

The Non-Identity Reading in North Slavic Coordination Constructions

This paper investigates sentences with a coordination structure and across-the-board (ATB) movement in which the ATB-moved element is interpreted as referentially non-identical in each of the conjuncts. It considers existing approaches to this phenomenon, discusses their shortcomings and argues for an ATB approach with coordination of TPs, independent movement chains and subsequent ellipsis.

Munn (1999), te Velde (2002, 2005), Gawron & Kehler (2003, 2004), Larson (2012), De Vries (2017) show that the non-identity reading (NIR) is possible in ATB constructions; consider also (1), which has meaning (2) and can be answered by (3).

(1) Kiedy tę książkę Joanna napisała a wydawnictwo opublikowało?
 when the book.ACC Joanna.NOM wrote and publisher.NOM published
 ‘When did Joanna finish the book and the publisher publish it?’

(2) At what time x, Joanna finished her book at x and at what time y, the publisher published the book at y?

(3) Joanna tę książkę napisała v 2013 roku a wydawnictwo ją opublikowało v 2015 roku.
 Joanna the book wrote in 2013 year and publisher it published in 2015 year.
 ‘Joanna finished her book in 2013 and it came out in 2015.’ (Polish)

Gawron & Kehler (2003, 2004) propose an analysis with a respective operator which can only apply to cases with plural DPs or with phrases unspecified for number like *what, who, when, where*, as in (1). Hence (4b) can answer (4a) with *where* and *in what cities*, but not (4a) with *in what city*.

(4) a. Where / In what cities / #In what city did Mary vacation and Bill decide to live?

b. Mary vacationed in Paris and Bill decided to live in Toronto. (Gawron & Kehler 2003, 93)

The Czech counterpart in (5) and (6), however, shows that NIR is possible with singular DPs and in addition, that (5) with the plural DP cannot be answered by (6). It in fact requires an answer with more cities for each conjunct (e.g. Mary in Paris and Prague and Bill in Toronto and Berlin).

(5) Kde / #V jakých městech / V jakém městě M. trávila dovolenou a B. se rozhodl žít?

where/ in what cities in what city M. spent vacation and B. self decide to live

(6) Mary trávila dovolenou v Paříži a Bill se rozhodl žít v Torontu.

Mary spent vacation in Paris and Bill self decide to live in Toronto

‘Mary vacationed in Paris and Bill decided to live in Toronto.’ (Czech)

G&K’s analysis also has a problem with data like (7), where Jerzy’s teacher and Joanna’s teacher do not have to be one and the same person. See also NIR with the singular ‘what thing’ in (12a,b).

(7) Swojego nauczyczela Jerzy lubi a Joanna nienawidzi.

self teacher.ACC Jerzy.NOM likes and Joanna.NOM hates

‘His teacher, Jerzy likes and Joanna hates.’

(Polish)

Munn’s analysis (1999) is based on Chierchia’s (1993) functional reading of wh-elements and cannot be used for ATB topicalizations since in contrast to the wh-example in (8), the topicalization in (9) does not license NIR (the paired reading) (for other problems, see G&K 2003).

(8) Which man / whom did Bill kill on Tuesday and Fred kill on Wednesday? (Munn 1999, 422)

(9) # Toho muže / tohohle Bill zabil v úterý a Fred (zabil/oběsil) ve středu.

this man this.ANIM Bill killed on Tuesday and Fred killed/hanged on Wednesday

‘This man/this one, Bill killed on Tuesday and Fred killed/hanged on Wednesday.’ (Czech)

Larson (2012) analyzes NIR in Macedonian ATB constructions and argues that there is movement only from the leftmost conjunct because in the subsequent ones, there is just a gap (later recovered). This analysis has a problem with languages that also display movement from the second conjunct; consider (10), with the standard movement diagnostic – Condition C –, which demonstrates that the condition is violated in both conjuncts.

(10) a. * Sestre Pavla₁ on₁ dal knigu a Ivan buket. (Russian)
 sister.DAT Pavel.GEN he.NOM gave book.ACC and Ivan.NOM bouquet.ACC

b. * Sestre Pavla₁ Ivan dal knigu a on₁ buket.

sister.DAT Pavel.GEN Ivan.NOM gave book.ACC and he.NOM bouquet.ACC

In the same vein, the Russian ATB questions in (11) show that strong crossover effects are also present in both conjuncts.

(11) a. * Č’ju₁ mat’ on₁ ne poprivetsvoval a Oleg ne poceloval?
 whose mother.ACC he.NOM not greeted and Oleg.NOM not kissed

- b. * Č'ju₁ mat' Oleg ne poprivetsvoval a on₁ ne poceloval?
 whose mother.ACC Oleg.NOM not greeted and he.NOM not kissed

In a scenario with two friends at a flea market, the ATB question in (12a) can have NIR, as shown in (12b) (for some speakers, embedding does NIR more salient). As to movement, the island diagnostic in (12c,d) then shows that the ATB construction is ungrammatical independently of whether the adjunct containing the gap is present in the first or the second conjunct.

- (12) a. (Řekni mi,) Jakou věc / co Jana prodala a Jirka koupil?
 (Tell me) what thing.ACC what.ACC Jana.NOM sold and Jirka.NOM bought
 '(Tell me) What thing/what did Jana sell and Jirka buy?'
 b. Jana prodala zrcadlo a Jirka měl štěstí, protože
 Jana.NOM sold mirror.ACC and Jirka.NOM had happiness.ACC because
 koupil staré šachy.
 bought old chess.ACC
 'Jana sold a mirror and Jirka was lucky because he bought an old chess set.'
 c. * Co Jana prodala t a Jirka měl štěstí, protože koupil t?
 what.ACC Jana.NOM sold and Jirka.NOM had happiness.ACC because bought
 d. * Co Jirka měl štěstí, protože koupil t, a Jana prodala t?
 what.ACC Jirka.NOM had happiness.ACC because bought and Jana.NOM sold (Cz)

(7) with NIR and reconstruction of the anaphor *swójego* below the second subject also supports an analysis with movement from all conjuncts. Movement from both conjuncts also poses a problem for **Te Velde** (2002, 2005), who argues that there is not movement from the subsequent conjunct(s). In addition, his proposal has a problem with data containing case or gender syncretism, in which the syncretic extracted elements do not have identical formal features, since features of the first conjunct are copied on elements of the second conjunct in his analysis. Consider (13), with the syncretic *kogo* and distinct case features in the particular conjuncts.

- (13) Kogo Janek lubi t a Jerzy nienawidzi t?
 who.ACC/GEN Janek likes t.ACC and Jerzy hates t.GEN
 'Who does Janek like and Jerzy hate?' (Polish, Borsley 1983,170)

Examples like (7), (12) and (13) also argue against **Zhang's** (2009a,b) proposal that NIR is licensed by non-thematic properties of the ATB-moved element.

A viable **alternative to the approaches above** is an analysis with independent movement chains and a subsequent ellipsis operation. Recall that (10)-(12) argue for movement from both conjuncts. And crucially, (14) shows that there are indeed two *independent* chains since the conjuncts can differ with respect to reconstruction of the topicalized element. In the first chain, *každé dítě* does not reconstruct and binds the pronominal *jeho rodiče*, whereas in the second one, it reconstructs and is in the scope of the indefinite *nějaká učitelka*. (Czech)

- (14) [Každé dítě]₁ [jeho rodiče]₁ přivedli do školy a [nějaká učitelka] uvedla do třídy.
 every child his parents brought to school and some teacher ushered into classroom
 'Every child was brought to the school by his parents and was ushered into the classroom by a teacher.'

An analysis with more chains was proposed by George (1980) and Wilder (1994) but they assume conjoined CPs. But given economy, the conjunction of (the smaller) TPs dominated by one CP is preferred over the conjunction of CPs. This is also supported by the fact that sentence mood (encoded in CP) must be identical for both conjuncts; see (15).

- (15) * Tuhle knihu kup a Jana prodá!?
 this book.ACC buy and Jana.NOM sells? (Czech)

Thus, e.g. for ATB topicalizations, I propose the derivation with independent chains in (16a), in which lambda operators bind the coindexed traces of the moved elements. This gives us the interpretation with two different referents, as shown in (16b) and also correctly derives the fact that (5) with the plural DP requires an answer with more cities for each conjunct.

- (16) a. [_{CP} XP [_λ₁ [_{YP} [_λ₂ [_C [_{&P} [_{TP} t₁] [_& [_{TP} t₂]]]]]]]]] b. As to x, P(x) and as to y, Q(y)
 Not to violate the Coordinate Structure Constraint, the movements to CP need to proceed simultaneously, as proposed independently by Chomsky (2008) and Bošković (2012). This is followed by an ellipsis operation on the identical second fronted element. Given parallelism requirements on movement from coordinations (see e.g. Blümel 2013), two fully distinct phrases cannot be fronted.