Feeding agreement: Anti-locality in Crow applicatives of unaccusatives

Introduction. Crow (Siouan; Montana, USA) is a polysynthetic, head-final language that displays an active-stative agreement pattern. Subjects of active intransitives receive A-set agreement, bolded in (1), while stative subjects of intransitives receive B-set agreement, underlined in (2); the diagnostic of noun incorporation indicates that active intransitives are unergatives and stative intransitives are unaccusatives. (Note: *bíisshi* 'tell a lie' behaves exactly like other Crow stative intransitives.)

(1) **baa**-chiwakíi-k
     1A-pray-DECL

     'I prayed' (active intransitive/unergative)

(2) bii-wíisshi-k
     1B-tell.lie-DECL

     'I lied' (stative intransitive/unaccusative)

Benefactives in Crow are expressed with the applicative morpheme *-ku*. This morpheme may appear on unergatives and unaccusatives as in (3) and (4). In both constructions, A-set agreement is used to cross-reference the subject while B-set agreement refers to the applicative argument. Therefore, unlike simple unaccusatives, the theme in applicatives of unaccusatives controls A-set agreement.

(3) dii-**waa**-chiwaká-a-**wa**-ku-k
     2B-1A-pray-JUNCT-1A-APPL-DECL

     'I prayed for you'

(4) dii-wíissa-a-**wa**-ku-k
     2B-tell.lie-JUNCT-1A-APPL-DECL

     'I lied for you'

Following the typology of Pylkkänen (2008), I assume *-ku* is a high applicative, in which ApplP sits between above VP but below *v*P, since *-ku* may attach to unergatives. Therefore, we expect the theme argument in VP to be structurally lower than the applicative argument in ApplP. In this paper, I argue that in these applicative constructions, the highest argument is in fact the theme argument and the lowest argument is the applicative argument. In other words, theme arguments raises over applicative arguments. My claim is that in applicatives of unaccusatives, A-set agreement, which involves agreement with an argument in Spec*v*P, results from raising the theme into Spec*v*P. This is only possible because of an intervening projection, ApplP, and thus represents a case of generalized anti-locality as defined by Deal (2019:408): movement of a phrase from SpecXP must cross a maximal projection other than XP, as schematized in (5) with local and non-local A-movement.

(5) a. * $[_{vP} X_i [_{VP} t_i]]$ (✗ LOCAL A-MOVEMENT: *violates anti-locality*)

     b. ✓ $[_{vP} X_i [_{ApplP} Y [_{VP} t_i]]]$ (✓NON-LOCAL A-MOVEMENT: *subject crosses over ApplP*)

Diagnosing applicatives of unaccusatives. Determining the height of the arguments in applicatives of unaccusatives rests on three pieces of evidence. First, Crow has SOV word order and in applicatives of unergatives and unaccusatives, as in (6) and (7), overt DP subjects must precede applicative arguments, suggesting that subjects are structurally higher than applicative arguments. Second, *sapéen* and *sapée* 'who' have a nominative-accusative-like distribution: the former is used for subjects of all verbs (including unaccusatives) as well as their causativized counterparts, whereas the latter is used for all other arguments (e.g. objects of transitive verbs). In other words, *sapéen* must be used to refer to the highest argument of the clause. In applicatives of unaccusatives, *sapéen* can only be used to refer to the theme argument, but not the applicative argument, as in (6). Word order of nominals is flexible in these constructions and when *sapéen* follows the applicative argument, as in (7), it must still refer to the theme. Therefore, this diagnostic suggests that the highest argument in applicatives of unaccusatives is the theme argument, not the applicative argument.

(6) sapéen Taylor-sh bíiss-a-ku-?
     who.SBJ Taylor-DEF tell.lie-JUNCT-APPL-Q

     'Who lied for Taylor?'
     NOT 'Who did Taylor lie for?'

(7) Logan sapéen bíiss-a-ku-?
     Logan who.SBJ tell.lie-JUNCT-APPL-Q

     'Who lied for Logan?'
     NOT 'Who did Logan lie for?'

Third, the "antipassive" prefix *baa-*, homophonous with 1A, may attach to transitive verbs to demote the object. In applicatives of transitives, *baa-* demotes the theme, but not the applicative argument. Thus, in constructions with more than one underlying object, *baa-* demotes the lowest one, as in (8); in applicatives of transitives, the lowest object is the theme. In contrast, only the applicative argument can be demoted in applicatives of unaccusatives, as in (9). These facts suggest that the lowest object in applicatives of unaccusatives is the applicative argument, not the theme.

(8) L. baa-óossh-b-aa-wa-ku-k
    L. AP-cooked-1A-CAUS-1A-APPL-DECL
    'I'm cooking (something) for Logan'

(9) baa-wíiss-a-wa-ku-k
    AP-tell.lie-JUNCT-1A-APPL-DECL
    'I lie for people'

Analysis: Feeding agreement. I propose that the theme in applicatives of unaccusatives raises to Spec$v$P, crossing over ApplP, as in (10a), as a response to constraints on anti-locality; I assume that unaccusative v in Crow bears an EPP feature. The applicative argument does not raise because movement is too close to the landing site which would violate the anti-locality constraint. Similarly, in simple unaccusatives (i.e. without ApplP), as in (2), raising the theme to Spec$v$P is also too close. Moreover, non-local A-movement of the theme into the Spec$v$P landing site feeds A-set agreement. In Crow, Asp and v are probes that contribute to A- and B-set agreement, respectively. Asp probes the highest goal until it reaches a phase boundary (Chomsky 2000, 2001); following Legate (2003) and Deal (2009), I assume that v in unaccusatives is a phase. If Asp agrees with a DP, as in (10b), then those features will be realized with A-set agreement morphology, otherwise A-set agreement does not surface. (Details on the observed surface order of morphemes cannot be described here.)

(10) a. $[_{CP} [_{AspP} [_{vP} X_i [_{ApplP} Y [_{VP} t_i V] Appl] v] \varphi] C]$ (NON-LOCAL A-MOVEMENT)

    b. $[_{CP} [_{AspP} [_{vP} X_i [_{ApplP} Y [_{VP} t_i V] Appl] v] \varphi] C]$ (A-SET AGREEMENT)

Conclusion. The presence of A-set agreement in Crow applicatives of unaccusatives can be straightforwardly captured by assuming constraints on anti-locality. This constraint holds not only for Ā-movement (Boškivić 2016, Erlewine 2016, a.o.), but has recently been argued to also hold for A-movement (Deal 2019). Crow represents another instance of anti-locality constraints on A-movement. In simple unaccusatives, the theme does not raise to the immediate landing site, Spec$v$P, because it is too close. However, with a high applicative, which sits between vP and VP, the theme argument undergoes movement into this A-position. In addition, raising to Spec$v$P feeds agreement with a probe on Asp resulting in A-set agreement to surface in applicatives of unaccusatives. These constraints on movement contribute towards a better understanding of what distinguishes A-movement from Ā-movement – a ban on "too short" movement seems not to be one of them.

References. Bošković, Ž. 2016. On the timing of labeling: Deducing Comp-trace effects, the Subject Condition, the Adjunct Condition, and tucking in from labeling. *The Linguistic Review*, 33(1), 17-66. • Chomsky, N. 2000. Minimalist Inquiries: The Framework. In R. Martin, D. Michaels, and J. Uriagereka (eds.), *Step by Step: Essays on Minimalism in Honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press. • Chomsky, N. 2001. Derivation by Phase. In M. Kenstowicz (ed.), *Ken Hale: A life in language*, 1–52. Cambridge, MA: The MIT Press • Deal, A. R. 2009. The origin and content of expletives: Evidence from "selection". *Syntax*, 12(4), 285-323. • Deal, A. R. 2019. Raising to ergative: Remarks on applicatives of unaccusatives. *Linguistic Inquiry*, 50(2), 388-415. • Erlewine, M. Y. 2016. Anti-locality and optimality in Kaqchikel Agent Focus. *Natural Language & Linguistic Theory*, 34(2), 429-479. • Legate, J. A. 2003. Some interface properties of the phase. *Linguistic Inquiry*, 34(3), 506-515. • Pylkkänen, L. 2008. *Introducing arguments* (Vol. 49). MIT press. **Sel. Abbr.:** AP: antipassive, DECL: declarative, JUNCT: juncture, Q: interrogative.