The Syntax and Morphology of Focus in Dagbani

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Introduction

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- Dagbani has two markers of ex-situ focus: n/m/ŋ and ka.
- What is the distribution?
- · How do we explain the distribution?
- Wider Question: How does Dagbani (and the analysis thereof) fit in with other languages of the region?

Introduction

- · Basic cases:
- (1) a. Abu ń dá búkù máá
 Abu FOC buy.PERF book DEF
 'ABU bought the book.'
 - b. Búá máá kà Abu dá goat DEF FOC Abu buy.PERF 'Abu bought THE GOAT.'

Traditional Description

- Traditionally:
 - *n* is the marker of focussed **subjects**.
 - ka marks all other arguments and adjuncts.
- Surprise: allomorphy of focus marker based on Grammatical Function.
- Bigger question: what can allomorphy be sensitive to?

The Distribution of the Markers

Introduction: Background

Focus in West African languages (Fiedler et al., 2010) (Informal version)

- Subjects and non-subjects often (not always) behave differently under focus in the languages of West Africa.
- Subject marking of focus is consistenly more robust than marking of non-subjects.

Introduction: Background

Marking asymmetry (Fiedler et al., 2010) (Official version)

- Non-subject focus cannot or need not be marked syntactically.
 - Non-subject focus is restricted to *in-situ* positions (Bole, Duwai, Bade, Ngamo (all Chadic))
 - NSF is not restricted to *in-situ* positions (Mabia, Kwa, Hausa (Chadic))
- Subject focus must be marked

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- · Subject focus must be marked
- Takeaway conclusion: subject focus is different.
- This holds whether focus is prosodically, syntactically or morphologically marked.

Dagbani: Background

• Dagbani is a Mabia (Gur) language spoken in Northern Ghana.



Figure 1: Dagbani: (Hammarström et al., 2018)

Dagbani: Morphosyntactic characteristics

- Strongly analytic morphology
- Rigidly SVO word order
- (2) a. Abu tú bíá máá Abu insult.perf child Def 'Abu has insulted the child'
 - b. * Bíá máá Abu tú
 child DEF Abu insult.PERF
 'Abu has insulted the child'
 - c. * Abu bíá máá tú
 Abu child DEF insult.PERF
 'Abu has insulted the child'

Asymmetry

- Morphological distinction between subjects and non-subjects.
- (3) a. Abu ń dá búkù máá

 Abu Foc buy.PERF book DEF

 'ABU bought the book.' (subject focus)
 - b. * Abu kà dá búkù máá
 Abu Foc buy.PERF book DEF
 intended: 'ABU bought the book.' (subject focus)
 - c. Búá máá kà Abu dágoat def foc Abu buy.perf'Abu bought THE GOAT.' (object focus)
 - d. * Búá máá ń Abu dá
 goat def foc Abu buy.perf
 intended: 'Abu bought THE GOAT.' (object focus)

Side note: Gurene (Mabia) is the same

- Dagbani is not alone in this pattern.
- (4) a. a-nı n zàa nyé bừdáa lá?
 a-WH FOC yesterday see man DEF
 Who saw the man yesterday?' [Dakubu 2003, p. 4]
 - b. á-nı ŋmè ?ì a-wн beat 3sg.inт Who beat him?' [Dakubu 2003, p. 4]
 - c. bá-nı tì fờ nyε?ba-wн ғос 2sc seeWho (what group) did you see?' [Dakubu 2003, p. 4]
 - d. lòg-kứ-nì tì fừ nyε?
 thing-ku-wh Foc 2sc see
 Which thing did you see?' [Dakubu 2003, p. 4]

Side note: Kusaal (Mabia) is the same

- (5) a. múì kà bà sá dī.rice Foc 3PL PST eatIt is rice that they ate yesterday (not beans)' [Abubakari 2016]
 - b. Dáú lá ń dā' bứ

 g lá.

 man def foc buy goat def

 'It is the man that bought the goat (not the woman)'

 [Abubakari 2016]

Sisaala (Mabia, Pisaali dialect) is the same

a. Duma yəbə loori.

(6)

Duma buy car. 'Duma has bought a car' [Dumah 2016, p. 6] b. Duma rε yɔbɔ loori. Duma Foc buy car. 'It is Duma who bought a car' [Dumah 2016, p. 6] c. Emma nyogo daasi. Emma burn sticks 'Fmma burnt sticks' [Dumah 2016, p. 7] d. Daasi nε Emma nyɔgɔ sticks Foc Emma burnt 'It is sticks that Emma burnt.' [Dumah 2016, p. 7]

Subjects vs. Other?

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- However, embedded subjects combine with ka, and not n.
- (8) Do so ka n wum ni o da lorri man certain; Foc I heard that he buy car 'I heard that A (CERTAIN) MAN bought the car.'

Subjects vs. Other?

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 - [n] is a focus particle that combines with SUBJECTS.
 - [ka] combines with other focused elements.
- However, embedded subjects combine with *ka*, and not *n*.
- (9) Do so ka n wum ni o da lorri man certain; Foc I heard that he buy car 'I heard that A (CERTAIN) MAN bought the car.'
- This suggests a two-way difference between matrix subjects vs. everything else.
- However, syntactic differences do not back up this dichotomy.

Island Violations

- It is possible to extract from a coordination in an embedded subject position:
- (10) Mary; ka m wun ni [o; mini Abu] da loori Mary; Foc I heard that [she; and Abu] buy-perf car 'I heard that MARY and Abu bought a car.'
 - Other islands are able to be violated too.
- (11) ŋùníɨ kà á béhím bòndálí kà òɨ kàná? who foc 2sg wonder when foc 3sg come.perf 'Who do you wonder when she/he came?'

Island Violations: Only embedded subjects

- This is not possible with matrix subjects, or non-subjects.
- (12) a. * Abu; ń t; míní Chentiwuni dá lòòrí
 Abu Foc and Chentiwuni buy.perf a.car
 'ABU and Chentiwuni bought a car.'
 - b. * Chentiwuni; ń Abu míní t; dá lòòrí
 Chentiwuni Foc Abu and buy.PERF a.car
 intended: 'Abu and CHENTIWUNI bought a car.'
- (13) a. * Abu $_i$ kà Wumpini nyá $[t_i$ míní Chentiwuni]. Abu Foc Wumpini see.PERF [and Chentiwuni] 'Wumpini saw ABU and Chentiwuni.'
 - b. * Chempang_i kà Abu nyá Napari mínì t_i
 Chempang Foc Abu see.PERF Napari and
 intended: 'Abu saw Napari and CHEMPANG'

Island Violations: Only ESF

(14)

a.

 This holds for other islands as well — it is *only* embedded subjects that can violate them.

who FOC Wumpini make.PERF claim that 3SG see.PERF búá?
goat
'Who has Wumpini made the claim that he has seen a goat?'

ηùní; kà Wumpini tò jíná nì ò; nyá

b. * ŋúní_i kà ò tó jíná ní ò_i nyá yá t_i? who Foc 3sg make claim that 3sg see.PERF 'Who has s/he made the claim that he has seen?'

How to focus a coordination

- With matrix subjects and non-subjects, to focus one part of a coordination, you need to put the focus marker after the entire coordination.
- (15) a. Napari míní Mbangba kà tí sà pùhí. Napari and Mbangba Foc 1PL PST greet.PERF 'We greeted NAPARI and Mbangba yesterday.'
 - b. Napari míní Wumpini ń dá lòòrí Napari and Wumpini Foc buy.PERF lorry
 'NAPARI and Wumpini have bought a car.'

ESF requires resumption

(16) a. Búá só; kà ń tèhí nì *(ò;) kpé dúú máá goat certain Foc 1sg think.perf C 3sg enter room def ní Loc

'A CERTAIN GOAT I think that it has entered the room'

- b. Abu_i ń (*o_i) dá búkù máá
 Abu Foc he buy.perf book def
 'ABU bought the book.'
- c. Búá máá_i kà Abu dá (*o_i) goat DEF FOC Abu buy.PERF it 'Abu bought THE GOAT.'

ESF from within coordination

(17) a. Chempang; kà m wún nì *(ò;) míní Abu dá
Chempang; Foc I heard that he; and Abu buy.perf
lòòrí
car

'I heard that CHEMPANG and Abu bought a car.'

ESF from islands

- (18) a. ŋùníɨ kà á béhím bòndálí kà òɨ kàná? who foc 2sg wonder when foc 3sg come.perf 'Who do you wonder when she/he came?'
 - b. * Bò ká á béhím ní wúlàzùγú ká ó kɔhí
 Whatfoc 2sg that why foc 3sg sell.perf
 'What do you wonder why he/she sold?'

ESF from islands

- (19) a. ŋùníɨ kà Wumpini tò jíná nì òɨ nyá
 who foc Wumpini make.perf claim that 3sg see.perf
 búá?
 goat
 'Who has Wumpini made claim that he has seen a
 goat?'
 - b. * ŋúní_i kà ò tó jíná ní ò_i nyá yá t_i? who Foc 3sg make claim that 3sg see.PERF 'Who has s/he made the claim that he has seen?'

Summary

	Marker	Resumption?	Island Extraction?
MSF	n/m/ŋ	Х	Х
ESF	ka	\checkmark	✓
NSF	ka	×	X

Table 1: Interim Summary

Sidenote

- Though characterised above as a difference between matrix subjects and embedded subjects, the reality is that it is length of movement that is the distinguisher.
- When embedded subjects 'move' to the embedded left periphery, they appear with *n* and no resumptive.
- (20) Wumpini yèlí-yá nì Mbangba ń/* kà dá lòòrí. Wumpini say.perf-dj that Mbangba foc buy.perf car 'Wumpini said that MBANGBA bought a car.'
 - It is then a difference of short vs. long subject movement.

Why use resumptives for non-local

subjects?

Subject Resumption

- Dagbani is far from the only language to use resumption when there is an A'-dependency such as focus.
- A matrix subject vs. embedded subject disparity is also well-attested.
- Irish (McCloskey, 1990):
- (21) a. * fear nár fhan sé sa bhaile man C.NEG.PST remained he at home 'a man that didn't stay at home.'

[Irish]

 an fear an dhúirt mé go dtiocfadh sé the man C said I C would-come he 'the man that I said (he) would come.'

Subject only focus

- What is more curious about Dagbani is that resumptives are only allowed in the embedded subject position.
- This is in contrast to many other languages, where resumptives are possible for all positions.
- (22) a. Búá só; kà ń tèhí nì *(ò;) kpé dúú máá ní goat certain FOC 1sG think.PERF C 3sG enter room DEF LOC 'A CERTAIN GOAT I think that it has entered the room'
 - Abu_i ń (*o_i) dá búkù máá
 Abu Foc he buy.PERF book DEF
 'ABU bought the book.'
 - c. Búá máá_i kà Abu dá (*o_i) goat def foc Abu buy.perf it 'Abu bought THE GOAT.'

Elements of the analysis: Subjects in Spec,TP

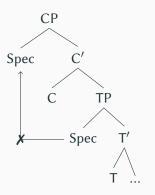
- We can assume that there is a very strong requirement that the subject move to Spec,TP in Dagbani (= the traditional EPP, of sorts).
- As noted earlier: argument structure is rigidly SVO.
- Subjects appear before tense morphemes:
- (23) Ábú sà bú bíhí máa. Abu past beat.perf children def 'Abu beat the children yesterday.'
 - Subjects therefore can be assumed to canonically raise to Spec,TP.

Elements of the analysis: Antilocality

- Antilocality: movement cannot be too short.
- Range of proposals: Schneider-Zioga (2007), Grohmann (2011), Erlewine (2016), and Douglas (2017).

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- Range of proposals: Schneider-Zioga (2007), Grohmann (2011), Erlewine (2016), and Douglas (2017).
- · Key idea for us:



- It is not possible to move from the specifier of a projection to the specifier of the immediate projection above it.
- Movement from Spec,TP to Spec,CP violates this.

Elements of the analysis: Embedded Subjects

- Combining these, a possible way to solve the problem presents itself.:
 - The subject DP is directly generated in Spec,CP
 - ightharpoonup licenses the information structure feature on C
 - A resumptive fills Spec,TP
 - *fulfills the EPP.*
 - A'-binding between the two ensures the resumptive is interpreted correctly.

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 (24) \quad [_{CP} \; Focus_i \; [ \; _{C'} \; ka \; [_{TP} \; Subj \; [_{VP} \; V \; Obj \; [_{TP} \; ResPr_i \; [_{VP} \; V \; Obj \; ] \; ] \; ] \; ] \; ] \; ] \; ]
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Embedded Subjects

- So, why not do this with a matrix subject?
- McCloskey (1990): resumptive pronouns cannot be bound too closely.
- ★ The Highest Subject Restriction.
- (25) a. * fear nár fhan sé sa bhaile man C.neg.pst remained he at home 'a man that didn't stay at home.' [Irish]
 - an fear an dhúirt mé go dtiocfadh sé the man C said I C would-come he 'the man that I said (he) would come.'

Elements of the analysis

- If we try to repeat the trick for matrix subjects:
 - · The subject DP is directly generated in Spec,CP
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 - A resumptive fills the matrix Spec,TP
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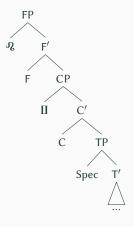
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 - A'-binding needed between the two ensures the resumptive is interpreted correctly.
 - This is problematic, since the resumptive would be bound too closely and violate the Highest Subject Restriction.
- Matrix subject focus is then stuck.
- There is seemingly no way to reconcile moving between Spec,TP and Spec,CP.

Why are there two focus markers?

Proposal: Outline

 We propose that Dagbani resorts to generating an extra projection above Spec,CP to give the subject room to move.

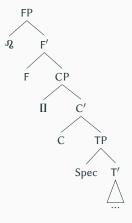


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This will be immediately revised

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 \mathcal{R} = position for (locally) moved subject foci Π = position for other focus arguments F = nC = ka

This will be immediately revised

FP...

- · What could FP be?
- It is in complementary distribution to *ka*.
- This suggests that it is related to the head that *ka* expresses.
- Let's assume then that it is the same type of head as the one that expresses ka, that is, a C head with an interpretable focus feature.
- Proposal: In order to give the subject space to move, Dagbani allows the CP to be iterated.

Proposal: Iterate CP

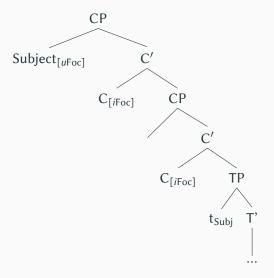
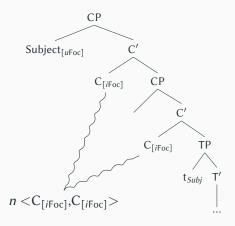


Figure 2: An iterated CP

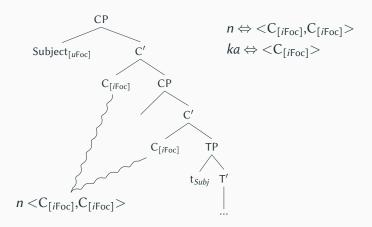
Iterating CP: More useful than you'd think

• This allows us to model the difference between *n* and *ka*.



Iterating CP: More useful than you'd think

• This allows us to model the difference between *n* and *ka*.



Iterating CP

- The two focus marker strategy then is the result of a conspiracy of factors:
 - 1. Subjects have to move to Spec,TP.
 - 2. Subjects have to move to Spec, CP if focussed.
 - 3. A resumptive pronoun cannot violate the HSR.
 - 4. Movement must obey antilocality.
- Iterating the CP then allows for enough syntactic distance for local subjects to move without needing a resumptive pronoun, and not violating antilocality.

Could it be anything else?

- Not that we can think of.
- In Issah and Smith (To Appear), we show that the following do not work:
 - C-T bundling (where T and C combine to form a single head, à la Bennet, Akinlabi, and Connell, 2012; Martinović, 2015; Erlewine, 2018).
 - n as a marker of in-situ focus.
 - n as an exceptional licensor of nominative case.
- There is empirical evidence and conceptual arguments against all of these.

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 - n as a marker of in-situ focus.
 - *n* as an exceptional licensor of nominative case.
- There is empirical evidence and conceptual arguments against all of these.
- Although the CP-iteration is not pretty, it at least works, is empirically supporting, and offers an explanation of the two focus markers.



Conclusions

- Dagbani obeys the requirement in West African that subject focus must be marked (Fiedler et al., 2010).
- Dagbani somewhat unique in how it resolves subject focus marking.
- Iterating the CP allows distance.
- Voabularly Insertion and allomorphy can be sensitive to the number of instances of a given feature (Moskal and Smith, 2016; Smith et al., 2019)

Outstanding Questions

- Why is CP-iteration to resolve this situation so rare?
- The same confluence of factors is found in many other West African languages (Issah and Smith, in prep): without

References i

References

- Abubakari, Hasiyatu (2016). *Contrastive focus particles in Kusaal.*Poster presented at ACAL 47.
 - Bennet, Wm G., Akinbiyi Akinlabi, and Bruce Connell (2012). "Two subject asymmetries in Defaka focus constructions". In:

 Proceedings of the 29th West Coast Conference on Formal

 Linguistics. Ed. by Jaehoon Choi et al. Somerville, MA: Cascadilla

 Proceedings Project, pp. 294–302.
- Dakubu, M. E. Kropp (2003). *Interrogative structures in Farefare*.

 Manuscript, Insitute of African Studies, University of Ghana.

References ii





Erlewine, Michael Yoshitaka (2016). "Anti-locality and optimality in Kaqchikel Agent Focus". In: *Natural Language and Linguistic Theory* 34.429-479.

 (2018). "Extraction and licensing in Toba Batak". In: Language 94.3, pp. 662–697.

Fiedler, Ines et al. (2010). "Subject focus in West African languages". In: Information structure: theoretical, typological and experimental perspectives. Ed. by Malte Zimmermann and Caroline Féry. Oxford: Oxford University Press, pp. 234–257.

References iii

- Grohmann, Kleanthes (2011). "Anti-Locality: too close relations in grammar". In: *The Oxford handbook of linguistic Minimalism*. Ed. by Cedric Boeckx. Oxford: Oxford University Press, pp. 260–290.
- Hammarström, Haroald et al. (2018). *Glottolog 3.2.* Available online at http://glottolog.org, Accessed on 2018-02-04.
- Issah, Samuel A. and Peter W. Smith (in prep). Subject extraction strategies in West African languages. Manuscript.
 - (To Appear). "Subject and non-Subject ex-situ Focus in Dagbani".
 Glossa.
- Martinović, Martina (2015). "Feature geometry and head-splitting: Evidence from the morphosyntax of the Wolof clausal periphery". PhD thesis. Chicago, II: University of Chicago.

References iv

- McCloskey, James (1990). "Resumptive Pronouns, A'-Binding, and Levels of Representation". In: *The Syntax of the Modern Celtic Languages*. Ed. by Randall Hendrick. Vol. 23. Syntax and Semantics. Academic Press, pp. 199–248.
- Moskal, Beata and Peter W. Smith (2016). "Towards a theory without adjacency: Hyper-contextual VI-rules". In: *Morphology* 26.3-4, pp. 295–312.
- Schneider-Zioga, Patricia (2007). "Anti-agreement anti-locality and minimality: The syntax of dislocated subjects". In: *Natural Language and Linguistic Theory* 25.2, pp. 403–446.
- Smith, Peter W. et al. (2019). "Case and number suppletion in pronouns". In: *Natural Language and Linguistic Theory* 37.3, pp. 1029–1101.