Morphological evidence for a movement analysis of adverbial clauses

CLS Main Session, Akɔɔse, Bantu, morphosyntax, wh-agreement, adverbial clauses

Several authors have provided syntactic, semantic, and etymological arguments for an analysis in which adverbial (subordinate) clauses involve movement of some element, usually a null operator (Haegeman 2007, 2009a, b, 2010; among others). This paper contributes to this discussion by providing morphological evidence that syntactic movement does indeed take place in the derivation of temporal and conditional adverbial clauses.

The Bantu language Akɔɔse (Hedinger 2008) exhibits wh-agreement (see Reintges et al. 2006 for a typology); that is, it marks its verbs with respect to whether an element has been extracted to the left periphery. This morphological reflex of movement encodes whether the extracted element originated above or below v, as shown in (1–3) for wh-questions, where the verbal morphology indicates the original site of the wh-element.

(1) No extraction
Mw-ǎn ë-pim-eØ-mbaaŋgé,
1-child 1.NEG-throw.out-PFV 10-cocoyam
‘The child didn’t throw out the cocoyams.’ (Hedinger 2008: 105 (295))

(2) Wh-subject
Ø-Nzé ë-pim-eØ-mbaaŋgé?
1-who 1.NEG-throw.out-SE.PFV 10-cocoyam
‘Who didn’t throw out the cocoyams?’ (Hedinger 2008: 105 (295))

(3) Wh-non-subject
Chě mw-ǎn ë-pim-e?
what 1-child 1.NSE.NEG-throw.out-PFV
‘What didn’t the child throw out?’ (Hedinger 2008: 106 (297))

The same extraction marking occurs not only in other canonical wh-movement contexts (Chomsky 1977), such as relative clauses, cleft questions, and topicalization, but also in temporal and conditional adverbial clauses. The distribution of wh-agreement morphology in these adverbial clauses neatly coincides with claims previously put forth regarding the site of extraction for the relevant operators.

Verbs in central temporal clauses display non-subject extraction morphology, as in (4), which supports a view in which a temporal operator moves from a position below V to the CP layer (Haegeman 2007: 293).

(4) Áde ‘when’ with non-subject extraction marking
Áde mw-ǎn ë-pim-eØ-mbaaŋgé, ...
when 1-child 1.NSE.NEG-throw.out-PFV 10-cocoyam
‘When the child didn’t throw out the cocoyams, ...’ (Hedinger 2008: 106 (297))

1Abbreviations: APPL = applicative, HORT = hortative, IPFV = imperfective, NEG = negative, PFV = perfective, NSE = non-subject extraction, PERS = personifier, QUOT = quotative, SE = subject extraction, INF = infinitive. Bare numerals in glosses indicate noun class, encoding both number and gender features.
In central conditional clauses, verbs show “subject” extraction, illustrated in (5). This supports the hypothesis that this operator is extracted to the left periphery from a position above v (Haegeman 2007: 302–303; 2009b: 39–42; 2010: 636).

(5) Nzé ‘if’ with subject extraction marking
Ø-Pɔpé e-kút-ɛ’, nzé ě-yag-e bwām.
9-papaya 9-crack.APPL-IPFV if 9.NEG-ripe-SE.PFV well
‘Papaya cracks if it is not fully ripe.’ (Hedinger 2008: 237 (657))

Finally, verbs in peripheral adverbial clauses have no extraction marking, as seen in (6), which is in line with Haegeman’s (2007: 303–306) claim that only central adverbial clauses involve movement.

(6) Kénée ‘although, even though’ with no extraction marking
Aá á-chəg mó m-baŋ, kénée Ø-ngəə
3SG.QUOT 1-call.HORT.PFV 1 3-nickname although 9-leopard.PERS
ě-hel-ɛɛ mím-ɛ m-baŋ a-chəg.
1.NEG-can-PFV 3-that 3-nickname INF-call
‘He said he should call him names, even though Leopard wasn’t able to do it.’ (Hedinger 2008: 235 (644))

The overt marking of movement in Akɔɔse may be taken as compelling evidence for a movement analysis for both central temporal adverbial clauses and central conditional clauses. A low extraction site is necessary for temporal adverbials in order for non-subject extraction marking to surface on the verb, and the “subject” versus non-subject extraction (or high versus low site of extraction) distinction helps to explain some of the differences between conditional and temporal adverbial clauses.

References