(How) do head-movement and mirror-image order combine?
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Ritter (1992), Fassi Fehri (1993), Carstens (1991) among others attribute the order $[_{DP}$ N...] to raising of N, collecting any functional heads in its path and landing in an X^0-type snowball adjoined to D. Based on post-head mirror-image modifier orders (see Greenberg's Universal 20), some recent studies have rejected this kind of approach in favor of XP movement accounts (see Cinque 2005; Shlonsky 2004 for relevant analyses of order in DP). In this paper I explore some tensions in Bantu languages between factors favoring head movement on the one hand and those suggestive of phrasal movement on the other. I argue that even in the presence of mirror image modifier orders, N+D amalgamation is highly motivated and restriction to XP movement is not plausible. Lastly, I propose extension of the approach to Semitic.

Word order inside DPs of Bantu languages is consistent primarily in being noun-initial, with a systematic exception in that demonstratives may precede N. There are no articles; the inventory of adjectives is somewhat limited; and in some languages a possessive pronoun must immediately follow the noun. Apart from this, mirror-image order is usually preferred but other possibilities abound. Semantic correlates have been identified for the pre- vs. post-nominal demonstrative orders, but not for other ordering options. Absent below are the demonstrative-initial orders, which I argue involve XP-movement of the demonstrative to Spec, DP.

(1)   a.   zvigaro zvikuru zvitema zvangu   [Shona]
               8chair 8big   8black 8my

        b.   zvigaro zvitema zvikuru zvangu
               8chair 8black 8big   8my

        c.   zvigaro zvangu zvitema zvikuru
               8chair 8my   8black 8big

        d.   zvigaro zvangu zvikuru zvitema
               8chair 8my   8big   8black

               'My big black chair'

(2)   a.   zvipunu zvikuru zvitatu izvi
               8spoon 8big   8three 8these

        b.   zvipunu zvitatu izvi   zvikuru
               8spoon 8three 8these 8big

        c.   zvipunu zvitatu zvikuru izvi
               8spoon 8three 8big   8these

        d.   zvipunu izvi   zvikuru zvitatu
               8spoon 8these 8big   8three

e.   zvipunu izvi   zvitatu zvikuru
        8spoon 8these 8three 8big

        'These three big spoons'

I explore two approaches: (a) universal base-generated **hierarchy and order** of all elements, with movement restricted to XPs (Cinque 2005); versus (b) universal [Spec, head, complement] order, and base-generation of modifiers constrained by just a universal **hierarchy**, with their orderings +/-fixed and leftward X and XP movements both allowed (see Abels & Neeleman 2006; Takano 2003). I show that the latter approach fares much better at accounting for the Bantu facts. Derivation of (2d) is particularly tortured under the Cinque-style approach, requiring that as one among several options, Shona NP must raise across A; [$_{XP}$ NP, A] can then raise left of Num, and NP sub-extracts across the demonstrative. To derive the range of possibilities, diverse final landing sites must be hypothesized with the consistent left-edge ordering in DP arising through a conspiracy of apparently unrelated factors.

There are two welcome consequences of approach (b) above.

First, it does not require a conspiracy to explain the cross-Bantu pattern [$_{DP}$ (Dem) N…], which can be attributed to the same sources across all orders and languages: raising & adjunction of N to D and optional demonstrative fronting. Other movements might occur in the DPs of some Bantu languages, but these two appear to be consistent.

Second, it permits a principled account of a striking cluster of properties in Bantu. These are: (i) the inclusion of grammatical gender in the features of subject agreement (SA); (ii) very abundant agreement, including iterating SA on all aspectuals; (iii) gender-bearing N at the left edge of DP; and (iv) exotic A-movements like Subject-Object Reversal and transitive locative inversion constructions (see Ndayiragije 1999 and Kinyalolo 1991). Properties (ii) and (iv) suggest that the Active Goal Requirement of (Chomsky 2001) is met in some way independent of unvalued Case. Carstens (to appear) argues that adjunction of N to D is crucial to explaining these properties, since it provides every DP with the [-interpretable] feature of grammatical gender which meets the Active Goal Requirement and is never valued by Agree, hence never deactivated. Without N-to-D adjunction, Carstens argues, grammatical gender is inaccessible to any head outside DP with sensitivity to D's [person] feature, since [person] intervenes.

The availability of [number] as a consistent component of clausal agreement is accounted for under two assumptions: (i) as a quantifier it must raise to take scope throughout the DP, but (ii) anti-locality universally prevents overt raising of NumP to Spec of D, as D is NumP's selecting head. Instead, the features of Num raise to D in all languages, explaining its general availability in agreement (see Grohman 2000, Pesetsky & Torrego 2001, Abels 2003, Matushansky 2006 for relevant locality proposals).

It is unlikely to be accidental that Semitic languages have a subset of the Bantu cluster of properties: (i) grammatical gender in SA; (ii) iteration of SA on aspectuals; and (iii) (usually) left-edge N. If a consistent part of Semitic DP syntax is adjunction of N to D (contra Shlonsky 2004), the 1st two properties follow automatically from Carstens's proposals. The absence of exotic Bantu-style A-movements is explained by applying a Case parameter proposed in Diercks (to appear). Assuming abstract Case is absent in Bantu as Diercks claims, but is present in Semitic, the pattern of facts is predicted: Semitic has the gender-inclusive, abundant agreement that follows from adjoining [+gender] N to D, but Semitic T must enter an Agree relation with the subject that is quite optional in Bantu, leaving Bantu but not Semitic T free to Agree with other expressions.

The paper thus shows that head-movement, anti-locality, and symmetrical base-generation options for modifiers play crucial roles in deriving not only variation in the internal syntax of DPs, but also variation in how DPs participate in agreement and A-relations. Looking at clausal and DP-internal domains together makes clear the pivotal role of these factors, and argues that XP/snowball-movement does not best fit the facts.