

## What can silent elements tell us about Grammar?

In this talk, I examine the distribution of PRO in Russian gerundive clauses (RGCs). I claim that 1) PRO in RGCs has properties of Obligatory Control (OC) standardly associated with binding, and 2) RGCs are TP-adjuncts opaque for Agree. 1) and 2) result in a Binding without Agree (BWA) puzzle. I explain BWA by analyzing PRO as a definite description with a free individual concept and a bound situation variable. I show that my proposal extends to phenomena, unrelated to BWA. I also discuss the consequences of BWA for the syntax-semantics interface.

**BWA** 1) PRO in RGCs has OC properties, such as the need for a c-commanding antecedent - (1), sloppy readings, and a *de se* interpretation (Landau 2000).

- (1) \*Petina<sub>i</sub> sestra ušla, [PRO<sub>i</sub> ne pobrivšis’].  
 Peter’s sister left not having.shaved  
 ‘\*Peter’s sister left without shaving himself.’

2) Evidence for RGCs being TP-adjuncts: a) RGCs do not permit the agreeing nominative and the ‘second dative’ on secondary predicates - (2) (Franks and Hornstein 1992). This suggests that the two routes for Control in Russian are unavailable for RGCs (Landau 2008).

- (2) [Vernuvšis’ domoj ?\*p’janyj /\*odnomu] Ivan srazu leg spat’.  
 having.returned home drunk.NOM /alone.DAT Ivan.NOM at.once lay.down to.sleep  
 ‘Having returned home drunk/alone, Ivan lay down to sleep at once.’

b) RGC is a separate domain for *ni*-words licensing; c) diachronically, RGCs had the status of independent clauses (Yokoyama 1979). It follows from 1) and 2) that Binding is possible without Agree.

**Analysis** RGCs are TP-adjuncts that lack a CP layer, which explains the failure of Agree. This failure does not preclude PRO from having bound properties because PRO is decomposed into a free individual concept ( $u_5$ ), a bound situation variable ( $s_1$ ), an identity relation  $R$ , and a D-head, as in (3) (Wolter 2006, Elbourne 2008).

- (3)  $[[PRO]]^g = D [ R [ u_5(s_1) ] ] = [\lambda f_{et}. \iota x f(x)=1](\lambda y \lambda z. y=z([\lambda s. u_5(s)](s_1))) = \iota x x=u_5(s_1)$   
 defined iff there is exactly one  $x$  such that  $x=u_5(s_1)$

(4-a) has the LF in (4-b) and the derivation in (4-c). The situation variables in (4-b) are bound by the same index 1 and eventually saturated by the topic situation ( $s^*$ ).

- (4) a. Guljaja, Ivan vstretil prijatelja.  
 promenading Ivan met friend  
 ‘Ivan met a friend while promenading.’  
 b.  $[s^* [1 [[_{TP-ing} [PRO \text{ in } s_1] [_{VP} s_1 \text{ promenading} ] ] \& [[Ivan \text{ in } s_1] [_{VP} s_1 \text{ met a friend} ] ] ] ] ] ]$   
 c.  $[\lambda s. [[TP]]^g \wedge [[TP - ing]]^g](s^*) = [\lambda s. Ivan \text{ in } s \text{ met a friend in } s \wedge \iota x x=u_5(s) \text{ promenades in } s](s^*) = Ivan \text{ in } s^* \text{ met a friend in } s^* \wedge \iota x x=u_5(s^*) \text{ promenades in } s^*$

**Extensions** 1. My proposal correctly predicts that TP-ing does not have an independent reference time anchoring (Shvedova 1980). 2. My proposal extends to PRO with quantifiers like *každyj* ‘each’ and *oba* ‘both’.

**Consequences** BWA requires us to reconsider the syntax-semantics interface. A strong revision states that Bind-if-Agree is a false correlation and has to be abandoned. But, then, we will lose the explanation for well-documented cases of Binding-when-Agree. I propose a weaker revision postulating an economy principle that permits BWA in definable cases.

**References** Elbourne, P. 2008. Demonstratives as individual concepts. *Linguistics and Philosophy* 31:409-466; Franks, S., and N. Hornstein. 1992. Secondary predication in Russian and proper government of PRO. In *Control and Grammar*, 1-50. Dordrecht: Kluwer; Landau, I. 2000. *Elements of Control*. Dordrecht: Kluwer; Landau, I. 2008. Two routes of control. *Natural Language and Linguistic Theory* 26:877-924; Shvedova, N.Yu. 1980. *Russkaja Grammatika*. Moscow: Izdatel'stvo Nauka; Wolter, L.K. 2006. That's that. PhD thesis, University of California, Santa Cruz; Yokoyama, O.T. 1979. *Studies in Russian Functional Syntax*. PhD thesis, Harvard University.