Tone as a diagnostic of morphosyntactic structure in South African Bantu Languages Irina Monich University of Surrey

In Sotho and Nguni languages the verb has two forms in affirmative main tensed clauses: the disjoint form and the conjoint form. The disjoint form is used when the verb is vP-final. The conjoint form is used when the verb is followed by other vP-internal material – an adjunct or an argument. This disjoint/conjoint contrast is illustrated in (1) and (2) for Setswana (a Sotho language) and in (3) and (4) for isiXhosa, (a Nguni language).

Most of the discussion of the Sotho-type disjoint/conjoint distinction that has been offered in the literature ignores tonal information and relies only on segmental differences between conjoint and disjoint forms (Buell 2005, Halpert 2012, Zerbian 2006). Therefore, once the tonal information is considered, the existing analyses fail to account for the facts, especially in the Perfect, where the contrast between the disjoint and conjoint form is often manifested only in terms of the tonal melody. In contrast to afore-mentioned analyses, Creissels (1997, 1998) gives a full description of the tonal system of Setswana, including the disjoint/conjoint form contrast. However, the main weakness of his approach is that he assumes every form to be a linear string of morphemes, without internal hierarchical structure. As a result, he is forced to explain apparent irregularities in word-internal tonal processes by means of form-specific exceptions and special theoretical devices, such as empty syllables.

I propose a new account of the disjoint/conjoint distinction in Sotho and Nguni languages. The main claim is that in the disjoint form the verbal stem is lower in the structure than in the conjoint form. Specifically, I argue that in conjoint environments the verbal stem (or, more precisely, a morphological constituent known as "Macrostem" in Bantu linguistics) raises to T(ense) and makes up a single MWd with the heads in the inflectional domain. In the disjoint form, however, the Macrostem stays lower in the structure and forms a separate MWd from T. The two MWds that make part of the disjoint form are at first mapped to two PhWds but are eventually combined into a single prosodic constituent, which I argue to be a recursive PhWd. The proposed structure of the conjoint and disjoint form is shown in (5).

The difference in structure of disjoint and conjoint forms is manifested through tone. The tonal processes that take place between the Subject Marker (a subject clitic that procliticizes to T) and the verbal stem in conjoint forms, are those that are otherwise observed in MWd-internal environments. On the other hand, the tonal processes that take place between the Subject Marker and the verbal stem in disjoint forms, are those that take place across PhWd-boundary (i.e. between words) and in other verbal forms that can be shown to consist of two MWds (i.e. potential and consecutive).

Although tonal processes vary wildly across Sotho and Nguni languages, I show that they underlie identical structures. As can be seen comparing (2-3) with (3-4), IsiXhosa tonal melodies are radically different from those in Setswana. However, I show that the analysis proposed for Setswana can be extended to IsiXhosa, as a representative of Nguni languages. In this language too, the tonal evidence indicates that the disjoint form consists of two MWds that make part of a recursive PhWd, while the conjoint form consists of a single MWd mapped to a single PhWd. Thus the tonal evidence supports the conclusion that in the disjoint form the verbal stem fails to raise to T and remains lower in the structure than in the conjoint forms.

1. Setswana

a. CONJOINT PRESENT FORM: bá rék-á búkà 2PLSM buy-FV CL9.book

'They are buying a book'

b. Disjoint Present form: bá **à** rék-à 2PLSM Disj buy-FV

'They are buying'

2. Setswana

a. Conjoint Perfect form: **bá tshámík-íl-é** di-kétó

CL2SM play-PERF-FV CL10.keto

'We have played diketo'

b. DISJOINT PERFECT FORM: **bá tshàmík-íl-è**

CL2SM play-PERF-FV

'They played'

c. Conjoint Perfect form: **bá thàlúyán-ts-é** sí-ntlè

CL2SM understand-PERF-FV CL7-good

isiXhosa

'They understood well'

d. DISJOINT PERFECT FORM: bá thálòyàn-tsè

CL2SM understand-PERF-FV

'They understood'

a. Conjoint Present form: lì-nyìnyìthék-ìs-à...

CL5SM-be_slippery-CAUS-FV

"it makes slippery"

b. DISJOINT PRESENT FORM: lí-và-nyìnyìthék-ìs-à

CL5SM-be_slippery-CAUS-FV

"it makes slippery"

4. isiXhosa

a. CONJOINT PERFECT FORM: lì-nyìnyìthèk-ìs-ê...

CL5SM-be_slippery-CAUS-PERF.FV

"It has made slippery"

b. DISJOINT PERFECT FORM: lí-nyínyíthék-ís-ìl-è

CL5SM-be_slippery-CAUS-PERF-FV

"It has made slippery"

5. a. Conjoint form: $\{ P_{PhPhr} [P_{PhWd} (MWd(SM-V-v-T-ThV))] - (V-v-) - [(OBJ)] \}$

b. DISJOINT FORM: $\{P_{hPhr}[P_{hWd}(MWd) (SM-T-ThV)-[P_{hWd}(MWd)V-v-ThV)]\}$

References

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