

Phase Sensitive Morphology and Dependent Case
Kimberly Johnson • University of Massachusetts, Amherst

1. Introduction Creek (Muskogean, no. of speakers: 600, av. age: 70) is a predominantly head-marking language which nevertheless has morphological case on nouns. Case marking is also largely optional (1) and makes a binary distinction between subject and nonsubject, marking all nonsubjects (arguments and adjuncts) with accusative case (2). This typologically unusual case system is thus of broad interest.

- (1) Ifá(-t) pó:si lást-i:(-n) á:ssi:c-éy-s
dog(-NOM) cat black-DUR(-ACC) chase.IMPF-P1-IND
'The dog was chasing the black cat.'
- (2) Méyli-t an-có:ko-n apátaká-n ícki-n in-há:y-is
Mary-NOM 1.SG.POSS-house-ACC bread-ACC her.mother-ACC 3.DAT-make.IMPF-IND
'Mary is making traditional bread at my house for her mother.'

The optionality and indiscriminate marking of adjuncts pose significant challenges to Head Licensed Case Theory (Chomsky 2000, 2001). I argue that the Creek system receives a natural treatment in Dependent Case Theory (DCT) (Marantz 1991; Baker 2015) with the addition of post-syntactic Vocabulary Insertion in a Distributed Morphology framework (Halle & Marantz 1994; Harley & Noyer 1999).

Based on original data from fieldwork and corpus data, this paper develops an account of the Creek case system in DCT. I demonstrate that Creek case is not entirely optional, but is constrained structurally along two lines. Case-marking is obligatory on 1) the second of two internal arguments and 2) nouns larger than a definite DP. I propose that case features are spelled out differently depending on the phase in which they are assigned by vocabulary entries keyed to that phase. Case is not optional *per se*, rather nouns are ambiguous as to whether they project additional structure. This makes predictions about the interpretation of bare NPs.

2.1 Structure Dependent Optionality The first condition under which case is obligatory is structural. The second of two objects must have overt case-marking. This holds of direct objects of ditransitives (3), as well as of applied arguments across a range of double object constructions and transitive unaccusatives.

- (3) Méyli(-t) i-ccó:sti(-n) **cító*(-n)** ím-ip-áti:-t ów-ey-s
Mary(-NOM) 3.POSS-child-(ACC) **snake-*(ACC)** 3.DAT.give-IP-PST-SS be-P1.IMPF-IND
'Mary had already given her child **a snake**.'

2.2 Size Dependent Optionality The second condition has to do with the size of a nominal. As reported in Martin (2011), while case is optional on most nouns, certain types of nouns require overt case-marking. These include independent pronouns (personal and demonstrative), and quantifier and numeral phrases. I add deictic expressions to this list and propose that overt case correlates with a structure larger than a definite DP. In (4a), case is optional on a definite DP, but is obligatory with the deictic DP, (4b).

- (4) a. i:-mōweys kōw-it, **ma hokti:(-t)** ta:k-la:teyk-is
RFL-do.so think-SS, **DEM woman(-NOM)** LOC-fall.PFV-IND
'**The girl** fell deliberately.'
- b. I:-mōweys kōw-it, **ma-t hokti:-t** ta:k-la:teyk-is
RFL-do.so think-SS, **DEM-NOM woman-NOM** LOC-fall.PFV-IND
'**That_{deix} girl** fell deliberately.'

I analyze nominals with optional case as structurally ambiguous; when they project additional structure they are overtly case-marked, when they do not, case-marking is null. Deixis and numeral/ quantificational modification disambiguate in favor of a large structure. I argue that bare NP's and DP's are ambiguous and may project an additional deictic D-layer (Patel-Grosz & Grosz 2017).

(5) *Definite DP: ambiguous between small and large structure*

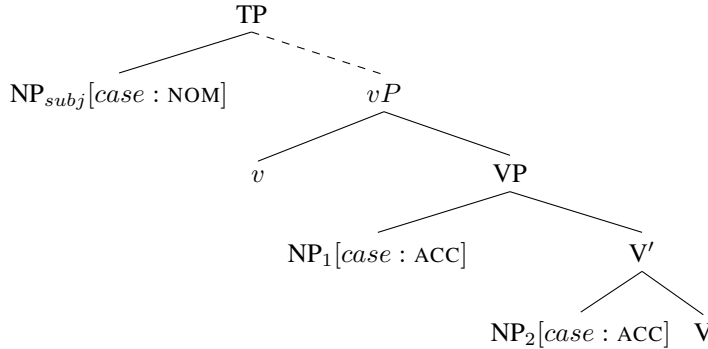
- a. Small Structure & Null Case: $[_{DP} D_{def} NP]$
- b. Large Structure & Overt Case: $[_{DP} D_{deix} [_{DP} D_{def} NP]]$

My analysis predicts that overt case on bare NP's and (in)definite DP's should have a semantic effect. This prediction receives support from speakers who feel that a noun with case is "closer" to the speaker. More fieldwork is needed to pinpoint the exact meaning, but speaker intuitions provide suggestive evidence that case is associated with meaning, though perhaps not always with deictic semantics.

3. Dependent Case Proposal Creek case can be modeled with a basic Accusative dependent case system under which Accusative case is assigned to any c-commanded noun. Nominative is *unmarked* case. Following Baker (2015), I assume c-command relations are evaluated and case is assigned at each phase.

3.1 vP-Phase At the *vP*-phase of a ditransitive, NP₂ is c-commanded by NP₁ and its case features are valued Accusative. NP₁ is not assigned Nominative, which is a last resort rescue for unvalued case features

(6) *Case assignment in a ditransitive*



at the end of the derivation. I assume case features are always valued, but not always spelled out, and restrict spell-out with post-syntactic insertion of case morphemes. At the *vP*-phase, the vocabulary entry in (7) is accessed.

- (7) *vP-phase Vocabulary Entry*
- a. $[ACC] \leftrightarrow /-n/$

Since NP₂ is the only noun receiving case in the *vP*-phase, it alone is

spelled out using the rule in (7). This derives obligatorily overt case on NP₂ regardless of its size.

3.2 CP-Phase I propose that Creek has a "soft" *vP*-phase. As such, it triggers only partial spell-out and *vP*-internal arguments remain visible at the CP-phase (Baker 2015). NP₁, though not c-commanded at the *vP*-phase, is c-commanded by the subject at the CP-phase. Since it does not already bear case features, NP₁ is assigned Accusative. The subject is assigned Nominative. Case features of the subject and NP₁ are spelled out by the vocabulary entries in (8). These are structurally conditioned to spell out case on DP's bearing a feature associated with additional structure. I formalize this for deictic expressions.

The entries in (8) derive optional case for subjects and any other NP assigned case in the CP-phase. If these nominals are large DP's, the rules in (8) spell out their case features. If they have a small structure, their case features are not spelled out.

(8) *CP-phase Vocabulary Entries*

- a. $[+DEIX, NOM]_{DP} \leftrightarrow /-t/$
- b. $[+DEIX, ACC]_{DP} \leftrightarrow /-n/$

4. Extending to Adjuncts Accusative case does not discriminate between arguments and adjuncts. The Creek clause can accommodate at most two adjuncts without additional verbal morphology - a temporal adverb and a location. My system predicts that adjuncts behave just like arguments and are assigned Accusative case under c-command. Higher adjuncts originate below the subject and have optional case, while low adjuncts are predicted to have obligatory case when they are preceded by another *vP*-internal nominal. This intricate system requires a considerably complex treatment in a Head-Licensed case approach, where heads would be needed to license case for each adjunct. The elaborate pattern of optionality, which is dependent on size of the DP and location in the structure, would also involve a multiplicity of spell-out rules as well as accidental homophony between Accusative and other nonsubject cases. The present Dependent Case approach accurately accounts for the behavior of adjuncts and captures the generalization that they are Accusative-marked. Finally, I will show that this Dependent Case system explains the co-existence in Creek of an Active agreement system with the Nominative-Accusative case system in a typologically natural way.