Agreement at PF: An Argument from Partial Control

Idan Landau
Ben Gurion University

Grammatical agreement has been at the focus of intensive research in recent years, controversial questions including configurational constraints (locality and intervention), morphological consequences (spellout and impoverishment) and semantic implications (feature valuation and interpretability). The answers to many of these questions turn on the answer to a more fundamental question: *Where in the grammar does agreement apply*? If the operation Agree is syntactic, it may have interpretive effects; if it is postsyntactic, applying at PF, it should have no such effects. In this talk I present a novel argument for the PF view of agreement (see Bobaljik 2008). The argument is based on the observation that in certain environments of Partial Control, a special case of Obligatory Control (OC), the morphological [person] feature on PRO and its semantic value diverge. The former is uninterpreted since it is assigned at PF; perforce, all agreement operations that copy the features of PRO are also located at PF.

To set the stage, observe that PRO in OC is interpreted as a bound variable (Morgan 1970, Fodor 1975). In (1a) PRO is a non-referential variable bound by the QP *nobody* and in (1b) the PRO inside the ellipsis site is a variable bound by the local subject *Claire*, giving rise to an obligatory sloppy reading.

(1) a. $Nobody_i$ agreed $[PRO_i$ to take care of Jimmy].
     b. $Mary_i$ hoped $[PRO_i$ to get a new car] and Claire did too.

Furthermore, PRO in OC bears valued morphological ϕ-features. These features are copied onto agreeing elements, like bound SELF-reflexives or secondary predicates (both of which are licensed locally, i.e., never across clause boundaries). In languages like Persian, with subjunctive OC complements, PRO also determines verbal agreement (Darzi 2008) (see also Landau 2008 and Bobaljik and Landau 2009 for extensive evidence that PRO bears case features).

(2) a.   She preferred $[PRO_{[3,SG,F]}$ to introduce $herself_{[3,SG,F]}$/*himself].
     b.   hem   hivtixu   li $[PRO_{[3,PL]}$ le'hagi'a   levuš-$im_{[PL]}$].   *Hebrew*
          they   promised   to.me   to.arrive   dressed-PL
          'They promised me to arrive dressed.'
     c. $Mæn_i$ mi-tun-æm   [(ke) $PRO_{i\ [1,SG]}$ næ-r-$æm_{[1,SG]}$ xune].   *Persian*
          I   DUR-be.able-1SG (that)   not-go.SUBJ-1SG home
          'I am able not to go home.'

Recent work suggests that ϕ-features on bound *pronominal* variables are partially or totally uninterpreted (Heim 2008, Kratzer 2009), arising from a "feature transmission" process at PF. This work centers on pronouns in quantified contexts. The question is whether PRO in OC can be shown to inherit its ϕ-features by a similar process of PF transmission *even in non-quantified contexts*. As I show below, a peculiar mismatch between the morphological and semantic values of [person] on PRO in Partial Control (PC) provides a positive answer to this question.

In PC, PRO is understood to be a set including the controller and some additional participant(s) salient in discourse (Landau 2000). Departing from Landau's analysis, assume that

PC is generated by the attachment of an *associative morpheme* (AM) to the inflectional head of the infinitive (3a), on a par with the plural morphology recruited by certain languages to express associative plurals (Corbett 2000, Daniel and Moravcsik 2005). This morpheme functions as a group operator on the index of the controller, yielding a set of salient referents including the referent of this index (3b) (Kratzer 2009); for example, a set consisting of the speaker and the (referents of the) controller, (3c).

(3)   a.   They$_i$ agreed [PRO$_i$ to-*AM* discuss the matter further].
      b. $[\![AM(i)]\!]^{g,c} = \{g(i)\} \cup \{g(n) \mid g(n)$ is salient and associated with g(i) in c$\}$
      c.   = *They$_i$ agreed for us (=me+them$_i$) to discuss the matter further*.

Because the AM is docked on a ϕ-less head (infinitival T), it fails to generate a [plural] marking and only induces semantic plurality.

(4)   Bill told Sam that he's willing to work together / *become partners.

Strikingly, a parallel matching condition holds between the morphological [person] values of the controller and PRO in PC - even when in conflict with the semantic person value of PRO. Although the controlled subject of (3a) includes the speaker (on the intended reading), it cannot bind a 1st person reflexive (5a), unlike an overt 1st person plural pronoun (5b).

(5)   a.   * They agreed to discuss ourselves.
      b.   They$_i$ agreed for us (=me+them$_i$) to discuss ourselves.

Examples (6a-b), on the italicized readings, demonstrate that the morphological [person] value of PRO in PC is strictly inherited from the controller, being "blind" to the outcome of semantic person resolution rules (i.e., a group including the speaker should be 1st person). Notice that a *single* PRO is shared by the two conjuncts in (6a), and that the embedded gerundive adjunct in (6b) is predicated of the PC PRO.

(6)   a.   PC PRO: morphologically [3PL], semantically [1PL]
           They wanted [PRO to prepare themselves and then meet for debate].
           *They wanted that **they** would prepare themselves and then **we** (= they and me/us) would meet for debate.*
      b.   PC PRO: morphologically [2PL], semantically [1PL]
           Would you$_{PL}$ (all) like [PRO to rehearse together before presenting yourselves]?
           *Would you like it for **us** (= you$_{PL}$ and me/us) to rehearse together before **you** present yourselves?*

The most natural explanation for the mismatch between the morphological and semantic person values on PC PRO is that morphological ϕ-features are transmitted to PRO (from the controller) at PF, "too late" to feed semantic interpretation. This conclusion plausibly holds of OC PRO in general. Since the ϕ-features of PRO are copied onto agreeing elements (e.g., in (2)), it follows that agreement processes in general apply (exclusively or optionally) at PF.

Time permitting, I will discuss data from Portuguese (Modesto 2010, Sheehan 2012), where the morphological and semantic features on PC PRO are aligned; thus PRO$_{[3PL]}$ and

sometimes even PRO$_{[1PL]}$ are controlled by DP$_{[3SG]}$. This alignment is made possible, I suggest, by the availability of inflected infinitives, which provide an overt spellout slot for the AM attached to their T-head in PC.

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