

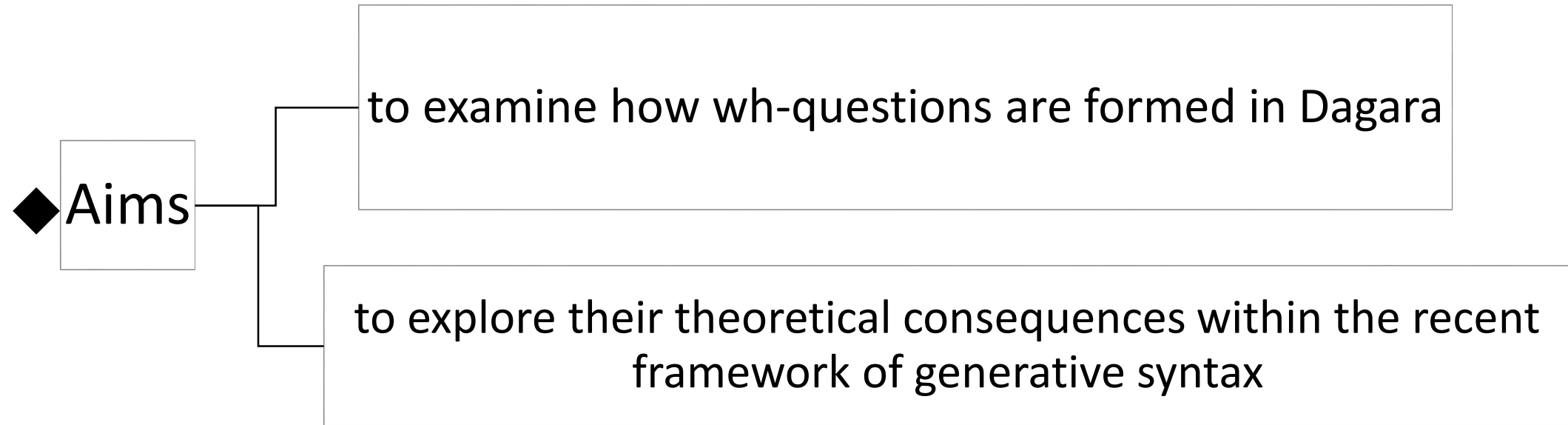
On movement of wh-phrases in Dagara

Alain Noindonmon Hien

Graduate School of International Cultural Studies

Tohoku University (Sendai, Japan)

1. Introduction



- ◆ Dagara is a Mabia (ex-Gur) language spoken in Burkina Faso and Ghana.
- ◆ 720,000 to 840,000 native speakers (Cf. SOME 2013: 19)

1. Introduction

- ◆ **Dialects:** 1. Dagara Wule, Dagara Lobr → Northern Dagara (Burkina Faso)
 - 2. Dagaare → Southern/Central Dagara (Ghana)
 - 3. Dagaari-Dioula → (Burkina Faso)
- (Eberhard et al. 2019)

◆ Dagaare is argued to be an obligatory wh-movement language

(1) a. **Bong** la ka fo da nyε_ ?

what F that you PAST see

b. *Fo da nyε la **bong** ?

you PAST see F what

‘What did you see?’

(Hiraiwa et al. 2017: 15)

1. Introduction

(2) Dagara

a. **Bò** nu ka fu ta nyε_ ?

what FOC that you PAST see

b. Fu ta nyε-n **bò** ?

you PAST see-AFF what

‘What did you see?’

(2a-b) are grammatical.

1. Introduction

1.1 Research Questions

- (i) What triggers movement of wh-phrases in wh-questions in this language?
- (ii) How are wh-phrases in situ licensed in Dagara?
- (iii) What can wh-questions in Dagara tell us about the theory of movement?

1. Introduction

1.2. Hypotheses

H1: Movement of wh-phrases in the language is a case of focus movement.

H2: When wh-phrases are in situ, they are licensed by C via LF wh-movement.

H3: LF wh-movement and overt focus movement obey the same constraints in Dagara

1. Introduction

1.3. Data Collection

◆ The data presented here were collected in Burkina Faso.

I constructed well-formed and ill-formed Dagara sentences based on my native intuition and asked other native speakers (15 speakers) of Dagara for an acceptability judgment.

◆ The same data were translated into Dagaare and judged by 20 native Dagaare speakers in Ghana. There was no significant difference between the two dialects.

1. Introduction

1.4. The Outline of the presentation

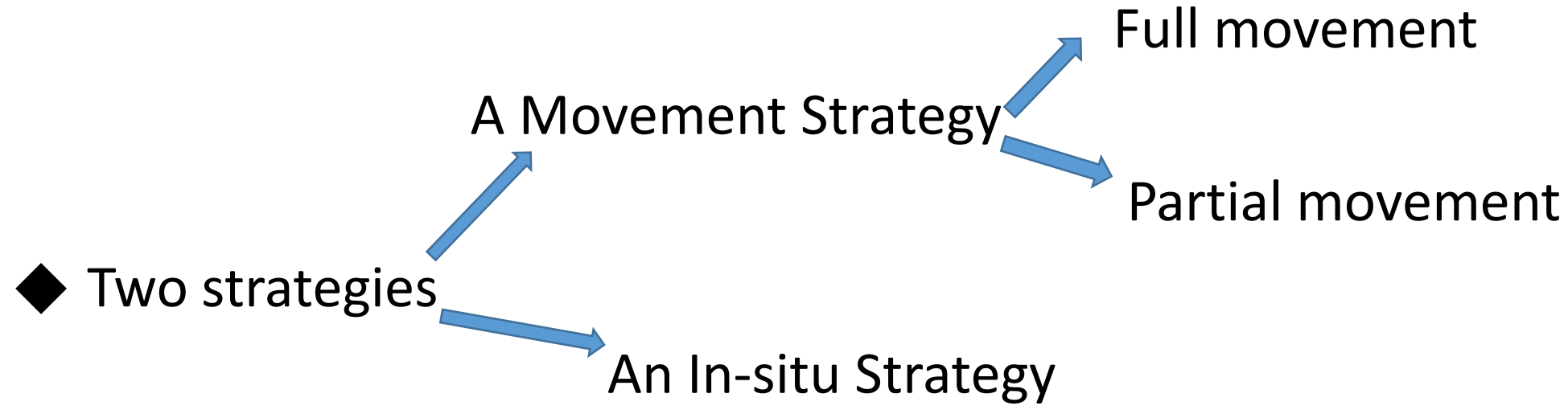
Section 2: The formation of wh-questions in Dagara.

Section 3: Overt movement of wh-phrases in Dagara

Section 4: How wh-phrases in situ are licensed in Dagara

Section 5: Conclusion

2. The Formation of Wh-Questions in Dagara



2. The Formation of Wh-Questions in Dagara

2.1. A Movement Strategy

(Matrix wh-questions)

(3) a. **Ànú** *(nu) ka Ayuo nyε _?
who FOC that Ayuo saw
'Who did Ayuo see?'

b. **Bò** *(nu) _ dún Ayuo?
what FOC bit Ayuo
'What bit Ayuo?'

c. **ηmηmηn** *(na) ka fu máál a mobiil _?
how Foc that you fixed the car
'How did you fix the car?'

Ka is optional in (3a, c).

Ka is absent when a subject wh-phrase undergoes movement.

2. The Formation of Wh-Questions in Dagara

2.1. A Movement Strategy (Embedded wh-questions)

(5) a. Ànú *(nu) ka Ayuo yèl ka mobiil ημε _ na?

who Foc that Ayuo said that car hit AFF

'Who did Ayuo say that a car hit?'

b. Ayuo yèl la ka Ànú *(nu) ka mobiil ημε _ ?

Ayuo said AFF that who Foc that car hit

'Who did Ayuo say that a car hit?'

2. The Formation of Wh-Questions in Dagara

2.1. A Movement Strategy (Embedded wh-questions)

(6) a ***Ànú** nu ka Ayuo yèl _ dà na mobiil?

Who Foc that Ayuo said bought AFF car

b. Ayuo yèl la ka **Ànú** nu _ dà mobiil?

Ayuo said AFF that who Foc bought car

'lit. Who did Ayuo say that bought a car?'

2. The Formation of Wh-Questions in Dagara

2.1. A Movement Strategy (Embedded wh-questions)

(7) a. **Nyinē** na ka Dar tier ka ti dà-na mobiil ?

where Foc that Dar think that we bought-AFF car

'Where did Dar think that we bought the car?'

b. A bie yèl la ka **nyinē** *(na) ka Dar cen ?

the child said AFF that where Foc that Dar went

'lit The child asked where Dar went.'

2. The Formation of Wh-Questions in Dagara

2.2. An In-Situ Strategy

(Matrix wh-questions)

- (8) a. Ayuo dà-n **bò**?
Ayuo bought-AFF what
'What did you buy?'
b. ***Bò** dùn na Ayuo ?
what bit AFF Ayuo
'What bit Ayuo?'
c. Fu ɪ na zɛ **ɲmɪɲmɪn**?
you did AFF sauce how
'What did you do with the sauce?'

2. The Formation of Wh-Questions in Dagara

2.2. An In-Situ Strategy (Embedded wh-questions)

(9) a. Yɪ yèl-la ka a bie dà-n **bò?** .

you said-AFF that the child bought-AFF what

'What did you said that the child bought?'

b. A Ayuo yèl-la k'ú kù na a bie **aŋmín?**

the Ayuo said-AFF that'he gave AFF the child how-much

'How much did Ayuo say that he gave to the child?'

2. The Formation of Wh-Questions in Dagara

◆ **There is a subject-object asymmetry in Dagara:**

While an embedded object wh-phrase can be extracted, an embedded subject wh-phrase cannot.

An object wh-phrase can remain in situ while a subject wh-phrase cannot.

2. The Formation of Wh-Questions in Dagara

◆ The Dagaare data

No significant difference is found between Dagara and Dagaare.

(10) a. Bong la ka Ayuo da _?

what FOC that Ayuo bought

b. Ayuo da la bong?

Ayuo bought AFF what

'What did Ayuo buy?'

c. Ayuo nyε la boɔlu?

Ayuo saw AFF what

'What did Ayuo see?'

2. The Formation of Wh-Questions in Dagara

◆ The Dagaare data

No significant difference is found between Dagara and Dagaare.

(11) a. Dabuɔ la ka Ayuo gaa _?

when FOC that Ayuo left

b. Ayuo gaa la dabuɔ?

Ayuo left AFF when

'When did Ayuo leave?'

2. The Formation of Wh-Questions in Dagara

◆ The Dagaare data

No significant difference is found between Dagara and Dagaare.

(12) a. Ang la ka Ayuo nyε?

who FOC that Ayuo saw

b. *?Ayuo nyε la ang? (not because of the wh-phrase in situ)

Ayuo saw AFF who

'Who did Ayuo see?'

The Dagara counterpart of *who* and *what* can change morphologically when they are accompanied by a focus marker. The changed *wh*-phrase cannot occur in situ.

2. The Formation of Wh-Questions in Dagara

- (13) a. Ànú nu ka Ayuo nyε _?
who FOC that Ayuo saw
- b. Àan-nu ka Ayuo nyεn_?
who-FOC that Ayuo saw
'Who did Ayuo see?'
- (14) a. *Ayuo nyεn-n àan?
Ayuo saw-AFF who
- b. Ayuo nyεn-n ànú?
Ayuo saw-AFF who
'Who did Ayuo see?'

The morphological change of *who* and *what* seems to be applied to Dagaare.

2. The Formation of Wh-Questions in Dagara

Appendix: Examples of the Dagara sentences used for the acceptability judgement test in Ghana

<i>Consultants</i>	<i>Bong la Ayuo da</i> What Foc Ayuo bought	<i>Bong la ka Ayuo da</i> What Foc that Ayuo Bought	<i>Ayuo da la bong</i> Ayuo bought AFF what
	'What did Ayuo bought?'		
<i>C1</i>	acceptable	perfect	bad
<i>C2</i>	acceptable	perfect	perfect
<i>C3</i>	bad	perfect	perfect
<i>C4</i>	acceptable	perfect	acceptable
<i>C5</i>	perfect	perfect	acceptable
<i>C6</i>	acceptable	perfect	acceptable
<i>C7</i>	acceptable	perfect	acceptable
<i>C8</i>	bad	perfect	acceptable
<i>C9</i>	acceptable	perfect	perfect
<i>C10</i>	bad	perfect	perfect
<i>C11</i>	acceptable	perfect	perfect
<i>C12</i>	acceptable	perfect	bad
<i>C13</i>	acceptable	perfect	perfect
<i>C14</i>	acceptable	perfect	perfect
<i>C15</i>	acceptable	perfect	bad
<i>C16</i>	acceptable	perfect	perfect
<i>C17</i>	bad	perfect	acceptable

3. Overt movement of Wh-Phrases in Dagara

3.1. Overt Wh-Movement is Focus Movement in Dagara

3.1.1. The Presence of a Focus Marker

(15) a. **Dar** *(ru) ka Ayuo nye _.

Dar Foc that Ayuo saw

'Ayuo saw DAR.'

b. **Ànú** *(nu) ka Ayuo nye _?

who FOC that Ayuo saw

'Who did Ayuo see?'

c. **Bò** *(nu) _ dún Ayuo?

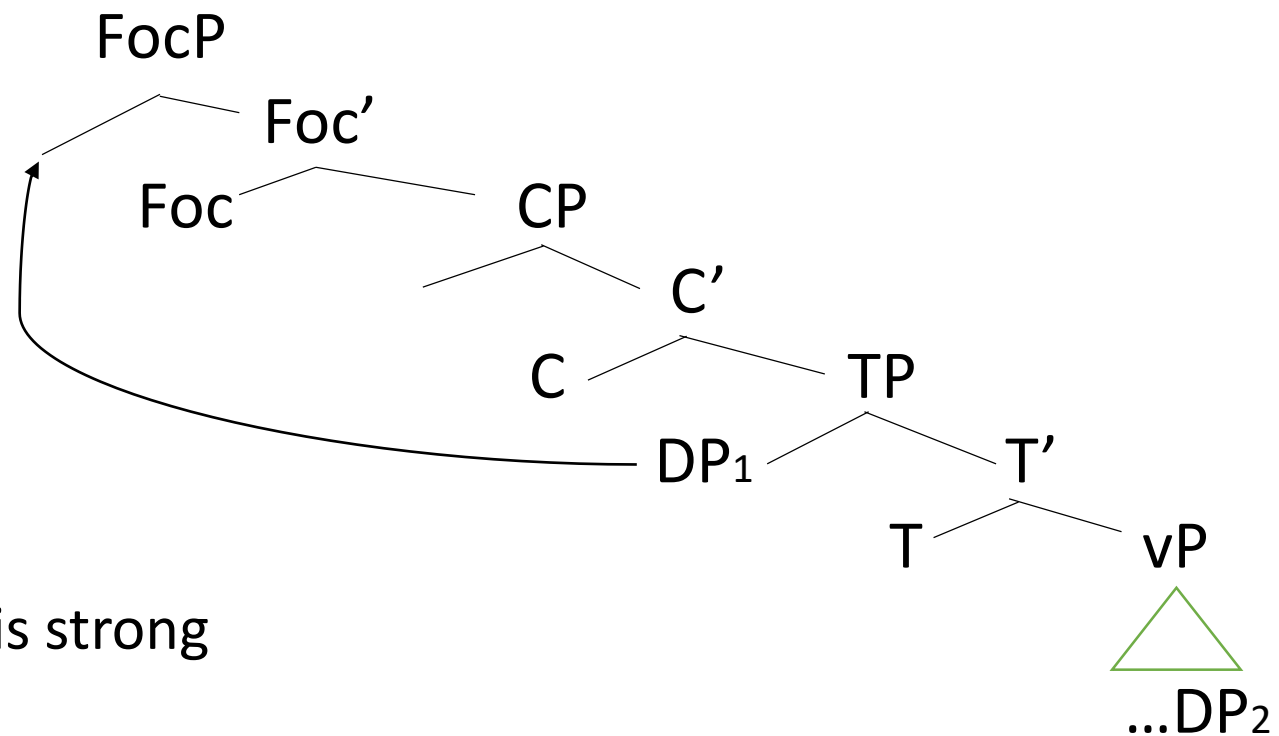
what FOC bit Ayuo

'What bit Ayuo?'

3. Overt movement of Wh-Phrases in Dagara

- d. ημλημιν *(na) ka fu máál a mobiil _?
how Foc that you fixed the car
'How did you fix the car?'

(15')



The focus feature is strong

3.1. Overt Wh-Movement is Focus Movement in Dagara

3.1.2. Question-Answer Pairs

- (16) a. **Ànú nu** ka Ayuo nyε _?
who FOC that Ayuo saw
'Who did Ayuo see?'
- b. **Zã *(nu)** ka Ayuo nyε _.
John FOC that Ayuo saw
'Ayuo saw JOHN.'
- c. ??Ayuo nyε na **Zã**.
Ayuo saw AFF John
'Ayuo saw John.'

- (16') a. Ayuo nyε-n ànú?
Ayuo saw-AFF who
'Who did Ayuo see?'
- b. ??**Zã nu** ka Ayuo nyε _.
John FOC that Ayuo saw
'Ayuo saw JOHN.'
- c. Ayuo nyε na **Zã**.
Ayuo saw AFF John
'Ayuo saw John.'

3.1. Overt Wh-Movement is Focus Movement in Dagara

◆ Reduced Answers (Fragment Answers)

(17) a. Ànú nu ka Ayuo nyε _?

who FOC that Ayuo saw

'Who did Ayuo see?'

b. Zã nu ka Ayuo nyε _.

John Foc that Ayuo saw

'Ayuo saw JOHN.'

c. Zã nu.

John Foc

'John'

d.*Zã nu ka

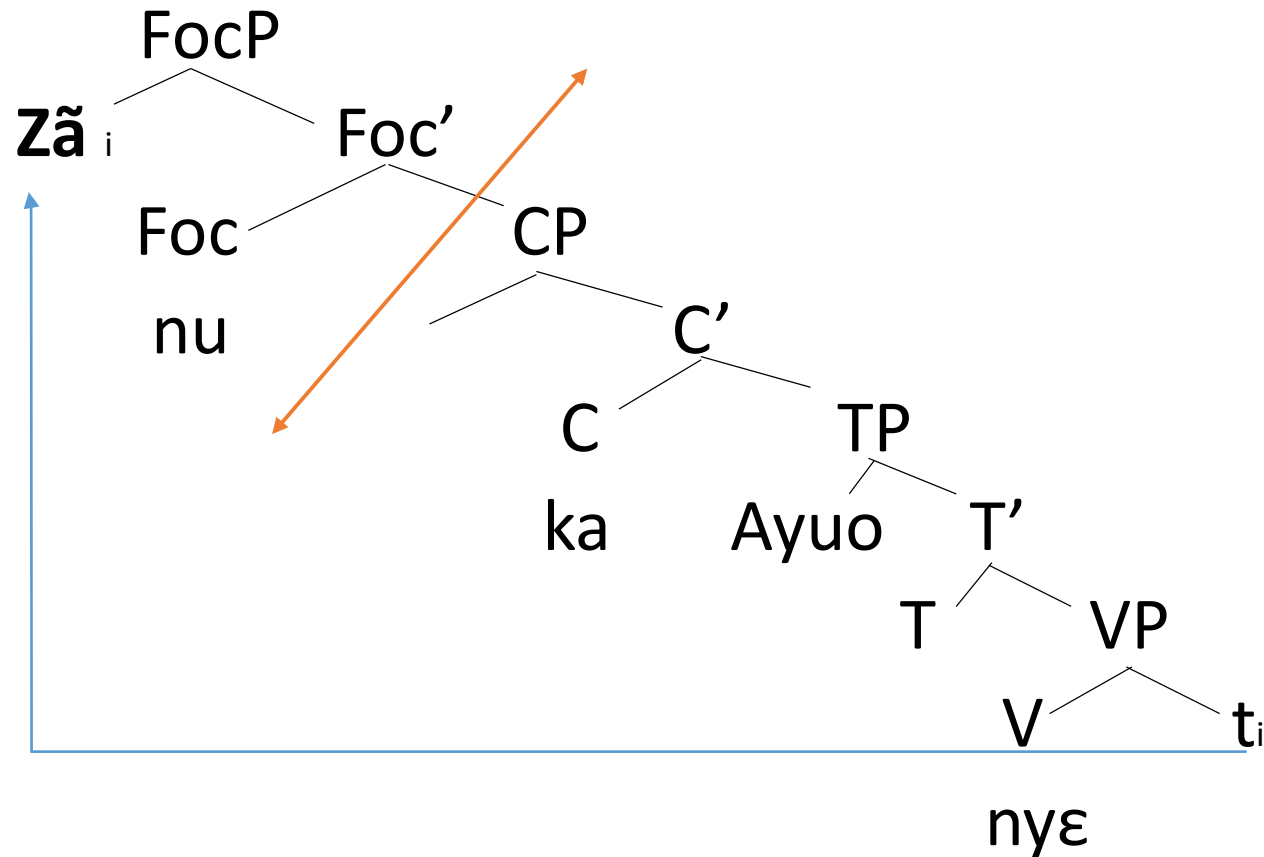
John Foc that

e.*Zã.

3.1. Overt Wh-Movement is Focus Movement in Dagara

◆ Reduced Answers (Fragment Answers)

(17')



This is why (17c) is felicitous while (17d-e) are bad.

3. Overt movement of Wh-Phrases in Dagara

3.2. Locality of focus movement in Dagara

(18) The Complex NP Constraint

a. Dar dé-n a sɛbɛ 'lan Zã nan ta sɛb ba _.

Dar took-AFF the book that John RECL PST wrote AFF

'Dar took that book John wrote.'

b. ***Bò** nu ka Dar dé _ Zã nan ta sɛb-ba_?

what Foc that Dar took John RECL PST wrote- AFF

'Dar took what John wrote_?'

3. Overt movement of Wh-Phrases in Dagara

3.2. Locality of focus movement in Dagara

(19) The Adjunct Condition

- a. **A Dar wá dà a núǒ,** tì na máál la a bǒdìr.
the Dar if buy the chicken, we will cook AFF the food
'We will cook if Dar buys the chicken.'
- b. ***Bó nu ka a Dar wá dà_**, tì na máál-la a bǒdìr ?
what Foc that the Dar if buy we will cook AFF the food
'lit. What will we cook if Dar buys_?'

3. Overt movement of Wh-Phrases in Dagara

3.2. Locality of focus movement in Dagara

(20) The Coordinate Structure Constraint

a. A bie 'lan tú na **Ayuo ni Pol** zãa.

the child that insulted AFF Ayuo and Paul yesterday

'That child insulted Ayuo and Paul yesterday.'

b. ***Ànú** nu ka a bie 'lan tú **Ayuo ni** _ zãa?

Who Foc that the child that insulted Ayuo and yesterday

3. Overt movement of Wh-Phrases in Dagara

3.2. Locality of focus movement in Dagara

(21) The Anti-locality Constraint

- a. Movement of a phrase from the specifier of XP must cross a maximal projection other than XP.
- b. Movement from position α to β crosses γ if and only if γ dominates α but does not dominate β .

(Cf. Erlewine 2020: 2)

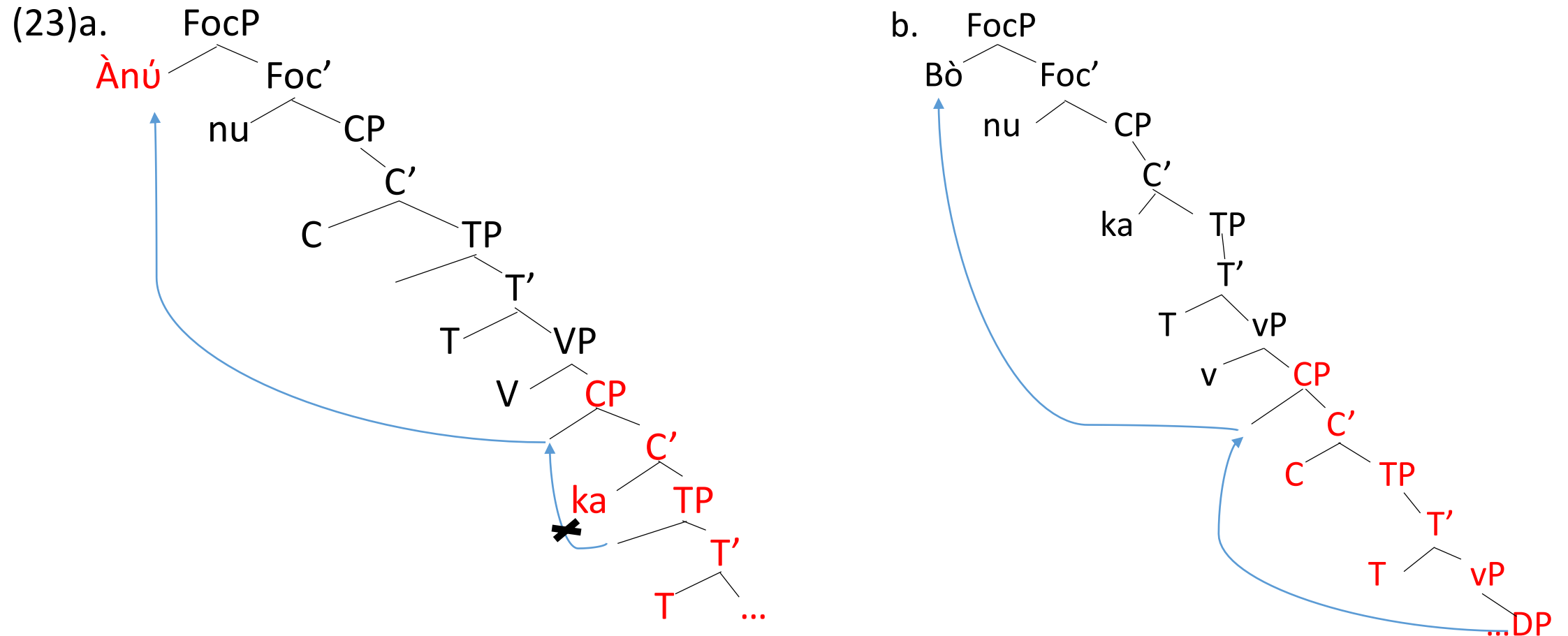
3. Overt movement of Wh-Phrases in Dagara

3.2. Locality of focus movement in Dagara

- (22) a ***Ànú** nu Ayuo yèl _ ka _ dà na mobiil?
Who Foc Ayuo said that bought AFF car
'lit. Who is it that Ayuo said that bought a car?'
- b. Bò nu ka Ayuo yèl ka Pol dà na _
What FOC that Ayuo said that Paul bought AFF
'What did Ayuo say that Paul bought?'

3. Overt movement of Wh-Phrases in Dagara

3.2. Locality of focus movement in Dagara



4. Licensing in-situ wh-phrases in Dagara

Wh-phrases in situ are licensed by C through LF wh-movement.

(24) The Anti-locality Constraint

a. *_[FocP] Ànú nu (ka) Ayuo yèl [_{CP} _ ka [_{TP} _ dà na mobiil]]?

Who Foc that Ayuo said that bought AFF car

'lit. Who is it that Ayuo said that bought a car?'

b. *_[CP] Ànú [_{TP} _ dà-n mobiil]?

who bought-AFF car

'Who bought a car?'

Why can't a subject wh-phrase remain in situ?

4. Licensing in-situ wh-phrases in Dagara

Wh-phrases in situ are licensed by C through LF wh-movement.

(25) The Complex NP Constraint

a. Dar dé-n a sɛbɛ 'lan Zã nan ta sɛb ba _.

Dar took-AFF the book that John RECL PST wrote AFF
'Dar took that book John wrote.'

b. ***Bò** nu ka Dar dé _ Zã nan ta sɛb-ba_?

what Foc that Dar took John RECL PST wrote- AFF

c. *Dar dé na **bò** Zã nan sɛb-ba_?

Dar took AFF what John RECL wrote-AFF
'Dar took what John wrote_?'

4. Licensing in-situ wh-phrases in Dagara

Wh-phrases in situ are licensed by C through LF wh-movement.

(26) The Adjunct Condition

- a. **A Dar wá dà a núǒ,** tì na máál la a bǒdìr.
the Dar if buy the chicken, we will cook AFF the food
'We will cook if Dar buys the chicken.'
- b. ***Bó nu ka a Dar wá dà_**, tì na máál-la a bǒdìr ?
what Foc that the Dar if buy we will cook AFF the food
'lit. What will we cook if Dar buys_?'
- c. ***A Dar wá dà bò,** tì na máál la a bǒdìr?
the Dar if buy what, we will cook AFF the food

4. Licensing in-situ wh-phrases in Dagara

Wh-phrases in situ are licensed by C through LF wh-movement.

(27) The Coordinate Structure Constraint

- a. A bie 'lan tú na **Ayuo ni Pol** zãa.
the child that insulted AFF Ayuo and Paul yesterday
'That child insulted Ayuo and Paul yesterday.'
- b. ***Ànú** nu ka a bie 'lan tú **Ayuo ni** _ zãa?
Who Foc that the child that insulted Ayuo and yesterday
- c. *A bie 'lan tú na **Ayuo ni ànú** zãa?
The child that insulted AFF Ayuo and who yesterday

5. Conclusion

- Wh-questions are formed through two strategies in Dagara: Movement and in-situ.
- Overt movement of wh-phrases is focus movement.
- Wh-phrases in situ undergo covert movement.
- Focus movement and covert movement of wh-phrases obey the same conditions on movement.

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Υε τέρ ra πύόρου!

Thank you very much!

A n i c e!