with alternative sets)
- "focus" somewhat unexplicit
  - primary accent?
  - focus of (question + positive answer)?
  - both? other possibilities?
Accent (1)

- V before li, V focused: H*

---

Pitch (Hz)

<table>
<thead>
<tr>
<th>Time (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>kar</th>
<th>di</th>
<th>nal’</th>
<th>no</th>
<th>bu</th>
<th>det</th>
<th>li</th>
<th>u nas</th>
<th>pen</th>
<th>sion</th>
<th>naja</th>
<th>re</th>
<th>for</th>
<th>ma</th>
<th>ili</th>
<th>ne</th>
<th>bu</th>
<th>det</th>
</tr>
</thead>
<tbody>
<tr>
<td>cardinal</td>
<td>be–FUT</td>
<td>LI</td>
<td>at us</td>
<td>pension</td>
<td>reform</td>
<td>or</td>
<td>not</td>
<td>be–FUT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Accent (2)

- V before *li*, later focus: H*

![Pitch Time Graph](Image)
Accent (3)

- XP before *li*, XP focus: H*

![Graph showing pitch variations over time with labels for at-ease, Li, you, with this, and judgment.](image)
Accent (4)

- XP before *li*, later focus: H*

![Pitch vs Time Graph]

<table>
<thead>
<tr>
<th>A</th>
<th>dos</th>
<th>ta</th>
<th>toch</th>
<th>no</th>
<th>li</th>
<th>po</th>
<th>lu</th>
<th>cha</th>
<th>jut</th>
<th>o</th>
<th>stalq</th>
<th>ny</th>
<th>e</th>
<th>pen</th>
<th>sio</th>
<th>ne</th>
<th>ry</th>
</tr>
</thead>
<tbody>
<tr>
<td>and</td>
<td>enough</td>
<td>LI</td>
<td>get</td>
<td>other</td>
<td>pensioners</td>
<td>250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Time (s) 0 3.14676
Accent (5)

- borderline case: focus particles before *li*
Summary: Accent in *li*-YNQs

- H*, independently of accents later in the sentence.
- *Always* H*, even in the case of V+li with later focus (never deaccenting of pre-li material).
- Accent provides no independent reason for distinguishing V+li from XP+li.
- Later H* accents found both in V+li and in XP+li.
Focus in *li*-YNQs

- Relatively clear cases:
  - Preceding wh question
    Čto tam budet i čego tam ne budet? BUDUT li tam MERSEDESY?
    what there be_{fut} and what there not be_{fut} be_{fut} LI there mercedeses
    ‘What will and what will not be there? Will there be Mercedeses?’

  - “out of the blue” - “Here is my question:”
    ČASTO li vas PREDAVAŁI?
    often LI you gave-away
    ‘Have you often been given away?’
Focus in *li*-YNQs

• contrast with element from preceding context:

[Dostatočno oni polučajut? Net, ne dostatočno.] A ... OSTAL’NYE p.?

enough they get no not enough and other

‘Do they get enough? No, not enough. And (do) the other (pensioners get enough?)’

cf. “Accent(4)”

• alternatives (*if*/*whether* ... or ...)

[... kardinal’no:] \textit{BUDET li u nas pensionnaja reforma, ili ne budet?}

decisive be\textsubscript{fut} LI at us pension reform or not be\textsubscript{fut}

‘... is decisive: Will there be a pension reform or won’t there be (one)’
# Overview

1. Introduction

2. *li*-YNQs
   - Accent
   - Focus

3. “Intonationally marked” YNQs
   - focus x mood experiment
   - results for production and perception tasks
   - mood or sentence type marker?

4. [Q] and focus in Russian
   - VERUM focus
   - [Q] as a focus particle

5. Conclusions
Intonational YNQs

• traditional view (e.g., Siemund 2002):
  • question tune applied to a declarative clause yields a question (/ an interrogative?)
  • Russian as a paradigm case: word order as in declarative + “IK-3” contour = YNQ

• but:
  • IK-3 may have several functions
  • Intonational YNQs are non-embeddable. Does IK-3 mark questions or interrogatives? Mixed bag?
  • pattern of prominence (Ladd 1996) differs systematically from the one in declaratives:
Prominence in iYNQs (1)

• “out of the blue” context:
  Maša kupila KNIGU. [declarative: sentence-final]
  Maša KUPILA knigu? [interrogative: on finite verb]
  \(M_{\text{NOM}}\) bought book\(_{\text{ACC}}\)

• other loci of prominence:
  Maša KUPILA knigu. [minimal or contrastive focus]
  Maša kupila KNIGU? [special emphasis, focus]
  \(M_{\text{NOM}}\) bought book\(_{\text{ACC}}\) (Ladd 1996)
Prominence in iYNQs (2)

- **Tasks**
  - disentangle mood vs. focus marking - compare to clear (*li-*) interrogatives
  - clarify intonation of proper vs. improper questions (if those exist)

- **Reading Study** (Meyer/Mleinek 2004, 2006)

<table>
<thead>
<tr>
<th>Mood</th>
<th>Focus</th>
<th>Wide Focus</th>
<th>Contrastive focus (verb)</th>
<th>Minimal focus (verb)</th>
<th>Contrastive focus (object)</th>
<th>Minimal focus (object)</th>
</tr>
</thead>
<tbody>
<tr>
<td>YNQ</td>
<td>maxinter</td>
<td>conVinter</td>
<td>minVinter</td>
<td>conOinter</td>
<td>minOinter</td>
<td></td>
</tr>
<tr>
<td>declarative</td>
<td>maxdecl</td>
<td>conVdecl</td>
<td>minVdecl</td>
<td>conOdecl</td>
<td>minOdecl</td>
<td></td>
</tr>
</tbody>
</table>

- 4 speakers, 8 it./cond., randomized, fillers
Reading Study

• Sample materials:

[Na koncerte:] Irina igrala mazurki. [maxdecl]
at concert I._NOM played mazurkas

[A: Vy včera byli na koncerte?] Irina igrala mazurki? [maxinter]
you yesterday were at concert I._NOM played mazurkas

[A: Kak vam ob”jasnila Irina v tanceval’nom kružke mazurki?] [minVdecl]
how youDAT explained I._NOM in dancing group mazurkas

B: Irina igrala mazurki. [minVdecl]
I._NOM played mazurkas
Results (1)

• Essential: Comparing the right conditions. *Not* “out of the blue” questions vs. decl., but
  • decl/int with same conditions (context, prominence)
  • within YNQs, different contextual conditions etc.
• timing normalized, using a relative time scale (1/4 syllables)
• F0 maxima, alignment, accent shape
• YNQs: significantly higher and significantly delayed pitch maxima (compared to respective declaratives)
Results (2)

average F0 (Hz)

conVde
conVint
minVde
minVint


time (1/4 syll.)
Results (3)

- within declaratives, contrastive or minimal focus significantly higher F0 maxima than maximal focus
- within YNQ conditions, no differences in (average) pitch height, delay, or accent shape
- peak delay characteristic of YNQs: L+H* L(*)
- perception test: almost perfect results for YNQ conditions; only contrastive declaratives with focus on the verb problematic (~50% precision)
Overview

1. Introduction
2. *li*-YNQs
   - Accent
   - Focus
3. “Intonationally marked” YNQs
   - focus x mood experiment
   - results for production and perception tasks
   - mood or sentence type marker?
4. [Q] and focus in Russian
   - VERUM focus
   - [Q] as a focus particle
5. Conclusions
Mood or sentence type? (1)

- evidence for “declarative questions” in Russian: distribution of negative indefinites:

  Ne dopustil tam nikto / *kto-nibud` ošibku.
  not allowed there nobody somebody mistake
  ‘Nobody allowed for a mistake there.’

  Ne dopustil li *nikto / kto-nibud` ošibku?
  not allowed LI nobody somebody mistake
  ‘Didn’t anybody allow for a mistake?’

  A nikogo / kogo-nibud` drugogo iz podpol`ščikov ty ne znaeš`?
  and noone someone other from undergrounders you not know
  ‘Don’t you know anyone / someone else from the underground?’

  (Brown&Franks 1996, 273)
Mood or sentence type? (2)

- certain modal particles disambiguate:
  - No ty že nikogda (*kogda-nibud’) ne pretendoval na rol’ stratega? - but you MP never sometimes not aimed at role strategist
  ‘But you didn’t ever aim at the role of the strategic leader, did you?’ -
  
poluutverditel’no sprosil Dok. (Tübingen Russian Corpora)
  half-assertively asked D.
  , asked Doc half-assertively.’

- derivable purely semantically?

- hypothesis: licensing by a [Q] feature, optionally present in questions (and obligatorily in interrogative sentences)
Mood or sentence type? (3)

- What about intonation?
  - informants:
    a. Ty ne kupil nikomu PODAROK?
       you not bought nobody-dat present
       “out of the blue”
    b. Ty ne KUPIL nikomu podarok?
       FVerum, F-contrast, …

- authentic “declarative questions” (w/ modal particles):
  a. No ved’ polučajutsja NOŽNICY?
     but MP arise scissors
     ‘But a gap arises?’
  b. Vy ved’ po-moemu načinaete s detskix KNIŽEK, da?
     you MP as-far-as-I-know begin from children`s books yes
     ‘As far as I know, you start from children’s books?’
VERUM focus? (1)

- Schätzt Ede Wagner? (Stechow 1981)
esteeem E. W. [answer highlights the position of fin. V]
- Ja, er SCHÄTZT ihn. / Nein, er schätzt in NICHT.

‘Does Ede like Wagner? - Yes, he does. / No, he doesn’t.’

• Höhle (1992): VERUM not an *illocutionary* operator (> also in embedded clauses)

• BRRZ (1992): in the highest clausal projection

• Reich (2001/unpubl., departing from Stechow class lect.): Q morpheme could associate with focus on POS or NEG to derive YNQ meaning
VERUM focus? (2)

- Romero&Han (2004):
  - operator on proposition $p$ expressing that the speaker is certain that $p$ should be added to the common ground (alternatives: sentential adverbs *probably, possibly* etc. - J. Jacobs).
  - pragmatic implicature: VERUM focus in YNQ $p$? >> speaker originally believed that $p$ did not hold
  - arises when “focal stress cannot be licensed by anything other than VERUM” (2004, 631) - not absolutely obligatory even in English, cf.

\[ I \text{ was wondering whether Sue visited you last week. So, DID she visit you last week? } \]
VERUM and Russian iYNQs

- no obligatory pragmatic VERUM effect in YNQs
- attempts at deriving focus on V from general semantic considerations misleading:
  - language-specific / lexical factor involved
  - accent *not* on Vfin in certain Russian YNQs:
    “explicative questions” (Mehlig 1994)

[What was that noise behind the wall last night?]
*Sosedi peredvigali PIANINO? - #Sosedi PEREDVIGALI pianino?*
‘neighbours moved piano’ / ‘Did our neighbours move the piano?’

alternative questions

*Dokladčik razvil novye IDEI ili tol’ko povtoril xorošo IZVESTNOE?*
speaker developed new ideas or only repeated well known
‘Did the speaker develop new ideas or (did he) just repeat well-known things?’
[Q] as a focus particle

- associates with a focused constituent
  - minimal XP: Maša kupila [F KNIGU]?
  - larger XPs: alternative questions
  - up to TP: Mehlig’s “explicative questions”
- Vfin
  - semantic null effect: excluded alternative (POS/NEG) brought back in by semantics of Q itself
  - allows for further operators associating with foci, cf. (optional) VERUM or secondary accents
  - Vfin prominence need not be due to VERUM, thus no obligatory pragmatic effect
- lexical property of Russian (vs. other languages)
Conclusion

• Accent in *li*-YNQs:
  • H*; no distinction w.r.t. XP+*li / V+*li
  • later foci marked by H* in both cases

• Focus in *li*-YNQs:
  • additional contextual relations involved in later foci:
    completive structures, contrast

• iYNQs:
  • specific accent L+H* L(*), marking questionhood
  • [Q] acts as a focus particle in “true” interrogatives
  • no obligatory pragmatic VERUM effect