

Case and Caselessness in Moro ^{*}

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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.
- Yet Baker (2015) argues that in many languages, case is dependent on the presence of another c-commanding DP in the same phase, following Marantz (1991).

(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:

(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) **Moro Dependent Case Rule**

If there are two DPs in ϕ , and DP1 c-commands DP2,

- (a) Value DP2 as accusative.
- (b) Where $\phi = \{CP, DP\}$

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:

(4) éga-nac-ó ηάλλο-η κόγια-η
 1SG.RT-give-PFV Ngallo-ACC Kojá-ACC
 ‘I gave Ngallo to Kojá.’ / ‘I gave Kojá 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) ηάλλο gΛ-nac-ən-ú κόγια-η
 Ngallo CLg.RT-give-PASS-PFV Kojá-ACC
 ‘Ngallo was given to Kojá’ / ‘Ngallo was given Kojá’

- - 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:

(6) ηw-Kúku-(*η)-ki₁ n=égó-bwáη-á t₁
 FOC-Kuku-(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:

(7)	a.	lənɟe	Kúku-ŋ	b.	lənɟ-en	gǎ-Kúku
		mom	Kuku-ACC		mother-3.poss	CLg.poss-Kuku
		‘Mom of Kuku’			‘Kuku’s mom’	
	c.	eɽǎ	Kúku-ŋ	d.	eɽ-en	gǎ-Kúku
		dad	Kuku-ACC		father-3.poss	CLg.poss-Kuku
		‘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, Kúku (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.

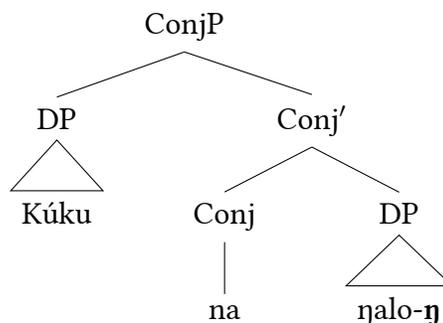
- **Argument 5: DP Coordination**

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

(8)	Kúku	na	ŋalo-ŋ	l-aŋer-á
	Kuku-ACC	and	Ngalo-ACC	CLL.RT-good-ADJ
	‘Kuku and Ngalo are nice.’			

- Accusative case on the first argument is ungrammatical.

(9) **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

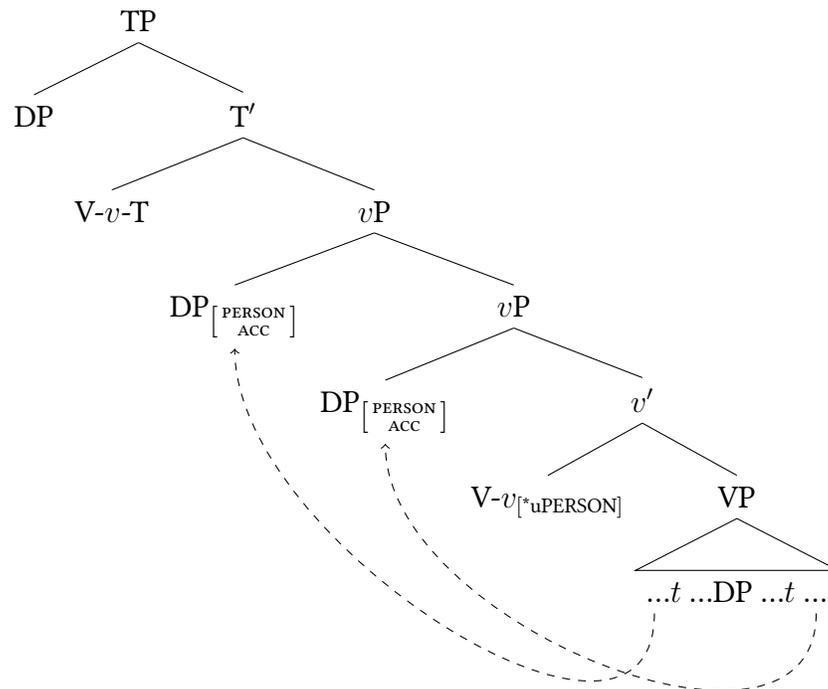
- Variable binding provides evidence for a structural asymmetry:

(11) ígΛ-SΛj-ΛC-ú lÁmmiə lənəlnəŋ é-nega dəŋgen
 1SG-see-L.APPL-PFV boys each LOC-houses 3PL.POSS
 ‘I saw each boy at his house.’

(12) * éga-dwΛj-iŋ-ú leŋg-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, *v*P]
 - - 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-ə-ŋə-ŋo 1SG>3SG
 CLg-give-PFV-1SG.OM-3SG.OM ‘She gave him to me’
 b. *g-a-nac-ə-ŋə-ŋe *3SG>1SG

- [PERSON]-valued objects in [Spec, *v*P] 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 ɲera(*-ŋ)
 1SG-give-PFV Koja-ACC girl(*-ACC)
 b. éga-nac-ó ɲera(*-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-ldə-ñ-əbərəjəc-i ...
 but brothers-1SG.POSS-ASSOC.PL COMP2-CLL-INF-1SG.OM-loose-CONS.PFV
 ‘But my brothers let it go ...’
 b. ... Koja-ɲənda l-a-f-o eg-al y-i-b-ər-n-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 ɲalló na nəŋ-ɲú-bug-i
 CLg-insult-PFV Nalo and 3SG.I-3SG.OM-punch-CPFV
 ‘He yelled at Ngallo_i and then punched him_i.’
 b. kuku g-war-ó ɲera na nəŋ-é-búg-í
 kuku CLg-insult-PFV child and 3SG.I-punch-CPFV
 ‘Kuku yelled at the child_i and then punched him_i.’

- (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/absolute, 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).

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