A′-movement restrictions in Igbo reanalyzed

Introduction. This paper provides a novel analysis for A′-extraction restrictions in Igbo clauses which involve a preverbal harmonizing morpheme E/A. We argue that clauses with E/A which ban extraction involve a CP-layer, which is in competition with the layer required in A′-movement. Our analysis of E/A also predicts when its appearance does *not* correspond with an A′-extraction restriction, providing the first unified analysis of both the E/A morpheme and various structures that contain it.

The puzzle. Igbo (Niger-Congo; Nigeria) clauses with the perfective morpheme (1) or negation (2) are incompatible with A′-movement. (3)-(4) display this restriction with attempted focus fronting, which involves A′-movement of an XP to the specifier of C_{WH} *kà* (Amaechi, 2020; Jian, forthcoming).

(1) Àdá ꜜé-rí-é-lá ꜜjí.
Ada E/A-eat-OVS-PFV yam
'Ada has eaten yam.'

(2) Àdá é-ꜜrí-ghí jí.
Ada E/A-eat-NEG yam
'Ada did not eat yam.'

(3) *Jí kà Àdá ꜜé-rí-é-lá ɟí.
yam C_{WH} Ada E/A-eat-OVS-PFV
Int.: *'Ada has eaten YAM.'*

(4) *Jí kà Àdá é-ꜜrí-ghí ɟí.
yam C_{WH} Ada E/A-eat-NEG
Int.: *'Ada did not eat YAM.'*

Clauses with the perfective/negation contain a harmonizing vowel between the subject and the verbal complex, which we refer to as E/A. We argue that E/A indicates the presence of a higher structural layer in perfective and negative clauses, and that the ban on A′-movement is the result of structural competition between the higher structure in E/A-clauses and that which drives A′-movement, like C_{WH}. We first show that **1.** E/A surfaces in all relevant structures where extraction is restricted, and **2.** these structures are also restricted from being embedded in subjunctives, which commonly have a reduced periphery (*e.g.*, Pietraszko 2021).

1SG-inversion. An argument that extraction restrictions are not specific to other functional morphology in (1) or (2) comes from the phenomenon of 1SG-inversion (Goldsmith 1981) in clauses containing morphology that otherwise co-occurs with A′-extraction. Clauses containing *-rV*, which receive default temporal interpretation (past tense with eventive verbs, present tense with stative verbs), are one such case. They usually disallow E/A (5) and permit extraction (8). In 1SG-inversion, the 1SG pronoun which can appear preverbally like other pronouns (6), 'inverts' with the verbal complex (7). With inversion, E/A is obligatory. Extraction in this clause becomes impossible (10); *cf. -rV* clauses which do not contain E/A (8), (9).

(5) Àdá (*é)-rì-rì jí.
Ada (*E/A)-eat-rV yam
'Ada ate yam.'

(6) Ḿ rì-rì jí.
1SG eat-rV yam
'I ate yam.'

(7) *(É)-rì-rì m jí.
*(E/A)-eat-rV 1SG yam
'I ate yam.'

(8) Jí kà Àdá rì-rì.
yam C_{WH} Ada eat-rV
'Ada ate YAM.'

(9) Jí kà ḿ rì-rì.
yam C_{WH} 1SG eat-rV
'I ate YAM.'

(10) *Jí kà é-rì-rì m.
yam C_{WH} E/A-eat-rV 1SG
Int.: *'I ate YAM.'*

E/A is the unifying element which appears across the three configurations banning extraction (1), (2), and (7), which also pattern together with respect to a second diagnostic shown in the following section. Further evidence that E/A in (7) is the same as E/A in negation and the perfective comes from the fact that only a single preverbal vowel appears when 1SG-inversion occurs in these clauses (11)-(12). Extraction is also banned, as expected (not shown).

(11) É-ꜜrí-é-lá m ꜜjí.
E/A-eat-OVS-PFV 1SG yam
'I have eaten yam.'

(12) È-rí-ꜜghí m jí.
E/A-eat-NEG 1SG yam
'I did not eat yam.'

Embedding. We claim that E/A indicates the presence of higher structure in the constructions discussed thus far, specifically, that these clauses contain a CP-layer which is in competition with C_{WH}, implicated in A′-movement. As such, we expect other structures which involve other Cs and/or are reduced in size to also be incompatible with perfectives, negation, and 1SG-inversion. This prediction is born out in subjunctives, which contain the complementizer *kà* (13). Subjunctives cannot be negated (14), expected if E/A in negation indicates the involvement of the C-layer, as we argue. They also cannot contain the perfective (not shown).

(13) Ézè kwèrè kà Àdá gá-á órírí.
Eze agree C_{SBJV} 1SG go-OVS party
'Eze allowed Ada to go to the party.'

(14) *Ézè kwèrè kà Àdá á-ꜜgá-ghị́ órírí.
Eze agree C_{SBJV} Ada E/A-go-NEG party
Int:. *'Eze allowed Ada to not go to the party.'*

Finite clauses are embedded under *nà*, a high C (*e.g.*, Rizzi's Force°; Amaechi 2020) which embeds clauses with left-peripheral elements, like A′-fronted foci (15). *Nà* embeds clauses with negation, the perfective, and, crucially, with 1SG-inversion (16). Focus fronting to the left periphery of subjunctives (17), and 1SG-inversion (18), are not possible; this is expected if they require higher structure that cannot be embedded in subjunctives.

(15) Ézè chè nà órírí kà Àdá gà-rà.
Eze think C party C_{WH} Ada go-rV
'Eze thinks that Ada went to the PARTY.'

(16) Ézè chè nà á-gà-rà m skúùl.
Eze thinks C E/A-go-rV 1SG school
'Eze thinks that I went to school.'

(17) *Ézè kwèrè kà órírí kà Àdá gá-á.
Eze agree C_{SBJV} party C_{WH} Ada go-OVS
Int:. *'Eze allowed Ada to go to the PARTY.'*

(18) *Ézè kwèrè kà á-gá-á m skúùl.
Eze agree C_{SBJV} E/A-go-OVS 1SG school
Int.: *'Eze allowed me to go to school.'*

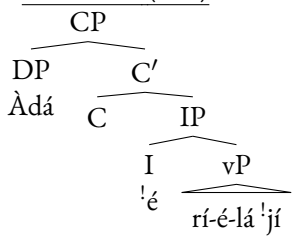
Analysis. We have established that E/A signals the recruitment of a CP-layer in perfectives, negation, and 1SG-inversion, supported by the extraction and embedding restrictions together. We now show that the non-clitic subject is in a different position in an E/A-clause as opposed to the *-rV*-clause, as evidenced by the distribution of clitic subjects. In *-rV*-clauses, the clitic and non-clitic subject are in complementary distribution preceding the verbal complex, (5) & (19). In E/A-clauses, on the other hand, the clitic subject occurs in place of E/A (20), *i.e.*, in the same projection, whereas non-clitic subjects occur to the left of E/A (1)-(2), *i.e.*, in a higher projection. This structural difference is in line with a broader observation for some Niger-Congo languages, that subjects surface in a left-peripheral position in certain matrix environments, and that those clauses are incompatible with A′-extraction (*e.g.*, Baker 2003, Henderson 2006, Schneider-Zioga 2000, 2007, for Bantu, Martinović 2015, 2023 for Wolof, Jian forthcoming for polar questions in Igbo).

(19) Ó-rì-rì ꜜjí.
3SG-eat-rV yam
'S/he ate yam.'

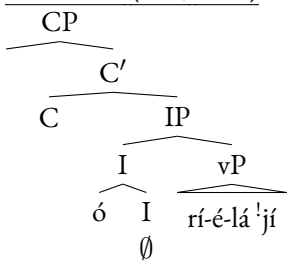
(20) Ó-(*é)-ꜜrí-é-lá ꜜjí.
3SG-(*E/A)-eat-OVS-PFV yam
'S/he has eaten yam.'

Crucially, our analysis aims to capture that we do not observe the availability of two specifier positions in Igbo, a lower one – here, Spec,IP – and a higher one – Spec,CP. What we do observe is the ability of the clitic subject to occupy a lower position, distinct from the one occupied by the non-clitic subject in E/A-clauses. We therefore propose that (i) I in E/A-clauses is defective and does not project a specifier, (ii) non-clitic subjects are hosted in Spec,CP in these clauses, and (iii) subject clitics adjoin to I. For concreteness, we propose that E/A spells-out I in configurations where local φ-features are not present, as we take to be the case when subjects are hosted in Spec,CP (21). This is cashed out with contextual allomorphy rules in (24). E/A does not surface in E/A-clauses or *-rV* clauses that contain a clitic, as they adjoin to I, or in clauses where I projects a specifier and hosts a subject, as we take to be the case in *-rV* clauses (23).

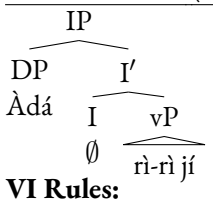
(21) **E/A-clause** (PFV)



(22) **E/A-clause** (PFV; clitic)



(23) **Non-E/A clause** (*-rV*)



(24) **VI Rules:**
a. $I \rightarrow \emptyset / [\varphi]__$
b. $I \rightarrow e$

Additional evidence: Indefinite subjects. If E/A is the spell-out of I, we predict that it should surface not just in environments in which a non-clitic subject is in some higher position, as in perfectives and negation, but also in *-rV*-clauses in the absence of φ-features in the IP layer. Exactly such a construction exists in Igbo: the subject is phonologically null, and interpreted as an existential indefinite, as in (25)-(26). We take the subject to be a φ-featureless *pro* (Fenger 2018). As (27) shows, *-rV* sentences with E/A and an indefinite subject allow extraction (*wh*-phrases focus front; Amaechi 2020). This reinforces our claim that E/A does not ban extraction itself, but that it signals the absence of the subject φ-features in the IP-layer. In perfectives, negation, and 1SG-inversion this results from the presence of a CP-layer, the real source of extraction restrictions.

(25) É-ꜜrí-é-lá ꜜjí.
E/A-eat-OVS-PFV yam
'Someone has eaten yam.'

(26) É-rì-rì jí.
E/A-eat-rV yam
'Someone ate yam.'

(27) Gị́ꜜnị́ kà é-sì-rì?
what C_{WH} E/A-cook-rV
'What did someone cook?'

A unified analysis. Previous analyses have not treated É/A in different environments as one and the same element. Déchaine (1993) provides an analysis of E/A in perfectives as a nominalizer and Amaechi (2020) takes this to be the source of extraction restrictions. However, the tonal parallels between E/A in perfectives and a harmonizing morpheme found in putative nominalizations used to establish this claim do not hold in the variety discussed here. Goldsmith (1981) discusses the incompatibility of 1SG-inversion and focus fronting as a general ban on 1SG-inversion embedded under C – this does not hold in the variety discussed here given (16). Our proposal successfully unifies a class of previously unconnected phenomena.

References.

Amaechi, Mary. 2020. A′-movement dependencies and their reflexes in Igbo. Doctoral dissertation, Universität Potsdam.

Baker, Mark. 2003. Agreement, dislocation, and partial configurationality. In *Formal approaches to function in grammar*, eds. Heidi Harley Andrew Carnie and MaryAnn Willie, 107–132. Amsterdam: Benjamins.

Déchaine, Rose-Marie. 1993. Predicates across categories: Towards a category neutral syntax. Doctoral dissertation, University of Massachusetts Amherst.

Fenger, Paula, 2018. How impersonal does *one* get? A study of *man*-pronouns in Germanic. *The Journal of Comparative Germanic Linguistics* 21(3):291-325.

Goldsmith, John. 1981. Complementizers and Root Sentences. *Linguistic Inquiry* 12(4):541-574.

Henderson, Brent. 2006. Multiple agreement and inversion in Bantu. *Syntax* 9(3):275–289.

Jian, Jasper. 2024. Feature bundling in the left periphery of Igbo interrogatives. To appear in *Proceedings of the 54th Annual Meeting of the North East Linguistics Society*.

Martinović, Martina. 2015. Feature geometry and head-splitting: Evidence from the morphosyntax of the Wolof clausal periphery. Doctoral dissertation, University of Chicago.

Martinović, Martina. 2023. Feature Geometry and Head Splitting in the Wolof Clausal Periphery. *Linguistic Inquiry* 54:79–116.

Pietraszko, Asia. 2021. The coming apart of case and focus in Bantu. *Natural Language and Linguistic Theory* 39:579–599.

Schneider-Zioga, Patricia. 2000. Anti-agreement and the fine structure of the left periphery. In *University of California Irvine Working Papers in Linguistics 6*.

Schneider-Zioga, Patricia. 2007. Anti-agreement, anti-locality and minimality. The syntax of dislocated subjects. *Natural Language & Linguistic Theory* 25(2):403-446.