## On the structural and referential deficiency of 3PL

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One of the questions surrounding pronouns, including impersonals, concerns their structural complexity (Cardinaletti and Starke 1999, Déchaine and Wiltschko 2002, Ritter and Wiltschko 2019). In this presentation, I address this question, focusing on the 3PL pronominal subject in Russian, (1)–(4). The null form, (2)–(4), can have a referential (deictic) reading (2) or an arbitrary one, which in its turn can be existential (3) or quasi-universal (4) (Malamud 2013).

- (1) Zdes' oni rabotajut xorošo. here they work.3PL well 'Here they work well.' (known individuals/\*arbitrary people)
- (2) Xorošo rabotajut.
  well work.3PL
  'They work well.'
  (pointing at working individuals)
- (3) Zdes' rabotajut. Govorite potiše. here work.3PL speak.2PL quieter 'People are working here. Speak quieter.'
- (4) Zdes' rabotajut xorošo. here work.3PL well 'People here (generally) work well.'

Barbosa (2019) has recently proposed that null subjects are bare (rootless) nPs of type  $\langle e,t\rangle$ . In her analysis, nP can be shifted to type e by (i) D-merger, which derives an overt pronoun at PF and serves an  $\iota$ -operator at LF, as in (1), or (ii) movement (to Spec,TP), yielding a definite description, as in (2). This approach faces the following problems. First, the claim that movement produces a type shift from property to entity puts the cart before the horse: definiteness could plausibly be the driving force of movement – the inverse is not obvious. Second, it is not clear how semantic composition proceeds between the nP of type  $\langle e,t\rangle$  and a Voice projection of type  $\langle e,\langle s,t\rangle\rangle$ . The type mismatch can be resolved by Predicate Abstraction (Heim and Kratzer 1998) when nP moves to Spec,TP, leaving a trace of type e, but this derivation applies only to (2). To account for arbitrary readings in (3)–(4), Barbosa (2019) appeals to "semantic incorporation" (Farkas and de Swart 2003), which she takes to be an instance of Predicate Modification (Heim and Kratzer 1998). This implementation, however, is not straightforward given the type mismatch.

The above problems can be avoided if we recognize that pro, just like overt pronouns, can be of different syntactic sizes (the idea going back to Holmberg 2005). In fact, applying the Universal Spine Hypothesis (Wiltschko 2014), I separate (2) from (3)–(4), suggesting that pro in (2) is a full GroundP (Ritter and Wiltschko 2019). As for (3)–(4), I submit that the arbitrary 3PL is a  $\varphi$ P, in which the 3<sup>rd</sup> person is the distal function (DIST) applied to a set of discourse referents (Ackema and Neeleman 2018). Moreover, taking speech acts to be events, it is natural to assume that DIST is a function of type  $\langle e, \langle s, t \rangle \rangle$  (from individuals to speech act events). That is,  $\varphi$ P and Voice have the same semantic type. Finally, the interpretative difference between (3) and (4) boils down to the structural position of  $\varphi$ P in the clause. If it stays in situ (Spec, VoiceP), it falls under the rule of Existential Closure (Heim 1982) – (5a). If  $\varphi$ P moves to Spec,TP (followed by locative fronting), it ends up in the restrictor of the generic operator (Krifka et al. 1995) – (5b). This (second) option yields a kind reading: 'people at given location'.

- (5) a.  $\exists x,s [DIST(x,s) \land Agent(x,s) \land work(s) \land here(s)]$ 
  - b. GENx,s [DIST(x,s)  $\land$  here(s)] [Agent(x,s)  $\land$  work-well(s)]

Thus, revisiting Barbosa's analysis, we are led to re-evaluate the semantic contribution of  $\varphi$ -features – person features in particular – projecting their own phrase ( $\varphi$ P). Being functions, they can restrict a predicate, but they are unable to saturate it. Even though they are not probing (inflectional)  $\varphi$ -features, they still do not contribute to full interpretation on their own.

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