Differential Object Marking by A′-status

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Summary. Some recent accounts of differential object marking (DOM) argue that it results from certain NPs having exceptional licensing requirements (Kalin 2014, 2018, Levin 2018). Kalin (2018), for instance, argues that the functional heads present in the extended projection of animate, specific or definite NPs (but absent elsewhere) can give their NP an exceptional case-licensing requirement—a property I refer to as *neediness*. Only those NPs with neediness-inducing functional heads need to be assigned case, giving rise to DOM. I provide novel support for this general approach by considering data from Choctaw (Muskogean, data from published sources and original fieldwork). This language features a typologically unusual DOM pattern: case-marking on objects is conditioned by whether or not the argument has undergone A′-movement. I follow Cable (2007, 2010) in assuming that NPs undergoing A′-movement merge with a functional head Q^0, which is targeted by A′-probes. I propose that Q^0, like Animate^0/Specific^0/Definite^0/etc in other languages, can induce neediness on the NP with which it merges.

Basic pattern. Choctaw is an SOV language with both accusative and nominative objects (1-2). In-situ objects are generally unmarked for case (Broadwell 2006), though overt marking is possible.

(1) sa-ttiyaapishi-yat katos-**(ã)** lhiyohli-tok
my-sibling-NOM cat-**(ACC)** chase-PST
'My sibling chased the cat.'

(2) Anaak-oosh towwa-**(yat)** am-ittola-tok
I.FOC-NOM ball-**(NOM)** 1SG.DAT-fall-PST
'It's ME who dropped the ball.'

Examples (1-2) also show that subjects are obligatorily case-marked. Crucially, fronted objects (3) or right-extraposed objects (4) are obligatorily case-marked too.

(3) katos-***(ã)*** sa-ttiyaapishi-yat lhiyohli-tok
cat-***(ACC)*** my-sibling-NOM chase-PST
'The cat, my sibling chased it.'

(4) Chris-at habli-tok towwa-***(yã)***
Chris-NOM kick-PST ball-***(ACC)***
'Chris kicked the ball.'

I propose to treat this alternation between case-marked and Ø-marked objects as DOM.

Analysis: Q^0 makes NPs *needy*. Kalin (2018) argues that functional heads in the extended projection of NP may cause the whole NP to become needy. Typical candidates would be heads like Animate^0 and Specific^0 (Danon 2011). I propose that Cable's Q-particle—a functional head which serves as a target for A′-probes—may induce neediness too. So in (1-2), the in-situ objects lack Q^0, meaning they are not needy and do not (obligatorily) receive case. But in (3-4), the objects A′-move: in order to undergo A′-movement, the moving element must be headed by Q^0, which has the side-effect of inducing neediness, and so such objects are obligatorily case-marked. Note that arguments without needy functional heads are still available for case-assignment, as with the subject arguments in (1-4); they just don't *require* case.

Next, I (i) show that it is A′-movement that causes neediness, and not just any movement; (ii) show how case-marking on extracted vs. in-situ possessors supports the analysis presented here; (iii) show how the disparate set of DOM-inducing properties of Choctaw objects also supports the analysis; and (iv) argue against a (pseudo)-noun incorporation analysis.

Other kinds of movement don't induce neediness. Arguments may move a short distance, likely remaining within vP, without being obligatorily case-marked. This is shown in examples (5-7). Assuming that direct objects are merged in the complements of their verbs, the boxed caseless objects must have moved over the participial clause to get to their spellout positions, yet this movement does not force case-marking.

(5) boxed **[tõshpa-t]** haloppachi-h
knife **[be.quick-PRT]** sharpen-TNS
'Hurry up and sharpen the knife.'

(6) ofi-t hattak **[wohõwa-t]** lhiyohli-tok
dog-NOM man **[bark-PRT]** chase-PT
'The dog chased the man, barking.'

(7) John-at aatõksali **[ishtishko shõli-t]** nowa-t iya-h
John-NOM workplace **[cup carry-PRT]** walk-PRT go-TNS
'John walked to work carrying a cup.'

Further evidence that this short movement does not induce neediness comes from syntactic causatives of transitive verbs. Assuming that in their base-generated positions, the causee argument c-commands the theme argument, then one of the two possible orders in (8-9) must be a consequence of a short scrambling

operation, yet neither argument needs to be marked, in either order.

(8) katos iti   ish-aboyya-chi-tok
    cat   tree 2SG.ERG-climb-CAUS-PT
    'You made the cat climb the tree.'

(9) iti   katos ish-aboyya-chi-tok
    tree cat   2SG.ERG-climb-CAUS-PT
    'You made the cat climb the tree.'

This shows that neediness must be a property of A′-movement, and not, for instance, movement in general.

Support: in-situ vs. extracted possessors. Like in-situ objects, in-situ possessors may be marked with ACC case or go unmarked, as shown with the *wh*-possessor in (10). This is because they lack Q^0, and so are not needy. A′-extracted possessors, on the other hand, must be case-marked as in (11). This is because they are made needy by their Q^0.

(10) S.-at   [**kata-(hõ)** im-ilĩpa] hõkopa-tok
     S.-NOM [**who-(ACC)** 's-food] steal-PST
     'Whose food did Suzie steal?'

(11) **kata-hõ**$_i$ S.-at   [t_i im-ilĩpa] hõkopa-tok
     who-ACC S.-NOM ['s-food] steal-PST
     'Whose food did Suzie steal?'

Providing further support for the analysis, when a possessor is pied-piped to an A'-position it is not obligatorily case-marked (12-13). This is expected: the pied-piped NP is not headed by Q^0, so is not needy—only the larger NP that contains it is headed by a Q^0 and thus becomes needy.

(12) [**kata** im-ofi-yõ]$_i$ alla-t t_i habli-tok?
     [**who** 's-dog-ACC] child-NOM   kick-PT
     'Whose dog did the kid kick?'

(13) [**Mary** ĩ-tãchi-akõ]$_i$ alla-t t_i apa-tok
     [**Mary** 's-corn-ACC] child-NOM   eat-PT
     'It was Mary's CORN that the kid ate.'

Support: the non-uniformity of neediness-inducing heads. A′-movement is not the only property to induce neediness in an NP. Objects carrying the focus marker -*ako* (14) and demonstrative determiners like -*ma* 'that' (15) must be case-marked too, even when in-situ.

(14) J.-at   ofi-akoo-***(sh)**   im-illi-tok
     J.-NOM dog-FOC-***(NOM)** 3.DAT-die-PT
     'John's DOG died.'

(15) K.-at   chokka-ma-***(t)**   ĩ-boowa-h
     K.-NOM house-DEM-***(NOM)** 3.DAT-built-TNS
     'Katie got that house built.'

We can understand this by assuming that functional heads other than Q^0 may induce neediness: the functional heads spelling out -*ako*/-*ma* in (14-15) are needy too. In this way, the exceptional licensing approach to DOM, argued for here, is well set up to deal with languages where neediness is induced by a disparate set of properties on the NP (cf. Levin 2018).

Against a (pseudo)-noun incorporation analysis. The data in (5-9) serve as evidence against a NI or pseudo-NI analysis of caseless objects in Choctaw: NI and pseudo-NI typically require adjacency between the noun head and the verb complex (Baker 1988, Massam 2001, Levin 2015), yet Choctaw happily breaks adjacency between a head noun and a verb without marking the noun phrase. What's more, the Ø-marked object does not obligatorily receive an indefinite or non-specific reading, a characteristic property of (pseudo)-NI (Dayal 2011). Definite, specific referents (16), including proper names (17), may be Ø-marked in object position (see Munro 1999 for similar data from related Chickasaw).

(16) alla-mat   **ã-kana**   hottopaali-tok
     kid-DEM.NOM **my-friend** hurt-PT
     'That kid hurt my friend.'

(17) kanah-at   **Buck** aapisa ĩ-kooli-h
     someone-NOM **Buck** window 3.DAT-break-TNS
     'Someone broke a window for Buck.'

Conclusions. Cross-linguistically, DOM is generally conditioned by animacy, specificity or definiteness. This study allows us to add A′-status to that collection of properties. The Choctaw pattern can be straightforwardly assimilated to *exceptional licensing* accounts of DOM: neediness can be induced in an NP not only by the familiar heads from the extended projection of NP (e.g. Animate^0, Specific^0/D^0, Participant^0, etc; see Danon 2011, Norris 2014), but also by Cable's Q^0, which can happily merge with an NP.

Selected references. Broadwell, G. A. 2006. *A Choctaw Reference Grammar*. ● Cable, S. 2010. *The grammar of Q*. ● Danon, G. 2011. Agreement and DP-internal feature distribution. *Syntax* 14. ● Dayal, V. 2011. Hindi pseudo-incorporation. *NLLT* 29. ● Kalin, L. 2014. Aspect and argument licensing in Neo-Aramaic. UCLA PhD. ● Kalin, L. 2018. Licensing and Differential Object Marking: The View from Neo-Aramaic. *Syntax* 21. ● Levin, T. 2018. On the nature of differential object marking: Insights from Palaun. *NLLT*. ● Munro, P. 1999. Chickasaw subjecthood. In *External Possession*.