

# Differential Object Marking by A'-status\*

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## 1. Introduction

Differential object marking (DOM) refers to the phenomenon where the presence vs. absence of case-marking on an object noun phrase is determined by some property of that noun phrase. Aissen's (2003) classic article provides examples such as the Turkish pair in (1), whereby the presence vs. absence of case-marking on the object is correlated with its specificity: specific objects are case-marked, nonspecific objects are not.

- (1) a. Ali bir **kitab-i** aldı.  
Ali one **book-ACC** bought  
'A book is such that Ali bought it.' (specific book) (Turkish, Enç 1991: 5)
- b. Ali bir **kitap** aldı.  
Ali one **book** bought  
'Ali bought some book or other.' (non-specific book) (Turkish, Enç 1991: 5)

Some recent accounts of DOM hold that it results from certain NPs having *exceptional case requirements* (Kalin 2014, 2018, Levin 2017, van Urk 2019). Kalin (2018), for instance, argues that the functional heads present in the extended projection of certain NPs imbue their NP with an exceptional requirement for case, resulting in these NPs being assigned case even in object position, a position where (in the languages in question) case is not otherwise assigned. In Turkish, the head that induces a case requirement would be 'Specific<sup>0</sup>', which introduces specificity semantics. NPs with Specific<sup>0</sup> require case-licensing, NPs without Specific<sup>0</sup> do not.

In this article, I argue that the typologically unusual DOM pattern found in Choctaw, a Muskogean language spoken in Mississippi and Oklahoma, provides novel support for this

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\*Enormous thanks are due to the Mississippi Choctaw speakers who were so generous to share and discuss their language with me, as well as to the Office of the Chief, the Culture Committee and the Language Program at the Mississippi Band of Choctaw Indians for hosting and supporting me. Thanks also to Jim Wood, Bob Frank, Hadas Kotek and visitors to my poster at NELS 49 for valuable discussion and feedback.

approach. In Choctaw, the presence vs. absence of case-marking on an object is conditioned by whether the object has undergone A'-movement, a.k.a. its 'A'-status'. The basic pattern is illustrated in (2). The *in situ* object in (2a) may be optionally case-marked, while the fronted object in (2b) *must* be case-marked.

- (2) a. Alíkichi-yat tákkon-(**a**) apa-tok.  
 doctor-NOM peach-(**OBL**) eat-PST  
 'The doctor ate the peach.'
- b. Tákkon-\*(**a**), alíkichi-yat apa-tok.  
 peach-\*(**OBL**) doctor-NOM eat-PST  
 'The peach, the doctor ate.'

This pattern of DOM at first seems outside the remit of exceptional-case-requirement approaches: such approaches require that the conditioning factor for the (non-)appearance of case-marking is an *intrinsic* property of the NP itself, and so can be encoded as a head or formal feature in the extended projection of the NP. Properties like animacy, specificity and definiteness fit the bill. By contrast, the property of having undergone A'-movement is not typically thought of as an intrinsic property of an NP.

However, when we consider recent developments in the syntax of A'-movement, the Choctaw pattern becomes less surprising. In particular, Cable (2007, 2010) argues that all NPs that undergo A'-movement merge with a functional head  $Q^0$ , which is then targeted for movement by A'-probes. In Tlingit, which Cable studies in depth,  $Q^0$  is overt, but he shows that there is reason to assume a null  $Q^0$  in languages such as English. I propose that  $Q^0$  in Choctaw essentially functions like Spec<sup>0</sup> in Turkish: it imbues the NP it merges with with an exceptional requirement for case. This account of Choctaw's typologically-unusual DOM simultaneously preserves the insights of the exceptional-case-requirement approach, while extending the empirical reach of the 'Q-particle' analysis in a new direction.

Section 2 lays out the basic facts of the interaction between case-marking and fronting. Section 3 provides the analysis—that case-marking is made obligatory by the presence of a Q-particle—and argues against some alternative proposals. Section 4 shows that the distribution of obligatory case-marking in Choctaw really does fit the profile of a Q-particle.

## 2. Case-marking in Choctaw

Choctaw NPs may be marked with nominative (NOM) or oblique (OBL) case morphemes.<sup>1</sup> (2a) illustrates case-marking in a canonical transitive clause with overt subject and object. The default constituent order is SOV, but constituents may be fronted, as in (2b).<sup>2</sup>

<sup>1</sup>Much previous literature on Choctaw and closely-related Chickasaw calls oblique case 'accusative', but I suggest that 'oblique', (also employed by Nicklas 1974) is more transparent, given the heterogeneous syntactic environments in which it is found—see the conclusion for discussion.

<sup>2</sup>Constituents may also be extraposed, as in (i). Broadwell (2006: 39) and Ulrich (1986: 17) state that extraposed objects are obligatorily case-marked, like fronted objects, but the speakers I consulted did not share such categorical judgments, and would often volunteer sentences like (i), with extraposed, caseless objects. I therefore focus on the contrast between in-situ and fronted NPs, and set aside extraposed NPs.

See Ulrich (1986) and Broadwell (1990, 2006) for discussion of Choctaw constituent order. Case-marking on overt subjects is obligatory, as in (2), and arguments may be freely dropped, as in (3). Note also that Choctaw has an split-intransitive agreement system that does not straightforwardly align with its nominal case system, and which I ignore in this article.

- (3) Chopa-h.  
buy-TNS  
'He bought it.'

Turning to non-subjects, case-marking on in-situ objects is optional, as shown in (2a), while case-marking on fronted objects is obligatory, as in (2b). *Wh*-movement, which is optional in Choctaw, has the same effect on case-marking: in-situ object *wh*-phrases are optionally case-marked, as in (4a), while fronted *wh*-phrases are obligatorily case-marked, as in (4b).<sup>3</sup>

- (4) a. Hattak-m-at káta<sup>h</sup>-(o) i-tòksali-h?  
man-DEM-NOM who-(OBL) DAT-work-TNS  
'Who does that man work for?'  
b. Káta<sup>h</sup>-(\*o) hattak-m-at i-tòksali-h?  
who-(\*OBL) man-DEM-NOM DAT-work-TNS  
'Who does that man work for?'

Choctaw also allows *wh*-possessors to be fronted, and we see the same contrast between in-situ and moved NPs. NP-internal possessors are optionally case-marked, as shown for a standard NP possessor in (5a) and a *wh*-possessor in (5b). Fronted possessors must be case-marked, as in (5c).

- (5) a. [Suzie-(ya) ishki] afaama-li-tok.  
Suzie-(OBL) mother meet-1SG.ERG-PST  
'I met Suzie's mother.'  
b. Bill-at [káta<sup>h</sup>-(o) i-kanòmi] afaama-tok?  
Bill-NOM who-(OBL) DAT-relative meet-PST  
'Whose cousin did Bill meet?'  
c. Káta<sup>h</sup>-(\*o)<sub>i</sub> Bill-at [ \_<sub>i</sub> i-kanòmi] afaama-tok?  
who-(OBL) Bill-NOM DAT-relative meet-PST  
'Whose cousin did Bill meet?'

- (i) Alla-m-at kooli-tok, kocha=aapisa.  
child-DEM-NOM break-PST outside=window  
'The child broke the window.'

<sup>3</sup>Note that there are several different nominative case-markers, and several different oblique case-markers (cf. -a in (2), -o in (4)). I ignore these differences here.

In summary, we have seen that in-situ object NPs and in-situ possessors NPs are optionally case-marked, while the same NPs, when fronted, *must* be case-marked.

### 3. Analysis

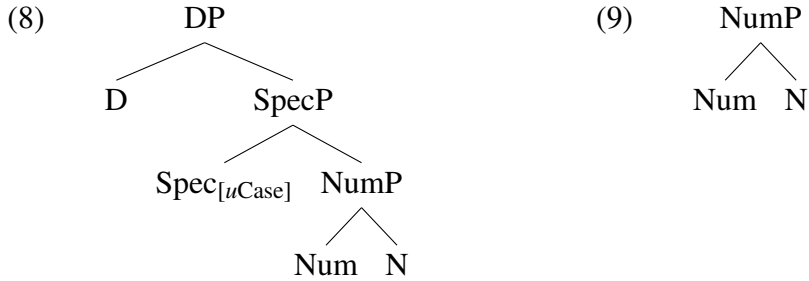
I propose that the contrast in case-marking between in-situ and fronted NPs should be understood as a kind of DOM. I show that the Choctaw facts nicely tie together the *exceptional case requirement* approach to DOM, recently developed in detail by Kalin (2018), and the *Q-particle* analysis of *wh*-movement, developed by Cable (2007, 2010).

The core of Kalin’s analysis, and others in its theoretical family (e.g. Levin 2017, van Urk 2019), is that DOM occurs because some NPs must be assigned case, and others need not be. Turkish, as illustrated in (1), has a distinction between specific NPs, which require case, and non-specific NPs, which do not. This distinction is neutralized in subject position, in which all NPs are assigned case regardless of whether or not they need it, but the distinction emerges on NPs in object position, a position where case is *not* obligatorily assigned in those languages with DOM. Kalin formalizes the case-requiring property as the presence of [*uCase*], an unvalued case feature. In Turkish, specific NPs have [*uCase*], so must get case from somewhere, and nonspecific NPs lack it, resulting in specificity-based DOM. (6) shows an NP in object position, without [*uCase*], not being assigned case, and (7) shows an object NP *with* [*uCase*] being assigned case from some unshown case-assigner (the identity of the case-assigner varies from language to language and is not relevant here).

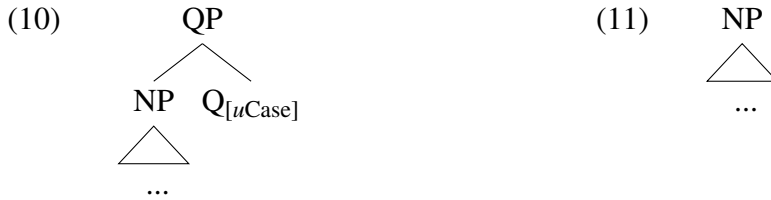


In order to encode the language-specific connection between [*uCase*] and a particular property of the NP (e.g. specificity), Kalin proposes that, in a given language, [*uCase*] can be associated with particular functional heads in the extended projection of a noun, which include, among others,  $D^0$  (introducing definiteness),  $\text{Specific}^0$  and  $\text{Animate}^0$ . These heads are only projected on nominals that have the relevant features— $\text{Specific}^0$  is only projected on specific nominals,  $\text{Animate}^0$  on animate nominals, and so on.<sup>4</sup> A possible structure for a Turkish specific NP is given in (8)—the  $\text{Specific}^0$  head is merged, with its [*uCase*] feature, and accordingly must be assigned case. In contrast, a possible structure for a nonspecific Turkish NP is given in (9)—there is no  $\text{Specific}^0$  head, and thus no [*uCase*] feature, and the NP does not require case.

<sup>4</sup>Kalin notes that it is perfectly possible to create a notational variant of her analysis which does not rely on a proliferation of phonologically-null functional heads—for instance, the [*uCase*] feature could be formalized instead as a diacritic on interpretable features such as [DEFINITE] or [SPECIFIC], which would not necessarily instantiate their own heads. I stick with Kalin’s notation to make the connection to her analysis as clear as possible.



With this theoretical background in place, we can move to my analysis: I propose, in line with Kalin (2018), that DOM in Choctaw is conditioned by a [*uCase*] feature on a functional head in the extended projection of NP. In Choctaw this head is the *Q-particle*, a functional element which, in the analysis developed by Cable (2007, 2010), heads all constituents undergoing A'-movement, enclosing them within a QP. The syntactic structure of a NP that undergoes A'-movement in Choctaw is thus given in (10), and its corresponding non-A'-moving equivalent is given in (11).



This analysis explains the basic generalizations illustrated in (2) and (4-5). Objects that undergo A'-movement are obligatorily case-marked because  $Q^0$ , which heads all XPs undergoing A'-movement, carries a [*uCase*] feature. In the following two subsections I dispense with some potential alternative analyses, and in section 4 I show that the distribution of case-morphemes fits the profile of a Q-particle.

### 3.1 Being in an A'-position does not induce case-marking

An alternative interpretation of the facts as stated so far is that the relevant property for obligatory case-marking is not *A'-movement*, exactly, but simply *being in an A'-position*, whether by movement or simply by being base-generated there. If true, this would mean that the distribution of obligatory case-marking on objects does not fit the distribution of the Q-particle, falsifying the analysis.

However, the sentences in (12) show that *movement* to an A'-position really is the crucial ingredient to force case-marking. These sentences feature left-peripheral NPs functioning as 'scene-setting' topics (Lambrecht 1994), which introduce locations or times. They are not linked to argument positions within the clause. Crucially, these non-argumental NPs are *optionally* case-marked.

- (12) a. Walmart-(**a**) kana-p-ato a-tahpala-tok.  
Walmart-(**OBL**) someone-DEM-NOM 1SG.DAT-shout-PST  
'Some guy shouted at me at Walmart.'

- b. Himmak nittak-(a) ish-baliil-aachi-h-o?  
 now day-(OBL) 2SG.ERG-run-FUT-TNS-Q  
 ‘Are you going to run today?’

Haegeman (2000, 2012) proposes that adjunct topics are base-generated in A'-positions, and do not move there. Assuming that the non-argumental topics in (12) fall into her class of topics, their case-marking is correctly predicted to be optional under my analysis. However, under the alternative analysis sketched above, they are predicted, erroneously, to have obligatory case-marking.

### 3.2 Short movement does not induce case-marking

Another alternative interpretation of the facts so far is that while obligatory case-marking is indeed associated with NPs that undergo movement, it need not be A'-movement—perhaps any movement would have this effect. Indeed, the fact that all *subjects* are obligatorily case-marked (as nominative) might lead us favor this view, under the assumption that Choctaw has a dedicated subject position to which all subject NPs move (on which see Broadwell 2006: 38–43). However, we can show that not all moved NPs are case-marked. The evidence comes the fact that short movement operations to a low post-subject position fail to induce obligatory case-marking on the moving NP—it turns out that only movement to a *pre*-subject position induces obligatory case-marking.

Consider the pair of sentences in (13). In (13a), the object NP is adjacent to the verb and is, expectedly, optionally case-marked. In (13b), the same object NP now precedes the participial phrase *toshpat* ‘being quick’, and is also optionally case-marked.

- (13) a. Toshpa-t bashpo-(ya) haloppa-chi-h!  
 be.quick-PTCP knife-(OBL) sharp-CAUS-TNS  
 ‘Hurry up and sharpen the knife!’  
 b. Bashpo-(ya) toshpa-t haloppa-chi-h!  
 knife-(OBL) be.quick-PTCP sharp-CAUS-TNS  
 ‘Hurry up and sharpen the knife!’

If I am correct in assuming that *bashpo-(ya)* in (13a) has moved across the participial phrase, then we have an instance of a movement operation that fails to induce obligatory case-marking.

Another relevant pair is shown in (14), which shows that two overt object arguments of a ditransitive verb—in this case, a causative of a transitive verb—may be freely reordered, and that an object need not be case-marked whether it comes first or second.<sup>5</sup>

<sup>5</sup>Note that examples such as (14a), where a caseless object may be separated from the verb by a case-marked object, argue against a potential (pseudo-)incorporation analysis of Choctaw caseless objects (cf. Dayal 2011). Typically (pseudo-)incorporation requires the noun be adjacent to the verb. Other reasons to doubt a (pseudo-)incorporation analysis are (a) the existence of caseless possessors (e.g. *Suzie* in (5a)) and (b) the fact that caseless NPs can be definite and specific (e.g. *Suzie ishki* ‘Suzie’s mother’ in (5a)).

We have thus seen that merely undergoing movement is not enough to induce obligatory case-marking—it needs to be *long* movement, to a pre-subject position. I assume that this long movement is A'-movement. Next, I provide a further, predicted parallel between the distribution of obligatory case-marking in Choctaw, and the distribution of the Q-particle

The motivating observation that led Cable (2007, 2010) to the Q-particle analysis is that, in Tlingit, constituents that undergo *wh*-movement must show a particular morpheme at their right edge. This morpheme—the Q-particle—marks the right edge of the entire moved constituent, as in (15)—*not* the right edge of the *wh*-word itself, as shown in (15b).

- The distribution of obligatory case-marking in Choctaw is the same as that of the Q-particle in Tlingit. The basic pattern is that obligatory case-marking, like the Q-particle, is found only at the right edge of the entire moved constituent. In (16a), the possessor of the object is fronted by itself, and must be case-marked. In (16b), however, the entire NP is fronted, and now case-marking is only obligatory at the right edge of the entire fronted NP.

- (16) a. Kátah-\*(o)<sub>i</sub> John-at [<sub>i</sub> ittiyaapishi-ya] haksichi-tok.  
 who-\*(OBL) John-NOM [ sibling-OBL] trick-PST  
 ‘Whose sibling did John trick?’  
 b. [Kátah ittiyaapishi-\*(yo)]<sub>i</sub> John-at [<sub>i</sub> haksichi-tok?  
 [who sibling-\*(OBL)] John-NOM trick-PST  
 ‘Whose sibling did John trick?’

This distribution follows from the analysis: in (16a), Q heads the constituent which A'-moves, and does *not* appear within the A'-moved constituent.

## 5. Conclusion

I have shown that Choctaw NPs are afflicted by a typologically-unusual variety of DOM, wherein typically-optional case-marking becomes obligatory on fronted NPs. This unusual system falls out of the account of DOM presented by Kalin (2018), once we integrate it with Cable's (2007, 2010) proposal that A'-moving XPs are headed by a particular functional item (the Q-particle). Some issues remain for future work.

One issue is that there is no optionality in typical DOM systems: nonspecific objects in Turkish, for instance, do not have the *option* of being case-marked. By contrast, Choctaw objects that do not undergo A'-movement *do* still have the option of being case-marked. I believe this is likely because the presence vs. absence of Q<sup>0</sup> is not the only determinant of case-marking—for example, NPs with demonstrative determiners must be case-marked in all positions, including object position as in (17).

- (17) Ofi-m-\*(a)            lhiyohli-li-tok.  
       dog-DEM-\*(OBL) chase-1SG.ERG-PST  
       'I chased that dog.'

See Broadwell (2006: 73–5) for discussion of some other factors which (probabilistically) condition case-marking in Choctaw.

A second issue relates to the *source* of oblique case in Choctaw. Kalin's (2018) analysis assumes that all case, including the non-obligatory case drafted in to satisfy the [*uCase*] feature of certain NPs, is assigned from functional heads. Yet oblique case in Choctaw is hard to localize to a single functional head. It occurs on objects, causing previous authors to identify it as 'accusative', but also on possessors (e.g. (5)) and base-generated non-argument topics (e.g. (12)). What's more, we even find oblique case on the left conjunct inside a coordinated, nominative-marked subject, as in (18).

- (18) [Hattak-m-a    hicha oshi]-yat    itt-itooma    átta-h.  
       [man-DEM-OBL and    child-NOM RECIP-be.close be.NG-TNS  
       'That man and his son live close to each other.'

It thus seems better to characterize oblique case as a kind of 'elsewhere' case, potentially the spellout of the unvalued case feature [*uCase*]. In this way, the model here diverges from Kalin's: in her model, case is tied to *licensing*, and an unvalued [*uCase*] feature that remains at the end of a derivation will result in a crash. In the analysis presented here, however, unvalued [*uCase*] features are happily exponed, and do not crash the derivation.

A third issue, and potentially the largest, relates to the categorial status of *wh*-phrases. Broadwell (2006) notes that all of Choctaw's *wh*-phrases, including those meaning 'who' and 'what', behave in certain ways like verbs, with adjunct *wh*-phrases in particular behaving essentially like adjoined full clauses. If some or all *wh*-words should be analyzed



as adjoined clauses, rather than NPs in argument positions, the correct analysis may look quite different to the one presented here.

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