

# Hyperraising from Pseudorelatives in Moro

Peter Jenks (UC Berkeley)

November 11, 2016

---

## 1 Introduction

Raising (cross-clausal A-movement) is made possible by two factors:

1. Structural incompleteness of the lower clause, e.g. as a TP
2. Caselessness of lower subjects, allowing them to get case and satisfy higher clause EPP

These two factors account for the distribution of raising in English:

- (1)
- a. It seems [<sub>CP</sub> that Kuku chopped down the tree].
  - b. Kuku<sub>i</sub> seemed [<sub>TP</sub> *t<sub>i</sub>* to chop down the tree].
  - c. \*Kuku seemed [<sub>CP</sub> that *t<sub>i</sub>* chopped down the tree].

**My goal:** To account for the availability of hyperraising in Moro using these same notions:

- (2)
- a. *Kúk:u g-a-rómát-iə* [ (\*nə) *g-é-ʃáð-á* *ugi* ]  
K. CLg-RTC-continue-IPFV (λ.COMP) CLg-DPC1-chop-IPFV CLg.tree  
'Kuku kept chopping the tree'
  - b. *oráŋ g-a-n:-ó Kúk:u-ŋ* [ (\*nə) *g-é-land-ó* *Awúr* ]  
man CLg-RTC-hear-PFV Kuku-ACC λ.COMP CLg-DPC1-close-PFV CLj.door  
'The man heard Kuku close the door'

### Section 2 Evidence for hyperraising

- (2a): Hyperraising to subject
- (2b): Hyperraising to object

### Section 3 Pseudorelatives in Moro as reduced clauses

- *Pseudorelatives*: Apparent relative clauses which occur as predicates (Cinque 1995)

- (3)
- a. Ho visto [ Mario che correva a tutta velocità ]. (Italian)
  - b. J'ai vu [ Mario que courait à toute vitesse]. (French)
  - c. I saw Mario running at full speed.

- I will argue that Moro pseudorelatives are reduced CPs embedded in small clauses

### Section 4 Dependent case in Moro

- Moro accusative case is a dependent case; subjects are caseless (Jenks and Sande 2016)
- As subjects lack case, they can move into case positions in the higher clause
- Syntactic licensing/ Abstract Case is not needed to account for these patterns

## 2 Hyperraising

**Moro** (Niger-Congo, Kordofanian, W. Heiban)

- Kordofanian language, spoken in the Nuba mountains of Sudan and by the Moro diaspora in Khartoum and beyond
- The Moro and surrounding community are fighting a tragic civil war against the Sudanese government (see [nubareports.org](http://nubareports.org))
- My data from the Thetogovela dialect have been provided thanks to a family in San Diego and one Moro language activist who lives in Khartoum

Main clauses, subject relative clauses, and non-subject relative clauses contain distinct inflectional ‘clause vowels’ (Jenks and Rose to appear):

*a/Λ*- Finite root clauses with no extraction, ‘root clause vowel’ = RTC, (4a)

*é/í*- Subject relative clauses, ‘dependent clause vowel 1’ = DPC1, (4b)

*ǎ*- Non-subject relative clauses, ‘dependent clause vowel 2’ = DPC2, (4c)

- (4) a. *Kúk:u g- $\Lambda$ -sAtf-ú jamala*  
 Kuku CLg-RTC-see-PFV CLj.camel  
 ‘Kuku saw the camels.’
- b. *jamalá [-s:↓ $\bar{i}$ ]-sAtf-ú Kúk:u ]*  
 CLj.camel SCLj-DPC1-see-PFV Kuku  
 ‘the camels that saw Kuku’
- c. *jamalá [-s:ǎ (nǎ↓=) Kúk:u (nǎ↓)g- $\bar{ǎ}$ ]-sAtf-ú ]*  
 CLj.camel -SCL λCOMP= Kuku COMP-CLg-DPC2-see-PFV  
 ‘the camels that Kuku saw’

- Relative clauses are otherwise regular finite verbs.

However, the subject relative clause vowel also occurs in the complements of certain predicates:

- (5) a. *Kúk:u<sub>i</sub> g-a-rámǎt-iǎ [ \_\_\_<sub>i</sub> g-é-↓ $\bar{f}$ ǎǎ-á ugi ]*  
 K. CLg-RTC-continue-IPFV CLg-DPC1-chop-IPFV CLg.tree  
 ‘Kuku kept chopping the tree’
- b. *orán g-a-n:-ó Kúk:u- $\eta$ <sub>i</sub> [ \_\_\_<sub>i</sub> g-é-land-ó  $\Lambda$ wúr ]*  
 man CLg-RTC-hear-PFV Kuku-ACC CLg-DPC1-close-PFV CLj.door  
 ‘The man heard Kuku close the door’
- (6) a. **Direct perception (R-t-O):** -*n:-* ‘hear’, -*sAtf-* ‘see’, -*wǎnda $\bar{t}$ -* ‘watch’, -*wǎǎ-* ‘find’, -*bǎǎ-* ‘stumbled across’, -*ǎnd-* ‘catch’
- b. **Desiderative (R-to-O):** -*bwǎ $\eta$ -* ‘want’
- c. **Modal (R-to-S):** -*ǎn:-* ‘seem’
- d. **Aspectual (R-to-S):** -*rámǎ $\bar{t}$ -* ‘continue’

→ I will show these are raising predicates, where the relative ‘head’ occurs in the higher clause.

## 2.1 Evidence for raising

- DPs in the higher clause can be inanimate, so aren't agents (unlike control) (7)
- Quasi-idiomatic meanings can be preserved (8)

(7) Inanimate nouns are possible in raised positions

- a. *ηάω*  $\boxed{\eta}$ -*a-rámáti-iá* *η-é-↓dón-éα*  
 CL $\eta$ .water CL $\eta$ -RTC-continue-IPFV CL $\eta$ -DPC1-rain-IPFV  
 'It keeps on raining.'
- b. *é-g-a-n:-á* *ηάω* *η-é-↓dón-éα*  
 1SG-CLg-RTC-hear-IPFV CL $\eta$ .water CL $\eta$ -DPC1-rain-IPFV  
 'I hear it raining.'

(8) Idiomatic interpretations preserved in raising

- a. *ís:ía*  $\boxed{j}$ -*Λ-rámáti-iá* [*j-i-p-ón-ía* ]  
 CLj.gun CLj-RTC-continue-IPFV CLj-DPC1-beat-PAS-IPFV  
 'The gun kept being fired.'
- b. *é-g-a-n:-ó* *ís:ía* *j-i-bug-án-ú*  
 1SG-CLg-RTC-hear-PFV CLj.gun CLj-DPC1-strike-PAS-PFV  
 'I heard the gun be shot.'

- Additionally, (8a-b) show that passivization can feed hyperraising, so the raised arguments must be interpreted in the lower VP.

Second, the raised DP is an argument of higher clause:

**Subject** the verb agrees with the raised argument like a normal subject ((7a), (8a)).

**Object** clear evidence comes from case marking (9), pronominal cliticization (10), verb-particles (15), passives of raising-to-object (12), and adverbs (not shown).

(9) *orán* *g-a-n:-ó* *Kúku* $\boxed{\eta}$  [*g-é-lánd-ó* *Λwúr* ]  
 man CLg-RTC-heard-PFV Kuku-ACC CLg-DPC1-close-PFV door  
 'The man heard Kuku close the door'

(10) *é-g-a-* $\boxed{\eta\acute{o}}$ -*n:-a* [*g-é-lág-á* *i-ki* ]  
 1SG-CLg-RTC-3SG.OM-hear-IPFV CLg-DPC1-cultivate-IPFV LOC-field  
 'I hear him cultivating in the field.'

(11) *é-g-a-bəð-ó* *Kúku* $\eta$ - $\boxed{\text{nano}}$  [*g-é-lág-á* *i-ki* ]  
 1SG-CLg-RTC-fall-PFV Kuku-ACC-at CLg-DPC1-cultivate-IPFV LOC-field  
 'I stumbled across Kuku cultivating the field.'

(12) *Kúku* *g-Λ-n:-ən-ú* [*g-é-lág-á* *i-ki* ]  
 Kuku 1SG-CLg-RTC-hear-PASS-IPFV CLg-DPC1-cultivate-IPFV LOC-field  
 'Kuku was heard cultivating in the field.'

→ The DP is interpreted in the lower clause; its surface position is in the higher clause.

Hyperraising has been analyzed as copy raising or prolepsis (Ura 1994; Nevins 2004):

(13) John<sub>i</sub> looks like he<sub>i/\*j</sub> is sick.

Moro allows *pro*-drop, so we need to show that hyperraising isn't copy raising. Three arguments:

1. Only the subject can move to the higher clause, unlike copy-raising:

(14) John looks like Mary impressed him.

(15) \**é-g-a-bəð-ó*      *Kúku<sub>i</sub>-ŋ-nano* [ *Káka g-í-p-óŋó<sub>i</sub>* ]  
 1SG-CLG-RTC-fall-PFV Kuku-ACC-at      Kaka CLG-DPC1-beat-3SG.OM  
 'I stumbled across Kuku like Kaka was beating him<sub>i</sub>.' (intended)

2. Copy raising in English requires direct evidence (Asudeh and Toivonen 2012); while true for some HR-to-O, it is untrue for HR-to-S w/ 'continue' (8a) and HR-to-O with 'want':

(16) *é-g-a-bwáŋ-á*      *was-ŋŋ-o*      [ *k-é-dát-toð-a*      *ram* ]  
 1SG.CLG-RTC-want-IPFV CLG.wife-1SG.POSS-ACC      CLG-DPC1-ITER-move-IPFV early  
 'I want my wife to get up early'

3. Last, complementizers are never allowed in hyperraising, unlike control/prolepsis (§3).

→ The predicates above trigger overt A-movement to their subject or object position.

## 2.2 Hyperraising issues

Two factors seem to be involved in raising in Moro and other languages:

1. An EPP feature on T (R-to-S) or V (R-to-O) (cf. (Lasnik 2003))
2. A theory of CP/TP permeability (Carstens and Diercks 2013; Halpert 2016)

(17)  $[_{TP} \eta áw_{[DP]} \eta a_{[T:EPP]} [_{vP} r á m á \xi i a \dots [_{CP/TP} \langle \eta á w \rangle \eta é^{\downarrow} d á n é a ]]]$   
 water CL<sub>ŋ</sub>.RTC continue raining  
 'It kept raining' (Raising to Subject)

(18)  $[_{TP} (pro) \acute{e} g a [_{vP} -n n - á [_{VP} K ú k u_{[DP]} \langle n n \rangle_{[V:EPP]} [_{CP/TP} \langle K ú k u \rangle g é l á g á i k i ]]]]$   
 I 1SG.CLG.RTC heard Kuku cultivate in-field  
 'I heard Kuku cultivating in the field.' (Raising to Object)

Now compare English:

- (19) a. \*It<sub>i</sub> seemed [CP that t<sub>i</sub> was raining ]  
 b. \*I expected Kuku<sub>i</sub> [CP that t<sub>i</sub> cultivated in the field ]

→ What leads to the permeability of the pseudorelative clause?

### 3 Pseudorelatives in Moro as reduced clauses

Raising-to-object verbs can take a root-CP complement in addition to PRs:

- These root CP complements do not allow raising (20b)
- Compare the raising structure in (20c)

- (20) a.  $\acute{e}\text{-}g\text{-}a\text{-}n\text{-}\acute{o}$   $[\text{CP } \boxed{t\acute{a}} \text{ } \acute{is}:\acute{a} \text{ } j\text{-}\boxed{\Lambda}\text{-}bug\text{-}\acute{a}n\text{-}\acute{u}]$   
 1SG-CLg-RTC-hear-PFV COMP CLj.gun CLj-RTC-strike-PAS-PFV  
 ‘I heard that the gun was shot.’
- b. \* $\acute{e}\text{-}g\text{-}a\text{-}n\text{-}\acute{o}$   $\acute{is}:\acute{a}_i$   $[\text{CP } \boxed{t\acute{a}} \text{ } t_i \text{ } j\text{-}\boxed{\Lambda}\text{-}bug\text{-}\acute{a}n\text{-}\acute{u}]$   
 1SG-CLg-RTC-hear-PFV CLj.gun COMP CLj-RTC-strike-PAS-PFV  
 ‘I heard that the gun was shot.’
- c.  $\acute{e}\text{-}g\text{-}a\text{-}n\text{-}\acute{o}$   $\acute{is}:\acute{a}_i$   $[\text{COMP}/\lambda\text{COMP} \boxed{(*t\acute{a}/*n\acute{a})} \text{ } t_i \text{ } j\text{-}i\text{-}bug\text{-}\acute{a}n\text{-}\acute{u}]$   
 1SG-CLg-RTC-hear-PFV CLj.gun (COMP/ $\lambda$ COMP) CLj-DPC1-strike-PAS-PFV  
 ‘I heard the gun be shot.’ = (8b)

→ Not all clauses are permeable in Moro.

*In this section:* Moro pseudorelatives are structurally reduced clauses, equivalent to FinP/TP.

#### 3.1 Moro pseudorelatives are not Italian pseudorelatives

Pseudorelatives in Romance (Cinque 1995, ex. (1-2)) (these also occur in Greek):

- (21) a. Ho visto [ Mario che correva a tutta velocità ]. (Italian)  
 b. J’ai vu [ Mario que courait à toute vitesse]. (French)  
 c. I saw Mario running at full speed.

- If these constructions were identical to their Moro counterparts, we would have a good head start on understanding Moro pseudorelatives
- But syntactic and semantic properties of these constructions show they are distinct in certain instructive ways

In Italian (22), but not in Moro (23), there is good evidence from focus clefts that the bracketed constituent above form a constituent (Cinque 1995, ex. (5)):

- (22) MARIO CHE PIANGEVA, ho visto!  
 Mario that was weeping (focus), I saw

- (23) a. \* $\eta^w\acute{o}$ -[ $g\acute{u}k\acute{u}$   $g\acute{e}$ - $l\acute{a}g\acute{a}$   $i$ - $ki$ ] $_i$   $\acute{e}g\acute{o}$ - $(\eta\acute{o})$ - $n\acute{o}$   $t_i$   
 FOC-Kuku CLg.DPC1-saw.IPFV LOC-field 1SG.CLg.DPC2-3SG.OM-hear.PFV
- b.  $\eta^w\acute{o}$ -[ $matfiki$   $g\acute{i}$ - $pw\acute{a}$   $\acute{o}r\acute{a}b\acute{a}g\acute{w}\acute{a}$ ]  $\acute{e}g\acute{o}$ - $\eta\acute{o}$ - $bw\acute{a}n\acute{a}$   
 FOC-man CLg.DPC1-beat.IPFV lyre 1SG.CLg.DPC2-3SG.OM-like.IPFV  
 ‘It’s the man that plays the lyre who I like.’

- Cinque (1995) argues that PRs are small clauses with CP predicates.
- I will adopt this general idea, with the caveat that the DP obligatorily moves out of the PR in Moro (but apparently not in Italian)

Moulton and Grillo (2015) show that Italian PRs are instances of direct perception (24a), like infinitives (24b), but unlike finite CPs (24c):

- (24) a. *Gianni ha visto [ Maria piangere ] ...ma pensiva ridesse.*  
 Gianni has seen Maria cry.INF ...but thought laugh.SUBJ  
 ‘Gianni saw Maria cry but thought she was laughing.’ (Direct perception)
- b. *Gianni ha visto [ Maria que piangeva ] ...ma pensiva ridesse.*  
 Gianni has seen Maria that cry.IPFV ...but thought laugh.SUBJ  
 ‘Gianni saw Maria crying but thought she was laughing.’ (Direct perception)
- c. *Gianni ha visto dalle lacrime [ que Maria piangeva ] ...# ma pensiva ridesse.*  
 Gianni has seen from.the tears that Maria cry.IPFV ... but thought laugh.SUBJ  
 ‘Gianni saw Maria crying, #but thought she was laughing.’ (Indirect perception)

Additionally, Moulton and Grillo demonstrate that infinitive and PR direct perception have different semantics from each other:

- Infinitives are existentially quantified situations, and can be negated (25a), cf. (26a-b)
- PRs project existence presuppositions for the situation, akin to definites (25b), cf. (26c-d)
- Strikingly, Moro PRs pattern with Romance infinitives rather than PRs (27).

- (25) a. *Dato che Maria non ha mai ballato, Gianni non ha mai visto [Maria ballare].*  
 Given that M. NEG has never danced, G. NEG has never seen M. dance.INF.  
 ‘Since M. has never danced, G. has never seen M. dance.’
- b. *#Dato che M. non ha mai ballato, Gianni non ha mai visto [M. che ballava].*  
 Given that M. NEG has never danced, G. NEG has never seen M. that dance.IPFV.  
 ‘Since M. has never danced, G. has never seen M. dancing.’

- (26) a. John saw Mary leave.  
 b. John didn’t see Mary leave (...because she never left.)  
 c. John saw Mary’s departure.  
 d. John didn’t see Mary’s departure (...#because she never left.)

- (27) *báte-báte Kúku gé-nná (n=)áη-sétfá kúku-η*  
 never Kuku CLG.DPC1-neg.aux (λCOMP=)3SG.INF-watch.IPFV Kuku-ACC  
*gé-lágá gi*  
 CLG.DPC1-cultivate.IPFV field  
 ‘Kuku has never seen Kuku cultivating the field.’  
 →*Fine in a context where Kuku has never cultivated the field*

- Similar contrasts occur in other opaque environments, such as conditionals (not shown)

Moulton and Grillo: Italian PRs are definite descriptions describing a situation (ex. 24-25):

(28) [DP D [CP Maria C<sub>λ(1,2)</sub> [TP past/s<sub>2</sub> [AspP IPFV [VP ⟨Maria⟩ ballava ]]]]]

→ This can't be right for Moro, however, as Moro PRs aren't definite descriptions.

### 3.2 Moro pseudorelatives are not full CPs

Moro has two complementizers, both of which can be freely omitted in most environments:

*tá* (=COMP) occurs with root, subjunctive, and some infinitive object control complements (29)

*ná* (=λCOMP) occurs in instances of non-subject extraction and in some control clauses (30)

(29) COMPLEMENT CLAUSES WITH *tá*

- a. *éga-láñéta* [ *tá* *Kúk:u* *ká-gá*-*tundú* ]  
 1SG.CLG.RTC-know.IPFV COMP1 Kuku PST-CLG.RTC-cough.PFV  
 'I know that Kuku had coughed.'
- b. *éga-mwandəðó* *Kúk:u-ŋ* [ *tá* *gə*<sup>↓</sup>*noáná* *ðamala* ]  
 1SG.CLG.RTC-ask.PFV Kuku-ACC COMP1 CLG.DPC2-watch.IPFV CLj.camel  
 'I asked Kuku that he watch the camel.'
- c. *é-g-a-mwandəð-ó* *kúk:u-ŋ* [ *tá* *áñá*<sup>↓</sup>*búgí* *ís:iá* ]  
 1SG-CLG-RTC-ask-PFV Kuku-ACC COMP1 3SG.INF-hit.INF1 CLj.gun  
 'I asked Kuku to shoot the gun.'

(30) CLAUSES WITH *ná* (which can double)

- a. *jamalá* [ -s:ə *ná*= *Kúk:u* *ná*-*gá*-*sətfú* ]  
 CLj.camel -REL.OP λ.COMP= Kuku COMP2-CLG.DPC2-see.PFV  
 'the camels that Kuku saw'
- b. *Kúk:u g-əndəfínú* [ *n*=*áñá*<sup>↓</sup>*láváfa* *ñál:o-ŋ* ]  
 Kuku CLG.(RTC)-try.PFV λ.COMP=3SG.INF-hide.INF2 Ngalo-ACC  
 'Kuku tried to hide Ngalo.'

All raising environments prohibit overt complementizers (Jenks and Rose to appear):

- (31) a. *Kúk:u g-íð-á* (\**tá*) *áñá*<sup>↓</sup>*ɕóm-é*  
 Kuku CLG-(RTC)-do/will-IPFV COMP1 3SG.INF-move-INF1  
 'Kuku will move.'
- b. *é-g-a-bwáñá* *ñáw* (\**tá*) *áñá*<sup>↓</sup>*dán-é*  
 1SG-CL-RTC-want.IPFV CLj.water (COMP1) 3SG.INF-rain-INF1  
 'I want it to rain.'

- I conclude that all raising environments in Moro are not full CPs (cf. Bošković 1997)
- Subject relative clauses and PRs lack complementizers, so they must also be reduced

### 3.3 A proposal

(32) [ForceP Force [FinP Fin [TP T ... ] ] ] (Rizzi 1997)

- a. English C  $\longleftrightarrow$  [ Force, Fin ]
- b. Moro C  $\longleftrightarrow$  [ Force ]
- c. Moro T  $\longleftrightarrow$  [ Fin, T ]

- [Spec, FinP] is the A-position for subjects in Moro
- Accounts for the independence of force and finiteness in Moro

(33) Complementizers

- a. *tá*  $\longleftrightarrow$  [Force:Decl ]
- b. *ná*  $\longleftrightarrow$  [Force:Decl, uWh]

(34) Clause vowels

- a. *a*  $\longleftrightarrow$  [Fin: Indicative]
- b. *á*  $\longleftrightarrow$  [Fin: Subjunctive]
- c. *é*  $\longleftrightarrow$  [Fin: Predicative]

(35) [VP see [PredP Kuku Pred $_{\lambda s}$  [TP *s* [AspP IPFV [VP ⟨Kuku⟩ cultivating the field ]]]]]

#### Syntax

- Subjects raise to [Spec,PredP] due to an EPP feature on Pred
- This is also an A-position, and can feed further A-movement (raising, passives)
- A movement always reconstructs

#### Semantics

- CP-sized PredPs denote sets of situations
- Pseudo-relative selecting verbs have lexical entries that can take sets of situations as their internal argument

- (36) a.  $[[\text{PredP}] = \lambda s. \exists s' [s \leq s' \ \& \ \text{cultivate}(\mathbf{k}, \iota \text{field}, s)]$   
 b.  $[[\text{see}_1] = \lambda P_{\langle s, t \rangle}. \lambda e. \exists s'' [ \text{see}(s'', e) \ \& \ P(s'') ]]$   
 c.  $[[\text{VP}] = \lambda e. \exists s'' [ \text{see}(s'', e) \ \& \ \exists s' [ s'' \leq s' \ \& \ \text{cultivate}(\mathbf{k}, \iota \text{field}, s'') ] ]]$

This account naturally extends to DPC1 in absolute clauses (Rose et al. 2014, ex. 29):

- (37) *ɲá:l:o ga-válóna lədží l-é-lál-ləvəŋfa um:iə*  
 Ngalo CLG.RTC-PROG.sing.IPFV cll.man CLL-DPC1-ITER-hide.IPFV clg.boy  
 ‘Ngalo is singing while the men are hiding the boy.’

- Some rule of situation-identification will allow these to modify matrix TP
- (37) also shows that DPC1 can occur with an overt subject, so it isn't *wh*-agreement.

Unlike full ForcePs, I suggest that FinPs are not phases.

- Normal relative clauses are islands for extraction (38)
- But PR complements are transparent for extraction (39)

- (38) a. *Kúku ga-b<sup>w</sup>ápá madzǐ-ki* [ *g<sup>w</sup>ano* *ηálo-η* ]  
 Kuku CLg.RTC-like.IPFV man-REL.OP CLg.(DPC1)-insult.PFV Ngalo  
 ‘Kuku likes the man who insulted Nalo.’
- b. \**η<sup>w</sup>ǎ-dzǎ-ki Kúku ga-b<sup>w</sup>ápá madzǐ-ki* [ *g<sup>w</sup>arǎ-(ηó)* ]  
 FOC-who-REL-OP Kuku CLg.RTC-like.IPFV man-REL.OP CLg.(DPC1)-insult.PFV-(3SG.OM)  
 Intended: ‘Who does Kuku like that man who insulted (him)?’
- (39) *ηw-Andá-ki nǎ=ηálo gǎ-setfú kúku-η* [ *gí-vǎlíǎ* ]  
 FOC-what-REL-OP λCOMP=Ngalo CLg.DPC2-see.PFV Kuku-ACC CLg.DPC1-buy.IPFV  
 ‘What did Ngalo see Kuku buy?’

- Carstens and Diercks (2013) make a similar proposal for Lubukusu, which only allows one of two kinds of complementizers in hyperraising
- Brazilian Portuguese hyperraising clauses exceptionally allows null subjects in finite clauses, possibly a sign of reduced size (Nunes 2008)
- Additional factors may also be possible for allowing hyperraising, including whether the C heads bear  $\phi$ -features (Halpert 2016).
- Moro C heads clearly lack  $\phi$ -features (they can’t be subjects, can’t trigger agreement) so they would not be expected to be interveners for A-movement in Halpert’s system.

## 4 Case and hyperraising

Moro is a dependent accusative case language (Jenks and Sande 2016)

- Subjects never receive morphological case features
- As a result, no conflicting case requirements arise after raising, even from finite clauses

### 4.1 Dependent vs. lexically governed case

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

- (40) **Moro Dependent Case Rule**  
 If there are two DPs in  $\phi$ , and DP1 c-commands DP2,
- Value DP2 as accusative.
  - Where  $\phi=\{CP, DP\}$

## 4.2 Evidence for Dependent Case in Moro

Four arguments in favor of dependent accusative case in Moro:

1. Both internal arguments of a ditransitive verb show accusative case.
2. The lower argument shows accusative case marking when a ditransitive is passivized.
3. In a genitive construction, the lower noun shows accusative case.
4. When two DPs are coordinated, the lower one (the second conjunct) shows accusative case, even in subject position.

### Argument 1: Ditransitives

Both objects of ditransitive verbs surface with accusative case:

- (41) *éga-nac-ó      ɲáɓlo-ŋ      kója-ŋ*  
 1SG.RTC-give-PFV Ngallo-ACC 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.

### Argument 2: Passives

Accusative case is still assigned to internal arguments in passives:

- (42) *ɲáɓlo    gA-nac-ən-ú      kója-ŋ*  
 Ngallo CLG.RTC-give-PASS-PFV Koja-ACC  
 ‘Ngallo was given to Koja’ / ‘Ngallo was given Koja’

- If accusative case is assigned by  $v_{agent}$ , it should disappear in passive contexts

### Argument 3: Bare nominal complements

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

- (43) a. *lənge Kúku-ŋ*      b. *lənɣ-en      gá-Kúku*  
 mom Kuku-ACC      mother-3.poss CLG.poss-Kuku  
 ‘Mom of Kuku’      ‘Kuku’s mom’  
 c. *eɽá Kúku-ŋ*      d. *eɽ-en      gá-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 (??), an Agree-based analysis of accusative case is untenable.
- Kúku (43a,c) is the complement of ‘mom’/‘dad’, making it eligible for dependent case
- In (43b,d), the possessors raise to [Spec,  $n$ ] which assigns inherent genitive case

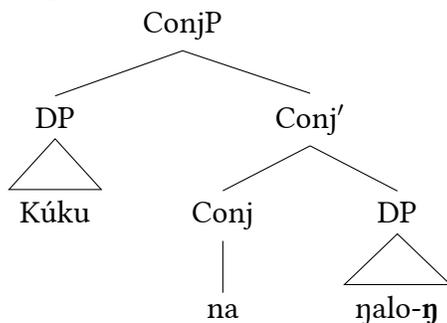
#### Argument 4: DP Coordination

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

- (44) *Kúku na ηalo-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.

- (45) **Dependent case assignment in coordination**



### 4.3 Raising into dependent case

- (46)  $[_{TP} (pro) \acute{e}ga \quad [_{vP} -nn-\acute{a} [_{VP} Kúku_{[DP]} \langle nn \rangle_{[V:EPP]} [_{CP/TP} \langle Kúku \rangle \acute{g}el\acute{a}g\acute{a} \acute{i}ki \quad ]]]]$   
 I 1SG.CLG.RTC heard Kuku cultivate in-field  
 ‘I heard Kuku cultivating in the field.’ (Raising to Object)

- Once moved, the raised DP will receive dependent ACC.
- Languages where nominative is assigned by T should not allow hyperraising
- Carstens and Diercks 2013; Diercks 2012: Bantu lgs with hyperraising lack nominative case

## 5 Conclusion

Summary of main points:

- Moro allows raising-to-subject and raising-to-object out of finite clauses (hyperraising)
- The environments that allow hyperraising are structurally impoverished FinPs
- Moro allows subjects, which lack case, to move into different case positions

The resulting picture doesn't actually look that different from English:

- Raising is only allowed with infinitives
- Infinitive clauses lack a CP layer and are transparent to extraction (Bošković 1997)
- Infinitive T doesn't assign nominative case, allowing DPs to move into higher case positions

**What about Licensing?** Nothing about the Moro system indicates that DPs *need* (abstract) Case

- We can account for the patterns above by taking morphological case patterns seriously
- Postulating abstract Case on finite subjects would create a problem

→ We're better off without abstract Case (McFadden 2004; Landau 2006)

**Acknowledgements** I'm very grateful to Elyasir Julima and Angelo Nasir for their gracious help and insight on this project. I'm also grateful to Sharon Rose and Hannah Sande, who collaborated on different aspects of this project, and to Amy Rose Deal, Line Mikkelsen, and an audience at UC Berkeley for helpful comments. This work was supported by the Hellman Fellows Foundation.

## References

- Asudeh, Ash, and Ida Toivonen. 2012. Copy raising and perception. *Natural Language and Linguistic Theory* 30:321–380.
- Baker, M. 2015. *Case*. Cambridge University Press.
- Bošković, Željko. 1997. *The syntax of nonfinite complementation: An economy approach*. Cambridge, MA: MIT Press.
- Carstens, Vicki, and Michael Diercks. 2013. Parameterizing case and activity: Hyper-raising in Bantu. In *Proceedings of NELS 40*, ed. Seda Kan, Claire Moore-Cantwell, and Robert Staubs, volume 1, 99–118.
- Cinque, Guglielmo. 1995. The pseudo-relative and ACC-ing construction after verbs of perception. In *Italian syntax and universal grammar*, 244–275. Cambridge: Cambridge University Press.
- Diercks, Michael. 2012. Parameterizing case: Evidence from Bantu. *Syntax* 15.3.
- Halpert, Claire. 2016. Raising parameters. In *Proceedings of WCCFL 33*, ed. Kyeong min Kim et al., 186–195.
- Jenks, Peter, and Sharon Rose. to appear. Documenting raising and control in Moro. In *Africa's endangered languages: Documentary and theoretical approaches*, ed. Jason Kandybowicz and Harold Torrence. Oxford University Press.
- Jenks, Peter, and Hannah Sande. 2016. Case and caselessness in Moro. Presentation at NELS 47.
- Landau, Idan. 2006. Severing the distribution of PRO from case. *Syntax* 9:153–170.
- Lasnik, Howard. 2003. *Minimalist investigations in linguistic theory*. Routledge.
- Marantz, A. 1991. Case and licensing. Ms.
- McFadden, Thomas. 2004. The position of morphological case in the derivation: A study on the syntax-morphology interface. Doctoral Dissertation, University of Pennsylvania.
- Moulton, Keir, and Nino Grillo. 2015. Pseudo-relatives: Big and direct. In *Proceedings of NELS 45*.
- Nevins, Andrew. 2004. Derivations without the activity condition. In *Mit working papers in linguistics 49*, 287–310. MITWPL.
- Nunes, Jairo. 2008. Inherent case as a licensing condition for A-movement: The case of hyper-raising constructions in Brazilian Portuguese. *Journal of Portuguese Linguistics* 7:83–108.
- Rizzi, L. 1997. The fine structure of the left periphery. In *Elements of grammar: A handbook of generative syntax*, ed. L. Haegeman, 281–327. Dordrecht: Kluwer.
- Rose, Sharon, Farrell Ackerman, George Gibbard, Peter Jenks, Laura Kertz, and Hannah Rohde. 2014. In-situ and ex-situ wh-question constructions in Moro. *Journal of African Languages and Linguistics* 35:91–125.
- Ura, Hiroyuki. 1994. *Varieties of raising and the feature-based bare phrase structure theory*, volume 7 of *MIT Occasional Papers in Linguistics*. MITWPL.