Introduction

- disjunction markers in some languages behave like positive polarity items (PPIs; Szabolcsi 2002)
- De Morgan's laws
  - $\neg(p \vee q) = \neg p \wedge \neg q$
  - $\neg(p \wedge q) = \neg p \vee \neg q$
- *neither_nor* reading = conjunctive reading = De Morganic reading = narrow-scope reading
- disjunctive reading = wide-scope reading ≠ exclusive disjunction XOR

Some logically well-behaved languages:

(1) James doesn't speak Russian or German.
  a. James speaks neither.
  b. Either James doesn't speak Russian or he doesn't speak German.

(2) Jan spreekt geen Russisch of Duits.
John speaks NEG Russian or German
see above [Dutch]

(3) Es nestrādāju skolā vai universitātē.
I not.work school.LOC or university.LOC
'I don't work at a school or university.' [Latvian]

In other languages the relevant De Morgan's law doesn't hold:

(4) Mari nem járt hokira vagy algebrára
Mari not went hockey-to or algebra-to
≠ 'Mary didn't take hockey and didn't take algebra.' 'Either Mary didn't take hockey or she didn't take algebra.' [Hungarian]

(5) On ne govorit po-russki ili po-nemecki
He NEG speaks Russian or German
'He doesn't speak Russian or German.' [Russian]

- Hungarian-type languages
  - Polish, Serbo-Croatian, Japanese (Szabolcsi 2002); French (Spector 2014)

Background and motivation

Szabolcsi (2002)

(6) On ne govorit po-russki ili / libo po-nemecki
he not speaks by-Russian ILI LIBO by-German
'He doesn't speak Russian or he doesn't speak German.'

Empirical motivation

- questionable acceptability of the wide-scope reading

Theoretical motivations

- Spector's (2014) taxonomy of positive polarity items (PPIs)
- purely semantic unificationist accounts of PPI-hood

Aims

- compare two plain disjunction markers—*ili* and *libo*—in Russian
  - against backdrop of **exhaustification**-based analyses of positive polarity
- situate *ili* and *libo* on crosslinguistic landscape of positive polarity items
- argue for a more prominent rôle of syntax in PPI-(anti-)licensing

Claims and premises

Core claims

- despite not being discontinuous, *libo* is a global PPI
- *ili* isn't a local PPI
- purely semantic analyses of PPI-hood are insufficient
- there must be more than one path to PPI-hood

Some assumptions

- disjunction does not take wide scope by movement/QR
- instead, scope piggybacks on phrasal vs. clausal character of disjunction

Russian plain disjunction and positive polarity

Before we can continue talking about PPI-disjunctions, it is useful to recap the two central properties most PPIs have in common: *anti-licensing* and *rescuing*.

Properties of PPIs

Anti-licensing

inability to scope under clausemate sentential negation

- subject to locality restrictions
  - *Mary doesn't know someone here.
  - I don't think [Mary knows someone here]

Rescuing

- anti-licensor itself in scope of DE-operator
  - If Mary doesn't know someone there, she should stay at home.
  - Nobody doubts [Mary doesn't know someone here]

Disjunction markers as global and local PPIs

According to Spector (2014); Nicolae (2016), PPI-hood results from an obligatory **exhaustification** requirement (Chierchia 2013).

- syntactic operator **Exh** strengthens the meaning by eliminating alternative propositions
- vacuous exhaustification is disallowed since it doesn't lead to strengthening

Global PPIs (Spector 2014)

- relevant alternatives are **scalar alternatives**

Local PPIs (Nicolae 2016)

- relevant alternatives are **domain alternatives**

libo as a global PPI (Spector 2014)

- local and global PPIs only differ wrt the domain of anti-licensing
- *ergo* a PPI-disjunction must satisfy 2 requirements to be classified as global:
  - [∨ > ¬] under negation
  - this reading must persist across multiple clause boundaries

Anti-licensing not subject to locality restrictions

(7) * Ja ne dumaju [čto on govorit po-russki libo po-nemecki]
I not think that he speaks by-Russian LIBO by-German
('I don't think he speaks either language.')

ili as a local PPI: locality of anti-licensing

[¬ > ∨] in predication

(8) Ja ne ščitaju pivo vrednym ili protivnym
I not consider beer harmful or gross
'I do not consider beer harmful or gross.'

(9) on ne byl / budet vorom ili mošennikom
he not was / will.be thief or crook
'He {wasn't/won't be} a thief or a crook.'

[¬ > ∨] across clause boundaries

(10) Ja ne dumaju [čto on govorit po-russki ili po-nemecki]
I not think that he speaks by-Russian ILI by-German
'I don't think he speaks either language.'

Against *ili* being a local PPI: order and scope

Consider the contrast between the *in-situ* and fronted disjunction:

(11) On ne govorit po-russki ili po-nemecki
he not speaks by-Russian or by-German
'He doesn't speak Russian or German.' [∨ > ¬]

(12) [Po-russki ili po-nemecki] on ne govorit
by-Russian or by-German he not speaks
'Russian or German, he doesn't speak.' [¬ > ∨]

Overt scope paradox

- fronting the disjunction should change scope relations, yet the disjunction scopes under the negation,
- which it couldn't do *in situ*
- not predicted by any approach to PPI-hood known to me

No competition between fronted *ili* 'or' and *ni_ni* 'nor':

(13) [Po-russki ili po-nemecki] on ne govorit
by-Russian or by-German he not speaks
'Russian or German, he doesn't speak.' [¬ > ∨]

(14) [Ni po-russki ni po-nemecki] on ne govorit
nor by-Russian or by-German he not speaks
'He doesn't speak Russian or German.' [¬ > ∨]

What works for *ili* doesn't work for *libo*

(15) * [Po-russki libo po-nemecki] on ne govorit
by-Russian or by-German he not speaks
('Russian or German, he doesn't speak.') [¬ > ∨]

My idea (very informally)

- *ili* 'or' might be a local PPI
- PPI-hood should be formulated with reference to syntactic hierarchical relations rather than semantic notions such as downward entailment
  - perhaps akin to Beck's intervention effects? (**NB**: very tentative)
- both clausal and phrasal disjunction are required (cf. Toosarvandani 2013 for corrective *but*)
- *ne* 'not' isn't sentential negation but is instead licensed by an abstract negation operator Op¬ (cf. Zeijlstra 2004)

Acceptability of disjunction under negation

So far we've been assuming that (16) was a good sentence of Russian.

(16) On ne govorit po-russki ili po-nemecki
he not speaks by-Russian or by-German
'He doesn't speak Russian or German.' [∨ > ¬]

- But my informal consultations with Russian-speaking linguists reveal that the sentence is hardly acceptable
- unless there is a prosodic boundary between the two disjuncts

Alternative structure for [∨ > ¬]

- two clausal disjuncts + ellipsis

(17) [On ne govorit po-russki] ili [~~on ne govorit~~ po-nemecki]
he not speaks by-Russian or he not speaks by-German

- [∨ > ¬] follows naturally
- prosodic boundary between disjuncts highlights clausal disjunction structure
- limited acceptability due to
  - reparsing, or
  - problems with recoverability for ellipsis
- nice processing experiments to help us decide (Hoeks et al. 2006)

Clausal and phrasal disjunction: copular facts

- conjunctive reading unavailable due to *ili* not being evacuable from underneath *ne*:

(18) * On ne [vor ili mošennik]
he not thief or crook
('He isn't a thief or a crook.') [phrasal]

- disjunctive reading also unavailable
  - possibly because the way ellipsis is done in the second disjunct, it cannot be recovered

(19) * [On ne vor] ili [~~on ne~~ mošennik]
he not thief or he not crook
('He isn't a thief or a crook.') [clausal]

Clausal and phrasal disjunction: fronted disjunctions

(20) [Po-russki ili po-nemecki] on ne govorit
by-Russian or by-German he not speaks
'Russian or German, he doesn't speak.' [¬ > ∨]

(21) LF: $\text{OP}_{\neg}$ [Russian or German] he *ne* speaks

(22) [Po-russki ~~on ne govorit~~] ili [po-nemecki on ne govorit]
by-Russian he not speaks or by-German he not speaks
'Russian or German, he doesn't speak.' [∨ > ¬]

Advantages of this view

- anti-licensing being restricted to negation only falls out straightforwardly:
  - no intervening *ne* ⟶ no PPI-like effect
  - **Exh**-based accounts overgenerate
- wobbly judgements in re wide-scope readings are attributable to processing/parsing considerations

all whilst maintaining a reasonably credible syntax

Conclusions

- at least 2 ways of deriving the PPI-behaviour of plain disjunction
  - obligatory exhaustification + scalar alternatives (*libo*)
  - *ne*-intervention (*ili*)
- which aren't necessarily incompatible
  - *cf.* Chierchia's (2013) **Exh**-based approach to negative concord

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