Head-movement in Bantu DPs

1. Introduction. Ritter (1992), Fassi Fehri (1993) 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-nominal 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.

2. Empirical issues. Word order inside DPs of Bantu languages is consistent primarily in being noun-initial, with a systematic exception in that a demonstrative (DEM) may precede N. There are no articles; the inventory of adjectives is somewhat limited; and in some languages a possessive pronoun is restricted to immediately following the noun. Apart from this, mirror-image order is usually preferred but other options are common. Semantic correlates may exist for the pre- vs. post-nominal location of DEM (+/- aforementioned) but do not systematically accompany other ordering choices.

   (1) a. zvipunu zvikuru zvitatu izvi spoon big three these d. zvipunu izvi zvikuru zvitatu
       b. zvipunu izvi zvitatu zvikuru e. izvi zvipunu zvitatu zvikuru
       c. zvipunu zvitatu zvikuru izvi f. izvi zvipunu vzikuru zvitatu

       ‘These three big spoons’ [Shona]

3. An XP-movement approach. Building on proposals of Kayne (1994), Cinque (2005) argues that cross-linguistic word-order variation derives entirely from leftward XP-movement. The orders (1a-f) then must be derived as follows:

   (2) [NP spoons] these t_NP three t_NP big t_NP (=1b; complete NP-movement)
   (3) these [NP spoons] three t_NP big t_NP (=1e; Cinque: very rare) \rightarrow
   (4) [XP [NP spoons] three t_NP big t_NP] these t_XP (=1c; NP moves twice followed by roll-up)
   (5) a. *these three [NP spoons] big t_NP NP can’t surface in Spec.A \rightarrow
e. these [YP [NP spoons] big t_NP] three t_YP (=1f; NP moves once +roll-up part way) \rightarrow
c. [XP [YP [NP spoons] big t_NP] three t_YP] these t_XP (=1a; successive roll-ups)
   (6) [NP spoons] these [YP t_NP big t_NP] three t_YP (=1d; roll-up part way & sub-extract NP.
       Cinque: very few languages; possibly spurious)

4. Drawbacks. There are no structural correlates here to the consistent aspects of the word orders in (1): [NP N...Dem... ] and [NP Dem N... ]. Absent compelling evidence to the contrary this pattern is best analyzed in terms of a unitary N-position across which DEM can raise, since N is either left-most or follows DEM while everything else varies.

5. Analysis. To account for the position of Bantu nouns I assume following Carstens (1991) that they always raise to D. With Giusti (2002) and Alexiadou, Haegeman &
Stavrou (2007), I analyze DEM as a base-generated XP modifier below DP. Its features enter into a relationship with D that may result in DEM-raising to Spec, DP. These assumptions derive the 2 consistencies of DP word order across Bantu languages.

6. Limitations of symmetric base-generation. The acceptable modifier orders (1a-f) can be easily derived through symmetric base-generation options for modifiers within a hierarchically consistent universal base (see Abels & Neeleman 2006). But without the addition of N-movement, this approach over-generates unacceptable orders such as [Num-N-A-Dem], [A-N-Num-Dem], [Dem-Num-N-A], and [Dem-Num-A-N] for Bantu.

7. Big picture gains from N-movement. The N-to-D approach permits a principled account of a striking cluster of Bantu properties. 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 Ndairagije 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 N-to-D adjunction is crucial to explaining these properties, since it provides every DP with the uninterpretable feature of grammatical gender which meets the Active Goal Requirement and is never valued by Agree, hence never deactivated. Without N-to-D, grammatical gender is inaccessible to any head outside DP with sensitivity to D’s [person] feature, since [person] intervenes. Lexical insensitivity to [person] permits participles to “see” past it to agree in gender. 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 Grohmann 2000, Pesetsky & Torrego 2001, Abels 2003, Matushansky 2006 for relevant locality proposals).

8. Semitic. 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. Shlonsky (op cit) shows that Semitic Qs can intervene between D and N. In the spirit of Aboh (2004) I accordingly argue for an articulated DP structure in which definiteness and person are features of distinct heads within the DP’s left-periphery.

9. Conclusions. The paper shows that N-raising is needed to account for word order within Bantu DPs and connects this with independent evidence for N-raising from clause-level phenomena. 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-inner domains together makes clear the pivotal role of these factors, and argues that XP/snowballing-movement does not best fit the facts.