Patterns of valuation for C-agreement in some Bantu languages

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1. Introduction. Constructions wherein C and T agree with different DPs are common and well-documented in Bantu languages (see (1); complementizer AGR = CA; subject AGR = SA).

(1) Ekihi ***ky***-o Kambale *a*-langira?
what **7CA**-C Kambale 1SA-saw
'What did Kambale see?' [Kinande; Schneider-Zioga 2007]

This paper shows that two less transparent C-T feature interactions in Kilega and Lubukusu nonetheless derive from independent uϕ of C and T probing downward.

2. Kilega: 1 or 2 uϕ? An intriguing Kilega complementarity between AGR with a lexical subject and AGR with an operator initially suggests the 2 share 1 uϕ set (see (2a,b)).

(2) a. bábo bíkulu ***b***-á-kás-íl-é mwámí **bikí** mu-mwílo?
2that 2woman **2SA**-A-give-PERF-FV 1chief 8what 18-3village
'What did those women give the chief in the village?'

b. **bikí** ***bi***-á-kás-íl-é bábo bíkulu mwámí mu-mwílo?
8what **8CA**-A-give-PERF-FV 2that 2woman 1chief 18-3village
'What did those women give the chief in the village?' [Kilega; Kinyalolo 1991]

But facts of pronominal subjects in A'-constructions reveal that this appearance is deceptive: the complementarity breaks down, and two important diagnostics argue that CA co-occurs with true SA in these cases. First, the ϕ–features of a pronominal subject iterate on every verbal element in the clause even when operator agreement is present (see (3a)). Second, such compound tense (CT) constructions exhibit hallmark properties of mono-clausal raising. (i) Agreement with the operator, found on V at each CP boundary of a long extraction, is disallowed on V2 of a CT ((3a) vs. (4a)) showing that an embedded CP is absent in CTs. (ii) Unraised versions of CTs are impossible (see (5)) confirming that V1 cannot select a CP, licensing an embedded subject. I conclude that V1 in (3a) is an auxiliary, selecting an AspectP with uϕ but no C or T ((3b) vs. (4b)). Thus a Kilega clause routinely includes at least 2 distinct uϕ sets above vP. It follows that phase heads are not the only source of probe features, and C-to-T Feature Inheritance, if it exists, must be parameterized -- not a necessity driven by the C-I interface (Chomsky 2007; Richards 2007). Updating Carstens (2005), the complementarity in (1) shows an absence of "A'-opacity" for full DPs (see Rezac 2003): any non-operator raised to Spec, TP can block (Agree (*wh*-C, OP)).

(3) a. Bikí ***bi-b-*** éte (****bi-)bá-***ku-lyá?
8what 8CA-2SA-PAST (*8CA-)2SA-PROG-eat
'What are they eating?'

b. [$_{CP}$ Bikí ***bi-*** [$_{TP}$ *pro* ***b-*** éte [$_{AspP}$ ~~*pro*~~ (****bi-)bá-***ku-lyá ~~bikí~~?]]] *= (3a)*

(4) a. Bikí ***bi-b***-á-ténd-ílé ***bi-b***-á-gúl-ílé <bikí>
8what 8CA-2SA-ASP-say-PERF 8CA-2SA-ASP-buy-PERF
'What did they say they had bought? (i = j or i ≠ j)

b. [$_{CP}$ Bikí ***bi***- [$_{TP}$ *pro*$_{i}$ ***b***-á-ténd-ílé [$_{CP}$ ~~bikí~~ ***bi***- [$_{TP}$ *pro*$_{j}$ ***b***-á-gúl-ílé ~~bikí~~]]]] *= (4a)*

(5) *I/ku-ete (bana) ***bá-***ku-lyá mupunga
9SA/17SA-be (2children) 2SA-ASP-buy-PERF eating 3rice
'It/there was/were (children) eating rice'

3. Lubukusu: anaphoric C? In a departure from the common Bantu pattern of CA with raised operators, Lubukusu C agrees with the subject of the higher clause even across an indirect object (see (6)), and even if an operator raises out of the clause introduced by agreeing C (see (7) vs. Kilega (4)). Diercks (op cit) argues convincingly that CA can differ in features from the higher SA; hence there are two uϕ sets involved.

(6) Ewe w-abol-el-a Nelsoni *a-/o-li ba-keni ba-rekukha.
you 2sSA-say-APPL-FV 1Nelson 1/2s-that 2-guests 2SA-left
'You told Nelson that the guests left. [Lubukusu; Diercks to appear]

(7) Siina ni-syo w-a-ulila **o**-li ba-limi b-a-kesa
7what COMP-7 2sSA-PST-hear 2s-that 2-farmers 2S-PST-harvest
'What did you hear that the farmers harvested?'

Diercks (op cit) claims the controller of Lubukusu CA "must have a mind to report", but CA with expletive subjects belies this (see (8)). I accordingly reject his view that subject-oriented anaphoric properties of CA seek locality with SU (see also Diercks, Putnam, & van Koppen 2011/12), and argue that a pure Agree-based analysis is possible and desirable.

(8) Ka-lolekana ka-li Tegani ka-a-kwa [Lubukusu; Diercks to appear]
6SA-seems 6-that 6SA-PST-fall
'It seems that Tegan fell'

I propose that Lubukusu CA is a subcase of Bantu's iterating subject agreement (3a), which always tracks the nominative since this DP doesn't acquire Case-value/deactivation until Agree with T. In contrast, IOs are Case-valued dative in situ by APPL, hence "deactivated". (6) is derived as in (9), where ForceP's head is Lubukusu agreeing C. An edge feature of phasal ApplP raises ForceP before VP spells out (see McGinnis 2001); then v raises it to c-command the subject. Crucially, an XP inherits unvalued uF of X, and can probe for a match.

(9) $[_{vP}$ $ForceP_{uPhi}$ $[_{vP}$ SU $[_{v'}$ v $[_{ApplP}$ ~~$ForceP_{uPhi}$~~ $[_{ApplP}$ IO $[_{Appl'}$ Appl $[_{VP}$ V ~~ForceP~~]]]]]]]
After ForceP raises to outer Spec, vP, uPhi of Force(P) are valued by "active" SU

As for why C cannot be valued by the embedded subject instead of the matrix, this follows from a small number of independently motivated proposals including an articulated left periphery (Rizzi 1997) in which a C below Force is the relevant phase head; and cyclic transfer (Chomsky 2001) which removes the embedded subject before agreeing C is merged. The articulated left edge is also crucial to explaining variation as to whether operators or subjects serve as sources of valuation for C's uϕ.

4. Conclusions. Bantu languages provide robust evidence that C and T can agree independently and that there are distinct Cs with differing heights and sensitivities. I conclude that the C-I interface "sees" only interpretable material (in Epstein, Kitahara, and Seely 2011, elements coded [+Sem]). Careful Minimalist analysis explains cross-linguistic variation in where agreement appears and what it takes its features from.

Selected References. Chomsky, N. 2007. Approaching UG from below. In Sauerland, U. & H.-M. Gartner (Eds.), *Interfaces +Recursion = Language?* Mouton de Gruyter. Diercks M. to appear. Lubukusu complementizer agreement as a logophoric relation. Forthcoming in *NLLT.* Diercks, M., M. Putnam, & M. van Koppen. 2011. The directionality of Agree: can a universal feature valuation operation be established? Paper at *The Minimalist Program: Quo Vadis?* Potsdam. Epstein, Seely, & Kitahara. 2011. Uninterpretable features: what are they and what do they do? In Putnam, M. (Ed.), *Exploring Crash-Proof Grammars.* Richards, M. 2007. On feature inheritance: an argument from the phase impenetrability condition. *LI* 38: 563-572.