A phase-based account of the PRO/anaphor distinction Sandhya Sundaresan, University of Tromsø(CASTL)/Stuttgart

This paper argues that the crosslinguistically well-attested syntactic, semantic and morphophonological differences between obligatory-controlled (OC) PRO and local anaphors can be captured as a function of phase-locality and cyclic Spell-Out. Such a reductionist treatment is motivated by the observation that controlled PRO and local/"SELF-"anaphors (Reinhart and Reuland, 1993) behave semantically identically as bound variables, syntactically occur in complementary distribution (the classic test for allomorphy of underlyingly identical elements), and might also be underlyingly featurally identical despite superficial morphophonological differences (for other reductionist approaches, see recent work in Kratzer, 2009; Heim, 2008, and others). The implementation builds on previous work by Reinhart and Reuland (1993) which argues for a typology of DPs based on an interpretable and inherent feature $[\pm R]$ on DPs, where R is a syntactic feature tied to the referential (in)dependence of the DP.

SETTING THE EMPIRICAL STAGE - DIFFERENCES AND SIMILARITIES BETWEEN PRO AND OVERT ANAPHORS: Syntactically, SELF-anaphors and OC PRO occur in complementary distribution: SELF-anaphors must have a local antecedent (descriptively: Binding Condition A) whereas PRO cannot (i.e. must be ungoverned) (Chomsky, 1981; Martin, 1996, and others). Morphologically, SELF-anaphors show agreement for person, number and gender features while PRO being silent, trivially doesn't. However, floating quantifier evidence from Icelandic (Sigurðsson, 1991) strongly suggests that PRO does possess phi-features though these are not realized overtly, suggesting in turn that the morphological differences between PRO and SELFanaphors are superficial and not underlying. Semantically, both SELF-anaphors and OC PRO behave like bound variables showing sloppy identity under VP ellipsis. SETTING THE THEO-RETICAL STAGE - ASSUMPTIONS AND CLAIMS: Following Landau (2004), I assume that overt anaphors and OC PRO are both bound variables (represented by a variable index on the D head); they have a [-R] feature indicating their variable status and also possess phi-features (contra the minimal phi-feature account in Heim, 2008; Kratzer, 2009). Essentially, then, PRO and anaphors are indistinguishable in the narrow syntax. But they are base-merged in different positions relative to their antecedents - thus forming **contextual allomorphs** in the narrow syntax. Architecturally, I assume a Y-modular grammar, cyclic Spell-Out (Chomsky, 2000, and others), and late insertion of morphophonological material (Halle and Marantz, 1993).

PROPOSAL: The challenge is to account for the cross-linguistically well-attested and systematic empirical differences between OC PRO and overt anaphors, outlined above, while maintaining the attractive claim that the two are indistinguishable in the syntax. My proposal is essentially that the choice between SELF-anaphors and OC PRO is regulated by whether the features of their binders are accessible when they are spelled out. This in turn depends on the syntactic (specifically phasal) relation between the [-R] DP and its antecedent and plays out in the following manner. If the antecedent is in a local relationship with (i.e. in the same minimal phase as) the [-R] DP, then the latter is spelled out as an overt anaphor with, where applicable, the necessary morphological features showing agreement with the antecedent DP (giving, for instance, differences such as *himself* vs. *herself* in English). If the antecedent is in a non-(phase)-local relationship with the binder (i.e when the antecedent DP is in a different phase domain), then the relevant features of the antecedent will remain inaccessible to the [-R] element which, furthermore, will be spelled out before the antecedent DP in the higher phase is merged in the structure. In such cases, I argue, the [-R] DP is unable to show agreement, where required, with its antecedent and is simply spelled out as a **default form**, namely: "PRO". Of course, there is no a priori reason why lack of agreement features on the DP should always be spelled out as a covert element like PRO - the proposal leaves open the theoretical possibility for an overt variant of PRO (i.e. an overt anaphoric DP with the same distribution as PRO but with

deficient/default features). The Dravidian simplex, long-distance anaphor *taan* is plausibly such an element because it can occur as a nonfinite subject with additional contrastive-focus effects (perhaps explaining its overtness):

(1) raman_i [taan_i/PRO_i saadatt-ai saappid-a] paa-tt-aan raman [self_i/PRO_i rice-A eat-INF] try-PST-3MS 'Raman tried to eat rice.'

At LF, both elements get semantically variable-bound yielding coreference effects. This proposal retains the idea that PRO and SELF-anaphors are born identical but correctly yields their cross-linguistically attested differences, as in the examples below:

- (2) John_i [$_{v*P}$ t_i saw himself_i/*PRO_i] (Simplex transitive)
- (3) [*_{CP}* John_i believes [*_{TP}* himself_i/*PRO_i to be a fool] (ECM)
- (4) John_i tried $[_{CP} |_{TP} PRO_i / *himself_i \text{ to juggle }]$ (Nonfinite complement)

In (2) and (3), the coreferent [-R] DP is in the same phase as (the lower copy of) John thereby having access to the features on John. As such, this [-R] DP is spelled out as himself. But in (4), the [-R] DP is in a different lower phase (lower CP) than its antecedent and thus doesn't have access to the features of the DP antecedent - note here that this DP is not at the edge of the CP phase but within the embedded TP. Furthermore, because of cyclic Spell-Out, it gets shipped to Spell-Out before John is merged into the structure. This combination of factors results in its getting spelled out with no agreement features, as PRO. The attractiveness of this hypothesis is that the empirical differences between PRO and anaphors fall out as a natural result of standard grammatical mechanisms that are already in place within the Minimalist theory, such as phase-locality and cyclic Spell-Out. Binding Condition A for anaphors is an epiphenomenon of these mechanisms and not an independent principle of the grammar. Another attractive simplification of this proposal is that, since PRO is featurally indistinguishable from anaphors in the syntax, it no longer has a unique status as a special empty category requiring the operation of a control module for its reference.

References

Chomsky, Noam. 1981. Lectures on government and binding. Dordrecht: Foris.

- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In Step by Step: Essays on minimalism in honor of Howard Lasnik, ed. Roger Martin, David Michaels, and Juan Uriagereka. Cambridge, Mass.: MIT Press.
- Halle, Morris, and Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The view from building 20: Essays in linguistics in honor of Sylvain Bromberger*, ed. Ken Hale and Samuel Jay Keyser. Cambridge, Mass.: MIT Press.
- Heim, Irene. 2008. Features on bound pronouns. In *Phi Theory: phi-features across modules and interfaces*, ed. Daniel Harbour, David Adger, and Susana Béjar, Oxford Studies in Theoretical Linguistics, 35–56. Oxford University Press.
- Kratzer, Angelika. 2009. Making a pronoun: fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40.
- Landau, Idan. 2004. The scale of finiteness and the calculus of control. Natural Language and Linguistic Theory 22:811–777.
- Martin, Roger. 1996. A minimalist theory of PRO and control. Doctoral Dissertation, MIT, Cambridge, Mass.

Reinhart, Tanya, and Eric Reuland. 1993. Reflexivity. Linguistic Inquiry 24:657–720.

Sigurðsson, Halldór Ármann. 1991. Icelandic Case-marked PRO and the licensing of lexical arguments. *Natural Language and Linguistic Theory* 9.