Semantics of Hybrid Coordination in Russian: New Evidence[1]

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Here I consider some semantic properties of Hybrid Coordination constructions with various sorts of quantifiers and show that they can all be analyzed using quantifier resumption.

Constructions with coordinated wh−words, like in (1), have enjoyed growing attention over the last years, since the groundbreaking paper by Kazenin (2000) who showed that such cases can not be interpreted as ellipsis and must be thus instances of true coordination of unlikes:

(1) a. Kto   i   kogo   pobedil?
      who   and   whom defeated
'Who was the winner and who was the loser?'

   b. Kto   kogo   pobedil?
      who   whom defeated
'Who defeated whom?'

   c. Kto   pobedil?
      who   won
'Who won?'

As reflected in the translation, question with coordinated wh-words is not fully equivalent to a conventional multiple wh-question: (1a) presumes there was one event of defeat and, accordingly, one pair of arguments is expected in an answer. (1b), in contrast, may presume the existence of multiple events of defeat and requests for multiple argument pairs in the answer. This distinction, known as single pair answer reading vs. pair list answer reading, makes questions with coordinated wh-phrases similar to simple wh-questions like (1c), which also normally presumes just one winning event and requests the identity of the single winner.

Another, previously unnoticed, parallel between coordinated wh-words and single wh-words comes from the availability of a rhetorical question reading. It is known that multiple wh-questions do not normally support rhetorical reading. In this respect, coordinated wh-words behave like single wh-words:

(2) a. Kto   i   kogda platit   nalogi?
      who   and   when   pays   taxes
rhetorical reading available: 'Nobody ever pays taxes.'

   b. Kto   kogda platit   nalogi?
      who   when   pays   taxes
rhetorical reading not available, only 'Who pays taxes when?'

   c. Kto   platit   nalogi?
      who   pays   taxes
rhetorical reading available: 'Nobody pays taxes.'

Kazenin (2000) was the first who tried to explain the semantic effect of single-pair reading, appealing to coordinate structure blocking quantifier raising. Recently, Gribanova (2008) made a proposal that the coordination prevents the absorption of wh-quantifiers (in the sense of Higginbotham and May 1981). These analyses, however, concentrate on deriving the difference between (1a) and (1b), and are not specific about what exactly the interpretation of conjoined wh-words is.

I claim that the interpretations of conjoined wh-words are equivalent to the resumption of the wh-quantifier, namely, to a single wh-quantifier over pairs: 'for what pair <x,y>.' Non-conjoined multiple wh-words are interpreted as a complex quantifier combination, roughly paraphrased as 'for each x, what y'.

Quantifier resumption accounts for other semantic properties of the coordination of identical quantifiers, not limited to wh-words. I use a unifying term *Hybrid Coordination* after Chaves and Paperno (2007) who reported the diversity of such constructions in Russian. I illustrate the point below.

Existential and universal quantifiers produce equivalent interpretation under resumption and under the composition of two identical quantifiers; for these types of quantifiers, examples with Hybrid Coordination are, as expected, truth-conditionally equivalent to examples without coordination:

(3) a. Dopustim,   kto-libo   i   kogo-libo   pobedil.
         assume   someone-nom and   someone-acc   defeated
'Assume that someone defeated someone.'

    b.   Dopustim,   kto-libo   kogo-libo   pobedil.
         assume   someone-nom someone-acc   defeated
'Assume that someone defeated someone.'

(4) a. Vse   i   vsekh   pobedili.
         everybody-nom   and   everybody-acc defeated
'Everybody defeated everybody.'

    b.   Vse   vsekh   pobedili.
         everybody-nom   everybody-acc defeated
'Everybody defeated everybody.'

Take, however, the case of negative quantifiers like *nekogo* '(there is) nobody (to)' formed from question words with the particle *ne:*

(5)   Nekomu   i   nekogo   pobedit'.
         Nobody.to-dat and   nobody.to-acc defeat
'There's nobody to defeat someone and nobody to be defeated.'

Coordination of two such quantifiers here produces the meaning of 'there is no pair <x,y> that could go into the defeat relation' and not a logically possible combination of two negative quantifiers that would yield the interpretation of 'everybody can defeat someone.' This is in accordance with the resumption reading (i.e. quantification over pairs). Another illustrative example involves the downward entailing quantifier 'not all:'

(6) a. Ne   vse   i   ne   vsekh   pobedili.
         not   everybody-nom   and   not   everybody-acc defeated
'It is not the case that everybody defeated everybody.'

    b.   ??Ne vse   ne   vsekh   pobedili.
         not   everybody-nom   not   everybody-acc defeated
'??Not everybody defeated not everybody.'

Speakers who accept this example interpret it as the negation of *everybody defeated everybody*. This reading is exactly what the resumption of 'not all' would produce when applied to a binary relation: 'not all pairs <x,y> are in the defeat relation.' The corresponding sentence without coordination is of limited acceptability and, if interpreted at all by native speakers, has a different reading 'not all x are such that they defeated not all y,' or, equivalently, 'someone defeated everybody.'

Exactly the same semantic effects are observed in the case of more conventional coordination. Let me cite here only one example, due to space limitations:

(7) a. Which man and which woman are married to each other?
    b.   Which man is married to which woman?

(7a) and (7b) request for single pair answer and pair list answer, respectively. Similarly to (6a) vs. (6b), (7a) but not (7b) can have a rhetorical reading 'no pair are married to each other.'

I present new data showing that quantifier resumption is a suitable interpretation principle for the whole class of constructions involving Hybrid Coordination of quantifiers. This semantic evidence provides additional support for the analysis of Hybrid Coordination as a subtype of coordination proper, suggesting a uniform semantic treatment of the conventional and Hybrid coordination.

References

Chaves, Rui P. and Denis Paperno: "On The Russian Hybrid Coordination Construction." *Proceedings of the 14th International Conference on Head-Driven Phrase Structure Grammar.* CSLI Pubications, 2007: 46-64.

Gribanova, Vera. "Structural adjacency and the typology of interrogative interpretations." *Linguistic Inquiry* 40(1). 2008

Higginbotham, James, and Robert May. 1981. "Questions, quantifiers, and crossing." *The Linguistic Review* 1:40–81.

Kazenin, Konstantin. 2000. *On coordination of wh-phrases in Russian*. Ms., Tübingen University and Moscow State University.