

Deriving disharmonic clausal word order: Case studies from West/Central Africa

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A range of languages across the world show disharmonic clausal word order, as seen in Aux-O-V patterns, where a head-initial TP (Aux-V) dominates a head-final VP (O-V). While compatible with the Final Over Final Condition on disharmonic structures (FOFC; Biberauer et al. 2014; Sheehan et al. 2017), these patterns are of interest given expectations for cross-categorial harmony within syntax (Greenberg 1963; Hawkins 1983; Dryer 1992, a.o.). Various analyses have been proposed for deriving Aux-O-V, with an especially large amount of research focussed on Germanic varieties where Aux-O-V is found in embedded clauses. Examples of Germanic varieties with Aux-O-V include West Flemish, Yiddish, and Zürich German (1):

- (1) ...das de Hans wil es huus chaufe.
that the Hans want.3SG.PRES a house buy.INF
'...that Hans wants to buy a house.'
(Zürich German; Haegeman & van Riemsdijk 1986:419, adapted)

Generative analyses of these Germanic Aux-O-V cases include verb projection raising (e.g. Haegeman and van Riemsdijk 1986), base-generation of OV (e.g. Koster 1975, Haider 2010), and verb movement + object shift (see Broekhuis 2023 for an overview). In recent approaches within the FOFC literature, disharmonic Aux-O-V has also been derived through roll-up movement, where a \wedge -feature appearing on contiguous low heads within an extended projection triggers progressive Comp-to-Spec movement (Biberauer et al. 2014, Sheehan et al. 2017).

In this talk, I evaluate how well these formal approaches apply to the disharmonic clausal word order patterns found in African languages. Such Aux-O-V (with DP objects) has been identified for languages from different families in West/Central Africa, including Atlantic, Eastern Songhay, Gur, Kru (2), Mande (3), and Bantoid (4). These varieties differ from Germanic in that Aux-O-V applies also in matrix clauses, and in that material may follow the verb (as in (4)).

- (2) e⁴ ji³ ja³¹ li³.
1SG.NOM FUT coconuts eat
'I will eat coconuts.'
Guébie (Kru; Sande et al. 2019:668)

- (3) mùsò ʋbénà~ná jégé sàñ.
Subj Aux O V
'The woman will buy fish.'
Bambara (Mande; Creissels 2005:41)

- (4) bá ŋɔ be-kana tála ɔ yɔkɔ
SM.2 FUT 8-basket put PREP 7.chair
'They will put baskets on the chair.'
Tunen (Bantoid; Mous 1997:125, adapted)

While the West African languages' word order patterns have been grouped together within the label 'S-Aux-O-V-X' (cf 'Type B' of Heine 1976), work on the syntactic properties of each language has shown that this single label in fact belies a large degree of variation. Comparative-historical work also argues against earlier accounts of shared origin within Niger-Congo and subsequent claims of areal diffusion from Mande, suggesting that the patterns have arisen by independent diachronic processes (e.g. Creissels 2005, 2018). Recent work therefore calls for the surface-oriented 'Aux-O-V'/'O-V-X' labels to be abandoned, with authors calling for

comparisons to be based on the underlying structural properties instead (Sande et al. 2019). In this talk, I provide further motivation for this viewpoint, providing supporting evidence from Aux-O-V in Bantoid. I present a formal analysis of Tunen as a case study of competing formal analyses, using empirical diagnostics from my own fieldwork in Cameroon to tease apart the different accounts. I first show briefly that headedness diagnostics, movement diagnostics, and Bantu verbal morphosyntax rule out a base-generation analysis of the kind applied to certain West African languages (Sande et al. 2019). I then highlight that further diagnostics show that a roll-up approach as applied to Germanic makes incorrect empirical predictions for Tunen, which I illustrate for adjunct placement and nominal modification. I therefore argue for a model in which the surface Aux-O-V word order pattern derives from an underlying head-initial pattern through V-to-*v* movement and object movement, as in (5).

(5) [TP T [AspP Asp [VoiceP DP_{Voice} Voice [_{VP} V+*Caus*+*Appl*+*v* [AppIP *t*_{Appl} [CausP *t*_{Caus} [_{VP} *tv*[_{tDP}]]]]]]]]]]

This analysis is diachronically-motivated given the close structural similarity between the Bantoid language Tunen and the genealogically closely-related Bantu languages. While having the same ‘S-Aux-O-V-X’ surface order found in West African languages, Tunen is thus in fact structurally much more similar to the Aux-V-O patterns in Narrow Bantu (for which see e.g. Julien 2002, van der Wal 2022). I propose that the difference between Tunen and other Bantu can be captured by two small parametric changes, firstly a lower degree of V movement (V-to-*v* vs V-to-Asp/T) and secondly a featural change affecting object licensing.

Looking more generally, this study highlights the multiple parameters of variation found within formal models of clausal disharmony (6):

(6) Parameters of variation in derivations of clausal disharmony:

Headedness	head-final / head-initial
VP movement	roll-up mvt / VP raising
V movement	V in-situ / V-to- <i>v</i> / V-to-Asp / V-to-T / V-to-C
Object movement	O in-situ / IS-conditioned mvt / formally-conditioned mvt

While analytical differences may to some extent reflect differences in theoretical assumptions of the authors, the case studies from Aux-O-V in West/Central Africa show that multiple different structural derivations are in fact needed even for superficially similar languages, something supported by syntactic and historical arguments. Syntactic theories must therefore allow multiple routes to disharmonic word order in order to capture the crosslinguistic variation.

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