Upward Agreement and Syntactic Counterfeeding in Lubukusu

Keywords: syntax, complementizer agreement, directionality, tier-based strictly local languages

- **1. Introduction** The issue of directionality in agreement has received much attention in recent Minimalist theory (Baker 2008; Carstens 2016; Pesetsky and Torrego 2007; Zeijlstra 2012). From a formal perspective which models linguistic dependencies as **tier-based strictly local** (**TSL**) patterns (Graf 2022), directionality is predicted to vary parametrically, just as long-distance phonological harmony may be progressive or regressive. This appears to be bourne out in the realm of **complementizer agreement**, which descriptively may target the embedded subject or the subject of the containing clause depending on the language. See (1) and (2) below; c1/c2 indicate noun class. All data is from Diercks (2013).
 - Downward complementizer agreement in West Flemish (Germanic)
 Kpeinzen da-j [CP (gie) morgen goat].
 I.think that-you (you) tomorrow go
 'I think that you'll go tomorrow.'
 - (2) Upward complementizer agreement in Lubukusu (Bantu)
 Ba-ba-ndu ba-bolela Alfredi [CP ba-li pro a-kha-khile].

 c2-c2-people c2-said c1.Alfred c2-that pro c1-fut-conquer

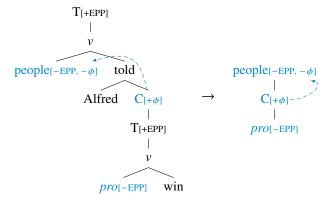
 'The people told Alfred that he will win.'
- **2. Main claims** I examine the Lubukusu agreement pattern as described by Diercks (2013) using Graf's (2022) framework. Of particular interest is the lack of complementizer agreement with hyper-raised subjects; only a non-agreeing complementizer is allowed, as shown in (3). This follows immediately from the formal analysis proposed below, whereas Diercks' analysis, which involves "indirect agreement" via an empty operator at the embedded clause edge, requires further stipulations. I argue that simplicity favors the direct approach. Additionally, the proposed treatment of hyper-raising equates to counterfeeding in the syntactic derivation, where the subject raises to the main clause yet remains invisible for agreement, representing yet another formal parallel with phonology.
 - (3) Agreeing complementizer incompatible with hyper-raising Sammy a-lolekhana mbo (*a-li) a-likho a-lwala. c1.Sammy c1-appears that (*c1-that) c1.PROG c1-be.sick 'Sammy appears to be sick.' (lit. 'Sammy seems that is sick.')
- **3. Analysis** We analyze syntactic dependencies as TSL patterns over MG derivation trees. Simplified structures for (2) and (3) are given in (4) and (5) on page 2. Each head appears in its position of first merge. The daughters of a head are its arguments in reverse merge order; for transitive ν these are the DP specifier and VP complement. Diacritics indicate movement and agreement, where +F marks the agreeing head and -F marks the target DP. For simplicity, only EPP movement (movement of the subject to Spec-TP) and ϕ -agreement on the complementizer are treated.

A linguistic dependency is TSL if it can be modeled with **local constraints on a tier** containing only a salient subset of the elements of the full structure. In Lubukusu, complementizer agreement is strictly subject-oriented. The relevant tier therefore contains i) agreeing complementizers and ii) DPs bearing the EPP diacritic (both highlighted in the examples). Note that EPP movement is itself regulated on another tier which enforces, e.g. relativized minimality.

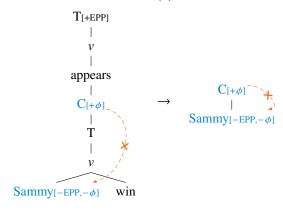
Abstracting from the technical details, the complementizer must agree with the closest structurally superior DP on the tier; for downward agreement, we would require the opposite configuration. This constraint is satisfied in (4), where the subject originates above C, but not in (5), where it originates below.

4. Implications From the present perspective, we expect formal parallels between phonology, morphology, and syntax, as well as similar types of variation. This study finds evidence for variation in directionality in agreement, as well as evidence of counterfeeding. In Minimalism it is typically expected that movement should feed/bleed subsequent syntactic operations. In contrast, the derivation tree model predicts counterfeeding and counterbleeding by default. This study thus highlights the need for further empirical and theoretical study of such phenomena.

(4) Derivation tree and tier for (2)



(5) Derivation tree and tier for (3)



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