1 Introduction

- Moro (Kordofanian) [Sudan] provides new evidence for accusative as a dependent case (Marantz 1991; Baker 2015).
  - We demonstrate that accusative case occurs wherever a DP is c-commanded by another DP within a phase, regardless of whether it is local to vP.
  - Accusative case appears in vP phase on human nouns, which undergo object shift to [Spec, vP] where they are accessible for dependent case assignment.
  - Only proper nouns and kinship surface with accusative, a restriction we attribute to the morphological component.

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2 Dependent vs. lexically governed case

- Standard analyses of structural case assume that it is assigned by a specific functional head under Agree with a local DP.

(1) Simplified case diagram here:

- For Baker, once c-command between DPs is established in a phase (=ϕ), case is assigned either ‘up’ or ‘down’ at Spell Out:

(2) If there are two DPs in ϕ, and DP1 c-commands DP2,
  a. value DP1 as ergative. =“assignment up”
  b. value DP2 as accusative. =“assignment down”

*We are very grateful to our Moro consultants Elyasir Julima and Angelo Nasser. We use the following abbreviations: sg = singular, pl = plural, irr = irrealis, prog = progressive, impf = imperfective, pfv = perfective, acc = accusative, Q = polar question particle, 1 = first person, 2 = second person, 3 = third person
• We propose the following Dependent Case Rule for Moro:

\[(3) \text{ Moro Dependent Case Rule} \]

If there are two DPs in $\phi$, and DP1 c-commands DP2,
(a) Value DP2 as accusative.
(b) Where $\phi=\{\text{CP}, \text{DP}\}$

3 Evidence for Dependent Case in Moro

• We present five arguments in favor of Dependent Case in Moro:

  • Both internal arguments of a ditransitive verb show accusative case.
  • The lower argument shows accusative case marking when a ditransitive is passivized.
  • In a genitive construction, the lower noun shows accusative case.
  • When two DPs are coordinated, the lower one (the second conjunct) shows accusative case, even in subject position.
  • A-bar extraction bleeds accusative case.

• Argument 1: Ditransitives

  • Both objects of ditransitive verbs surface with accusative case:

\[(4) \text{ éga-nac-ó } \eta\text{állo-ŋ } \text{kója-ŋ} \]
\[1\text{SG.RT-give-PFV } \text{Ngallo-ACC } \text{Koja-ACC} \]
'I gave Ngallo to Koja.' / 'I gave Koja to Ngallo.'

  • Multiple accusative case in double object constructions is predicted by the dependent case account, all three arguments are c-commanded by the subject DP.

  • While this could be modeled in a $v$ account under Multiple Agree (Hiraiwa 2001), the combination of the five arguments presented in this section stand together in favor of a Dependent Case analysis of Moro.

• Argument 2: Passives

  • Accusative case is still assigned to internal arguments in passives:

\[(5) \eta\text{állo } \text{ga-nac-\text{-an-ú} } \text{kója-ŋ} \]
\[\text{Ngallo } \text{clg.RT-give-PASS-PFV } \text{Koja-ACC} \]
'Ngallo was given to Koja' / 'Ngallo was given Koja'

  • - If accusative case were assigned structurally by $v_{\text{active}}$, it should disappear in passive contexts

Argument 3: Focused objects

• A-bar movement of the object bleeds accusative case assignment:

\[(6) \eta\text{w-Kúku-(\text{*ŋ})-ki}_{1} n=\text{égó-bwáp-á} t_{1} \]
\[\text{FOC-Kuku-(ACC-REL-OP } \text{REL.COMP-1SG.DPC-like-PFV} \]
'It’s Kuku that I like.'
• The highest copy of the object is not c-commanded by another DP, so we do not expect accusative case assignment on fronted objects.

**Argument 4: Bare nominal complements**

• ‘Accusative’ case markers also show up on inalienable possessors in the absence of possessor agreement:

\[(7)\]
\[
\begin{align*}
\text{a. } & \text{ləŋge Kuku-ŋ} & \text{b. } & \text{ləŋ-en gő-Kuku} \\
\text{mom Kuku-ACC} & \text{mother-3.poss clg.poss-Kuku} \\
& \text{‘Mom of Kuku’ } & & \text{‘Kuku’s mom’} \\
\text{c. } & \text{eť̃ Kuku-ŋ} & \text{d. } & \text{eť-en gő-Kuku} \\
\text{dad Kuku-ACC} & \text{father-3.poss clg.poss-Kuku} \\
& \text{‘Dad of Kuku’ } & & \text{‘Kuku’s dad’}
\end{align*}
\]

• As there is no \( v \) to assign ACC inside the DP in (7), an Agree-based analysis of accusative case is untenable.

• Instead, Kuku (6a,c) is the complement of ‘mom’ and ‘dad’, making it eligible for dependent case

• In (6b,d), the possessors raise to [Spec, \( n \) which assigns genitive case (cf. Dvorak 2011), blocking dependent case.

**Argument 5: DP Coordination**

• Coordination triggers accusative case on the second argument, even in subject position:

\[(8)\]
\[
\begin{align*}
\text{Kuku} & \text{ na ŋalo-ŋ l-aner-á} \\
\text{Kuku-ACC} & \text{ Ngalo-ACC cll.rt-good-ADJ} \\
& \text{‘Kuku and Ngalo are nice.’}
\end{align*}
\]

• Accusative case on the first argument is ungrammatical.

\[(9)\] **Dependent case assignment in coordination**

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          ConjP
            /\   /\            /\  /\     \\
               DP      Conj'        Conj      DP
                /\        /\         \  \     \\
               Kuku    na  ŋalo-ŋ
```

4 **Multiple [PERSON] object shift**

• Moro objects show radically symmetrical behavior for case assignment, passivization, etc. (Ackerman et al. 2015)

• But human objects always precede non-human ones:

\[(10)\]
\[
\begin{align*}
\text{a. } & \text{éga-nac-ó kọja-ŋ dia} \\
1sg-give-PFV & \text{Kọja-ACC cow} \\
& \text{‘I gave the cow to Kọja/ Kọja to the cow.’}
\end{align*}
\]
b. *éga-nac-ó diŋ kója-ŋ

- Variable binding provides evidence for a structural asymmetry:

(11) íga-saj-ac-ú lámmia lənənləŋ é-nega dəngən
1SG-see-APPL-PFV boys each LOC-houses 3PL.POSS
‘I saw each boy at his house.’

(12) *éga-dwaj-it̪-ú leŋ-en-andá lemmia (ododo)
1SG-send-APPL-PFV mothers-3P-ASSOC.PL boys all
‘I sent their mothers all the boys’ (intended)

- Multiple [PERSON] shift to [Spec, vP]
  - Human nouns are specified, [PERSON]
  - v has a strong, insatiable [uPERSON] probe

(13) Objects specified [PERSON] undergo object shift

- Evidence that v is fully articulated for person comes from person hierarchy effects among object clitics (Béjar and Rezac 2009).

(14) a. ga-nac-áŋ-ŋə̣-ŋə̣-ŋə̣
1SG>3SG
clg-give-PFV-1SG.OBJ-3SG.OBJ ‘She gave him to me’

b. *g-a-nac-áŋ-ŋə̣-ŋə̣
*3SG>1SG

- [PERSON]-valued objects in [Spec,vP] are accessible for dependent accusative case assignment in the CP phase.
5 **[PROPER] morphological case**

- Only names and kinship terms surface with overt accusative case in Moro:

  (15) a. éga-nac-ó kója-ŋ ñera(*-ŋ)
      1sg-give-pfv Koja-acc girl(*-acc)
  b. éga-nac-ó ñera(*-ŋ) kója-ŋ
     'I gave a girl to Koja/Koja to a girl.' (both exx.)

- Suppose these nouns share a feature [PROPER] (Matushansky 2006)

- A similar category ('Class 1a') has been noted to resist augments in Luganda (Hyman and Katamba 1991, 1993).

- Associative plurals are also restricted to [PROPER] nouns

  (16) a. orn lorlda-ñ-anda n-ldǝ-ñ-ébǝrǝjǝc-i ...  
      but brothers-1sg.poss-assoc.pl comp2-cll.inf-1sg.om-loose-cons.pfv
      'But my brothers let it go ...'
  b. ... Koja-ŋǝnda l-a-f-o eg-al y-i-b-ërn-ia Alufra
      Koja-assoc.pl cll-rtc-be.loc-pfv loc-place cly-dpc-prog-be.called-ipfv Alhufra
      'And he told them that Koja’s family was in Alhufra.'

- Last, 3P object clitics can only refer to [PROPER] antecedents:

  (17) a. g-war-ó ñalló na náŋ-ŋú-bug-i
      clg-insult-pfv Nalo and 3sg.i-3sg.om-punch-cpfv
      'He yelled at Ngallo, and then punched him.'
  b. kuku g-war-ó ñera na náŋó-búg-i
     kuku clg-insult-pfv child and 3sg.i-punch-cpfv
     'Kuku yelled at the child, and then punched him.'

  (18) **Accusative case allomorphy**
      i  -ŋ ↔ [Acc]/[PROPER]_
      ii  -∅ ↔ [Acc]/elsewhere

6 **Implications and Conclusions**

- Moro case marking has implications for animacy-based case splits from a typological perspective.

  - The distribution of [Acc] in Moro resembles object marking in person split ergative languages.
    - In Diyari, only high-animacy objects, including names, receive accusative case.
    - Low animacy objects are unmarked/absolutive, despite being syntactically indistinguishable Baker (2015, 22-23).
    - With Legate (2008), Baker concludes that animacy-based splits occur in the morphology (*pace* Merchant 2006).
Moro demonstrates that animacy-based splits are not always morphological: one split based on [PERSON] is syntactic, but another split based on [+PROPER] is morphological.

Thus, we would not be surprised to find a Moro’ in which a animacy-based split arose due to different syntactic positions of objects.

We predict both syntactic and morphological animacy-based case splits should be found across languages.

The Moro data provide novel support for accusative as a dependent case rather than a structural case valued by \( v \) (Marantz 1991; Baker 2015).

The arguments for Dependent Case in Moro are found in the following domains:

- The distribution of objects
- The distribution of case morphology

We have also shown that the distribution of overt accusative case is crucially dependent on the morphological component (Bobaljik 2008; Legate 2008).

References


