Subjects in Igbo Interrogatives: Evidence for a non-cartographic left periphery

There is increasing evidence that projections in the left periphery cannot be distinguished using categories like C and T alone and that differences arise as a result of the features present in a given head (Van Urk, 2015). Given such a system, features generally associated with T (e.g. subject licensing) can be affected by those associated with C (e.g. interrogative licensing), and the number of left peripheral projections can differ not only cross-linguistically, but between different clauses in a given language (Martinović, 2022). I argue that facts from Igbo (Niger-Congo, Nigeria) support such analyses: (i) the licensing of *in-situ wh*-questions is associated with the obligatory dislocation of non-clitic subjects, which constrasts (ii) *ex-situ wh*-questions where no such effect is observed. I suggest that (i) arises as a result of a left periphery where C/T-features remain bundled, whereas (ii) arises when those features are dispersed.

Data *Wh*-words in questions either extract to the left of a particle $k\dot{a}$ (1b) or remain *in-situ* (1c) (Uwalaka, 1991; Amaechi, 2020). This corresponds with an asymmetry in subject-licensing: unlike in canonical declaratives (1a) and *wh ex-situ* (1b), **non-clitic** subjects in *wh in-situ* are **obligatorily dislocated** (1c).

(1)	a.	Ézè gà-rà áhia.	b.	Èbéē kà Éze	é gà-rà?	c. É	zè _i *(ò _i)	gà-rà èbéē?	
		Eze go-rV market		where FOC E.	go-rV	E	. _i 3sg.cl _i	go-rV where	
		'Eze went to the market.'		'Where did Eze	e go?'	'Where did Eze go?'			

Polar interrogatives also feature dislocated subjects, paralleling *in-situ* interrogatives. The subject clitic is **high-toned in declaratives** (2a), but obligatorily **low-toned in interrogatives like** (2b) & (1c).

(2)	a. Ó gà-rà áh <u>i</u> a.	b. (Ézè) *(ò) gà-rà áhia?
	3sg.cl go-rV market	(Eze) 3sg.cl go-rV market
	'S/he went to the market.'	'Did s/he/Eze go to the market?'

Interpretive effects also point to a non-canonical position for non-clitic subjects in questions like (2b): the unavailability of an indefinite reading for the subject in (3b) is consistent with these subjects being **topics** (e.g. externally merged in spec, Topic; Georgi and Amaechi, 2022). (3b) is interpreted as 'Did a person (as opposed to an animal) eat my yam?' The same holds for non-clitic subjects in *in-situ wh*-questions.

(3) a	. Mmádù rì-rì jí [!] ḿ.	b.	#Mmádù ò)	rì-rì	jí	! <u>m</u> ?
	person eat-rV yam 1sg		person 3	sg.cl	eat-rV	yam	1sg
	'Someone ate my yam.'		Intended: "	'Did s	someor	ne eat	my yam?'

Proposal Connecting the asymmetry in subject licensing with the presence/absence of *wh*-movement, I propose that the two clause types arise from **two CT layers with different features** (Martinović, 2022).

Case 1 For *in-situ* and polar interrogatives, a bundled CT head probes for both subject and interrogative features: $[\phi^*, Q^*]$. To check ϕ^* , either a non-clitic subject moves to spec,CT or a prononimal clitic (D⁰) adjoins to CT⁰. To check Q*, I propose that a Q particle (Cable, 2010) must also occupy spec,CT. As such, Q* **cannot be checked when spec,CT is already filled by a non-clitic subject** (4a). This derives the restriction: **only clitic subjects are allowed since they leave spec,CT empty**. This allows the Q particle to be raised, checking Q* and finishing the derivation, (6a). I suggest that the Q particle in spec,CT is spelled out as a low tone which docks onto the subject clitic, accounting for the tonal alternation in (2a) vs. (2b).

(4) a. $*[_{CTP} Q DP_{sbj} [_{CT'} CT^0] ...]$ b. $[_{TopicP} [_{CTP} Q [_{CT'} [_{CT} D^0_{clitic} CT^0] ...]]]$

The Q particle in my proposal functions similarly to wh 'scope markers,' which previous proposals have also placed in spec,C (e.g. in German; Dayal, 1993). This is supported by the fact that it is the matrix subject that is dislocated when an embedded wh-word takes matrix scope, not the lower embedded subject.

(5) Ézè *(ò) chè [nà Àdá gà-rà èbéē]?
Eze 3sg.cl think C Ada go-rV where
'Where does Eze think that Ada went?'

Case 2 The above constructions are the result of C and T features remaining bundled in a single head, similar to structures in Van Urk (2015)'s analyses. However, *ex-situ wh*-constructions show that C/T features need not always be bundled in Igbo. Here, I propose that a lower spec,CT hosts the subject (checking ϕ^*), while a higher spec,CT hosts the A'-moved *wh*-word (checking FOC*). The higher head is spelled out as $k\dot{a}$ – the *ex-situ* marker (1b). Amaechi (2020)'s proposal is equivalent – the higher CT is her 'FocP'.

(6) a. $[CTP XP_{wh} [CT'[CT ka]][CTP DP_{sbj} [CT'[CT^0 ...]]]]]$

These structures above correctly account for the distribution of morphemes in the two question strategies. A last point to consider now is how the two left-peripheries are related. In **Case 1**, there is evidence of a single CT projection where the morphemes which check the two features are in competition for a single specifier, whereas in **Case 2**, I argue that the features are distributed across two projections. One option here is to adopt the Head Splitting mechanism proposed in Martinović (2022), where CT is merged as a single head with multiple features, but reprojection occurs to satisfy feature checking requirements. Allowing for reprojection, the different number of projections in the two clauses is reduced to differences in how CT features are organised, i.e. whether or not the application of Head Splitting results in a licit structure.

Consequences Compared to a previous analysis proposed by Amaechi (2020), who adopts a Rizzi split-CP system, modeling the Igbo left periphery as CT allows us to (i) better capture interactions between features which would otherwise be split amongst different heads and (ii) explain why these interactions can differ within a single language.

Evaluating a case where the two theoretical options provide contradictory predictions provides support in favour of my proposal. The CT system predicts that the morphemes which arise from one CT *cannot* co-occur in a clause with those from another CT. In Amaechi (2020)'s system, ka and the low tone are Foc⁰ and Int⁰ in a split-CP, predicting that they *can* co-occur in a given clause since they instantiate two heads in a single left periphery. It is the prediction made by the CT system that is borne out. (8) shows that it is not possible to form a polar question by docking a low tone onto a clause with focus fronting, as the split-CP system predicts should be possible. To appear together, the clause with ka must be embedded below a copula. The low tone can now appear in the left periphery of the higher clause, i.e. biclausal structure allows for two different CTs, (9). The examples show that the two morphemes are in complementary distribution, a natural consequence of the CT system.

(7)	Jí	kà ó	rì-rì.	(8)	*Jì	kà ó	rì-rì?	(9)	[CTP	Ò	bù	[CTP	jí	
	yam foc 3sg.cl eat-rV					yam foc 3sg.cl eat-rV				3sg.cl COP yam				
	'It'e	vam that	s/he ate '		Inte	nded:	'Is it vam	that s/he	kà	ó	rì-rì]]?		
	It's yall that s/ne ate.				ate?	,			FOC	C 3sg.cl eat-rV				
					'Is it yam t					that s/h	ie ate	?'		

I have shown that Igbo motivates a system where C and T features can interact (CT) and a mechanism which relates the projections in different clause types. This framework more thoroughly captures the subject-licensing asymmetry, variation in *wh*-movement, and the distributional properties of interrogatives in Igbo.

Selected References Amaechi, M. (2020) "A'-movement dependencies and their reflexes in Igbo"; Cable, S. (2010) *The Grammar of Q: Q-Particles, Wh-Movement, and Pied-Piping*; Dayal, V. (1993) "Scope Marking as Indirect Wh-Dependency"; Georgi, D. and M. Amaechi (2022) "Resumption in Igbo: Two types of resumptives, complex phi- mismatches, and dynamic deletion domains"; Martinović, M. (2022) "Feature Geometry and Head Splitting in the Wolof Clausal Periphery"; Uwalaka, M. (1991) "Wh-movement in Igbo"; Van Urk, C. (2015) "A uniform syntax for phrasal movement: A case study of Dinka Bor"