

Re-thinking Bantu anti-agreement effects: evidence from Kirundi*

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1 Introduction

- Anti-agreement effects (AAEs) have been documented in subject extraction contexts in many Bantu languages. (See e.g. [Schneider-Zioga 2000, 2007](#) for Kinande; [Diercks 2009, 2010](#) for Lubukusu; [Burns 2013](#) for Abo; [Cheng 2006](#); [Henderson 2007, 2009, 2013](#) for Bemba; [Baier 2018](#) for Kikuyu)
- In a standard clause with a Class 1 subject, the typical agreement morpheme *a-* appears (1a). When this subject is relativized, standard agreement is not allowed (1b); instead, a special morpheme *u-* is required (1c).¹

- (1) a. Umulendo **a**-ka-belenga ibuku.
1boy 1.AGR-FUT-read 5book
'The boy will read the book.'
- b. *umulendo **ú**-a-ka-belenga ibuku
1boy 1.REL-1.AGR-FUT-read 5book
'the boy who will read the book'
- c. umulendo **ú**-u-ka-belenga ibuku
1boy 1.REL-1.AAE-FUT-read 5book

'the boy who will read the book' (Bemba; [Cheng 2006, 197](#))

- In previously documented languages, AAEs commonly appear with agreeing complementizers (1.REL above). This morphology has factored into past analyses based on \bar{A} -movement and agreement in C.
- Within this context, extraction contexts in Kirundi—specifically relative clauses—possess a number of unexpected properties which complicate past analyses.
 1. Standard relative clauses lack C-agreement and AAEs.
 2. Subject headless relative clauses lack C-agreement but have AAEs.
 3. Non-subject headless relative clauses lacks AAEs but have C-agreement.
- This project aims to provide an account of the unexpected anti-agreement and C-agreement in Kirundi headless relative clauses and contribute to the typology of relativization and agreement in the Bantu family.

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¹Abbreviations used in glosses are as follows: AAE – anti-agreement morpheme; AGR – agreement morpheme; AUG – augment; DEP – dependent clause; DJ – disjoint; FV – final vowel. Noun class is marked by number.

Proposal

- ⇒ Kirundi AAEs are the result of operator agreement in C, in the specifier of a functional head which facilitates both COMP and Infl features.
- ⇒ Subject-object asymmetry in headless relative clauses is the result of the use of two different relativization strategies.
- ⇒ The presence of an overt relative marker in non-local headless relatives is primarily a phonological requirement – Spec,ForceP must have some type of nominal in it.

Roadmap

- §2 Anti-agreement effects in Bantu
- §3 Anti-agreement effects in Kirundi
- §4 Proposal
- §5 Conclusion

2 Anti-agreement effects in Bantu

- **Anti-agreement effects (AAEs):** suppression or modification of the agreement relation of an argument and a verb as a result of that argument's extraction
- AAEs have been documented in a broad variety of languages since [Ouhalla's 1993](#) initial work on the topic, including Bantu languages.
- AAEs across Bantu languages seem to pattern similarly, suggesting a common phenomenon.

2.1 Core properties

- In Bemba, canonical Class 1 agreement surfaces with a special form when a Class 1 subject is extracted locally, as in (2).

- (2) Bemba AAEs (Cheng 2006, 197)
- a. Umulumendo **a**-ka-belenga ibuku.
1boy 1.AGR-FUT-read 5book
'The boy will read the book.'

- b. *umulumendo ú-**a**-ka-belenga ibuku
1boy 1REL-1.AGR-FUT-read 5book
Intended: 'the boy who will read the book'
- c. umulumendo ú-**u**-ka-belenga ibuku
1boy 1REL-1.AAE-FUT-read 5book
'the boy who will read the book'

- A similar phenomenon is seen in Kinande and Lubukusu.
- Across all these languages, AAEs are defined by a shared set of properties.

(3) Properties of Bantu Anti-Agreement Effects

- a. Special form – unique morpheme, not default or lack of agreement
- b. Subject-only – only with subject extraction
- c. Limited distribution – only apparent with singular human subjects (Class 1)

- Canonical agreement occurs with the extraction of an object (4), a third person plural subject (5), or a third person singular subject of another noun class (6).

(4) Bemba Object Extraction (Cheng 2006, 197)

- a. Umulumendo **a**-ka-belenga ibuku
1boy 1.AGR-FUT-read 5book
'The boy will read the books.'
- b. ibuku ilyo umulumendo **a**-ka-belenga
5book 5REL 1boy 1.AGR-FUT-read
'the books that the boy will read'

(5) Bemba Class 2 Extraction (Cheng and Kula 2007, (2b))

- a. Abalumendo **ba**-ka-belenga ibuku.
2boys 2.AGR-FUT-read 5book
'The boys will read the book.'
- b. abalumendo **a**-**ba**-ka-belenga ibuku
2boys 2.REL-2.AGR-FUT-read 5book
'the boys who will read the book'

(6) Bemba Class 11 Extraction (Cheng and Kula 2007, (2b))

- a. Ulukasu **lu**-shitilwe leelo.
 11axe 11.AGR-buy.PERF.PASS today
 ‘The axe was bought today.’
- b. úlukásu ú-**lú**-shítúlwe léélo
 11axe 11REL-11.AGR-buy.PERF.PASS today
 ‘the axe that has been bought today’

2.2 Secondary properties

2.2.1 Agreement in C

- Bantu relative clauses with AAEs typically possess overt relative morphemes that express agreement in ϕ -features with the extracted argument.

(7) [DP $_{\phi}$ [AGR $_{\phi-C}$ [... t...]]]

- In Kinande, REL is spelled out similarly regardless of the argument extracted.

(8) Kinande Subject Relative (Schneider-Zioga 2007, 417)

omukali **oyo** u-anzire Kambale
 1woman 1REL 1.AAE-likes Kambale
 ‘the woman that likes Kambale’

(9) Kinande Object Relative (Schneider-Zioga 2007, 420)

ekitabu **ekyo** Kambale a-agula
 7book 7REL Kambale 1.AGR-bought
 ‘the book that Kambale bought’

- In some languages, this marking is morphologically asymmetrical, as in Bemba and Lubukusu, where the subject relative marker is a pre-prefix while object relative marker is a full relative pronoun.

(10) Bemba Subject Relative (Cheng 2006, 1)

umulumendo **ú**-u-ka-belenda ibuku
 1boy 1REL-1.AAE-FUT-read 5book
 ‘the boy who will read the book’

(11) Bemba Object Relative (Cheng 2006, 1)
 ibuku **ilyo** umulumendo a-ka-belenga
 5book 5REL 1boy 1.AGR-FUT-read
 ‘the book that the boy will read’

- Accounts vary in whether these morphemes represent functional heads or relative pronouns.²

2.2.2 Locality

- For most Bantu AAE languages, AAEs only occur with *local* subject extraction.
- In Bemba, relativization of an embedded subject does not trigger AAEs.

(12) Bemba Embedded Subject Extraction (Cheng 2006, 8)

N-ali-ishiba umwaana uo Peter a-léé-tóntonkanya (ati)
 I-TNS-know 1child 1DEM Peter 1.AGR-TNS-think that
á-ilé mailo.
 1.AGR-left yesterday
 ‘I know the child who Peter thinks left yesterday.’

- In some languages, however, AAEs can also arise in non-local extraction. In Kinande, extraction of the embedded subject can sometimes trigger AAEs.

(13) a. IyOndI yO Kambale ’akaBula nga **a**-langIra Marya?
 who that-AGR Kambale wonders if AGR-sees Mary
 b. IyOndI yO Kambale ’akaBula nga-yO **u**-langIra
 who that-AGR Kambale wonders if-AGR AAE-sees
 Marya?
 Mary

²There is also debate over whether this asymmetry is phonological or syntactic. Demuth (1995) argues for Sotho that the pre-prefix form is a phonologically collapsed version of the full relative marker but notes that a different relativization strategy could also be at play. In this vein, Diercks (2009) differentiates between the two forms, calling the first ‘C-agreement’ to signify a structure in which a nominal Fin head triggers subject agreement instead of the subject NP itself.

‘Who does Kambale wonder if ___ sees Mary?’ (Schneider-Zioga 2000, 16)

- The presence of AAEs is not optional; AAEs only appear when there is an agreeing complementizer downstairs as well.
- Schneider-Zioga 2000 argues that this is due to local extraction, suggesting that we can more confidently say that AAEs are a local phenomenon.

Quick recap

- ⇒ Across the Bantu family, anti-agreement effects appear in a specific context—extraction of Class 1 subjects—and take a specific form—/u-/ or /o-/.
- ⇒ Bantu AAEs typically occur in conjunction with agreeing C heads that express ϕ – features. *Bantu AAEs occur (almost) exclusively in local extraction contexts.*
- ⇒ These properties seem correlative: local extraction + AAEs + agreeing complementizer.

(14) Bantu RCs

	C-Agr.	AAE
Local	✓	✓
Non-local	✓	✗

3 Anti-agreement effects in Kirundi

- Kirundi data falls outside of the pattern noted above. In standard local extraction contexts (such as subject relative clauses), neither AAEs nor overt agreeing complementizers are present.
- It is not the case that these elements are wholly absent in the language BUT they only appear in headless relative clauses.

3.1 Headed relative clauses ([+H]RCs)

- Headed relative clauses in Kirundi differ from those in the Bantu languages cited above in two key properties: i) no agreeing relative marker,

and ii) no anti-agreement effects.

- (15)
- a. U-mu-gabo a-tēk-a u-mu-ceri.
AUG-1-man 1.AGR-cook AUG-3-rice
‘The man cooks rice.’ (Matrix)
- b. u-mu-gabo a-tēk-á u-mu-ceri
AUG-1-man 1.AGR-cook.DEP AUG-3-rice
‘the man (who) cooks rice.’ (Subject extraction)
- c. u-mu-ceri u-mu-gabo a-tēká
AUG-3-rice AUG-1-man 1.AGR-cook.DEP
‘the rice the man cooks.’ (Object extraction)

- The principal distinction of relative clauses is their dependent clause syntax, apparent from the dependent clause high tone on the verb root.
- Despite the lack of an overt complementizer, headed relative clauses pass standard diagnostics for \bar{A} -movement, such as establishing long-distance dependencies (shown below) and island-sensitivity (not shown).

- (16) Ndakūnda u-ryá mu-gabo [tūzí kó ____
I.like 1-DEM 1-man we.know.DEP that
a-tēká u-mu-ceri].
1.AGR-cook.DEP AUG-3-rice
‘I like that man we know that cooks rice.’

- The following table shows the distribution of AAEs and agreeing complementizers in Kirundi [+H]RCs.

(17) Kirundi [+H]RCs

	C-Agr.	AAE
Local	✗	✗
Non-local	✗	✗

3.2 Headless relative clauses in Kirundi

- Unlike [+H]RCs, headless relative clauses ([-H]RCs), referring to non-specific indefinite or generic entities, exhibit both AAEs and agreeing REL, albeit in a different distribution than in other Bantu languages.

3.2.1 AAEs in [-H]RCs

- AAEs only appear in Kirundi headless relative clauses where they display the same unique form and distribution as those attested elsewhere in the family.
- A special morpheme /u-/ is used to mark locally extracted Class 1 subjects.³

(18) [U-u-têk-a u-mu-ceri] a-künd-a i-n-rírĩmbo.
 [AUG-1-cook-IPFV AUG-3-rice] 1-like-IPFV AUG-9-song
 ‘The (one who) cooks rice likes the song.’

- AAEs are limited to Class 1; [-H]RCs of other classes don’t exhibit alternative morphology.

(19) a. Ndakũnda a-ba-gabo [ba-têká u-m-uceri].
 I.like AUG-2-man 2.AGR-cook.DEP AUG-3-rice
 ‘I like the men who cook rice.’ [+H]
 b. Ndakũnda a-[ba-têka u-m-uceri].
 I.like AUG-2-cook.HRC AUG-3-rice
 ‘I like (the ones who) cook rice.’ [-H]

- AAEs are limited to local subject extraction. They do not appear on the lower verb of compound tense constructions (20) or embedded subject extraction constructions (21).

(20) Compound Tense [-H]RC
 u-u-ríko a-ra-soma
 AUG-1-PROG 1-DJ-read
 ‘the one who is reading’

(21) Long-distance Extraction [-H]RC

³Interestingly, the tone of [-H]RCs is different from dependent clause tone. Based on comparison to headless nominal modifier constructions which can appear with and without an NP, I suggest this may be due to the vocalic augment appearing directly before the verb root. More research needed!

a. *Ndakũnda [u [tũzí [kó Muco a-kũndá]]].
 I.like AUG we.know.DEP that Muco 1.AGR-like.DEP
 Intended: ‘I like the one we know that Muco likes.’
 b. Ndakũnda [u-u-ó [tũzí [kó Muco a-kũndá]]].
 I.like AUG-1-REL we.know that Muco 1.AGR-like.DEP
 ‘I like the one we know that Muco likes.’

3.2.2 Agreeing REL in [-H]RCs

- Overt relative markers only exist in non-local headless relative clauses, in which they are obligatory.

(22) Object [-H]RC

a. *[U u-mu-gabo a-têká] u-raryôshe.
 AUG AUG-1-man 1.AGR-cook.DEP 3.AGR-be.delicious
 Intended: ‘The one the man cooks is delicious.’
 b. [U-u-ó u-mu-gabo a-têká] u-raryôshe.
 AUG-3-REL AUG-1-man 1.AGR-cook.DEP 3.AGR-be.delicious
 ‘The one the man cooks is delicious.’

- Local [-H]RCs, however, pattern like [+H]RCs in lacking an overt relative morpheme. Regardless of agreement, this morphology is prohibited.

(23) a. *u-u-ó u/a-têká umuceri
 AUG-1-REL 1.AAE/AGR-cook 3rice
 Intended: ‘the one who cooks rice’
 b. u-u-têka umuceri
 AUG-AAE-cook 3rice
 ‘the one who cooks rice’

- Evidence from negative existentials shows that the first morpheme of local [-H]RCs is not a relative marker but an augment vowel. Like standard nouns, [-H]RCs lose their initial vowel after /nta/.

(24) a. Nta [(i)gi-tabu gi-tukúr-a].
 there.is.no AUG-7-book 27.AGR-be.red-IPFV
 ‘There is no book that is red.’ [+H]

- b. Nta [(*)gi-túkur-a].
 there.is.no AUG-7-be.red-IPFV
 ‘There is no thing that is red.’ [-H]

3.3 Summary

- Kirundi headed relative clauses lack overt REL and AAEs in all contexts.
- Local headless relative clauses lack overt REL but exhibit AAEs.
- Non-local headless relative clauses lack AAEs but possess overt REL.

4 Proposal

- The lack of an overt relative marker in constructions with AAEs in Kirundi casts doubt on past analyses which include feature spell-outs in C (Cheng 2006; Diercks 2010; Henderson 2013).
- The ability in Kirundi for non-specific indefinite subjects to appear preverbally even when they cannot be left-dislocated (Carstens et al. 2010) or pro-dropped challenges accounts such as Schneider-Zioga (2007) where AAEs are the result of direct agreement below CP since these constructions appear to allow preverbal subjects in Spec,TP in standard declaratives.
- Additionally, accounts like Baier 2018 which argue that the copying back of \bar{A} -features triggers AAEs struggle to explain why only a subset of relative clauses exhibit AAEs.
- Therefore, an alternative account is needed.

4.1 Proposal 1: Kirundi AAEs are the result of operator agreement in C

- Null arguments denoting non-specific indefinite entities cannot appear in subject position or be pro-dropped, suggesting that they are not phonologically null arguments and do not induce rich agreement.

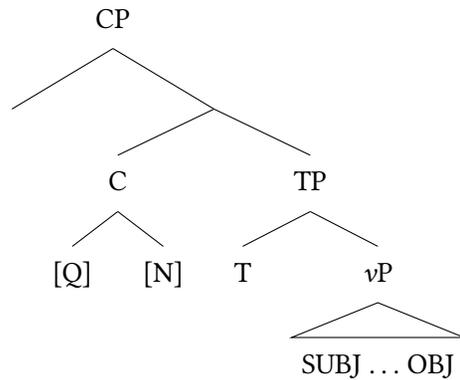
- (25) Umuganga a-zo-pima buri murwayi wese.
 1.doctor 1.AGR-FUT-examine every 1.patient 1.all

‘A doctor will examine every patient.’ (not necessarily the same doctor)’

- (26) a. U-mu-ntu y-a-ra-m-hámagār-ye éjo.
 AUG-1-person 3S.AGR-PST-DJ-1S.OM-call-PFV yesterday
 ‘Someone called me yesterday.’
 b. *Y-a-ra-m-hámagār-ye éjo.
 3S.AGR-PST-DJ-1S.OM-call-PFV yesterday
 Intended: ‘Someone called me yesterday.’
 Must mean: ‘He/she called me.’
 c. Harí u-u-a-n-hámagār-ye éjo.
 there.is AUG-1-PST-1S.OM-s call-PFV yesterday
 ‘I called someone yesterday.’ (literally: ‘There is one who I called’)
- (27) a. *N-a-ra-mu-hámagār-ye éjo.
 1S.AGR-PST-DJ-1.OM-call-PFV yesterday
 Intended: ‘I called someone yesterday.’
 Must mean: ‘I called him/her (mentioned already).’
 b. N-a-rá-hamagār-ye éjo.
 1S.AGR-PST-DJ-call-PFV yesterday
 ‘I called someone yesterday.’ (literally: ‘I called’)
 c. Harí u-u-ó n-a-hámagār-ye éjo.
 there.is AUG-1-ó 1S-PST-call-PFV yesterday
 ‘I called someone yesterday.’ (literally: ‘There is one who I called’)

- I propose that these empty category arguments are operators which induce AAEs when they agree in C.
- To model the structure of the Kirundi relative clause, I follow Henderson 2007 in proposing a combined Topic/Infl head (Fin) which accounts for subject/object inversion.
- In the structure below, a topic or relativized NP can move to Spec,CP with priority to the latter. I argue that T-to-C movement of the verb in relative contexts derives the properties of dependent clauses we see in Kirundi (high tone, lower negation, no disjoint).

(28) Type 3 Bantu relative clauses (Henderson 2007, 178)



- One benefit of this structure is that it allows an operator to move to Spec,CP without passing through Spec,TP, where it is never found in non-relative clauses.
- I take the special morpheme of Kirundi AAEs to be the spell-out of operator agreement in this position (similar to C-T agreement proposals in other languages).
- One implication of this is that we would predict AAEs to occur when an operator object moves to Spec,CP as well. In other words, AAEs would not be local but based on C-T agreement. This is indeed the case.

(29) u-u-ríko a-ra-guhana Yoháni
 AUG-1-PROG 1-DJ-punish John
 ‘the one that JOHN punishes’

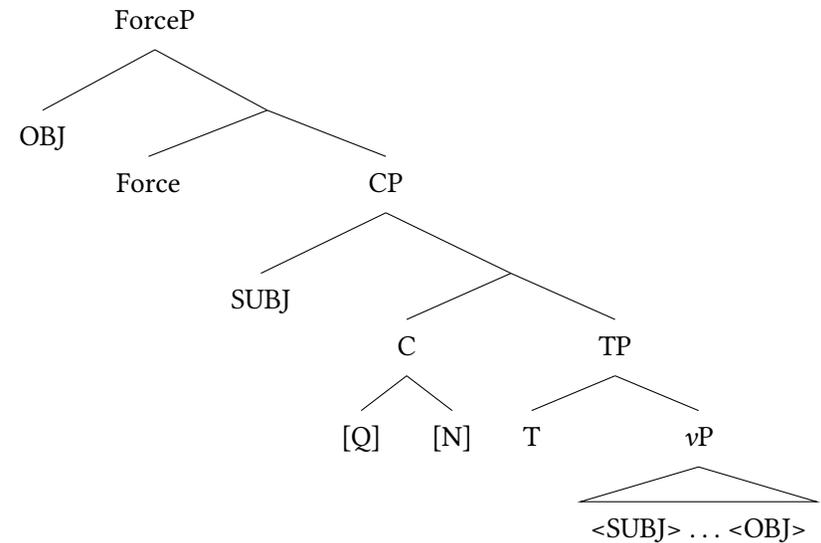
4.2 Proposal 2: Subject-object asymmetry results from different structures

- While the above structure can account for Kirundi relative clauses in which the relativized NP agrees with the verb (subject relative clauses, OVS clauses), it cannot account for object relatives in which verbal agreement is with the subject.
- In the vein of Henderson’s analysis, I propose that OSV relatives require

a different structure and this is why we see variation between the morphology of subject and object [-H]RCs.

- Specifically, a higher projection in C is needed. Following Henderson, I propose a Force head which attracts the relativized NP in contexts in which subject agreement has already occurred.⁴

(30) OSV relatives



- A subject cannot move to Spec,ForceP in this structure because movement from Spec,CP would be too local, accounting for the ungrammaticality of /-ó/ in subject [-H]RCs.
- The presence of an overt relative marking in non-local [-H]RCs is the result of obligatory spell-out in Spec,ForceP. The morphology of the relativized NP must be expressed so it appears as a relative pronoun in Spec,ForceP.

⁴I differ from Henderson in suggesting that OSV relatives in Kirundi are his Type 2 (where there is Force, Topic, and Fin) because non-specific indefinites can be in subject position of OSV relatives, suggesting that a subject in Spec,TopicP with *pro* in Spec,TP is not an option in Kirundi.

5 Conclusion

- Unlike most other AAE contexts in Bantu, Kirundi AAEs only appear in subset of subject extraction contexts. Additionally, it is only in these contexts that overt relative marking is found in Kirundi as well.
- This presentation aimed to document the surprising distribution of AAEs and relative agreement in Kirundi and provide an initial proposal for how to account for it.
- Implications:
 - AAEs can occur in contexts that lack overt relative complementizers.
 - AAEs cannot be explained solely by properties of C-T agreement or \bar{A} -features.
 - Even seemingly identical relative clauses (subject and object in Kirundi) may be derived via different structures.
- Potential weaknesses and open questions:
 - Anti-agreement: what are the exactly mechanics of impoverished agreement at the COMP/INFL head? Can this be related parametrically to other Bantu AAE constructions?
 - T-to-C movement: In OSV relatives, if the subject ends up in Spec,CP as a topic, how does the verb get its dependent properties? Does it still move to C?
 - Compound tense: the lower verb in CT constructions never exhibits AAEs. This militates against Henderson’s analysis of the constructions and supports Carsten’s raising analysing. However, if the empty category in [-H]RCs is an operator, how does it trigger standard agreement below, in lower Aspect? Is this just a different agreement relationship completely?
 - Operators elsewhere in the language: is there any overlap between [-H]RCs and nominal modifiers which also use /u-/ agreement?

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A Another view from Kinyarwanda

- Kinyarwanda, like Kirundi, has no overt REL in headed relative clauses.

- (31) a. umugabo **u**-têka umuceli
 1man 1.AAE-cook 3rice
 ‘the man who cooks rice’
 b. umuceli umugabo **a**-teká
 3rice 1man 1.AGR-cook
 ‘the rice the man cooks’

- Yet it exhibits AAEs in all subject extraction contexts.

- (32) Kinyarwanda AAEs
 a. U-mu-gabo **a**-têka u-mu-celi.
 AUG-1-man 1.AGR-cook AUG-3-rice
 ‘The man cooks rice.’
 b. *u-mu-gabo **a**-tek-á u-mu-celi
 AUG-1-man 1.AGR-cook-IPFV AUG-3-rice
 Intended: ‘the man who cooks rice’
 c. u-mu-gabo **u**-têk-a u-mu-celi
 AUG-1-man 1.AAE-cook-IPFV AUG-3-rice

‘the man who cooks rice’

- (33) Long-Distance Extraction
 Nkūnda umuntu tūzi (kó) **u**-teéka umuceli.
 I.like 1person we.know that 1.AAE-cook 3rice
 ‘I like the person we know (that) cooks rice.’
 (34) Person pronoun extraction
 Ni jyēwé/wōwé **u**-têka.
 COP me/you 1.AAE-cook
 ‘It’s me/you who cooks.’

- Implication: in some languages with both Comp/Infl in C, all subjects trigger AAEs. This configuration somehow lends itself to reduced agreement.
- Alternately: a Baier account of \bar{A} -driven feature impoverishment.
- Interesting: AAEs can occur in both verbs of a compound tense construction, suggesting that there is variation in whether CT is derived via movement through lower aspect (Carstens 2011) or multiple agreement (Henderson 2006).

- (35) Nkūnda **u**-ú-hora **a**-teéka umuceli.
 I.like AUG-1.AAE-always 1.AGR-cook 3rice
 ‘I like who always cooks rice.’
 (36) Nta muIsirayeli **u**-undi **u**-a-ba u-o-curuza
 there.is.no 1Israeli 1-other 1.AAE-COND-be 1.AAE-PRS-sell
 amazi
 5water
 ‘There is no other Israeli who would be selling water.’ (p.c. Juvenal Ndayirigije)

B Evidence that /-ó/ is a relative pronoun

- While the /-ó/ morpheme in non-local [-H]RCs may resemble a demonstrative, several points of data suggest that this is not a true DP.

- First, demonstratives lack the high tone of /-ó/.

- (37) a. u-u-o
AUG-1-DEM
'that one'
b. u-u-ó
AUG-1-REL
'one'

- Second, demonstratives can appear in DP positions—alone and heading subject relatives—but /-ó/ cannot.

- (38) a. Yohãni ni uwo (a-têká).
John COP DEM 1.AGR-cook
'John is that one (who cooks).'
b. *Yohãni ni uwó (a-têká).
John COP 1REL 1.AGR-cook
Intended: 'John is the one (who cooks).'

- Third, [-H]RCs with /-ó/ cannot appear with any NPs or determiners.

- (39) *Umũntu/uryá wó a-têká.
1person/1DEM.DIST 1REL 1.AGR-cook
Intended: 'The person/that one over there who cooks'

- The next two points support a relative pronoun story in particular.
- Fourth, /-ó/ also appears obligatorily in all non-finite relative clauses, even when there is an overt head noun.

- (40) Ndâzi [u-u-ó gu-têka u-mu-ceri].
I.know [AUG-1-ó 15-cook AUG-3-rice
'I know the (one) to cook rice.' (Subject Non-Finite)

- (41) Ndâzi [u-u-ó gu-têka].
I.know AUG-3-ó 15-cook
'I know the (one) to cook.' (Object Non-Finite)

- Fifth, /-ó/ occurs as a contrastive topic marker without dependent clause syntax.

- (42) I-ki-farãnsa ki-ó n-ra-ki-vúg-a.
AUG-7-French 7-O 1S.AGR-DJ-7OM-speak-IPFV
'As for French, I speak it.' (Kanampiu et al 2023)

C Past analyses for Bantu AAEs

C.1 Anti-locality: Cheng 2006; Schneider-Zioga 2007

- Anti-Locality Hypothesis (Grohmann 2003): movement of an agreeing DP within a prolific domain (vP/VP, IP/TP, or CP) results in a dependency that is 'too short'

- (43) *Anti-Locality Hypothesis* (Grohmann 2003, 26)
[_Ω XP_i [_Ω XP_T [_φ ... [_θ ...]]]
✗

→ AAEs result from movement of an argument 'too close' within the same domain.

- Cheng (2006) argues that an element can only move within the same domain if each of its copies is spelled out in a different way phonologically (following Grohmann's 2003 Condition on Domain Exclusivity).
- In Bemba then, both relative marker and the AAE morpheme are spell-outs of the extracted subject moving from Spec,TP to inner Spec,CP to outer spec,CP (in this case, the domain includes TP).

- (44) umulendo ú-u-ka-belenda ibuku
1.boy 1.REL-1.AAE-FUT-read 5.book
'the boy who will read the book' (Cheng 2006, 197)

→ AAEs occur in order to allow otherwise 'too close' movement.

- Schneider-Zioga (2007) argues that subjects in Kinande originate in topic position (in line with past evidence that they cannot have indefinite, non-specific interpretations (Baker 2003; Schneider-Zioga 2000).

(45) [_{TopP} NP_j [_{IP} *pro*_j [*vP* ...]]

- As a result, \bar{A} -movement, from TopP to CP, is too local.

(46) [_{CP} DP_i C [_{TopP} *t*_i Top [_{TP} *pro*_i Agr_i+T ...]]]

✗

- To allow \bar{A} -movement, the subject is generated lower, outside of CP, in extraction contexts. Anti-agreement is the realization of *direct* agreement of the subject as opposed to agreement with a subject-related *pro*.

C.2 Strong features: Henderson 2013

→ AAEs are an instance of repair in a movement chain with strong features.

- Positional feature strength (Richards 1997, 2001):
 - a strong feature is one that must be spelled out
 - a movement chain can only have one strong position
 - \bar{A} -movement creates a configuration with two strong positions: Spec,CP and Spec,TP

(47) a. Chain with two strong positions
* STRONG ... STRONG ... X

b. Chain with one strong position
✓ STRONG ... WEAK ... X

(adapted from Richards 1997, 123)

- Henderson argues that when a chain has two strong positions (like subject extraction in Bemba), the features in C and T must *agree* to support a single spell-out and this agreement exhibits the higher position's features.
- Alternative agreement occurs because C lacks the full suite of features—instead of [person], there is only [ref] (referential)—so agreement in C and T is featurally impoverished.

C.3 Criterial freezing: Diercks 2009, 2010

→ AAEs occur when a nominal complementizer satisfies the Subject Criterion.

- Following Criterial Freezing (Rizzi 2006, 2007), certain heads have criterial positions from which phrases cannot move further.
- The subject position (Spec,SubjP, above T) is one such position. When the Subject Criterion is satisfied by the clausal subject, movement is frozen.
- In Lubukusu, Diercks argues that the Subject Criterion can be satisfied by a nominal complementizer (Rizzi and Shlonsky 2007), allowing the subject to skip over Spec,SubjP.
- The relative marker in subject extraction constructions is a nominal Fin head which merges in SubjP to facilitate subject extraction. The impoverishment of [person] features is a result of their absence on the Fin head.

(48) a. Naliaka a-li mu-nju.
1.Naliaka 1.AGR-be 18-house
'Naliaka is in the house.'

b. Naanu o-o-li mu-nju?
who 1.REL-1.AAE-be 18-house
'Who is in the house?'

c. *Naanu a-li mu-nju?
who 1.AGR-be 18-house
Intended: 'Who is in the house?' (Wasike 2007, 235)

- Evidence that the complementizer is nominal comes from its resemblance to nominal prefixes elsewhere in the noun class system.

C.4 \bar{A} -driven feature impoverishment: Baier 2018

→ AAEs are the result of agreement with a DP that has \bar{A} -features.

- When a ϕ -probe agrees with a goal that has ϕ - and \bar{A} -features, it copies back all of these features.

-
- The presence of an \bar{A} -feature leads to $[\phi]$ -impoverishment resulting in the underspecification of the morphological realization of agreement (in Bantu, [person]).