Reflexive predicates and the Voice-v division of labor

Andrew Kato — University of California, Santa Cruz (Pronouns: he/him/his; Email: anmkato@ucsc.edu)

- **1. Overview.** Especially with the advent of minimalist approaches to syntactic derivation, a growing pursuit since Chomsky (2000; 2001) concerns laying out the mechanisms of the Agree operation, the primary tool for feature-based dependencies (see Deal, 2023). Debates over the years have included search-space directionality, locale (syntax versus PF), and halting conditions. The particular line of research explored here involves the reducibility of binding to Agree (binding-as-agreement henceforth: BAA), one of multiple ways in which researchers have attempted to decompose Conditions A–C (see Chomsky, 1981):
 - (1) a. **Binding as movement**: Antecedents externally merge (EM) with anaphors, then proceed to raise at a later step. (e.g., Zwart, 2002).
 - b. **Binding as** φ **-feature agreement**: Features on anaphors are valued via agreement by their antecedents (Hicks, 2009; Ke, 2019; Reuland, 2011).
 - c. **Binding as movement** + **agreement**: φ -feature agreement is preceded by movement. (Diercks et al., 2020; Rooryck & Vanden Wyngaerd, 2011).

In this work, I propose a novel approach to deriving reflexives in transitive constructions that relies on the emergent cooperation between v^0 and Voice⁰ involving movement + agreement. Taking on the perspective that θ -roles are generally introduced via distinct heads (thematic separation in Husband, 2023), I characterize anaphoricity with a reflexive-Voice⁰ that acts as a φ -probe (Paparounas & Akkuş, 2023). Departing from previous work, however, I argue that the unvalued internal-argument (IA) anaphor undergoes object shift as a result of obligatory EPP on the phasehead v^0 — motivated by observations of argument extraction in ERG/ABS languages (e.g., Mandar: Brodkin, 2022; Chuj: Brodkin & Royer, 2021). This allows for the natural preservation of the strong Phase Impenetrability Condition (PIC^S; see Chomsky, 2000; Gallego, 2020), and ensures that the IA is the first DP Voice⁰ encounters.

- 2. Patterns in Reflexivity. The intuitive principles guiding and favoring a BAA approach can be summarized as in (2). The fundamental restriction of precedence in anaphor distribution is described by Haspelmath as antecedent-reflexive asymmetry a postulate which entails Condition A. Moreover, the cross-linguistic empirical pattern emerges that pronominal forms and antecedents tend to match in φ -features (see Collins & Postal, 2012; Angelopoulos et al., 2023).
 - (2) a. **Antecedent-reflexive asymmetry**: An antecedent must occur higher on the rank scale of syntactic positions than its anaphor. (Haspelmath, 2023: 37).
 - b. The Pronominal Agreement Condition: An anaphor agrees in φ -features with its antecedent. (Angelopoulos et al., 2023: 3).
- **3. Condition A via BAA.** Constructing an analysis based on the patterns in §2, downward agreement serves as a natural explanation at play for local anaphors. Rooryck & Vanden Wyngaerd (2011; R&VW) is a notable example of a BAA approach that seeks this. However, their account argues for a *direct* Agree relation between co-referent items an account that falls out of place from perspectives that delineate functional heads as probes, not lexical elements such

as anaphors. Taking on a more fine-grained structure of the verbal system (i.e., where Voice⁰ introduces external arguments, e.g., Harley, 2013), anaphors adjoining to the edge of vP would not c-command antecedents. As a result, I depart from R&VW's view that anaphors probe. Instead, I build on the analysis of Turkish by Paparounas & Akkuş (2023) in having Voice⁰ mediate this relation. As seen in (3a-c), the reflexive (IA) still moves to the phase edge, but serves as as goal rather than a probe. Agreement with Voice⁰ initially fails, since the anaphor carries unvalued features. Once the pre-valued EA is merged, Voice⁰ and the IA — as a composite probe — successfully Agree with the new specifier (as in cyclic Agree). T⁰ probes as expected (3c), and the predicate verb can subsequently undergo head-movement to converge on linear order.

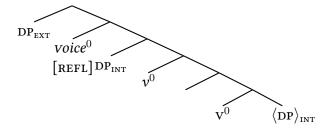
(3) a.
$$[V_{\text{oiceP}} \text{ EA Voice}^0 \ [V_{\text{P}} \text{ IA } \nu \dots \ [V_{\text{P}} \text{ V}^0 \ \langle \text{IA} \rangle]]]$$

b. $[V_{\text{oiceP}} \text{ EA Voice}^0 \ [V_{\text{P}} \text{ IA } \nu \dots \ [V_{\text{P}} \text{ V}^0 \ \langle \text{IA} \rangle]]]$

c. $[T_{\text{P}} \text{ EA T } [V_{\text{oiceP}} \ \langle \text{EA} \rangle \ \text{Voice}^0 \ [V_{\text{P}} \text{ IA } \nu \dots \ [V_{\text{P}} \text{ V}^0 \ \langle \text{IA} \rangle]]]]$

4. Implications. Reflected in (4) as a tree, the IA undergoes movement to [Spec, vP] for a different reason than R&VW originally proposed. While this movement, referred to as the "Principle for the Anaphoric Properties of Agreement (PAPA)" by Diercks et al. (2020: 361) still occurs, it is instead motivated by the EPP-feature on phase heads that triggers movement, such as with object shift in

(4) PAPA feeds a shorter search-space:



ERG/ABS voice alternations (e.g., Brodkin, 2022; see Legate, 2014). As a consequence of adopting the novel pairing of object shift and BAA on a cross-linguistic scale, the information in the transferred ν P phase need not be accessible to Agree. The parsimonious PIC^S can be freely maintained at this step via the conceptual unification between multiple argument systems. From a broader perspective, this analysis proves especially relevant for future research on the possible underlying mechanisms at play in the distributional patterns Conditions A–C sought to capture.

Sel ref. Angelopoulous, N., Collins, C., Michelioudakis, D., & Terzi, A. (2023). On the syntactic status of implicit arguments: Greek as a case study. To appear in WCCFL 41. • Brodkin, D. (2022). Two steps to high absolutive syntax: Austronesian voice and agent focus in Mandar. JEAL. • Brodkin, D., & Royer, J. (2021). Ergative anaphors and high absolutive syntax. To appear in WCCFL 39. • Chomsky, N. (1981). Lectures on government and binding. De Gruyter Mouton. • Chomsky, N. (2000). Minimalist inquiries: The framework. In Step by step. • Chomsky, N. (2001). Derivation by phase. In Ken Hale. • Collins, C. & Postal, P. M. (2012). Imposters: A study of pronominal agreement. MIT Press. • Deal, A. R. (2023). Current models of Agree. Ms, UC Berkeley. • Diercks, M., van Koppen, M., & Putnam, M. (2020). Agree probes down: Anaphoric feature valuation and phase reference. In Agree to Agree. Language Science Press. • Harley, H. (2013). External arguments and the Mirror Principle. Lingua. • Haspelmath, M. (2023). Comparing reflexive constructions in the world's languages. In Reflexive constructions in the world's languages. Language Science Press. • Husband, E. M. (2023). Thematic separation in light of sentence comprehension. Language & Linguistics Compass. • Legate, J. A. (2014). Voice and v: Lessons from Achnese. MIT Press. • Rooryck, J. & Vanden Wyngaerd, G. (2011). Dissolving Binding Theory. OUP. • Paparounas, L. & Akkuş, F. (2023) Anaphora and agreement in the Turkish DP: Delimiting binding-through-agree.