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.

Roadmap

- § 1 Introduction
- § 2 Dependent vs. lexically governed case
- § 3 Evidence for dependent case in Moro
- § 4 A syntactic asymmetry
- § 5 A morphological asymmetry
- § 6 Implications and conclusion

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 (=\( \phi \)), case is assigned either ‘up’ or ‘down’ at Spell Out:

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*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*
If there are two DPs in \( \phi \), and DP1 c-commands DP2,

a. value DP1 as ergative. = “assignment up”

b. value DP2 as accusative. = “assignment down”

- We propose the following Dependent Case Rule for Moro:

\[ \text{Moro Dependent Case Rule} \]

If there are two DPs in \( \phi \), and DP1 c-commands DP2,

(a) Value DP2 as accusative.

(b) Where \( \phi = \{ \text{CP, DP} \} \)

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:

\[ \text{(4) } \text{éga-nac-ó nállo-ŋ kója-ŋ} \]

\[ \text{1sg.rt-give-pfv Ngallo-acc Koja-acc} \]

\[ \text{‘I gave Ngallo to Koja.’ / ‘I gave Koja to Ngallo.’} \]

  - 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:

\[ \text{(5) } \text{nállo ga-nac-ən-ú kója-ŋ} \]

\[ \text{Ngallo clg.rt-give-pass-pfv Koja-acc} \]

\[ \text{‘Ngallo was given to Koja’ / ‘Ngallo was given Koja’} \]
- If accusative case were assigned structurally by $v_{active}$, it should disappear in passive contexts

**Argument 3: Focused objects**

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

  \[
  n\acute{e}_w-\text{Kuku-}^{(\text{\textquoteleft \textquoteleft })}\text{-ki}_1 \quad n=\acute{e}_g\acute{o}_\text{-bw\acute{a}_p}\acute{\text{-}\text{\textaverage}}_1 \\
  \text{FOC-Kuku-}^{(\text{ACC-REL.OP REL.COMP-1SG.DPC-LIKE-IPFV}}
  \]

  '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:

  \[
  a. \text{l\textendash\textquoteleft \textquoteleft g\acute{n}\textendash\textquoteleft \textquoteleft \text{Kuku}\textendash\textquoteleft \textquoteleft } \quad b. \text{l\textendash\textquoteleft \textquoteleft g\textendash\textquoteleft \textquoteleft \text{-en g\acute{o}\_\text{Kuku}} \\
  \text{mom Kuku-ACC \quad mother-3.poss clg.poss-Kuku} \quad \text{‘Mom of Kuku’ ‘Kuku’s mom’} \\
  c. \text{e\textendash\textquoteleft \textquoteleft g\acute{n}\textendash\textquoteleft \textquoteleft \text{Kuku}\textendash\textquoteleft \textquoteleft } \quad d. \text{e\textendash\textquoteleft \textquoteleft g\textendash\textquoteleft \textquoteleft \text{-en g\acute{o}\_\text{Kuku}} \\
  \text{dad Kuku-ACC \quad father-3.poss clg.poss-Kuku} \quad \text{‘Dad of Kuku’ ‘Kuku’s dad’}
  \]

  - As there is no $v$ to assign ACC inside the DP in (7), an Agree-based analysis of accusative case is untenable.
  - Instead, K\textcyr{uk}u (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:

  \[
  \text{Kuku na \textendash\textquoteleft \textquoteleft g\textendash\textquoteleft \textquoteleft \text{na} \textendash\textquoteleft \textquoteleft } \quad \text{Kuku-ACC and Ngalo-ACC clLT-good-ADJ} \\
  \text{‘Kuku and Ngalo are nice’}
  \]

  - Accusative case on the first argument is ungrammatical.

  \[
  \text{Dependent case assignment in coordination}
  \]
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) a. éga-nac-ó kója-ŋ diə
1SG-give-PFV Koja-ACC cow
'I gave the cow to Koja/ Koja to the cow.'

b. * éga-nac-ó diə kója-ŋ

- Variable binding provides evidence for a structural asymmetry:

(11) íga-saj-ac-ú ləmmiə ləŋəlnəŋ é-nega dəŋen
1SG-see-L.APPL-PFV boys each LOC-houses 3PL.POSS
'I saw each boy at his house.'

(12) * éga-dwaj-it̪-ú ləŋ-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).

\[(14)\]

- \( \text{g-a-nac-} \text{-nó-} \text{ŋə-ŋe} *3 \text{-g} > 1 \text{-g} \)

\( \text{I gave him to me} \)

- \( \text{g-a-nac-} \text{-nó-} \text{ŋe} *3 \text{-g} > 1 \text{-g} \)

\( \text{She gave him to me} \)

- [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:

\[(15)\]

- \( \text{éga-nac-ó } \text{kója-ŋ } \text{ŋera(*-ŋ)} \)

\( \text{1sg-give pfV Koja-acc girl(*acc)} \)

- \( \text{éga-nac-ó } \text{ŋera(*-ŋ)} \text{kója-ŋ} \)

\( \text{I gave a girl to Koja/Kojato a girl.} \) (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 lorli-da-ŋ-anda n-l-da-ŋ-ēbərəjɛc-i ... 
   but brothers-1SG.POSS-ASSOC.PL COMP2-CLL.INF-1SG.OM-loose-CONS.PFV
   ’But my brothers let it go …’
   b. … Koja-ŋanda l-a-f-o eg-al
      Koja-ASSOC.PL CLL-RTC-be.loc-PFV LOC-place
      y-i-b-ērn-ia Alufra
      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 ŋalló na nāŋ-ŋú-bug-i
   cl1G-insult-PFV Nalo and 3SG.1-3SG.OM-punch-CPFV
   ’He yelled at Ngallo, and then punched him.’
   b. kuku g-war-ó ŋera na nāŋá-búg-i
      kuku cl1G-insult-PFV child and 3SG.1-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


