

Question Formation in Ekhwa Adara

Josh Amaris, Emmanuel Bawa, Jason Kandybowicz, Zhilang Liu, Aidan Malanoski, Margaret Matte, Olivia Mignone, Nhu-Anh Nguyen, Shane Quinn, Alaa Sharif

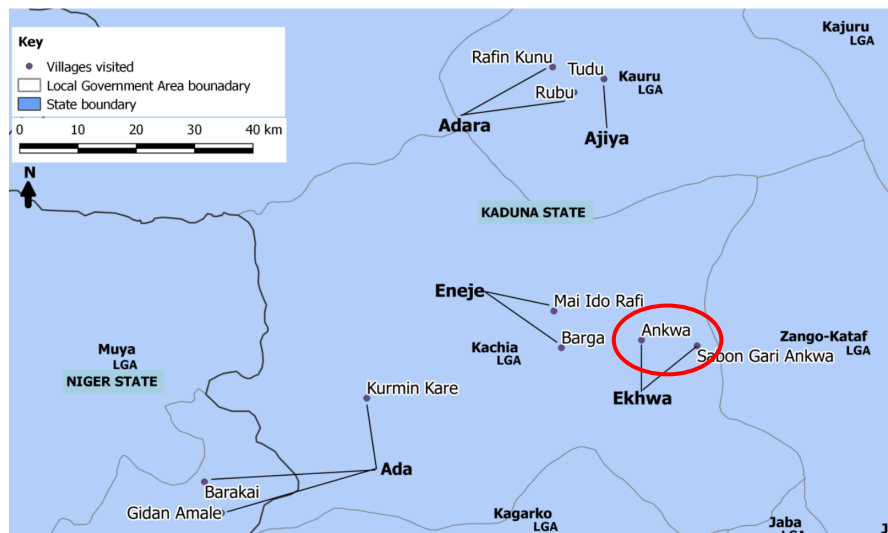
The Graduate Center, City University of New York

1. INTRODUCTION

Adara (ISO 639-3 [KAD]), also known as Eda, Edra, and Kadara) is an under-documented Benue-Congo language spoken by approximately 300,000 (Hon et al. 2018) to 500,000 people (Simons & Fennig 2018) in Kaduna and Niger states in Nigeria.



Map of the Adara area



This talk presents the first description of question formation in Adara. We investigate polar and *wh*- questions in Ekhwa Adara (EA)¹, the least researched of Adara’s five dialects.

KEY FINDINGS

- Polar Qs involve final lengthening + L% boundary tones.
- Polar Qs are optionally marked by sentence-initial Q particles.
- EA is an optional *wh*- movement language.
- Ex-situ *wh*- obligatorily precedes Foc⁰: Foc⁰ (*wh*- ‘WHO’) ≠ Foc⁰ (*wh*- ‘WHAT’) ≠ Foc⁰ (*wh*- ADJUNCT).
- Long-distance *wh*- in-situ is possible.
- Long-distance subject *wh*- movement requires pronominal resumption. Long *wh*- movement of non-subjects does not.
- Partial *wh*- movement is possible.
- Indirect Qs are formed via relativization, except when embedded under ‘ask’.
- Absence of superiority effects in multiple *wh*- questions.
- Multiple *wh*- fronting is possible, but constrained – the initial fronted *wh*- must be hierarchically inferior to the other(s).

TALK OUTLINE

§2: Polar Questions

§3: *Wh*- Questions

§3.1: *Wh*- in-situ

§3.2: *Wh*- Movement

§3.3: Embedded Questions

§3.4: Multiple *Wh*- Questions

§4: Conclusion

¹ The data and judgments presented in this talk come exclusively from fieldwork with the second author in the context of a Field Methods class at the CUNY Graduate Center in Fall 2022. Data are presented in IPA. Abbreviations for our EA glosses follow the Leipzig Glossing Rules and include: DEF = definite; FOC = focus; FUT = future; PERF = perfective; PROG = progressive; Q = question morpheme; REL = relative marker; SG = singular. The following diacritics are used to mark surface tone: \acute{V} = high, \grave{V} = low, \check{V} = mid; \hat{V} = falling.

2. POLAR QUESTIONS

EA's primary polar question formation strategy is intonational in nature. Matrix yes/no questions involve final-vowel lengthening and L% boundary tones, as is characteristic of the languages of the Sudanic belt region (Rialland 2007, 2009; Cahill 2012, 2015).

- (1) a. ijâ sù kɪ́ó
Ija PROG cry
'Ija is crying.'
- b. ijâ sù kɪ́ó:
Ija PROG cry.Q
'Is Ija crying?'

Evidence for an L% analysis:

- Intonational Phrase-final H tones are realized with falling pitch movements (1b).
- Intonational Phrase-final M tones are realized with falling pitch movements (2b).
- Intonational Phrase-final L tones are realized as L (2d).

- (2) a. omúsé ku ɪ́ó utébur
Omuse PERF buy table
'Omuse bought a table.'
- b. omúsé ku ɪ́ó utébù:r
Omuse PERF buy table.Q
'Did Omuse buy a table?'
- c. omúsé ku kɪ́ó oɪàì
Omuse PERF cry yesterday
'Omuse cried yesterday.'
- d. omúsé ku kɪ́ó oɪàì:
Omuse PERF cry yesterday.Q
'Did Omuse cry yesterday?'

The data in (1)–(2) also show that:

- Final-vowel lengthening/L% is not tense/aspect-dependent.
- Polar Qs are formed by true V lengthening and not simply the addition of a uniform V, which occurs in some languages of the region (Rialland 2007; Cahill 2015).

Syntactically, polar questions may be marked by an optional clause-initial Q particle (3a), which also surfaces in embedded polar questions (3b) and *wh*-in-situ constructions (3c).

- (3) a. (kó) ijâ sù kɪ́ó:
Q Ija PROG cry.Q
'Is Ija crying?'

- b. omúsé ku ɪó:ru kó ijâ ku kíó
 Omuse PERF ask Q Ija PERF cry
 ‘Omuse asked if Ija cried.’
- c. (kó) ijâ ku ɪó incí
 Q Ija PERF buy what
 ‘What did Ija buy?’

Note that in embedded polar questions (e.g., (3b)), a) the Q particle is not optional and b) there is no final-vowel lengthening or L%.

Final-vowel lengthening/L% is, therefore, a main clause phenomenon, as in Ikpana (Kandybowicz et al. 2023).

3. *WH*- QUESTIONS

3.1. *Wh*- *in-situ*

All argument *wh*- items may appear *in-situ* in root clauses.

- (4) a. iwé sú ɪɔ egbé
 who FUT buy house
 ‘Who will buy a house?’
- b. ijâ ku ɪi incí/iwé
 Ija PERF see what/who
 ‘What/who did Ija see?’
- c. ijâ ku dʒe iwé onsě
 Ija PERF give who name
 ‘Who did Ija give a name to?’
- d. ijâ ku dʒe awé-̀n incí
 Ija PERF give child-DEF what
 ‘What did Ija give the child?’

The Q particle *kó* may optionally appear in root clause object *wh*- *in-situ* questions (5).

- (5) a. (kó) ijâ ku .íó incí
 Q Ija PERF buy what
 ‘What did Ija buy?’
- b. (kó) iwé aṅu ku .íó incí
 Q who FOC PERF buy what
 ‘Who bought what?’

We presently lack the data to determine whether Q may also appear in non-object root *wh-* in-situ constructions.

All adjunct *wh-* items may also appear in-situ in root clauses.

- (6) a. ijâ ku .íó egbé imbí
 Ija PERF buy house where
 ‘Where did Ija buy a house?’
- b. ijâ ku .íó egbé ocná atú/apa
 Ija PERF buy house which day/time
 ‘When (i.e. which day/time) did Ija buy a house?’
- c. a sù ne otúma-ṅ níní
 3.SG PROG do work-DEF how
 ‘How is s/he doing the work?’
 ‘For how much (money) is s/he doing the work?’
- d. ijâ ku .íó egbé-ṅ domín incí
 Ija PERF buy house-DEF reason what
 ‘Why did Ija buy the house?’

Long-distance *wh-* in-situ is attested. All *wh-* items may appear in-situ in embedded clausal complements and take wide scope over the matrix clause.

- (7) a. omúsé ga iwé ku .íó egbé
 Omuse say who PERF buy house
 ‘Who did Omuse say bought a house?’
 NOT: ‘Omuse said who bought a house.’

- b. omúsé ga ijâ ku .íó incí
 Omuse say Ija PERF buy what
 ‘What did Omuse say Ija bought?’
 NOT: ‘Omuse said what Ija bought.’

Embedded in-situ adjunct *wh*- expressions may only be interpreted as originating in the embedded clause.

- (8) a. omúsé ga ijâ ku .íó egbé imbí
 Omuse say Ija PERF buy house where
 ‘Where did Omuse say Ija bought a house?’
 ✓ ‘Where-buy’
 * ‘Where-say’
- b. omúsé ga ijâ ku .íó egbé ocíná apa
 Omuse say Ija PERF buy house which time
 ‘When did Omuse say Ija bought a house?’
 ✓ ‘When-buy’
 * ‘When-say’
- c. omúsé ga ijâ ku .íó egbé níní
 Omuse say Ija PERF buy house how.much
 ‘For how much did Omuse say Ija bought a house?’
 ✓ ‘How much-buy’
 * ‘How much-say’
- d. omúsé ga ijâ ku .íó egbé domín incí
 Omuse say Ija PERF buy house reason what
 ‘Why did Omuse say Ija bought a house?’
 ✓ ‘Why-buy’
 * ‘Why-say’

3.2. *Wh*- Movement

EA is an optional *wh*- movement language. All interrogative expressions may either appear in-situ (4)–(8) or clause-initially (see below).

When fronted, *wh*- obligatorily precedes a focus marker.²

² When sluiced, however, *wh*- may optionally be accompanied by a focus marker (at least for ‘when’).

- (9) iwé *(a)ṅu ___ ku .íó egbé
 who FOC PERF buy house
 ‘Who bought a house?’

A selectional dependency exists between *wh-* and *Foc*⁰.

Ex-situ ‘who’ co-occurs with *aṅu* (9); moved ‘what’ appears with a different particle (*mo*).

- (10) a. incí *(mo) ijâ ku .íó ___
 what FOC Ija PERF buy
 ‘What did Ija buy?’
- b. *incí aṅu ijâ ku .íó ___
 what FOC Ija PERF buy
 Intended: ‘What did Ija buy?’

The *aṅu* particle is incompatible with ‘what’ (10b). The *mo* particle is incompatible with ‘who’ (11).

- (11) *iwé mo ___ ku .íó egbé
 who FOC PERF buy house
 Intended: ‘Who bought a house?’

The particles *aṅu* and *mo* are specific to ‘who’ and ‘what’ questions, respectively. The canonical focus marker in EA is *ku* (*ko*), as illustrated in (12).

- (12) egbé ku/*aṅu/*mo ijâ ku .íó ___
 house FOC Ija PERF buy
 ‘It’s A HOUSE that Ija bought.’

When an adjunct *wh-* expression is fronted, it obligatorily appears with *ku* (*ko*).

- (13) a. imbí ku/*aṅu/*mo ijâ ku .íó egbé ___
 where FOC Ija PERF buy house
 ‘Where did Ija buy a house?’
- b. ociná apa ku/*aṅu/*mo ijâ ku .íó egbé ___
 which time FOC Ija PERF buy house
 ‘When did Ija buy a house?’

- c. níńí ku/*ańu/*mo a sù ne otúńá-ń _____
 how FOC 3.SG PROG do work-DEF
 ‘How/for how much is s/he doing the work?’
- d. domín incí ko/mo/*ańu/*mo ijâ ku .íó egbé _____
 reason what FOC Ija PERF buy house
 ‘Why did Ija buy a house?’

When a *wh-* expression appears in-situ, it may optionally be accompanied by the item’s associated focus particle.

- (14) a. ijâ ku dze iwé (ańu) onsě
 Ija PERF give who FOC name
 ‘Who did Ija give a name to?’
- b. ijâ ku .i incí (mo)
 Ija PERF see what FOC
 ‘What did Ija see?’
- c. ijâ ku .íó egbé imbí (ku)
 Ija PERF buy house where FOC
 ‘Where did Ija buy a house?’
- d. ijâ ku .íó egbé ocńá apa (ku)
 Ija PERF buy house which time FOC
 ‘When did Ija buy a house?’
- e. a sù ne otúńá-ń níńí (ku)
 3.SG PROG do work-DEF how FOC
 ‘How/for how much is s/he doing the work?’
- f. ijâ ku .íó egbé-ń domín incí (ko/mo)
 Ija PERF buy house-DEF reason what FOC
 ‘Why did Ija buy the house?’

The selectional dependency between *wh-* & *Foc*⁰ is summarized in the table below.

FRONTED <i>WH</i> - ITEM	ACCOMPANYING FOC ⁰
<i>iwé</i> ‘who’	<i>aŋu</i>
<i>incí</i> ‘what’	<i>mo</i>
<i>imbí</i> ‘where’	<i>ku</i>
<i>ociná atú/apa</i> ‘when’	<i>ku/ko</i>
<i>níní</i> ‘how’	<i>ku</i>
<i>domín incí</i> ‘why’	<i>ko/mo</i>

Long-distance *wh*- movement is attested, but shows a subject–non-subject asymmetry that is typical of languages of the region (e.g., Nupe (Kandybowicz 2008)).

Long-distance subject *wh*- movement requires agreeing pronominal resumption in the extraction site, unlike long *wh*- movement of non-subjects.

- (15) a. *iwé aŋu omúsé ga *(a) ku .íó egbé*
 who FOC Omuse say 3.SG PERF buy house
 ‘Who did Omuse say bought a house?’
- b. *incí mo omúsé ga ijâ ku .íó (*a)*
 what FOC Omuse say Ija PERF buy 3.SG
 ‘What did Omuse say Ija bought?’
- c. *imbí ku omúsé ga ijâ ku .íó egbé*
 where FOC Omuse say Ija PERF buy house
 ‘Where did Omuse say Ija bought a house?’
 ✓‘Where-buy’
 ✓‘Where-say’
- d. *ociná apa ko omúsé ga ijâ ku .íó egbé*
 which time FOC Omuse say Ija PERF buy house
 ‘When did Omuse say Ija bought a house?’
 ✓‘When-buy’
 ✓‘When-say’
- e. *domín incí ko/mo omúsé ga ijâ ku .íó egbé*
 reason what FOC Omuse say Ija PERF buy house
 ‘Why did Omuse say Ija bought a house?’
 ✓‘Why-buy’
 ✓‘Why-say’

(15c–e) reveals that unlike in-situ adjunct interrogatives in embedded contexts, which can only be interpreted as originating in the embedded clause (8), moved adjunct *wh*-items can be interpreted as launching from either the main or embedded clause.

Partial *wh*- movement is attested in the language.

- (16) a. omúsé ga iwé aṅu ku ____ .íó egbé
 Omuse say who FOC PERF buy house
 ‘Who did Omuse say bought a house?’
- b. omúsé ga incí mo ijâ ku .íó ____
 Omuse say what FOC Ija PERF buy
 ‘What did Omuse say Ija bought?’
- c. omúsé ga imbí ku ijâ ku .íó egbé ____
 Omuse say where FOC Ija PERF buy house
 ‘Where did Omuse say Ija bought a house?’
 ✓ ‘Where-buy’
 * ‘Where-say’
- d. omúsé ga ociná apa ku ijâ ku .íó egbé ____
 Omuse say which time FOC Ija PERF buy house
 ‘When did Omuse say Ija bought a house?’
 ✓ ‘When-buy’
 * ‘When-say’
- e. omúsé ga níní ku ijâ ku .íó egbé ____
 Omuse say how.much FOC Ija PERF buy house
 ‘For how much did Omuse say Ija bought a house?’
 ✓ ‘How much-buy’
 * ‘How much-say’
- f. omúsé ga domín incí mo ijâ ku .íó egbé ____
 Omuse say reason what FOC Ija PERF buy house
 ‘Why did Omuse say Ija bought a house?’
 ✓ ‘Why-buy’
 * ‘Why-say’

In EA partial *wh*- movement constructions, the partially moved *wh*- is unaccompanied by an overt Q marker in the clause where it takes scope (i.e. the root clause).

Referencing Fanselow's (2006) typology, we can therefore classify EA as a Simple/Naked partial *wh*- movement language.

In this way, EA partial *wh*- movement resembles partial *wh*- fronting in other West African languages (e.g., Krachi (Torrence & Kandybowicz 2015); Bono and Wasa (Kandybowicz 2017, 2020); Avatime (Devlin et al. 2021); and Ikpana (Kandybowicz et al. 2021, 2023).

3.3. *Embedded Questions*

Wh- movement to an embedded focus position is also possible in indirect question constructions, but only when the embedding verb is 'ask'.

- (17) a. omúsé ku ɪó:ru iwé aɲu ___ ku ɪó egbé
Omuse PERF ask who FOC PERF buy house
'Omuse asked who bought a house.'
- b. omúsé ku ɪó:ru incí mo ijâ ku ɪó ___
Omuse PERF ask what FOC Ija PERF buy
'Omuse asked what Ija bought.'

Indirect questions embedded under other verbs are formed via relativization.

- (18) a. *omúsé kpé.ɪ iwé aɲu ku ɪó egbé
Omuse know who FOC PERF buy house
Intended: 'Omuse knows who bought a house.'
- b. omúsé kpé.ɪ anú-̀n da ku ɪó egbé
Omuse know person-DEF REL PERF buy house
'Omuse knows who bought a house.'
Lit. 'Omuse knows the person who bought a house.'
- c. omúsé kpé.ɪ ɔɲgã-̀ɲ da ijâ ku ɪó
Omuse know thing-DEF REL Ija PERF buy
'Omuse knows what Ija bought.'
Lit. 'Omuse knows the thing that Ija bought.'

The limitation of true embedded questions to ‘ask’ complement clauses places EA on a footing with Krachi (Torrence & Kandybowicz 2015), where identical facts obtain.

3.4. Multiple *Wh*- Questions

At present, we have observed two multiple *wh*- question strategies:

- (i) One *wh*- fronts, leaving the other(s) in-situ; optional initial Q marker (19).

(19) (kó) incí mo iwé ku íó ____
 Q what FOC who PERF buy
 ‘Who bought what?’

The grammaticality of structures like (19) suggests an absence of Superiority Effects (Kuno & Robinson 1972; Chomsky 1973, 1977) in the language, as in other West African languages (Saah 1994; Adesola 2005, 2005; Torrence & Kandybowicz 2015; Kandybowicz et al. 2023; Schurr et al. 2023).

- (ii) All *wh*- items front, each with accompanying Focus particle (20b).

(20) a. omúsé sú mani ijâ èŋfò
 Omuse FUT teach Ija song
 ‘Omuse will teach Ija a song.’

b. incí_i mo iwé_j aŋu omúsé sú mani-*(ŋ)_j t_i
 what FOC who FOC Omuse FUT teach-3.SG
 ‘Who will Omuse teach what?’

c. *iwé_j aŋu incí_i mo omúsé sú mani-*(ŋ)_j t_i
 who FOC what FOC Omuse FUT teach-3.SG
 Intended: ‘Who will Omuse teach what?’

Regarding strategy (ii), multiple *wh*- fronting is constrained – the initial fronted *wh*- item must be hierarchically inferior to the other(s) (20b-c).

The grammaticality of structures like (20b) might suggest the presence of a recursive FocusP domain in the EA left periphery (contra Rizzi 1997 and unlike what we find in other African languages (e.g., Aboh 2004)), unless the focus markers in (20b) are “term focus” particles not indigenous to the left periphery.

We are not aware of multiple *wh*- fronting behavior like this in any other African language. Of the two multiple *wh*- question strategies, strategy (i) is preferred over strategy (ii).

4. CONCLUSION

Our investigation into EA question syntax is ongoing. Future work will address the following issues (among others) related to the content of this handout:

- A fuller description of the distribution of optional Q particle *kó*
- A better understanding of the various focus particles and the selectional dependency between moved *wh*- & Foc^0
- Whether there is a third (purely in-situ) multiple *wh*- question strategy
- A derivational analysis of multiple *wh*- fronting that derives the fact that the initial fronted *wh*- item must be hierarchically inferior to the other(s), given the absence of Superiority Effects in the language

To summarize our key findings:

- EA polar Qs involve final lengthening + L% boundary tones.
- EA polar Qs are optionally marked by sentence-initial Q particles.
- EA is an optional *wh*- movement language.
- There is a selectional dependency between *wh*- & Foc^0 in EA.
- EA has long-distance *wh*- in-situ.
- Long-distance subject *wh*- movement in EA requires pronominal resumption.
- EA is a Simple/Naked partial *wh*- movement language.
- EA indirect Qs are formed via relativization, except when embedded under ‘ask’.
- *Wh*- movement in EA is not constrained by the Superiority Condition.
- Multiple *wh*- fronting is possible in EA, but constrained by an Anti-Superiority Condition – the initial fronted *wh*- must be hierarchically inferior to the other(s).

REFERENCES

- Aboh, Enoch. 2004. *The Morphosyntax of Complement-head Sequences: Clause Structure and Word Order Patterns in Kwa*. Oxford: Oxford University Press.
- Adesola, Oluseye. 2005. *Pronouns and Null Operators: A-bar Dependencies and Relations in Yoruba*. Ph.D. thesis, Rutgers University.
- Adesola, Oluseye. 2006. On the Absence of Superiority and Weak Crossover Effects in Yoruba. *Linguistic Inquiry* 37: 309-318.
- Cahill, Michael. 2012. Polar Question Intonation in Kɔnni. In Michael R. Marlo, Nikki B. Adams, Christopher R. Green, Michelle Morrison and Tristan M. Purvis (eds.), *Selected Proceedings of the 42nd Annual Conference on African Linguistics*, 90-98. Somerville, MA: Cascadilla Proceedings Project.
- Cahill, Michael. 2015. Polar Question Intonation in Five Ghanaian Languages. In Ruth Kramer, Elizabeth C. Zsiga and One Tlale Boyer (eds.), *Selected Proceedings of the 44th Annual Conference on African Linguistics*, 28-36. Somerville, MA: Cascadilla Proceedings Project.
- Chomsky, Noam. 1973. Conditions on Transformations. Indiana Linguistics Club, University of Indiana, Bloomington. Reprinted in Paul Kiparsky & Stanley Peters (eds.), *Festschrift for Morris Halle*. The Hague: Mouton.
- Chomsky, Noam. 1977. On *Wh*- Movement. In Peter Culicover, Thomas Wasow, and Adrian Akmajian (eds.), *Formal Syntax*, 71-132. New York: Academic Press.
- Devlin, Kerri, Blake Lehman, Travis Major and Harold Torrence. 2021. A Note on *Wh*-Questions in Avatime. In Akinbiyi Akinlabi, Lee Bickmore, Michael Cahill, Michael Diercks, Laura J. Downing, James Essegbey, Katie Franich, Laura McPherson and Sharon Rose (eds.), *Celebrating 50 Years of ACAL: Selected Papers from the 50th Annual Conference on African Linguistics*, 55-72. Berlin: Language Science Press.
- Fanselow, Gisbert. 2006. Partial Movement. In Martin Everaert, Henk van Riemsdijk, Rob Goedemans and Bart Hollebrandse (eds.), *The Blackwell Companion to Syntax (Volume 3)*, 437-492. London: Blackwell Publishing.
- Hon, Luther, Grace Ajaegbu, Carol Magnusson, Uche S. Nweke, and Zachariah Yoder. 2018. A Summary of a Sociolinguistic Survey of the Adara of Kaduna and Niger States, Nigeria. Ms. Summer Institute of Linguistics.
- Kandybowicz, Jason. 2008. *The Grammar of Repetition: Nupe Grammar at the Syntax-Phonology Interface*. Amsterdam: John Benjamins.
- Kandybowicz, Jason. 2017. On Prosodic Variation and the Distribution of *Wh*- In-situ. *Linguistic Variation* 17: 111-148.
- Kandybowicz, Jason. 2020. *Anti-contiguity: A Theory of Wh- Prosody*. New York: Oxford University Press.

- Kandybowicz, Jason, Bertille Baron Obi, Philip T. Duncan and Hironori Katsuda. 2021. Documenting the Ikpana Interrogative System. *Journal of African Languages and Linguistics* 42: 63-100.
- Kandybowicz, Jason, Bertille Baron, Philip T. Duncan, and Hironori Katsuda. 2023. *Ikpana Interrogatives*. Oxford: Oxford University Press.
- Kuno, Susumu & Jane J. Robinson. 1972. Multiple Wh Questions. *Linguistic Inquiry* 3: 463-487.
- Rialland, Annie. 2007. Question Prosody: An African Perspective. In Carlos Gussenhoven and Tomas Riad (eds.), *Tones and Tunes: Studies in Word and Sentence Prosody*, 35-62. Berlin: Mouton de Gruyter.
- Rialland, Annie. 2009. The African Lax Question Prosody: Its Realisation and Geographical Distribution. *Lingua* 199: 928-949.
- Rizzi, Luigi. 1997. The Fine Structure of the Left Periphery. In Liliane Haegeman (ed.), *Elements of Grammar*, 281-338. Dordrecht: Kluwer.
- Saah, Kofi. 1994. *Studies in Akan Syntax, Acquisition, and Sentence Processing*. Ph.D. thesis, University of Ottawa.
- Schurr, Hagay, Jason Kandybowicz, Abdoulaye Laziz Nchare, Tysean Bucknor, Xiaomeng Ma, Magdalena Markowska and Armando Tapia. 2023. Absence of Clausal Islands in Shupamem. Submitted. Ms. The Graduate Center, City University of New York.
- Simons, Gary F. & Charles D. Fennig. 2018. *Ethnologue: Languages of the World* (21st edition). Dallas: SIL International.
- Torrence, Harold and Jason Kandybowicz. 2015. *Wh- Question Formation in Krachi*. *Journal of African Languages and Linguistics* 36: 253-286.