# Pieces of the periphery: A glance into the cartography of Ibibio's CP domain

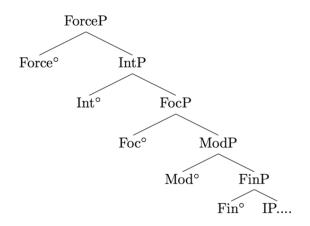
John-Patrick Doherty\*

Department of Linguistics University of Kansas; Lawrence, KS, USA

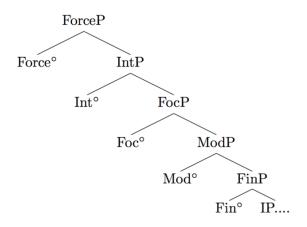
## 1. Introduction

Developments in cartographic observations of clause structure in Generative syntax predict strong formal linguistic universals among the ordering of phrases at the clausal edge. This ordering is assumed to result from a predetermined hierarchy that is defined by Universal Grammar (UG), reflecting an innate biological capacity for language in humans (Rizzi, 1989, p. 66). Ibibio, a Niger-Congo language, features a rich left periphery whose components demonstrate this hierarchical ordering. Through the interaction of left-peripheral phenomena such as Argument Focus, Partial *wh*- movement, Q markers, and complementizers, this ordering is revealed. If Ibibio's phrasal ordering differs from Rizzi's proposed structure in (1), then the universality of Rizzi's left periphery would be compromised. In addition to the phrases that Rizzi (1997) finds through Italian, Ibibio's grammar parameterizes the activation of an additional phrase. We will find that the underlying order of Ibibio's phrases does hold up to the posited hierarchy, supporting Rizzi's (1997) proposition of the ordering of the left periphery in UG. Here is a comparison of these two peripheral structures:

(1) Rizzi's (1997) Left Periphery



\*Address correspondence to j804d110@ku.edu



I will test these theoretical predictions with Ibibio, a Niger-Congo language. Ibibio's grammar features phenomena that interact with left peripheral phrases, such as overt left-dislocation of argument focus or Q markers. Ibibio's structural ordering of the phrases that these phenomena activate should align with the ordering in in (1) and if not, then the universality of Rizzi's (1997) posited UG-ordering would be compromised. This study does not attempt to account for all that comprises Ibibio's left periphery, only pieces of it that correspond to those that Rizzi (1997) claims are rigidly ordered to one another.

**1.1. Language background.** Ibibio is a Niger-Congo language estimated to have around 1.5 million L1 speakers (Connell, 2007). It is spoken in the Lower Cross State in southeastern Nigeria and is related to many mutually intelligible languages in the region such as Efik (the region's standard) and Anaang.

Ibibio is a Nominative-Accusative language with a moderately complex tonal inventory. There are two level tones and two contour tones as well as a derived high tone: the downstepped high tone (Urua, 2000). Languages with complex tonal systems tend to be isolating (Maddieson, 2003) as is the case for Ibibio. However, extensive morphology on the verb and far-reaching agreement demonstrate its synthetic capabilities, even though this degree of synthesis is not common across all lexical categories:

(3) mmá áfo à-ké-má-há á-ké-dí
 lady you 2nd.SG-PST-love-REL 3rd.SG-PST-came
 'The lady that you loved came.'<sup>1</sup>

This example illustrates how the verbal stems *má* and *dí* both may host multiple prefixes. It also demonstrates Ibibio's word order which is SVO. When this word order is changed, the leftmost word receives a contrastive or focalized interpretation according to our native speaker. It is this property that we will use to investigate the peripheral phenomena.

**1.2. Methodology.** Most data I use are the result of elicitation sessions with my language consultant unless otherwise noted. The consultant is a native speaker of Ibibio who learned English in adulthood. The elicitation sessions consisted of largely grammaticality-judgment tests and translations of English sentences. Discussions of interpretation and meaning were recorded and considered as well.

This analysis is organized as follows. In Section 2, the basic arguments for an articulated left periphery are reported. Section 2.1 reviews theoretical assumptions that provide a basis for the analysis and 2.2 lists

 $<sup>^{11</sup>st}$  = First Person;  $^{2nd}$  = Second Person;  $^{3rd}$  = Third Person;  $^{AA}$  = Anti-agreement marker;  $^{ADV}$  = Adverbial;  $^{C}$  = Complementizer;  $^{DET}$  = Determiner;  $^{FOC}$  = Focus marker;  $^{FUT}$  = Future tense;  $^{IMPF}$  = Imperfect aspect;  $^{INF}$  = infinitival tense marker;  $^{NEG}$  = Negation;  $^{NEUT}$  = neutral tense marker;  $^{PL}$  = Plural;  $^{PREP}$  = Preposition;  $^{PRES}$  = present tense;  $^{PST}$  = Past tense;  $^{Q}$  = Question particle;  $^{SG}$  = singular.

the specific diagnostics employed in it. Section 3 investigates a possible Focus Field in the middle of the CP domain and the various phenomena that interact with it such as focus (3.1) and *wh*-movement (3.2). Section 4 looks at the Force-Finiteness system, where items that occur very high in the periphery may interact. These include Q markers (4.1), complementizers (4.2), and certain adverbials (4.3). The conclusions drawn from these investigations are summarized in Section 5. Other left peripheral phenomena not included in the study are discussed in the Appendix.

#### 2. The necessity of more than CP

Since the seminal analysis in Rizzi (1997), a huge body of research concerning the left periphery has developed. The following section details the results of these developments and then situates Ibibio in relation to them.

Rizzi (1997), Cinque (1999), and others have demonstrated a need for an expanded left periphery in clausal structure, beyond the traditional singular Complementizer Phrase (CP). This expanded CP domain is broken into an array of functional projections that are assumed to be universally present, when active, in every language's clauses. Different grammars parameterize which phrases to employ, generating the diversity of human language.

Just as Pollock (1989) found in English and French evidence that the single projection of IP must be broken into several different projections, so does Rizzi (1997) with the CP. Using the order of lexical items and phrases that undergo left dislocation, and their relation to complementizers, he finds the need for such an articulated left periphery as in (1). Consider the following examples below that use the distinction of [+Fin] on C° to suss out this ordering:

- (4) a. Credo che [ $_{TOP}$  il tuo libro] loro lo apprezzerebbero molto  $1^{st}$ .SG.believe  $C_{[+Fin]}$  DET your book they it would.appreciate much 'I believe that, your book, they would appreciate very much.' (Rizzi, 1997, p. 228)
  - b. \* *Credo* [<sub>TOP</sub> *il tuo libro*] *che loro lo apprezzerebbero molto* 1<sup>st</sup>.SG.believe DET your book C<sub>[+Fin]</sub> they it would.appreciate much 'I believe, your book, that they would appreciate very much.' (Rizzi, 1997, p. 228)
- (5)\* Credo di [<sub>TOP</sub> il tuo *libro]* apprezzar-lo molto a. 1<sup>st</sup>.SG.believe C<sub>[-Fin]</sub> DET your book to.appreciate-it much 'I believe that, your book, it is appreciate very much.' (Rizzi, 1997, p. 228) libro] di b. apprezzar-lo Credo  $[_{TOP} il]$ tuo molto 1<sup>st</sup>.SG.believe DET your book C<sub>[-Fin]</sub> to.appreciate-it much 'I believe of your book, that it is appreciated very much.' (Rizzi, 1997, p. 228)

In example (4), the C *che* that selects a finite TP must precede the topicalized constituent *il tuo libro* or else it is ungrammatical (as in 4b). Example (5) demonstrates just the opposite with the C<sup>o</sup> *di*, where the same topicalized constituent moves beyond it. This distribution of topics is the initial proof that Rizzi (1997) uses to demonstrate that there must be multiple phrases in CP that host complementizers, namely ForceP and FinP. Topics, as (4a) and (5b) demonstrate, occur somewhere between the two, necessitating more than just a C<sup>o</sup> for complementizers.

To derive the position of FocP within this framework, Rizzi (1997) uses the difference in recursivity between Topics and Foci to determine that FocP must be embedded between two recursively occurring instances of TopP. Consider the examples below that were adapted from Rizzi (1997, p. 290).

(6) a. [<sub>TOP</sub> *il libro*] [<sub>TOP</sub> *a Gianni*] [<sub>TOP</sub> *domani*] [<sub>IP</sub> *glielo darò*] DET book to Gianni tomorrow him 1<sup>st</sup>.SG.FUT.give 'The book, to Gianni, tomorrow, I'll give it to him.' b. \*[<sub>FOC</sub> a Gianni] [<sub>FOC</sub> il libro] [<sub>TOP</sub> domani] [darò] (non a Piero, l'articolo) DET book 1st.SG.FUT.give to Gianni tomorrow 'I'll give the book<sub>FOC</sub> to Gianni<sub>FOC</sub> (not to Piero, the article) [<sub>TOP</sub> A Gianni] [<sub>FOC</sub> Questo] [<sub>TOP</sub> domani] [<sub>IP</sub> gli dovrete dire] C. him 2<sup>nd</sup>.SG.should say this to Gianni tomorrow 'To Gianni, tomorrow, you should tell him this<sub>FOC</sub>.'

As in English, (6a) demonstrates that Italian also allows many Topics high in the clause. Examples (6b-c) demonstrate that there can only be one focus, and it is able to be enclosed within the recursive Topics. This evidence brings us closer to the proposed left periphery in (1). Ibibio will be compared against (1) since it similarly syntactically marks this by dislocation to the clause's edge. This patterning of these phrases leads

us to Rizzi's proposed left periphery illustrated in (1).

Refinements to this cartography have been made since this influential analysis. Relevant to Ibibio is IntP which hosts the yes/no operators of polar questions (Aboh, 2004). These questions are marked by a Q particle in Ibibio. This particle's supposedly universal rigid ordering in relation to focalized constituents and complementizers situates it between the two and serves as an anchoring point of reference in the highest part of a clause.

These are the basic theoretical arguments for positing an articulated left periphery. The following subsection will situate this argument in relation to the Cartographic enterprise in syntax, as well as lay out further mechanics of clause structure that the analysis utilizes.

**2.1. Some assumptions of clause structure and cartography.** Since a strict cartographic approach maps one feature to one projection, the layout of the clause consists of numerous potential phrases instead of the conventional three: VP, TP, and CP. While these phrases have been broken into numerous pieces, they still represent relevant domains of phrases, or layers. These formerly singular projections are referred to as the Argument layer (VP), Inflectional layer (TP), and the Left Periphery (CP) in that ascending order (Rizzi, 1997). Cartography aims to map out the rich array of functional projections within these domains. Beyond this fundamental goal of the cartographic enterprise, the following are some additional assumptions of clause structure.

The VP layer originates with the verb inside the Verb Phrase. It contains argument and event structure, including thematic information. During numeration, lexical items of particular categories enter the computation at this layer of the clause via a type of external Merge called C-selection (Chomsky, 1995). This process sets up the foundation for the clause and as such is the most internal.

Between this layer and the Inflectional Layer above it, Aspect acts as in interface. AspP expresses grammatical aspect.<sup>2</sup> Cinque (1999) has compiled a hierarchy of 18 different Aspect heads using a variety of TP and VP adverbials, affixes, and other heads that demonstrate the gradual fluidity between the two layers. Above the AspP, tense and modality are expressed. Modals generally appear between AspP and TP, except epistemic modals according to Cinque's (1999) universal hierarchy of adverbs.

This subject-hosting phrase can be a TP with an EPP feature that acts as a probe, initiating agreement with a similarly valued head in the probe's domain (Pesetsky, 2000),<sup>3</sup> but does not have to be. For example, this layer can be many different sizes in terms of number of functional projections, and Baker and Willie (2010) demonstrate that in Ibibio the highest head in this layer, be it TP, MoodP, or even as low as AspP as in the subjunctive, bears the EPP feature that acts as a probe to trigger agreement with the subject. Rizzi and Shlonsky (2007) take it a step further and argue that at the very top of the inflectional layer there is a Subject Phrase (SubjP) that acts as an interface between the TP system and the CP domain above. This special SubjP, whose head acts as a probe for a nominal for its specifier position, has a deeply woven relationship with the head above it, the first in the Left Periphery proper, Finite Phrase (FinP).

<sup>&</sup>lt;sup>2</sup>As opposed to lexical aspect encoded by a verb.

<sup>&</sup>lt;sup>3</sup>Pesetsky (2000, p.2) follows Chomsky (2000) in defining the probe's domain as its c-command domain. This assumes that probes always search downward for similarly valued features to establish an Agree relationship with. Baker and Willie (2010) find through the incredibly rich agreement system in Ibibio that probes search upward. They argue this is a specific parameter of the language.

• <u>The Left Periphery</u>:

The interface between a propositional content (expressed by the IP) and the superordinate structure (a higher clause or, possibly, the articulation of discourse, if we consider a root clause).

Considering this definition in relation to Ibibio's phenomena that interact with this domain, the various systems within it and diagnostics to test them must be defined. Let us look into the left periphery in detail below, beginning with the largest system.

2.1.1 *The Force-Finiteness system*. The two heads marking the boundaries of this system host mainly complementizers. These are elements that contain information regarding the clausal mood (Indicative, Subjunctive, etc.), finiteness, and features that end up being inherited by T (Chomsky, 2000). The complementizers exist in the high Force° or the low Fin°. The rudimentary tense features that a complementizer has (finiteness) is interpreted at Fin° and the mood feature in Force°, where the complementizer is normally pronounced. While this system envelops almost the entire CP<sup>4</sup>, it may be nonexistent or reduced in defective clauses such as those with infinitival T heads. Besides these special cases, ForceP and FinP contain the entire left periphery as in (1).

*2.1.2 The Focus Field.* Also called the Topic-Focus System (Rizzi, 1997), this domain within the Force-Finiteness system contains XPs that are pragmatically highlighted or quantificational.<sup>5</sup> These can be Topics, Foci, and *wh*- items. Topics do not exclusively appear within this system in Ibibio, and for this reason we will refer to this as the Focus Field. Focus is also a primary function of phenomena interaction with this system as well like quantification.

Focus is a feature of a lexical item that denotes relevant or salient information in a clause. It is a highlighting device that interacts with syntax (displacement), semantics (operator evaluation), phonology (nuclear pitch accents), and pragmatics (information structure). The element bearing a [+FOC] feature is either new information or is contrasted with some other element. When focus is contrastive, it denotes that there exists at least one set that is excluded from the relevant alternative sets that may be the referent (Molnár and Winkler, 2010). This type of focus exhaustively interprets its answer(s).

General strategies of focus include being syntactically marked by overt left dislocation to a phase edge, the creation of a gap (or resumptive pronoun) at its launching site, and/or the realization of an overt Focus marking. In Ibibio, focus induces displacement to a phase edge in two ways. Duncan et al. (2014) argue that verb focus displaces the foci to the left edge of the VP phase in a low FocP as in their example included below. Argument focus displaces foci to the left edge of the CP as we will investigate in detail.

- (7) a. ákùn á-mà á-dép ngwèt akun 3<sup>rd</sup>.SG-PST 3<sup>rd</sup>.SG-buy book 'Akun bought the book.'
  b. ákùn á-ke (á-)dèé-dép ngwèt í-ké akun 3<sup>rd</sup>.SG-C 3<sup>rd</sup>.SG-FOC.buy book 3<sup>rd</sup>.SG.S
  - 'Akun bought<sub>FOC</sub> the book.' (Duncan et al., 2014, p. 46)

The head of the XP that host the foci contains an operator that probes for [+FOC] deeper within the structure that it attracts, satisfying the requirements of an AGREE relationship when both objects are in finally in a spec-head configuration. Focus can be identified (and disentangled from Topic) by means of interaction with Weak Crossover Effects (WCOs) due to the operator-variable nature of the construction. As well as focus, *wh*- items also display this sensitivity.

2.1.3 Interrogative Phrase. IntP is responsible for encoding Interrogative Force (Rizzi, 2001). In Ibibio, this is realized as an overt Q particle. *Wh*- words however do not appear in Spec,IntP. Instead, they are realized

 $<sup>^{4}</sup>$ XPs have even been detected above Force<sup>o</sup> such as Agr<sub>wh</sub>P in Wolof (Torrence, 2013), MoodP<sub>Evidential</sub> (Haegeman, 2003), and HighOperaterPhrase (Scott, 2012).

 $<sup>{}^{5}</sup>$ By 'quantificational' I mean that the XPs form some dependency in an operator-variable structure with another element lower in the derivation.

in Spec, FocP. While this may seem counterintuitive, *Wh*- items have a long history of being associated with focus. Aboh and Pfau (2011) find that *wh*- expressions are not inherently interrogative (like heads of relative clauses) and therefore the movement of such phrases is not triggered by a need to clause-type for Interrogative Force. Instead, the *wh*- phrase itself is composed of at least a lexical specification of [+FOC] that is present during numeration. Chomsky (1995, p. 30) proposes that lexical entries are able to be composed of three categories of features: Semantic Features, Phonological Features, and Formal Features. The lexical array of words containing these features would be arranged in the computation then spelled out where the resultant structure interacts with the C-I and A-P interfaces.

This applies to *wh*- phrases in that [+FOC] is an inherent Formal Feature of their lexical entries in *wh*-movement languages (as well as the entries of FOC particles like  $k\hat{e}$ ). This feature mandates an operatorvariable structure due to its quantificational nature whose dependency is shown by Aboh and Pfao (2011, p. 121) to perhaps be 'required cross-linguistically for the identification of the content of the question' rather than clause-typing for interrogative force'. Instead, a (potentially null) Q marker in IntP does this, and *wh*- items specify the content of the desired information. This separation of *wh*- and interrogativity is in alignment with the cartographic mapping of one feature to one projection as in Rizzi (2004). Furthermore, Ibibio's marking of *wh*- expressions with a focus marker, as well as its overt realization of a higher Q marker corroborate this disentanglement.

**2.2. Diagnostics.** To test the viability of the structure in (1) in relation to Ibibio, as well as the cartographic assumptions of clause structure, the following tests will be used. Argument Focus morphology will lay out basic focalization tactics. The relationship between focused arguments, functional focus markers, and complementizers will establish the basic position of the Focus Field in the Ibibio's periphery, if at all.

Next, since *wh*- items supposedly land in Spec,FocP, they should be predicted to be in complementary distribution with focused arguments, suggesting that they compete for the same semantic function and structural position. If so, then their structural relationship with complementizers would also parallel those of argument focus. Furthermore, the morphology of argument focus and *wh*- movement should be identical.

Moving to IntP, the Q marker  $\hbar t \dot{e}$  provides an easily detectable head for IntP. To test for the supposed high position of IntP, we may combine it with focalized constituents to verify this position. Adverbials that occur high within the periphery, such as evaluative or evidential ones, will determine the upper limits in which Inter<sup>°</sup> may appear.

Finally, the positions of different complementizers will determine the structure of the Force-Finiteness system. These will be examined by their relationships with subjunctive and infinitival clauses as well as adverbials. The results of these tests will yield the structure in (2).

#### 3. Testing for FocP

Our first test into the left periphery begins with focus. Typologically common for a Niger-Congo language, Ibibio leftwardly displaces foci into the periphery (Aboh, 2007). This activates the Focus Field and makes overt the Foc<sup>°</sup> with the marker *ké*. This will be our main indicator of the presence of Foc<sup>°</sup> opposed to a C<sup>°</sup> because, as I show below, this can co-occur with a higher complementizer of the same clause.

A secondary indication that focus is present is the morphology on T°. Clauses that contain a focused, contrasted, or quantified constituent mark their presence on T° with a different, nonneutral paradigm than basic neutral sentences. For example, in a simple past tense clause without contrast or focus, *má* is how T° is realized but those containing contrastive or quantificational elements make use of the nonneutral tense marker is *ké*.

**3.1. Argument Focus.** Ibibio's strategy for focusing nominals share characteristics with *wh*- movement such as gapping at launching sites and manifestation of overt *ké*. The standard method of focusing is demonstrated in (8b) below where arguments of a matrix clause are focalized. Example (8c) highlights the subject/object asymmetry of focus that Duncan et al. (2014) have argued for. The grammatical counterpart to (8c) is illustrated in (8d).

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- (8) a. ìnì á-má á-jem ngwèt ádò Ini 3rd.SG-PST 3rd.SG-look.for book DET 'Ini looked for the book'
  - b. ngwèt ádò ké ìnì á-ké-jem
     book DET FOC Ini 3rd.SG-PST.FOC-look.for
     'The book FOC, Ini looked for'
  - c. \* *ìnì á-ké á-ké-jem ìgwèt ádò* Ini 3rd.sG-PST.FOC 3rd.sG-PST-look.for book DET 'Ini<sub>FOC</sub> looked for the book'
  - d. *ìnì á-ké-jém ìgwèt ádò* ini 3rd.SG-PST.FOC-look.for book DET 'Ini<sub>FOC</sub> looked for the book'

Example (8b) demonstrates the three characteristics that Ibibio focalization has: left dislocation, realization of  $k\acute{e}$ , and the nonneutral morphology of T. From this data, the contents of the left periphery seem to contain a Focus Phrase. However, one could argue that this is an arbitrary designation. Why could it not simply be a CP, especially since the Foc°  $k\acute{e}$  is morphologically identical to the complementizer  $k\acute{e}$ ? The answer is revealed in argument focus of objects from embedded clauses as in (9a) below.

(9)	a.	<i>ìtá á-kéré ké ngwèt ádò ké ìnì á-ké-yem</i> ata 3 <sup>rd</sup> .sG-think C book DET FOC Ini 3rd.sG-PST.FOC-look.for										
		'Ata thinks that Ini looked for the book <sub>FOC</sub> .'										
	b.	íní á-kéré ké àtá á-má á-díá àdésì Ini 3rd.sG-think C Ata 3rd.sG-PST 3rd.sG-eat rice										
		'Ini thinks that Ata ate the rice.'										
	c.	íní á-kéré ké àtá ké á-ké á-díá àdésì Ini 3rd.sG-think C Ata FOC 3rd.sG-PST.FOC 3rd.sG-eat rice										
		'Ini thinks that Ata <sub>FOC</sub> ate the rice.'										

Now with a complementizer present, partial movement of  $\hat{\eta}gw \hat{t} d\hat{d}\hat{o}$  in (9a) allows us to see two things. First, there is indeed a good reason to call the position of the fronted constituent Spec,FocP instead of just Spec,CP although the heads of the two phrases are homophonous. Second, the ordering of the phrases is such that ForceP dominates FocP. This configuration does not hold for subject extraction as (9c) demonstrates though. The subject  $\hat{d}t\hat{a}$  is unable to undergo the same treatment. Rizzi & Schlongsky (2006) propose a possible analysis for this subject/object assymmetry.

Rizzi (1997, 2004, 2006) views movement as being driven by a principle of UG: a requirement at the interfaces called Full Interpretation. This states that in order to be properly interpreted at the C-I interface, a phrase that has scope-discourse interpretive properties (such as *wh*- items, foci), must occupy the specifier position of a criterial position, one that possesses a head with those features. The *wh*- criterion is one such example. Rizzi and Schlonsky (2007) take this further by stating that once a criterion is met, the phrase can no longer leave it; it is frozen in place. This relates to Ibibio's (9c) in that the subject *àtá* has reached Spec,SubjP right below FinP, thus is frozen in it's criterial position because of their proposed Subject Criterion. In this way, *àtá* here is frozen in place.

**3.2.** Wh- Movement. Now we will examine three traits of *wh*- movement in Ibibio; compatibility with focus, relationship with complementizers, and morphological similarity to focus. Ibibio is a wh-in-situ langauge whose *wh*- items may be focalized. Consider the example below demonstrating this:

(10) a. *íní á-yém ňsŏ* Ini 3<sup>rd</sup>.SG-write what 'What does Ini write?'
b. *ňsŏ ké íní a-ké á-yém* what FOC ini 3<sup>rd</sup>.SG-PST.FOC 3<sup>rd</sup>.SG-write 'What did Ini write?'

This example demonstrates that focus and *wh*- movement are linked by similar morphology and syntactic structure. This sets the stage for identifying their competition for Spec,FocP.<sup>6</sup> Let us now continue with the next test, checking how *wh*- items are realized in terms of Force via partial movement.

(11)	a.	íní	á-kéré	ké	àtá	á-ké		á-díá	'nsŏ					
		Ini	3 <sup>rd</sup> .SG-think	FOC	ata	3 <sup>rd</sup> .se	G-PS	T.FOC 3 <sup>rd</sup> .SG-eat	t what					
		ʻWł	'What does Ini think that Ata ate?' (in situ)											
	b.		á-kéré						á-díá					
		Ini	3 <sup>rd</sup> .SG-think	C W	hat	FOC	ata	3 <sup>rd</sup> .SG-PST.FOC	3 <sup>rd</sup> .SG-eat					
		'What does Ini think that Ata ate?' (partial)												
	c.		ké íní						á-díá					
		wha	at FOC ini	3 <sup>rd</sup> .SG-	thin	kС	ata	3 <sup>rd</sup> .SG-PST.FOC	3 <sup>rd</sup> .sG-eat					
		'What does Ini think that Ata ate?' (full)												

In example (11) we see that arguments in object position may undergo all wh- movement positions just as focalized objects do. Each overt movement type features Foc<sup>°</sup> ké, as evidenced in particular by (11b) that is dominated by Force<sup>°</sup>, and all types trigger nonneutral tense markings on T<sup>°</sup>. Partial wh- movement of subjects of embedded clauses are similarly disallowed as the examples in (12) demonstrate:

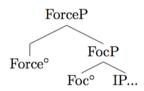
(12)	a.	íní á-kéré ké ànìé í-ké í-díá àdésì										
		Ini 3rd.SG-think C who AA-PST.FOC AA-ate rice										
		'Who does Ini think ate the rice?' (in situ)										
	b.	* Íní á-kéré ké <b>ànìé</b> *ké í-ké í-díá àdésì										
		Ini 3 <sup>rd</sup> .sG-think C who FOC AA-PST.FOC AA-eat rice										
		'Who does Ini think that ate the rice?' (partial)										
	c.	<b>ànié</b> ké Íní á-kéré ké á-ké á-díá àdési										
		who FOC Ini 3rd.SG-think C 3rd.SG-PST.FOC 3rd.SG-eat rice										
		'Who did Ini think that ate the rice?' (full)										

In example (12b), the ungrammaticality results from the focalization of *ànié*. This might be explained via Criterial Freezing (Rizzi and Schlonsky, 2007) like in example (9c). The particular criterial position that prevents *ànié* from undergoing focalization in (12b) would then be Spec,SubjP. The Subject Phrase is a landing site for subjects that exists in the inflectional layer above TP but lower than the periphery (Cinque, 1999) that again here would be a criterial position attracting *ànié*. This also neatly corroborates Baker and Willie's (2010) discovery that in Ibibio, an EPP feature is applied to the highest functional projection of the inflectional layer (e.g. MoodP, AspP), and cannot only be a feature of TP. This could be restated as a SubjP that occurs higher than all the projections in the Inflectional Layer.

<sup>&</sup>lt;sup>6</sup>Languages with multiple *wh*- phrases (like Russian) have been analyzed as parameterizing a 'High Operator Phrase' that occurs high in the peripheral structure (Scott, 2012). This is a unique position that hosts items with many different features associated with quantification (negation, *wh*-) and occurs in the matrix clauses. Scott (2012) uses this phrase to reanalyze the traditional dichotomy that Rudin (1988) outlined of multiple *wh*- languages. Namely those who adjoin *wh*- items to CP (based on insensitivity to superiority effects) and those languages that allow for multiple specifier positions within CP. Scott (2012) instead finds superiority effects in languages such as Russian that previously were thought to have none, and the High Operator Phrase is invoked to explain this.

**3.3. Preliminary conclusions.** Using several lines of evidence such as argument *wh*- items under focus (especially partially moved *wh*- phrases) and focus fronting the Focus Field of Ibibio can be said to minimally contain the following phrases in (13) in this particular order:

(13) Ibibio's Preliminary Left Periphery:



## 4. Force-Finiteness

The largest system within the expanded CP is the Force-Finiteness system. This is the structure of the clause that is responsible for serving as the link between the clause's "propositional content (expressed by IP) and the superordinate structure" as defined by Rizzi (1997, p. 283). It contains the great majority of the phrases of the periphery. Its basic functions are to fulfill clausal typing (Cheng, 1997) at Force° and supply rudimentary temporal information at Fin°, namely finiteness. IntP participates in the clause-typing of Interrogative Force thus is relevant for ForceP. At the other end of the system is the Mod(ifier)P that serves to host adverbial 'adjuncts' that modify the proposition in TP. This system is usually absent in defective clauses (eliminating the possibility of a Focus Field or Topic System) and truncated in limited clauses such as the subjunctive. Let us begin the examination with the IntP high in the system.

**4.1. IntP and polar questions.** In Ibibio, there are three ways to signal that a clause is typed with Interrogative Force. The first is pragmatic. There is no surface difference between the clause-typing of Declarative or Interrogative Forces, the context of the utterance makes the speaker's intentions clear (Essien, 1990). This is the most common form of questioning the proposition of a clause. The second way is to use a rising intonation pattern on the final word of the clause. The final method uses a syntactic marker *nte* clause-initially. Unlike *wh*- questions, polar questions of this type use the neutral tense marker paradigm (Essien, 1990, p. 155). Consider the following examples below:

- (14) a. *ìtè ń-mé-jàijă* Q 1<sup>st</sup>.SG-PRES-be.pretty 'Am I pretty?'
  - b. *ntè àmì m-mé-jàijă* Q 1<sup>st</sup>.SG 1<sup>st</sup>.SG-PRES-be.pretty
     'Am I pretty (opposed to another person)?'
  - c. \* *ìtè àmì ké ḿ-mé-jàijă* Q 1<sup>st</sup>.SG FOC 1st.SG-NEUT-be.pretty 'Am I<sub>FOC</sub> pretty?'

In example (14a), the question marker  $\hat{n}t\hat{e}$  appears to be above TP. This can be seen in adding the pronoun  $\hat{a}m\hat{i}$  as in example (14b) where its presence also introduces a contrastive reading according to my consultant. This does not appear to be contrastive focus because the verb bears no such morphology. This pronoun also cannot occupy Spec,FocP as (14c) demonstrates. This may also be due to freezing effects. The Q marker occupies some position high in the clause and looking at embedded clauses reveals just how high. Consider the examples below where  $\hat{n}t\hat{e}$  alone may only appear in the matrix clause.

(15) a. *ntê ìnì á-kéré ké àmì m-mé-jàijă* Q Ini 3<sup>rd</sup>.sG-think C 1<sup>st</sup>.sG 1<sup>st</sup>.sG-NEUT-be.pretty
 'Does Ini think that I am pretty?'

b. \* ìnì ntè á-kéré ké àmì m-mé-jàijă
 Ini Q 3<sup>rd</sup>.sG-think C 1<sup>st</sup>.sG 1<sup>st</sup>.sG-NEUT-be.pretty
 'Does Ini think that I am pretty?'

From the examples in (15), it seems that  $nt\dot{e}$  must occupy a phrase high in the matrix clause. Consider the examples in (16) where Speech-act adverbials that occur right next to ForceP in a Topic Phrase are inserted above  $nt\dot{e}$ . Speech-act adverbials are generated in high in the structure and do not occur without such parenthetical use. We see that in Ibibio this pattern holds as well:

(16)	a.					<i>á-kéré</i> 3 <sup>rd</sup> .SG-think			<i>ḿ-mé-jàijǎ</i> 1 <sup>st</sup> .SG-PST-be.pretty		
	'Honestly, does Ini think that I am pretty?'										
	b.	* <b>ntè</b> ké akpaniko ini á-kéré ké àmi <i>m-mé-jàijă</i> Q In truth Ini 3 <sup>rd</sup> .SG-think C 1 <sup>st</sup> .SG 1 <sup>st</sup> .SG-PST-be.pre									
'Honestly, does Ini think that I am pretty?'											

The PP *ké akpaniko* in (16a) has a parenthetical reading to it, suggesting it exists in the peripheral structure. It cannot occur below the Q marker as in (16b). This reflects the necessary existence of a phrase, perhaps TopP, that must dominate the interrogative Q marker's phrase. We can call this phrase IntP. Furthermore, example (17) below demonstrates the order of IntP in relation to focalized constituents:

(17) *ntè ngwèt ádò ké nnì á-ké-yem*Q book DET FOC Ini 3rd.sG-PAST-look.for
'Did Ini look for the book<sub>FOC</sub>?'

4.1.1 Complementizer mmê and Q-marker nte. While the Q marker cannot occur by itself in an embedded clause as in example (15b), it may appear in an embedded clause in conjunction with a special complementizer: mmê. Consider the following examples adapted from Major (2014, p. 569) illustrating the basic distribution of mmê:

(18)a. ekpe á-má á-bíp 'nтê àfó díyá à-dí ekpe 1<sup>st</sup>.SG-PAST 1<sup>st</sup>.SG-ask whether you FUT 2<sup>nd</sup>.SG-come 'Ekpe asked whether you will come.' b. *n*-d*i*-jongo-ké 'nтê ekpe á-má á-dì 1<sup>st</sup>.SG-know-NEG whether Ekpe 3<sup>rd</sup>.SG-PAST 3<sup>rd</sup>.SG-come 'I don't know whether Ekpe came.' c. ekpe á-má á-bíp 'nтê nsó ké á-ké tém ekpe 3rd.SG-PAST 3rd.SG-ask whether what FOC 3rd.SG-PAST cook 'Ekpe asked what you cooked.'

In example (18a), the complementizer occurs exactly where *ké* would, preceding the embedded clause after the matrix V. Example (18b) demonstrates this is also the case when negation is included. Example (18c) illustrates how it may precede a *wh*- item focalized to Spec,CP. These ordering facts suggest that the complementizer lies between ForceP and FocP.

Rizzi (1997) positions such complementizers in Spec,ForceP. Van Gelderen (2004) argues that these complementizers originate in Spec,FocP. This occupation of ForceP blocks *wh*- movement because its specifier position is the escape hatch that *wh*- items move through to a higher clause. Van Gelderen (2004) then argues that such complementizers then finally move to Rizzi's (1997) proposed position; Spec,ForceP. This landing site accounts for English's ordering of *whether* > *that*. This ordering is similarly reflected in Ibibio as example (19a) shows: (19)ìnì á-ké dì-jongo-ké 'nтê *htè àtá* á-má á-día a. Ini 3rd.SG-PAST.FOC PAST.FOC-think-NEG whether Q Ata 3rd.SG-PAST 3rd.SG-eat àdésì rice 'Ini doesn't know whether or not Ata ate the rice.' b. m-mè kérè 'nтê ànyě ikpé ìké wèt *ngwèt* 1<sup>st</sup>.SG-PRES think whether who ikpe AA-PAST.FOC write book 'I wonder who wrote the book.' (Qin, 2014, p. 631)

In example (19a), we see an embedded question introduced by the interrogative complementizer. It appears above the Q marker, but below the VP of the matrix clause. In example (19b), the complementizer appears before the *wh*- word in another embedded question that it intoduces. This demonstrates that  $m\hat{n}\hat{n}$  behaves similarly to  $k\hat{e}$  and that it appears high in the CP of the embedded clauses it introduces.

**4.2. Defective T systems in truncated clauses.** Starting with clauses that have little or no CP domain, we will examine Ibibio's infinitival and Subjunctive clauses. These types of clauses are thought to have T heads that contain a bundle of incomplete features (Chomsky, 2000). Phi-features (such as number, gender, and person) together form a bundle of features. This is somewhat at odds of a cartographic approach that attempts to map one feature to one head. When one of these phi-bundles is missing a feature, it is said to be defective. This defectivity of  $T^{\circ}$  in such clauses makes the phrase unsuitable for a SubjP given its truncated nature (Rizzi, 2004). If this is true, then in Ibibio as well there should be no ability for an active Focus Field. Let us test Ibibio's infinitival clauses against these claims.

4.2.1 *Infinitival clauses.* Defective T systems involve a TP that is selected by a higher VP, instead of the normal merging of TP with a higher CP. At a very basic level, this can be observed by the absence of a possible complementizer in the embedded, truncated clause. Consider the examples below where the invariant T *adi* appears in the embedded clause:

- (20) a. *ìnì à-kèmé adi bok efere* Ini 3rd-SG-may INF cook soup 'Ini may cook soup.'
  - b. *ìnì à-kèmé adi sí-bok efere* Ini 3rd-SG-may INF IMPF-cook soup 'Ini may be cooking soup.'
  - c. *efere* ké ìnì à-kèmé adi bok soup FOC Ini 3rd-SG-may INF cook 'Ini may cook soup<sub>FOC</sub>.'
  - d. \* *ìnì à-kèmé efere ke adi bok* Ini 3rd-SG-may soup FOC INF cook
     'Ini may cook soup<sub>FOC</sub>.'

In example (20a), no agreement appears on the T<sup> $\circ$ </sup> *adi* and the subject has been raised to a clause-initial position. The displacement is verified by the fact that *bok* is transitive and requires an agent and theme and *ini* is phonetically realized in a different position than it is interpreted as. Ibibio's infinitival clauses also contain an AspP as is demonstrated in (20b) where the imperfect aspect is able to be encoded between TP and VP. Example (20c) demonstrates that a long distance dependency between the object of the infinitival clause and the CP domain of the matrix is possible. This means that *efere* is able to form a dependency through the truncated CP domain of the embedded clause, perhaps directly to the matrix CP. Example (20d) illustrates the inability for an activated Focus Field to appear in this type of clause, confirming the generalizations of Rizzi (1997) regarding these clause types.

In order for such clauses to be clause-typed according to Cheng's (1997) CTH, there must at least be some remnant of CP in the left periphery since it is the phrase responsible for clause-typing. Rizzi (2004)

argues that in these limited C-systems, FinP will always exist to interact with the lower TP-domain. FinP provides the rudimentary temporal distinction that Chomsky (2000) argues is inherited by  $T^{\circ}$ . Thus as we can see that  $T^{\circ}$  does exist in the infinitival clauses in the form of *adi*, then FinP above it must have been present in order for  $T^{\circ}$  to receive the nonfinite feature. This would also alow for a very limited structure in the periphery, still allowing for clause-typing to occur.

4.2.2 *Subjunctive clauses*. A Subjunctive clause is another type of truncated clause in at least Ibibio. In Ibibio, they occur without a possible complementizer to introduce them (Baker and Willie, 2010). This is one sign that there may be no ForceP. Consider the following examples in (45) where the matrix verb *yèm* selects for these reduced clauses.

- (21) a. *Ìnì á-yèm okon á-bok efere* Ini 3rd.SG-want Okon 3rd.SG-cook soup 'Ini wants that Okon cooks soup.'
  - b. *Ìnì á-yem okon á-si-bǫk efere* Ini 3rd.SG-want Okon 3rd.SG-IMP-cook soup 'Ini wants that Okon is cooking soup.'
  - c. \* *Ìnì á-yem ké okon á-si-bok efere* Ini 3rd.5G-want C Okon 3rd.5G-IMP-cook soup 'Ini wants that Okon is cooking soup.'

In examples (21a) and (21b), the embedded verb displays many features of matrix verbs, namely that it agrees in phi-features with its subject and it also can encode aspect, revealing at least an AspP (21b). There is however a notable absence of an overt T°, even in its infinitival form *adi* as in (20). Example (21c) shows that the insertion of material in Force° is disallowed. Instead, it forces a negative reading of the embedded proposition as in (22):

(22) *Ìnì á-yem ké okon á-bok efere* Ini 3rd.sG-want NEG Okon 3rd.sG-cook soup 'Ini wants that Okon is not cooking soup.'

The instance of  $k\dot{e}$  here is not the focus marker or complementizer, but is used to mark negation in specific situations. In most nonnegated sentences, negation is marked by a suffix composed of a homorganic consonant followed by a vowel that undergoes vowel harmony. Duncan et al. (2014) argue that this suffix is the result of V raising-to-NEG in nonhortative and noncontrastive matrix clauses. In instances where V does not merge with NEG, it appears before the verb as the invariant morpheme  $k\dot{e}$  as in the examples below. Just to demonstrate negation, the following examples are provided:

(23) *ń-yíp-pé*1st.SG-steal-NEG
'I have not stolen.'

Without a T<sup> $\circ$ </sup>, it can be predicted that there would be no CP domain either for this clause. Example (24) below confirms this, even when omitting the problematic complementizer *ké* from the example in (21c).

(24)	a.	* Ìnì á-yem	(ke) efere	ké	okon	á-si-bok				
		Ini 3rd.SG-want	C soup	FOC	Okon	3rd.SG-IMP-cook				
'Ini wants that Okon is cooking soup <sub>FOC</sub> .'										
	b.	<b>efere</b> ké Ìnì á-	yem	okon	á-si-b	pok				
		soup Foc Ini 3	rd.SG-want	Okon	n 3rd.SG-IMP-cook					
		'Ini wants that Okon is cooking soup <sub>FOC</sub> .'								

These facts together suggest that the subjunctive clauses in Ibibio may maximally contain an AspP and NegP. The specifier position of AspP phrase may host the subject, if it is the case that the highest phrase of a TP domain contains the EPP feature that attracts a nominal to it (Baker and Willie, 2010). This however would not account for the example in (22) where NegP appears because negation occurs within the embedded CP and before the subject of the clause thus cannot be hosting it in Spec,NegP. The reason for this is unclear. Finally, (24b) shows normal focalization of a constituent within a subjunctive clause. These ordering patterns of truncated clauses support Rizzi's (1997, 2004) generalizations that defective clauses that lack complete Force-Finiteness system also lack the substructures (such as the Focus Field) within them, although the presence of  $T^{\circ}$  in infinitival clauses suggest that there is at least some piece in the periphery, FinP, responsible for the inheritance of temporal information to  $T^{\circ}$ .

**4.3.** Adverbials. Adverbial phrases are another instance of structure high in the clause. Cinque's (1999) massive cross-linguistic survey explores how different classes of adverbials are found to be each assigned a particular functional projection in a specific order. This ordering, like Rizzi's Left Periphery, is posited to be a language universal. With similarly strong theoretical predictions as Rizzi's, Cinque's (1999) hierarchy of adverbials can be tested using Ibibio.

At the top of this hierarchy high in the CP domain, Cinque (1999) finds adverbials related to the speaker's judgments of the speech act, or mood. These adverbs fall into three classes that are found to be ordered in the periphery in the following way:

(25) Speech-Act > Evaluative > Evidential

In Ibibio, examples of Speech-Act and Evaluative adverbial phrases are *ké akpaniko* ('honestly') and *ké ndjokiso* ('unfortunately') respectively. Cinque (1999) proposes that this hierarchy is universally rigid thus we should find that the order of these two adverbial phrases is too. Consider the data below:

- (26) ké akpaniko ngwèt ádò ké ini á-ké-yem in truth book DET FOC Ini 3rd.SG-PAST-look.for 'Honestly, Ini looked for the book<sub>FOC</sub>.'
- (27) ké ndjokiso ngwèt ádò ké nn á-ké-yem in bad.luck book DET FOC Ini 3rd.SG-PAST-look.for 'Unfortunately, Ini looked for the book<sub>FOC</sub>.'

The sentences in (26) and (27) demonstrate that the phrase they occupy dominates FocP. The two phrases are able to occur in the same sentence as well, however we were unable to compose them using FocP. Instead, consider the following examples below where the two adverbials are identified as peripheral elements by their relation to the polar question marker  $\hbar t \hat{e}$ :

(28)							<i>á-ké-yem</i> 3rd.SG-PAST-look.for				
	'Unfortunately, did Ini honestly look for the book?'										
(29)	) * <i>ké akpaniko ké ndjɔkiso 'ntè ìnì á-ké-yem 'ngwèt</i> PREP truth PREP bad.luck Q Ini 3rd.sG-PAST-look.for book 'Honestly, did Ini unfortunately look for the book?'										

In example (28), both PPs occur above the Q marker, however when their position is reversed as in (29), an ungrammaticality arises. This suggests that the two phrases occupy two different dedicated phrases in the periphery. Furthermore, the  $k\acute{e}$  marker on the verb appears. This nonneutral tense marker on V tells us that sometime within the sentence is contrastive, quantified, or negated, perhaps the subject *ini*. All in all, this suggests that Cinque's (1991) hierarchy of adverbials in the periphery holds for Ibibio as well.

**4.4. ModP.** The lowest phrase in the Force-Finiteness systems is a special phrase that Rizzi (2004, p. 241) identifies as one that hosts adverbials that modify the propositional content of the IP below it. This phrase is the natural position for peripheral adverbials (ie those that are not highlighted by Topic or Focus). Cinque's (1999) universal hierarchy of adverbs places epistemic adverbs, such as 'possibly', in the periphery. In Ibibio, the epistemic adverb *akpena*, denotes the speaker's judgments about both their certainty about it and has a deontic flavor in that it also encodes how the speaker thinks the world ought to be. Consider the examples below which feature this adverb in a variety of positions:

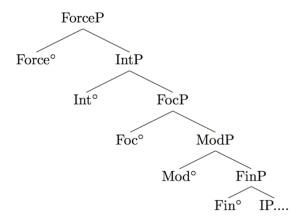
(30)a. akpena ini a-di bok efere perhaps Ini 3rd.SG-FUT cook soup 'Ini should probably be able to cook the soup.' b. *íní á-kéré* ké akpena nte àtá á-díá àdésì Ini 3rd.sG-think C perhaps ADV Ata 3rd.sG-eat rice 'Ini thinks that Ata should probably eat rice.' c. íní á-kéré ké àtá, akpena *ìtè* á-díá àdésì Ini 3rd.sG-think C Ata perhaps ADV 3rd.sG-eat rice 'Ini thinks that Ata, should probably eat rice.'

In example (30a), the adverb is placed in a matrix clause in its normally used position. In (30b), the adverb is given structural prominence by appearing in the the periphery. When it appears in this peripheral position, it must be accompanied by the adverbial nte (not to be confused with the overt Inter<sup> $\circ$ </sup> nte). This adverbial particle was identified by my native speaker as an adverb, as well as by a dictionary entry in Urua et al. (2004, p. 94). It has no meaning on its own, it is functional, and it must occur with adverbs placed high in the clause. This position would correspond to Rizzi's (2004) ModP, from which they may undergo further focalization or topicalization. The particle nte may be an overt realization of Mod<sup> $\circ$ </sup> that attracts adverbials like akpena to their specifier position when highlighted by structural prominence in the periphery. Furthermore, they may be preceded by a topicalized constituent as (30c) shows. This at least demonstrates that it exists in the periphery, but future investigation into its relation to the other structures will confirm its exact position as well as investigating the interaction of other adverbials in relation to nte.

#### 5. Conclusions

The locations journeyed through in this paper represent only a small fraction of the whole landscape of Ibibio's Left Periphery. Consider again (2) restated below.

(2) Pieces of Ibibio's Left Periphery



This structure in (2) represents at least five categories that must be present in Ibibio's Left Periphery. The exact ordering of these phrases, especially ModP, must be investigated further, however this should represent the general layout of these functional projections in relation to one another, especially under assumptions of UG. I was unable to elicit any projections above ForceP, however many investigations into the CP domain of other closely-related languages reveal such projections (cf. Torrence 2013) thus it is conceptually possible for a language to do so. Furthermore, this configuration in relation to Topicalization has been left aside for future research (see Appendix). Assuming a cartographic view of the periphery, Ibibio's possible projections in this domain are surely more numerous than those in (2), perhaps even hundreds exist. No language will have all these projections active in every clause, but rather parameterization activating the use of these dedicated functional heads builds the grammar, and by extension, the diversity of human language. The results of this study confirm the peripheral ordering Rizzi (1997) first explored, reflecting an underlying universal hierarchy. The findings support the idea of UG which reflects and posits an innate biological capacity for language in humans.

#### References

Aboh, E. O. (2004). Left or right? a view from the Kwa periphery. In Peripheries, pages 165–189. Springer.

- Aboh, E. O. (2007). Focused versus non-focused wh-phrases. *Trends in Linguistics Studies and Monographs*, 191:287.
- Aboh, E. O. and Pfau, R. (2011). What's a wh-word got to do with it. *Mapping the left periphery: The cartography of syntactic structures*, 5:91–124.
- Baker, M. and Willie, W. U. (2010). Agreement in Ibibio: From every head to every head. *Syntax*, 13(2):99–132.

Benincà, P. and Poletto, C. (2004). Topic, focus and V2: Defining the CP sublayers. *The Structure of CP and IP. The Cartography of Syntactic Structures*, 2:52–76.

- Cheng, L. L. S. (1997). On the typology of wh-questions. Taylor & Francis.
- Chomsky, N. (1995). The minimalist program. The MIT Press, Cambridge, Massachusetts.
- Chomsky, N. (2000). Minimalist inquiries: The framework. In Martin, R., Michaels, D., and Uriagereka, J., editors, *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, pages 89–155. The MIT Press, Cambridge, Massachusetts.
- Cinque, G. (1999). Adverbs and functional heads: A cross-linguistic perspective. Oxford University Press.
- Connell, B. (2007). Endangered languages in Central Africa. Language Diversity Endangered, pages 163–78.
- Duncan, P. T., Major, T., and Udoinyang, M. (2014). Ibibio verb focus as multiple copy spell-out. *Studies in Ibibio Grammar*.
- Essien, O. E. (1990). A grammar of the Ibibio language. Univ. Press Ltd.
- Haegeman, L. (2003). Notes on long adverbial fronting in English and the left periphery. *Linguistic Inquiry*, 34(4):640–649.
- Kiss, K. É. (1998). Identificational focus versus information focus. Language, pages 245–273.
- Lipták, A. (2010). On event operator movement in English factives. *Theoretical Linguistics*, 36(2/3):225–231.
- Maddieson, I. (2003). The sounds of the Bantu languages. In Van de Velde, M., Nurse, D., Bostoen, K., and Philippson, G., editors, *The Bantu Languages*, pages 15–41. Routledge.
- Major, T. (2014). Transitivity and valency, benefactives, abilitatives, imperatives, focus, vowel hiatus, agreement markers, serial verb constructions, control verbs. *Studies in Ibibio Grammar: Individual Elicitation Notes*.
- Molnár, V. and Winkler, S. (2010). Edges and gaps: Contrast at the interfaces. *Lingua*, 120(6):1392–1415.

Pesetsky, D. M. (2000). Phrasal movement and its kin. MIT press.

- Pollock, J.-Y. (1989). Verb movement, universal grammar, and the structure of IP. *Linguistic Inquiry*, 20(3):365–424.
- Qin, Z. (2014). Subject-object asymmetries, in situ questions, long distance wh- questions, indirect questions, and cnpc. *Studies in Ibibio Grammar: Individual Elicitation Notes*.

- Rizzi, L. (1989). The new comparative syntax: principles and parameters of universal grammar. *Cahiers Ferdinand de Saussure*, (43):65–78.
- Rizzi, L. (1997). The fine structure of the left periphery. In Elements of Grammar, pages 281–337. Springer.
- Rizzi, L. (2001). On the position Int(errogative) in the left periphery of the clause. *Current studies in Italian syntax: Essays offered to Lorenzo Renzi,* pages 287–296.
- Rizzi, L. (2004). Locality and left periphery. *Structures and beyond. The cartography of syntactic structures*, 3:223–251.
- Rizzi, L. and Shlonsky, U. (2007). Strategies of subject extraction.
- Rooth, M. (1992). A theory of focus interpretation. Natural Language Semantics, 1(1):75–116.
- Rudin, C. (1988). On multiple questions and multiple wh fronting. *Natural Language & Linguistic Theory*, 6(4):445–501.
- Scott, T. V. (2012). Whoever doesn't HOP must be Superior: The Russian left-periphery and the Emergence of Superiority. PhD thesis, Stony Brook University.
- Torrence, H. (2013). The clause structure of Wolof: Insights into the left periphery. John Benjamins Publishing.
- Urua, E.-A., Ekpenyong, M., and Gibbon, D. (2004). Uyo Ibibio dictionary. *ABUILD Language Description Curriculum Materials* #1. *Course*.
- Urua, E.-A. E. (2000). Ibibio phonetics and phonology. Centre for Advanced Studies of African Society.

Van Gelderen, E. (2004). The CP and split CP cross-linguistically. Word, 55(3):369–403.

## Appendix

My data on topicalization was insufficient to determine its structural configuration in the periphery, however was able to collect a few pieces of information that may be a part of the answer. Topics are disjoint constituents that are not quantificational (Rooth, 1992), define the aboutness or familiarity of the topicalized constituent (Kiss, 1998), do not convey new information like focus, and do not create scope (Lipták, 2010). Like focus however, they are able to be contrastive or noncontrastive, the latter being the most typical types of topic (Molnár and Winkler, 2010). They may occur in numerous positions throughout the periphery in Ibibio. Rizzi (2001) proposes an insertion of a TopP between every phrasal projection in the periphery. Stricter analyses define a Topic Field that only occurs above the Focus Field (Benincà and Poletto, 2004).

In the dialect of Ibibio of my language consultant, it seemed that a translation of 'as for x, ...' would accompany a noticeable pause between the argument and the remainder of the sentence, suggesting topicalization. The following examples demonstrate this where | indicates this pause:

(31) a. *ìnì* | *ké* ídém ámó á-ké-jem ngwèt ádò PREP self his 3rd.SG-PST.FOC-look.for book DET Ini 'As for Ini himself (opposed to someone else), he looked for the book' b. *ìnì á-ké-yem* ngwèt ádò ké ídém ámó Ini 3rd.SG-PST.FOC-look.for book DET PREP self his 'Ini looked for the book by himself.' c. ngwèt ádò ké ìnì ké ídém ámò | á-ké-yem 3rd.sg-Pst.FOC-look.for book DET FOC Ini PREP self his 'As for Ini himself (not someone else), a book<sub>FOC</sub> is what he was looking for.' (Not: 'A book<sub>FOC</sub> is what Ini by himself was looking for.')

A contrastive reading of the emphatic reflexive (ER) *ké ídém ámò* in examples (31a) and (31c) is the only one available according to my language consultant. This means the denotation of the nominal element that the ER modifies is excluding at least one set of relavant alternatives that it is contrasting with. In (31a) the DP *ìnì* as well as the ER, have a parenthetical reading, indicating it may be structurally disjoint from the rest of the sentence. This is lost for *ìnì* in (31b) suggesting that it here occupies a regular subject position within the TP-domain. This example also has a different interpretation when the ER is closer to the verb,

one that does not exclude a set of alternatives in a contrastive way, but rather provides emphasis about how Ini performed the action alone.

Another interesting feature is that the verb bears the nonneutral tense marker *ké*- when there is no other obvious trigger for it (i.e. *wh*- movement, focalization, negation, quantifiers). This morphology is required for these structures, and this is not expected for a typical topicalization strategy. This indicates that the ER must account for this morphology. This constituent operates in contrastive or emphatic way, aligning with the purpose of the morphology on the verb. Example (31c) demonstrates that it can co-occur with a focalized constituent thus does not occupy Spec, FocP. Here again there is a parenthetical prosodic pausing that is necessary before the VP. My consultant also translated *ìnì ké ídém ámò* preceded by *as for* and interpreted it as having a special emphatic quality. Perhaps it occupies a TopP. Consider the following examples:

- (32) a. *ke ídém ámó ké ìnì a-ké á-ké-yem ìgwèt ádò* PREP self his FOC Ini 3<sup>rd</sup>.SG-PST.FOC 3rd.SG-PAST.FOC-look.for book DET 'By himself<sub>FOC</sub>, Ini looked for the book.'
  - \* ìnì á-ké-yem b. ngwèt ádò ke ídém ámó Ini 3rd.SG-PST.FOC-look.for book DET PREP self his 'Ini himself (opposed to someone else) looked for the book.' ke akpaniko ngwèt ádò ké ìnì ké ídém ámò | akpena 'ntè c. in truth book DET FOC Ini PREP self his probably ADV á-ké-yem 3rd.SG-PST-look.for 'Honestly, as for Ini himself, he should look for the book<sub>FOC</sub>.'

In (32a), the ER may occupy Spec,FocP and the subject, ini, loses its parenthetical pause as just as it did in (30b). Another change when the ER is in this position comes with the translation. My native speaker said that when the ER is fronted like this, it is not contrastive with another entity as in (32b) and (32c). This suggests that the ER moves from a TP-internal position where it, along with the DP ini, are modifying the verb by their close proximity as in (31b).

Example (32c) demonstrates a number of items fronted to the periphery. What is important is that this demonstrates that there might indeed be TopP between the FocP with  $ngwet \, ade$  in Spec,FocP and the epistemic adverb *akpena* that occupies the lowest position in the periphery. The examples in (33) below demonstrate some of these different possible topics occurring in embedded clauses:

(33)	a.									<i>á-ké-yem</i> 3rd.SG-PST.FOC-loo		<i>ìgwèt</i> Dook	
										neone else), looked t			
	b.	* àtá	á-kéré	ìnì	ké	ídém	áme	ó ké	á-ké-y	<i>Jem</i>	'ngwèt	ádo	
		ata	3 <sup>rd</sup> .SG-think	lni	PREP	self	his	С	3rd.s	G-PST.FOC-look.for	book	DET	
	'Ata thinks that it was Ini, himself (opposed to someone else), looked for the book.'												,

This data is inconclusive as to where exactly the TopPs exist in the configuration in (1). Topicalization in Ibibio seems to be free for the most part, and if it is the case that ERs are topics as Ahn (2010) suggests, then it too could be occupying some peripheral position. The one clear topic position I was able to detect can be seen in example (31a) where the subject was prosodically disjoint from the remainder of the clause and my consultant actually translated it using 'as for' which indicates topics in English. However, the rest of the structural positions are inconclusive.



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