

# Resumption and long-distance wh-movement in Likpakpaanl

SAMUEL OWOAHENE ACHEAMPONG (GOETHE-UNIVERSITÄT FRANKFURT)

## 1 Introduction

Resumptive pronouns (RP) represent a common strategy in long-distance dependencies such as relativisation and long-distance wh-movement across languages (Shlonsky 1992). The distribution of resumptives varies cross-linguistically because some languages, like Palestinian Arabic, use them interchangeably with gaps created by wh-movement, while others, like Irish (McCloskey 1990, 2002) and Vata (Koopman 1984), employ resumptive pronouns in syntactic positions where gaps are expected after elements are moved. Despite much interest in the interaction between resumption and wh-movement cross-linguistically, it has received little investigation in Likpakpaanl. This paper has two main goals: first, to describe wh-movement in long-distance extraction, and second, to determine the relationship between resumptive pronouns and moved subject and non-subject wh-elements from embedded clauses. I also demonstrate that two reflexes accompany long-distance wh-movements, i.e. the use of either a resumptive pronoun or a trace in the base position of the wh-element. In the literature, there are two assumptions about the distribution of resumptive pronouns. One analysis holds that resumptive pronouns occur as a ‘Last-resort’ device in positions where movement is blocked, thus serving as an island obviation mechanism (McCloskey 2002). The alternative approach views resumptive pronouns as mere phonological realisations indicating traces of movement (Boeckx 2003, Aoun et al. 2001). This second view predicts that using resumptives in place of a trace in moved wh-elements should still show the effects of movement. These are summed into the classical view that A-bar dependencies can be derived either by movement leaving a gap (1-a) or by base-generation of an operator in the matrix clause, which binds a pronoun in the embedded (1-b). In base-generation approaches, the displaced DP is assumed to result from a merger in the specifier of a CP (see Shlonsky 1992, McCloskey 2002).

- (1) a. [CP, DP<sub>i</sub> [TP. . . [ . . . t<sub>i</sub> ]]] (Movement)  
 b. [CP, DP<sub>i</sub> [TP. . . [ . . . pro<sub>i</sub> ]]] (Base-generation and binding)  
 (Korsah and Murphy 2019: 226)

In this paper, I provide evidence from Likpakpaanl and show that long-distance wh-extraction with resumptive pronouns exhibit properties characteristic of A-bar movement using the distribution of RPs in syntactic islands. I contend that wh-movement in Likpakpaanl leaves traces when an object wh-element undergoes extraction, while a resumptive pronoun is required when a subject wh-element is A-bar moved. I propose that the complementarity of traces and resumptive pronouns in Likpakpaanl can be accounted for by assuming that there is an Extended Projection Principle (henceforth, EPP, Chomsky 1977, 1995) requirement in Likpakpaanl, the reason for which the Spec, TP position is always filled with an overt DP element. There is, thus, a blocking effect of this for local wh-subject extraction due to the Highest Subject Constraint (McCloskey 1990).

Beyond this introduction, the rest of the paper is organized as follows: Section 2 provides the basic properties of the language with a focus on morphology and word order. Section 3 introduces wh-questions in subject and non-subject sentences and in local and embedded contexts in Likpakpaanl and sets the stage for the whole discussion. Section 4 illustrates that Likpakpaanl long-distance wh-movement shows an asymmetry between subject and non-subject wh-movement where extracted wh-subjects leave a resumptive pronoun and non-subjects leave a trace in the base position. The analysis is presented in Section 5.

## 2 Basic structure of Likpakpaanl

Likpakpaanl (also known in the literature as 'Konkombaba') belongs to the Gurma Oti-Volta branch of the North Central Mabaia<sup>1</sup> (Gur) languages (Manessy 1971, Naden 1989). The people refer to themselves as *Bikpakpaam*, their language as *Likpakpaanl* and their land as *Kikpakpaanl*. The population of Bikpakpaam stands at over 831,000 in Ghana alone and 198,000 in the Togo (Schwarz 2007). Likpakpaanl is spoken in the Eastern corridor of the Northern and North-East regions of Ghana, as well as the Northern Volta. Some specific towns of their location include Saboba (their traditional capital), Tatale, Chamba, Gushegu, Bumbon, Chereponi, Yendi, Kpassa, Damanko and some parts of the Ahafo region as well. Typologically, Likpakpaanl is an SVO language and depending on whether the verb is transitive or intransitive, a simple sentence can have

<sup>1</sup>I use the term 'Mabaia' following Bodomo (2020, 1997) to refer to over the 80 languages spoken in the Savanna grasslands and West Africa

patterns such as SVO, SV or SVA as illustrated in (2-a), (2-b) and (2-c), respectively.

- (2) a. Ponpiir bì dàà í-ṅuò.  
P. IPFV buy 6-goat  
‘Ponpiir is buying goats.’ (SVO)
- b. Irene nàṅ gèèn.  
I. PST sleep  
‘Irene slept.’ (SV)
- c. Ù-bò gbààn gà wìi òṅ.  
1-child DEF FUT cry today  
‘The child will cry today.’ (SVA)

In a ditransitive construction, the indirect object precedes the direct object, as (3) shows. Thus, the ungrammaticality of (3-b) occurs because the direct object immediately follows the verb.

- (3) a. Neina fè tìi Obed kì-gbáṅ.  
N. HEST.PST give O. 11-book  
‘Neina gave Obed a book (yesterday).’
- b. \*Neina fè tìi kì-gbáṅ Obed.  
N. HEST.PST give 11-book O.  
int.: ‘Neina gave Obed a book (yesterday).’

Despite this order, information-structural-related constructions such as topicalisation and focus trigger the movement of subject, object or adjunct elements out of their canonical positions to higher projections in the left periphery of the clause. Likpakpaanl employs a noun class<sup>2</sup> system that primarily relies on class affixes, which carry additional information related to number agreement.<sup>3</sup> While prefixes are the more prevalent choice for indicating noun class, some nouns employ circumfixes, with some Classes having only suffixes for their class assignment. There are interesting agreement patterns within the DP, as illustrated in (4), where we see agreement between the noun, the demonstrative pronoun and the numeral.

- (4) Tì-gbàn tì-ṅmù tì-mìnà gà wòṅ.  
14-book 14-five 14-dem FUT lost  
‘These five books will be lost.’

After providing an overview of the structure of Likpakpaanl, the following

<sup>2</sup>See Winkelmann (2012), Bisilki and Akpanglo-Nartey (2017) for a detailed account of Likpakpaanl noun class systems.

<sup>3</sup>I use the class numbers (1-15) in the glossing to show whether a noun is singular or plural. Noun class agreement is also reflected in the choice of resumptive pronouns.

section will delve into how wh-questions are structured in the language, as well as the distinction between wh-questions involving subjects and those that do not.

### 3 Likpakpaanl wh-questions

This section examines wh-questions in Likpakpaanl in local (subject and non-subject sentences) and also in embedded constructions. I show that while wh-movement is possible in both local and non-local wh-constructions, there is an asymmetry where the extraction of a wh-phrases from the embedded subject position must be filled with a resumptive pronoun while non-subject wh-movement requires a trace.

#### 3.1 Local subject wh-questions

In Likpakpaanl, a subject wh-element in a matrix clause cannot be focused at all, but their corresponding answers must be overly focus-marked. Consider subject wh-phrases in the sentences in (5).

- (5) a.  $\text{Ŋmà (*Ié) nà̀n dà̀à ì-nà̀à gbà̀àn?}$   
 who FOC PST buy 4-cow DEF  
 ‘Who bought the cows?’  
 b.  $\text{John *(Ié) nà̀n dà̀à ì-nà̀à gbà̀àn.}$   
 J. FOC PST buy 4-cow DEF  
 ‘JOHN bought the cows.’  
 c.  $\text{?John nà̀n dà̀à ì-nà̀à gbà̀àn.}$   
 J. PST buy 4-cow DEF  
 ‘JOHN bought the cows.’

Apart from the ‘who’ wh-phrase, the example in (6-a) further demonstrates that the subject wh-phrase *bà* ‘what’ cannot also be overly marked by the focus particle, while the answer needs to be overly focus-marked for the sentence to be grammatical.

- (6) a.  $\text{Bà bì lîr kî-dî̀-̀k gbà̀àn nî?}$   
 what IPFV fall 11-room-11 DEF in  
 ‘What is falling in the room?’  
 b.  $\text{ì-nù lé bì lîr kî-dî̀-̀k gbà̀àn nî.}$   
 8-yam FOC IPFV fall 11-room-11 DEF in  
 ‘YAM is falling in the room?’  
 c.  $\text{?ì-nù bì lîr kî-dî̀-̀k gbà̀àn nî.}$   
 8-yam IPFV fall 11-room-11 DEF in  
 ‘YAM is falling in the room?’

The data in (5) and (6) show an asymmetry between subject wh-phrases, where the subject wh-element is not focus-marked (even optionally), but the answer is required to be obligatorily marked with the morphological focus particle *lé* else the sentence will be just a declarative statement and not a response to the wh-question as (5-c) and (6-a) show. The absence of the morphological focus particle in subject wh-phrases in Likpakpaanl in matrix questions suggests that they are based-generated in Spec-TP as shown by the lack of focus particle. I assume subject wh-phrases and, by extension, in-situ wh-questions in Likpakpaanl are licensed via Agree with the focus particle in projecting higher in the left periphery. Chomsky has proposed that the rule that establishes agreement (Agree) is a component of movement and contends that that agreement is the consequence of a bi-conditional situation in which an unvalued instance of feature F c-commands another instance of a valued F as illustrated in (7).

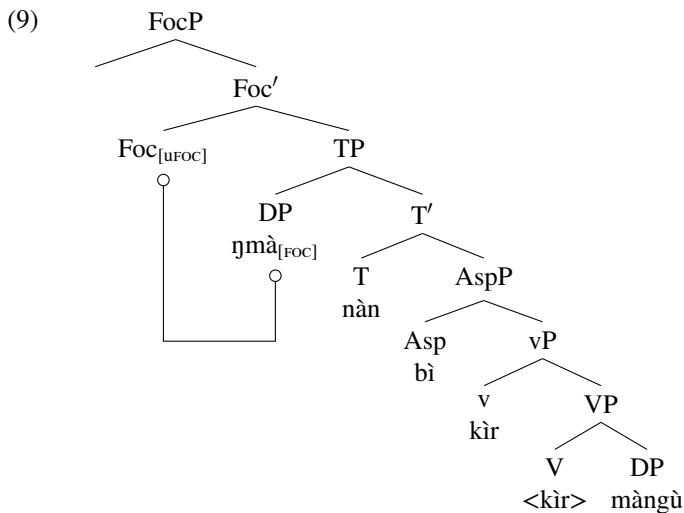
- (7) **Agree Chomsky (2001, 2000)**
- a. An unvalued feature F (a probe) on a head H scans its c-command domain for another instance of F (a goal) with which to agree.
  - b. If the goal has a value, its value is assigned as the value of the probe.
  - c. A feature F is uninterpretable iff F is unvalued.

According to Chomsky (2001), syntactic derivations converge if uninterpretable [*u*F] features are valued (under Probe-Goal relationship), and after valuation, they are deleted. Adopting the feature checking theory of Chomsky (2001, 2000), I also assume the projection of focus phrase (FocP) in the left periphery of the clause in line with Rizzi (1997). The Likpakpaanl wh-phrase has an interpretable focus feature [*i*F], while the focus projection in the left periphery has an uninterpretable focus feature [*u*F] and an EPP feature in the case of ex-situ wh-movement. Using the sentence in (8), I assume that the wh-phrase *ɲmà* with its [*i*F] features serves as a Goal for the [*u*F]-features on the Foc (Probe) to establish an Agree relationship with. The [*u*F] features are checked and deleted. The derivation of in-situ wh-questions is illustrated in (9)<sup>4</sup>.

- (8) **In-situ local subject focus**  
 ɲmà nà̀n bì kir mà̀ngù?  
 what PST IPFV pluck 4-mango  
 ‘Who was plucking a mango?’

---

<sup>4</sup>I also assume a similar Agree mechanism in the derivation of in-situ non-subject wh-questions in Likpakpaanl



### 3.2 Local non-subject wh-questions

Having looked at subject wh-questions, let us also consider the distribution of non-subject wh-phrases in the language. The data indicates that Likpakpaanl non-subject wh-elements in matrix clauses can be realised either in their canonical positions (10-a) or moved to the left periphery of the clause (11-a). Thus, if an object wh-question like (10-a) is asked, the answer can occur in in-situ (10-b) where the focus constituent in its canonical position is followed by *là* (10-b) or *lè* (11-b). It can also be fronted to the left periphery, as in (11-c).<sup>5</sup>

(10) **In-situ local non-subject focus**

- a. Mpòpìin nàn dàà bà?  
M. PST catch what  
'What did Mpòpìin buy?'
- b. Mpòpìin nàn dàà ì-nà là.  
M. PST buy 6-cow FOC  
'Mpòpìin bought COWS.'

The data in (11-a) show the A-bar movement of the wh-element *bà* 'what', as the direct object selected by the verb, to the Specifier of the focus phrase in the left periphery of the clause.

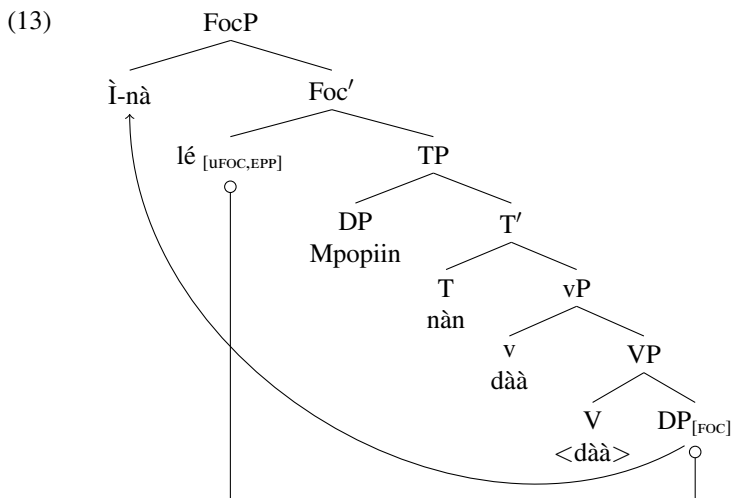
<sup>5</sup>The choice of *là* or *lè* is dependant on whether the focus particle is followed by an overt constituent or not. The former is used when a focal element occurs in clause-finally while the latter occurs clause medially with other elements following it (see Mursell et al. 2022).

(11) **Ex-situ non-subject focus**

- a. Bà<sub>i</sub> lé Tamanja nàn chùù t<sub>i</sub> lì-mùà-l gbààn ni?  
 what FOC T. FUT catch 5-river-5 DEF in  
 ‘What did Tamanja catch in the river?’
- b. Tamanja nàn chùù ì-jàn lé lì-mùà-l gbààn ni  
 T. FUT catch 6-fish FOC 5-river-5 DEF in  
 ‘Tamanja caught FISH in the river.’
- c. Ì-jàn<sub>i</sub> lé Tamanja nàn chùù t<sub>i</sub> lì-mùà-l gbààn ni  
 6-fish FOC T. PST catch 5-river-5 DEF in  
 ‘Tamanja caught FISH in the river.’

Using the example in (11-a), I argue that in non-subject wh-phrase, the derivation proceeds as follows. The verb *chùù* ‘catch’ merges with its wh-object complement *bà* ‘what’ and the adjunct to form the VP. Adopting the feature checking theory of Chomsky (1995, 2000), I assume that ex-situ wh-movement is derived in two steps: in the first step, the Probe (*t*F) on FocP searches its C-command domain for a Goal with a matching feature and find the wh-element. An agree relation is established, and the features are valued and deleted. In the second phase, the EPP feature on Foc-head triggers the extraction of the wh-phrase to Spec-FocP to check the EPP feature. The derivation of the sentence in (12) is represented in (13).

- (12) Ì-nà<sub>i</sub> lé Mpòpìin nàn dàà t<sub>i</sub>.  
 6-cow FOC M. PST buy  
 ‘Mpòpìin bought COWS.’



#### 4 On wh-movement in Likpakpaanl

Likpakpaanl allows both partial and long-distance wh-movement (henceforth LDW), and this section discusses the distribution of subject and non-subject wh-phrases in these two constructions. Likpakpaanl embedded clauses are introduced by an obligatory overt *Complementiser* head *kè* 'that'. I first examine partial wh-movement and then with LDW extraction in Likpakpaanl.

##### 4.1 Partial wh-extraction

In (14-a) and (14-b), the adjunct and object wh-phrases are moved from their base position to the Spec-FocP in the embedded CP.

- (14) a. Tanaan nà̀n lé̀n [CP *kè* [FocP *bà-dàà̀lì* *lé* [TP *Wumbei yò̀dò̀r*  
 T. PST say COMP what-day FOC W. take  
*ù-pì tì?]]]*  
 1-woman  
 'When did Tanaan say (that) Wumbei married a wife?'  
 b. Neina bà̀ dà̀k [CP *kè* [FocP *bà̀* *lé* [TP *Maabi fé*  
 N. PST think COMP what FOC M. HEST.PST  
*gbù̀ tì kì-sà̀à-k gbà̀n nì?]]]*  
 dig 11-farm-11 DEF in  
 'What did Neina think Maabei dug in the farm (yesterday)?'

Even though non-subject wh-elements can undergo intermediate movement, it is impossible for subject wh-phrase to move within the embedded clause (15), suggesting that they are base-generated in Spec-TP and are only licensed by the higher FocP as shown in (9). Thus, even the presence of a resumptive in Spec-TP, in this case, does not make the sentence licit.

- (15) \*Peter nà̀n bà̀è [CP *kè* [FocP *ɲmà̀* (\**lé*) [TP *ù̀* *pùn sì̀mà̀?]]]*  
 P. PST ask COMP who FOC RP roast 2.groundnuts  
 int.: 'Who did Peter ask if he roasted groundnuts?'

##### 4.2 Long-distance wh-extraction

In LDW extraction, both subject and non-subject wh-elements can undergo movement to FocP in the left periphery. There is, however, observed asymmetry in their derivations; the former leaves a resumptive pronoun, while the latter a gap. Consider the following examples:

- (16) **Long-distance subject wh-extraction**  
 a. Bà̀ *lé* Bínlù dà̀k *tì* *kè* *nì* *wì* *ɲì-bù̀* *gbà̀n?*  
 what FOC B. think.PFV COMP 3PL break.PFV 8-pot DEF  
 'What does Bínlù think that (it) broke the pots?'



- b. \*Bà<sub>i</sub> lé Bínlù dāk t<sub>i</sub> kè t<sub>i</sub> wù ñì-bùù gbààn?  
 what FOC B. think.PFV COMP break.PFV 8-pot DEF  
 int.: ‘What does Bínlù think that (it) broke the pots?’

I assume that the subject wh-phrase undergoes successive-cyclic movement through the edge of the CP to the landing site in Spec-FocP (16-a).<sup>6</sup> The resumptive pronoun is obligatory in the moved subject position inside the embedded CP, and (16-b) is ungrammatical because we have a gap instead of a resumptive pronoun in the base position of the moved subject. Following Sells (1984), I argue using the example in (18-a) that the RP pronoun is bound variables with a wh-antecedent as an operator in Spec-FocP of the matrix clause. In (17-b), the RP shows number agreement with the wh-plural antecedent ‘who’ as shown in the choice of a plural resumptive pronoun in (17-b).

- (17) a. [<sub>FocP</sub> mà<sub>i</sub> lé [<sub>TP</sub> Kòfí lén [<sub>CP</sub> t<sub>i</sub> kè [<sub>TP</sub> ù<sub>i</sub> dàà  
 who FOC K. say.PFV COMP RP buy.PFV  
 chééché?]]]]  
 4.bicycle  
 ‘Who did Kofi say that (he) has bought a bicycle?’
- b. [<sub>FocP</sub> mà-màm<sub>i</sub> lé [<sub>TP</sub> Kòfí lén [<sub>CP</sub> t<sub>i</sub> kè [<sub>TP</sub> bì/\*ù<sub>i</sub>  
 who-PL FOC K. say.PFV COMP RP  
 dàà chééché?]]]]  
 buy.PFV 4.bicycle  
 ‘Who did Kofi say that (they) bought a bicycle?’
- c. \* [<sub>FocP</sub> mà-màm<sub>i</sub> lé [<sub>TP</sub> Kòfí lén [<sub>CP</sub> t<sub>i</sub> kè [<sub>TP</sub> t<sub>i</sub> dàà  
 who-PL FOC K. say.PFV COMP buy.PFV  
 chééchè?]]]]  
 4.bicycle  
 int.: ‘Who did Kofi say that (they) bought a bicycle?’

Contrary to what we see in subject-extraction, non-subject wh-elements leave traces in their base positions and not resumptives. Let us now consider the case of long-distance movement in (18-a). There is an observed asymmetry between subject and non-subject wh-elements in long-distance movement. The wh-interrogative phrase *kì-là-kì* ‘which’ with [*i*F] in (18-a) is first merged with the VP and serves as a Goal is attracted by the Probe, Foc<sup>0</sup>. Once the features on FocP are checked, the EPP<sup>7</sup> feature on FocP in the second phase of the derivation triggers the A-bar movement of the focused constituent to Spec-FocP. Such A-bar movement triggers extraction of the object wh-phrase

<sup>6</sup>I use t<sub>i</sub> to indicate the cyclic movement of the wh-element.

<sup>7</sup>Rizzi (2006) also proposes that movement to Spec-Foc is triggered a *Focus Criterion* (Foc-C), which requires that a focus-bearing element in a structure to always move to Spec-Foc

through the intermediate Spec-CP and lands in the Spec-FocP (cf. Rizzi 1997, Sabel and Zeller 2006).

(18) **Long-distance non-subject wh-extraction**

- a. [<sub>FocP</sub> Kì-tìŋ kì-là-kì<sub>i</sub> lé [<sub>TP</sub> Mpopiin dàk [<sub>CP</sub> t<sub>i</sub>  
13-land-13 13-which-13<sub>i</sub> FOC M. think  
kè [<sub>TP</sub> Kunji nàn dàà t<sub>i</sub>?]]]]  
COMP K. PST buy  
'Which land did Mpopiin say (that) Kunji bought?'
- b. \*[[<sub>FocP</sub> Kì-tìŋ kì-là-kì<sub>i</sub> lé [<sub>TP</sub> Mpopiin dàk [<sub>CP</sub> t<sub>i</sub>  
13-land-13 13-which-13<sub>i</sub> FOC M. think  
kè [<sub>TP</sub> Kunji nàn dàà k<sub>i</sub>?]]]]]  
COMP K. PST buy RP  
lit: 'Which land did Mpopiin say (that) Kunji bought it?'

The discussion so far has demonstrated a distinction between the use of resumptives and gaps in Likpakpaanl. But what does this tell us about such dichotomy in terms of whether both entail base-generation and binding or A bar movement? It is expected that if these two options are derived differently, we should expect differences in island-sensitivity but this is not a straightforward approach because as McCloskey (2002, 2006) argues for Irish, resumptive pronouns appear in certain positions where gaps are also grammatical, suggesting gaps result from a movement derivation, whereas resumptives such as *iad* in (19) are the result of base-generation and binding.

- (19) na hamhráin sin nach bhfuil fhios cé a chum **iad**.  
the songs DEM NEG C is knowledge who C composed them  
'Those songs that we don't know who composed them.'  
(McCloskey 2006: 99)

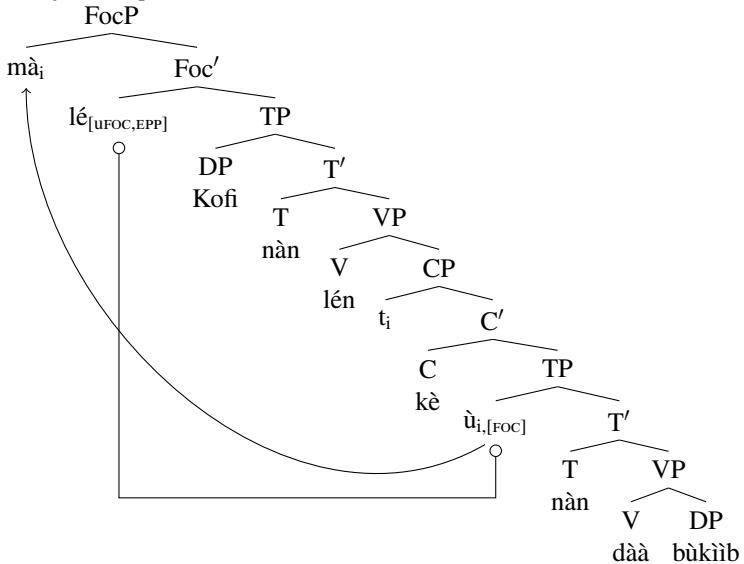
Koopman (1984) also shows that in Vata, a language of the Kru family spoken in the Ivory Coast, resumptive pronouns have the same properties as gaps but involve a movement derivation because resumptives are island-sensitive. Similar observations have also been made in Palestinian Arabic by Aoun et al. (2001) showing resumptive pronouns and gaps alternating freely. Having examined the distribution of presumptive and gaps in Likpakpaanl long-distance wh-moment, the next section provides a syntactic analysis of the observed empirical data.

### 5 On the syntax of long-distance wh-extraction

The data show that whenever a wh-phrase is extracted in Likpakpaanl, it occupies Spec-FocP of the focus head *lé*. The derivation proposed here is similar to what I argued for in (13) for ex-situ wh-movement, where I proposed a Probe-Goal relationship between the moved wh-phrase and the FocP that c-commands it for feature checking and valuation to license focus interpretation of the wh-element. I also argued that FocP is endowed with an EPP feature that triggers the movement to its Specifier.

- (20) mà<sub>i</sub> lé Kòfí nà̀n lén t<sub>i</sub> kè ù<sub>i</sub> dà̀a nà̀n bù-kììb?  
 who FOC K. PST say COMP RP PST buy.PFV 9-soap?  
 ‘Who did Kofi say (he) bought soap?’

- (21) *Subject wh-phrase extraction*



In the derived structure in (21), the assumption is that Likpakpaanl requires resumptive pronouns in embedded subject positions because it has an EPP feature that requires the subject position to be overtly filled. Due to this EPP feature, leaving a trace after extracting the embedded subject would violate the structural requirement to have an overt subject. The obligatory presence of resumptive pronouns in extracted embedded subject positions in Likpakpaanl satisfies EPP by having an overt element in the subject position. This explains why extracted embedded subjects can only bind resumptives, and not traces.

However, extracted matrix subject wh-phrases do not bind resumptive pro-

nouns but rather traces because resumptive pronouns are blocked for local/matrix subject extraction in order to comply with the Highest Subject Restriction (HSR) (McCloskey 1990, 2002).

- (22) **Highest Subject Constraint** (McCloskey 1990: 77-78)  
 “[T]he highest subject of a clause cannot be occupied by a resumptive pronoun [...] however, resumptive pronouns appear freely in the subject position of embedded clauses, finite and non-finite.”

The asymmetry between the use of trace and resumptive pronouns can be accounted for by positing that Likpakpaanl requires resumption for extracted embedded subjects to satisfy EPP but traces for extracted matrix subjects to satisfy HSR. Resumptives and traces are mutually exclusive due to these different constraints on embedded versus matrix subjects.

The common property of the binding relations that resumptive pronouns enter into is that they show no sensitivity to general constraints on movement. Ross (1967) notes that resumption obviates island effects, such as the adjunct island violation in (23-a). Such apparent violations are repaired if the dependency ends in a resumptive pronoun (23-b).

- (23) a. \*King Kong is a movie which<sub>i</sub> you’ll laugh yourself sick [<sub>CP</sub> if you see t<sub>i</sub> ]  
 b. King Kong is a movie which<sub>i</sub> you’ll laugh yourself sick [<sub>CP</sub> if you see it<sub>i</sub> ]  
 (Ross 1967: 433)

However, in Likpakpaanl, resumptives in Likpakpaanl are island-sensitive and do not repair islands and, therefore, point to a movement approach to resumption. The A-bar dependencies in the complex noun phrase island in the presence of both resumptives (24-a) and gap (24-b) are island-sensitive in the language.

- (24) *Complex Noun Phrase Constraint (CNPC)*  
 a. \*<sub>[FOCP]</sub> mà<sub>i</sub> lè Chàtí tük <sub>[DP]</sub> tìbɔŋùnlkààr <sub>[CP]</sub> kè <sub>[DP]</sub> ù<sub>i</sub>  
           who FOC C. tell.PFV rumour COMP RP  
           ŋùn t<sub>i</sub>]]]?  
           hear.PFV  
           int.: ‘Who has Chatí told a rumour that he heard?’  
 b. \*<sub>[FOCP]</sub> Bâ<sub>i</sub> lè Amà ŋmées <sub>[DP]</sub> kí-gbààŋ <sub>[CP]</sub> kè <sub>[TP]</sub>  
           what FOC A. write.PFV 2-book COMP  
           ù-bò kàrn nì<sub>i</sub>/t<sub>i</sub>]]]?  
           1-child read.PFV RP  
           int.: ‘What has Ama written a book that a child has read (it)?’

The CNPC imposes a constraint on movement transformations out of complex noun phrases, barring the movement of elements of relative clauses of DP islands. Thus, both presumptive and gaps do not allow movement out of a DP island (see Issah 2020, Koopman 1984, Korsah and Murphy 2019 for similar observations in Dabgani, Vata and Akan, respectively).

The use of resumptive pronouns in coordinate constructions in Likpakpaanl displays island sensitivity, as attempts to extract just one conjunct result in ungrammaticality even if a resumptive pronoun is used. Specifically, it is impossible in Likpakpaanl to move a single conjunct out of a coordinate structure - both conjuncts must undergo movement together. If only one conjunct is moved, leaving behind a resumptive pronoun in place of the other conjunct, the result is an illicit sentence (25-b). This Coordinate Structure Constraint (CSC) provides evidence that coordinate structures in Likpakpaanl constitute islands for movement operations.

(25) *Coordinate Structure Constraint*

- a. [TP Mpópíín gèè [DP Wàjà ní mà]]?  
M. love W. CONJ who  
‘Who and Waja does Mpópíín love?’
- b. \*[<sub>FocP</sub> mài lé [TP Mpópíín gèè [DP Wàjà nì ù<sub>i</sub>/t<sub>i</sub>]]]?  
who FOC M. love W. CONJ RP  
int.: ‘Who does Mpópíín love Wàjà and (him/her)?’

It is not only impossible to extract from the first conjunct but also from the second conjunct, as (26-a) illustrates. Both conjuncts can, however, undergo movement as a DP constituent.

- (26) a. [TP Tamanja kpà [DP ì-ṅùdò nì ì-gbéér]]]  
T. have 4-goat CONJ 1-pig  
‘Tamanja has goats and pigs?’
- b. \*[<sub>FocP</sub> Bàì lè [TP Tamanja kpà [DP nì<sub>i</sub>/t<sub>i</sub> nì ì-gbéér ]]]]?  
what FOC T. have it CONJ 1-pig  
int.: ‘What does Tamanja have (it) and pigs?’

The island sensitivity displayed by resumptive pronouns in Likpakpaanl coordinate constructions suggests they exhibit ‘gap-like’ behaviour, similar to actual gaps created by movement. Both resumptive pronouns and gaps in Likpakpaanl are subject to the same island constraints. Following Ross (1967), island effects are taken as evidence of movement. Therefore, the fact that resumptives in Likpakpaanl show island sensitivity implies their distribution involves movement, contrary McCloskey (2002), who propose that only gaps and not resumptives are island-insensitive. The parallel island behaviour of gaps and resumptives in Likpakpaanl CNPC and CSC structures support an

analysis where both involve movement rather than resumptives being inserted without movement.

(27) *Subject wh-movement with resumption*

[<sub>FocP</sub> *wh-phrase*<sub>i</sub> [<sub>Foc</sub> lé [<sub>TP</sub> ... [<sub>CP</sub> t<sub>i</sub> [<sub>C</sub> kè] ... [<sub>TP</sub> (RP)<sub>i</sub> ... [<sub>VP</sub> ... DP ]]]]]]

(28) *Object wh-movement with a gap*

[<sub>FocP</sub> *wh-phrase*<sub>i</sub> [<sub>Foc</sub> lé [<sub>TP</sub> ... [<sub>CP</sub> t<sub>i</sub> [<sub>C</sub> kè] ... [<sub>TP</sub> ... [<sub>VP</sub> ... t<sub>i</sub> ]]]]]]

**6 Conclusion**

This study provided a detailed empirical description of the distributional facts relating to resumption in long-distance wh-movement in Likpakpaanl, namely that it occurs only in contexts requiring subject extraction.

I have also shown that even though Likpakpaanl has RPs for both objects and subjects, only subject RPs have an overt realisation; object RPs have a null exponent, a gap. Using island tests like CNPC and CSC, I argued that in Likpakpaanl, A-bar extractions that leave behind a trace or resumption involve syntactic movement. The use of resumption and trace in Likpakpaanl is mutually exclusive: A-bar movement of wh-objects leaves a trace, while that of subjects leaves a RP. The analysis proposes a functional projection in the left periphery of the clausal structure containing a FocP with an EPP feature. The obligatory presence of a resumptive in Spec-TP in long-distance movement with wh-subjects is assumed to be due to the presence of a strong Extended Projection Principle (EPP) feature that requires the subject position to be overtly filled. The paper contributes to linguistic typology on resumption and enriches cross-linguistic variation in this domain.

**Abbreviations**

1SG	first person singular	FUT	future
2SG	second person singular	HSR	Highest Subj. Restriction
3SG	third person singular	IPFV	imperfective
2PL	second person plural	LD	long distance
COMP	complementiser	NEG	negative
CONJ	conjunction	PFV	perfective marker
DEF	definite article	PST	past
EPP	Extended Projection Principle	RP	resumptive pronoun
FOC	focus particle		

## References

- Aoun, J., L. Choueiri, and N. Hornstein (2001). Resumption, movement, and derivational economy. *Linguistic Inquiry* 32(3), 371–403.
- Bisilki, A. K. and R. A. Akpanglo-Nartey (2017). Noun pluralisation as a dialect marker in Likpakpaanl-Konkomba. *Journal of West African Languages* 44(2), 24–42.
- Bodomo, A. (1997). *The structure of Dagaare*. Stanford: CSLI Publications.
- Bodomo, A. (2020). Mabia: Its etymological genesis, geographical spread and some salient genetic features. In A. Bodomo, H. Abubakari, and S. A. Issah (Eds.), *Handbook of the Mabia Languages of West Africa*. Berlin: Galda.
- Boeckx, C. (2003). *Islands and chains: Resumption as stranding*. Amsterdam: Benjamins.
- Chomsky, N. (1977). On wh-movement. In P. Culicover, T. Wasow, and A. Akmajian (Eds.), *Formal Syntax*, pp. 71–132. New York: Academic Press.
- Chomsky, N. (1995). *The minimalist program*. Cambridge, MA: MIT Press.
- Chomsky, N. (2000). Minimalist inquiries: The framework. In R. Martin, D. Michaels, and J. Uriagereka (Eds.), *Step by step*, pp. 89–156. Cambridge, MA: MIT Press.
- Chomsky, N. (2001). Derivations by phase. In M. Kenstowicz (Ed.), *Ken Hale: A life in language*, pp. 1–52. Cambridge, MA: MIT Press.
- Issah, S. A. (2020). *On the structure of A-bar constructions in Dagbani: Perspectives of wh-questions and fragment answers*. Frankfurt: Peter Lang.
- Koopman, H. (1984). *The syntax of verbs: From verb movement in the Kru languages to universal grammar*. Dordrecht: Foris.
- Korsah, S. and A. Murphy (2019). Islands and resumption in Asante Twi. In R. Stockwell, M. O’Leary, Z. Xu, and Z. Zhou (Eds.), *Proceedings of the 36th West Coast Conference on Formal Linguistics*, pp. 226–236. Somerville: Cascadilla Proceedings Project.
- Manessy, G. (1971). Les langues gurma. *Bulletin de l’Institut Fondamental d’Afrique* 33(1), 117–246.
- McCloskey, J. (1990). Resumptive pronouns, A-Bar binding and levels of representation in Irish. In R. Hendrick (Ed.), *Syntax of the modern Celtic languages*, pp. 199–248. San Diego: Academic Press.
- McCloskey, J. (2002). Resumption, successive cyclicity, and the locality of operations. In S. D. Epstein and T. D. Seely (Eds.), *Derivation and Explanation in the Minimalist Program*, pp. 184–226. Oxford: Blackwell Publishers Ltd.
- McCloskey, J. (2006). Resumption. In M. Everaert and H. van Riemsdijk (Eds.), *The Blackwell Companion to Syntax*, pp. 94–117. Hoboken: Blackwell.
- Mursell, J., A. Himmelreich, and K. Hartmann (2022). Focus particles in Dagbani and Likpakpaanl. Talk at the University of Vienna.
- Naden, T. (1989). Gur. In J. Bendor-Samuel and R. L. Hartell (Eds.), *A classification and description of Africa’s largest language family*, pp. 140–168. University Press of America.
- Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman (Ed.), *Elements of grammar*, pp. 281–337. Dordrecht: Kluwer.
- Rizzi, L. (2006). On the form of chains: Criterial positions and ECP effects. In L. L.-S.

- Cheng and N. Corver (Eds.), *Wh-Movement: Moving on*, pp. 97–134. Cambridge, MA: MIT Press.
- Ross, J. R. (1967). *Constraints on variables in syntax*. Ph. D. thesis, MIT, Cambridge, MA.
- Sabel, J. and J. Zeller (2006). Wh-question formation in Nguni. In J. M. Mugane, J. P. Hutchinson, and D. A. Worman (Eds.), *Selected proceedings of the 35th Annual Conference on African Linguistics*, pp. 271–283. Somerville, MA: Cascadilla Proceedings Project.
- Schwarz, A. (2007). Particles lé and lá in the grammar of Konkomba. *Interdisciplinary Studies on Information Structure* 8, 115–139.
- Sells, P. (1984). *Syntax and semantics of resumptive pronouns*. Ph. D. thesis, University of Massachusetts Amherst.
- Shlonsky, U. (1992). Resumptive pronouns as a last resort. *Linguistic Inquiry* 23(3), 443–468.
- Winkelmann, K. (2012). D4. Konkomba (Likpakpaanl). In G. Miehe, B. Reineke, and K. Winkelmann (Eds.), *Noun class systems in Gur languages vol.4: North Central Gur languages*, pp. 472–486. Köln: Rüdiger Köppe Verlag.