Quantifier scope and the argument structure of Polish ditransitives

Paulina Łęska

Adam Mickiewicz University, Poznań

The aim of this study was to investigate quantifier scope in Polish ditransitives with two object orders, as in (1), which could unveil their underlying structure. In particular, two assumptions were tested, namely (i) whether there is a correlation between the availability of short scrambling and scope changing mechanisms in Polish and if yes, (ii) which of these mechanisms leads to scope ambiguity. Languages which allow word order permutations freely are argued to be more restricted as for the use of covert operations such as QR (Szabolcsi 1997; Ionin 2003). If, however, scope ambiguity in ditransitives is attested, two different mechanisms can be responsible for it, i.e. QR or scope reconstruction (Lechner 1996). Depending on which of these mechanisms is at play, different basic object orders can be proposed. If it is a freely applying QR of the two quantified objects, the order which is ambiguous can be either basic or derived (as proposed in Antonyuk 2015, Boneh and Nash 2018), but if scope reconstruction produces ambiguity, the object order which is ambiguous must be derived, as proposed in Bobalijk and Wurmbrand (2012), Lechner (1998, 2016).

To test which of these mechanisms could be responsible for scope ambiguity in Polish ditransitives, if such is attested, I used quantifier embedding in coordination. It is well known that QR in general obeys the coordinate structure constraint (CSC, Ross 1967), as claimed in Lakoff (1970), Ruys (1992), Fox (1995) among others. This claim is supported by evidence from Inverse Linking contexts shown in (2) for English (Ruys 1992: 33) which can be observed also for Polish (3). Examples in (2-3a) have the reading in which *every* takes scope over *someone* and binds the variable pronoun *it*. However, when the quantifier *every* is embedded in one conjunct, as in (2-3b), the variable reading is unavailable, which is due to the inability of *every* to undergo QR due to CSC. Since scope reduction is possible only in derived contexts, the prediction is that if the object order which allows for scope ambiguity does so regardless of quantifier embedding, it is possibly a derived one.

To test these assumptions, a questionnaire was conducted (modelled on Anderson (2004) for English). The sentences were built on two binary variables, namely the order of objects, i.e. IO_{DAT}>DO_{ACC} vs. DO_{ACC}>IO_{DAT} and quantifier embedding in coordination, and they included verbs which select for high datives (free datives, e.g. *otworzyć* 'open', *zamknąć* 'close'), and low datives (e.g. *wysłać* 'send', *przekazać* 'hand over') for comparison of the two structures, see (4). Each sentence was followed by a comprehension question with two possible answers corresponding to two scope readings. The questionnaire was completed by 72 native speakers of Polish (60 women, 12 men; M_{age}= 22.86, SD = 2.52), all graduates of higher education. The results showed that only the DO_{ACC}>IO_{DAT} order allows for scope ambiguity and it does so regardless of coordination (5-6). This suggests that it is scope reconstruction that is at work, and, consequently, that DO_{ACC}-IO_{DAT} could be a derived object order.

<div align="right">word count: 500</div>

(1) Jan   dał   Marii książkę/   książkę Marii.
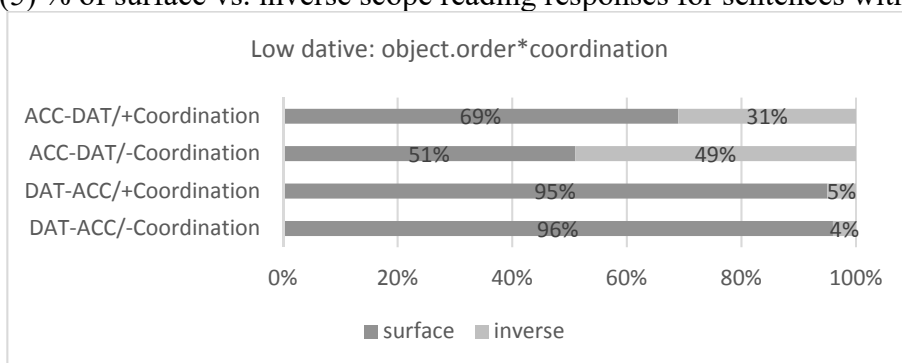   John gave   Mary$_{DAT}$ book$_{ACC}$/   book$_{ACC}$ Mary$_{DAT}$

(2)   a. Someone from every city$_i$ hates it$_i$

b. *Someone from every city$_i$ and my father hate it$_i$

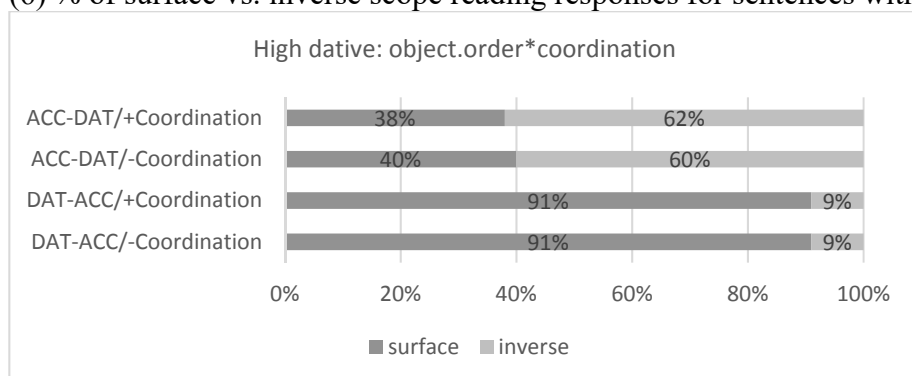(3)   a. Ktoś   z każdego miasta$_i$ nienawidzi go$_i$.
      Someone   from every city   hates it
      b. *Ktoś   z każdego miasta$_i$ i mój ojciec   nienawidzą go$_i$.
      Someone   from every city   and my father hates it

(4)   *Po powrocie z Grecji,*
      After coming-back from Greece,
      a. Marek wysłał   jakiejś koleżance   (pocztówkę i) każde zdjęcie z podróży.
         Marek sent   some friend$_{DAT}$ (postcard and) every photo$_{ACC}$ from trip
         Q: Ilu koleżankom wysłano zdjęcia?   A: a) Jednej   b) Kilku
         How-many friends got photos   one   several
      b. Marek wysłał   jakieś zdjęcie z podróży   (Adamowi i) każdej koleżance.
         Marek sent   some photo$_{ACC}$ from trip   (Adam and) every friend$_{DAT}$
         Q: Jakie zdjęcia wysłano koleżankom?   A: a) Wszystkim takie same b) Różne
         What-kind-of photos were-sent friends   everyone the same   different

(5) % of surface vs. inverse scope reading responses for sentences with low datives

Low dative: object.order*coordination

	surface	inverse
ACC-DAT/+Coordination	69%	31%
ACC-DAT/-Coordination	51%	49%
DAT-ACC/+Coordination	95%	5%
DAT-ACC/-Coordination	96%	4%

(6) % of surface vs. inverse scope reading responses for sentences with high datives

High dative: object.order*coordination

	surface	inverse
ACC-DAT/+Coordination	38%	62%
ACC-DAT/-Coordination	40%	60%
DAT-ACC/+Coordination	91%	9%
DAT-ACC/-Coordination	91%	9%

Selected references: Antonyuk, S. 2015. "Quantifier Scope and Scope Freezing in Russian". Doctoral dissertation, Stony Brook University, Stony Brook, NY. **Bobaljik, J. D. and S. Wurmbrand.** 2012. "Word order and scope: Transparent interfaces and the ¾ Signature", *Linguistic Inquiry* 43, 371-421. **Ionin, T.** 2003. "The one girl who was kissed by every boy: Scope, scrambling and discourse function in Russian". In Van Koppen, M. et al. (eds.), *Proceedings of ConSole X.* Leiden: Leiden University, 79-94. **Lechner**, W. 1996. "On semantic and syntactic reconstruction". *Wiener Linguistische Gazette* 57–59. 63–100. **Ross**, J. R. 1967. "Constraints on variables in syntax". Doctoral dissertation. Cambridge, Mass: MIT. Szabolcsi, A. 1997. "Strategies for scope taking". In: Szabolcsi, A. (ed.), *Ways of scope taking.* Dordrecht: Kluwer. 109–154.