

## The residue of the conjoint/disjoint alternation in Rukiga

### 1. Introduction: the conjoint/disjoint alternation

Some southern and eastern Bantu languages display an alternation between two verb forms that express the same tense-aspect semantics, but differ in their relation with what follows the verb. When the relation is close (French ‘conjoint’), the verb takes the so-called conjoint form and cannot appear in a clause-final position of a main clause (1b). The disjoint form, on the other hand, is allowed in clause-final position (1c).

Kinyarwanda (JD61, Ngoboka & Zeller 2017: page)

- (1) a. Abagoré baáteetse inyama. [remote past CJ]  
a-ba-goré ba-á-téek-ye i-nyama  
AUG-2-woman 2.SM-REM-cook-PFV AUG-10.meat  
‘Women cooked meat.’
- b. \*Abagoré baáteetse. [remote past CJ]  
a-ba-goré ba-á-téek-ye  
AUG-2-woman 2.SM-REM-cook-PFV
- c. Abagoré baáratéetse. [remote past DJ]  
a-ba-goré ba-á-ra-téek-ye  
AUG-2-woman 2.SM-REM-DJ-cook-PFV  
‘Women cooked.’

The distinction between the two forms is visible in the segmental and/or tonal morphology of the verb – in Kinyarwanda, the remote past conjoint form as in (1a) undergoes tonal reduction (*-teetse* vs. *-téetse*) and the remote past disjoint form is marked by the prefix *-ra-*, as in (1c). In terms of interpretation, the conjoint form is typically associated with focus on the element following the verb, either directly or indirectly, whereas the disjoint form is associated with focus on the predicate or truth value. The relation with focus will be discussed in more detail in section 3, and see Van der Wal (2017) for further crosslinguistic variation in the alternation.

Part of the variation in this alternation is that not every language or even every tense within a language marks the alternation as clearly as the Kinyarwanda remote past. For Haya, Hyman (1999: 160) describes “one last trace of the conjoint/disjoint opposition”, which is the today past tense: the disjoint form is marked by a long prefix *-áá-*, whereas the conjoint form has a short *-a-* prefix, as in (2).

Haya (JE22, Hyman 1999: 160)

- (2) a. CJ Y-a-koma Káto  
1SM-P1-tie 1.Kato  
‘He tied Kato.’
- b. DJ Y-áá-mu-kôma.  
1SM-P1.DJ-1OM-tie  
‘He tied him.’

Furthermore, the conjoint form in (2a) has undergone tonal reduction (TR): the lexical high (H) tone of the verb stem *-kóm-* is absent, in contrast to the disjoint form, which retains its H.

This tonal reduction turns out to be characteristic for other tenses in Haya as well, even if they do not show segmental marking. This is illustrated in Table 1, where the right-hand column shows the tonally reduced ‘conjoint’ forms:

	‘they tie’ etc.	‘they tie Káto’ etc. - TR
present habitual	ba-kóm-a	ba-kom-a káto
past 1	bá-á-kôm-a	ba-a-kom-a káto
past 2	ba-kom-íle	ba-kom-ile káto
past habitual	ba-a-kóm-ag-a	ba-akom-ag-a káto
future 1	ba-laa-kôm-a	ba-laa-kom-a káto
future 2	ba-li-kóm-a	ba-li-kom-a káto

Table 1 Haya tonal reduction (Hyman 1999: 160)

A bit further north, in Rukiga,<sup>1</sup> we find a similar alternation of H-retaining verb forms in final position (3a) vs. tonally reduced forms when an object follows (3b).<sup>2</sup>

- (3) a. H María y-áá-hínga.  
 1.Maria 1SM-N.PST-dig  
 ‘Maria has dug.’
- b. TR María y-aa-hiinga o-mu-siri.  
 1.Maria 1SM-N.PST-dig AUG-3-field  
 ‘Maria has dug the field.’

However, unlike Haya, Rukiga never shows any segmental marking of the alternation. This triggers the question whether this purely tonal distinction in Rukiga should be analysed as encoding the conjoint/disjoint alternation – similarly to the research question Kula (2017) poses for Bemba tone marking on verbs. In order to answer this research question, in this paper we describe the formal and interpretational properties of tonal reduction in Rukiga. In section 2, we first present the formal properties of the alternating conjugations, specifically the tones in different combinations of verbs and objects, and the sentence-final distribution. Section 3 then applies tests to establish the possible relation with focus, concluding that constituent-final distribution is the determining factor for tonal verb forms in Rukiga. Section 4 discusses the research question in light of the presented facts.

## 2. Five conjugations with two forms

As illustrated in Table 2, Rukiga has 5 basic conjugations which display tonal lowering. These can be contrasted with the infinitive and the remote future which show a retention of the lexical H tone of the verb, whether sentence-final or not.<sup>3</sup> Other tense/aspect categories are expressed periphrastically in Rukiga, by an auxiliary and either an infinitive or an

<sup>1</sup> Rukiga is classified as JE14 in Maho’s (2009) update of Guthrie (1948), and is spoken in south-western Uganda by some 2.4 million speakers (Ethnologue online). The data in this paper come from fieldwork by the authors in January 2019 in Kabale, and additional judgements from the second author, who is a native speaker of Rukiga. The language is often grouped together with the neighbouring language Runyankore, though there are lexical and grammatical differences. Even within the variants of Rukiga there is variation, especially in tone patterns. The tones used in this paper are based on Orunyaifo variety predominantly spoken in Ndorwa County in Kabale District.

<sup>2</sup> For the relevant examples we indicate the presence of tonal reduction on the verb by ‘TR’, and the absence by ‘H’.

<sup>3</sup> The falling tone on the penultimate syllable is due to regular phonological rules regarding long syllables of words in phrase-final position.

inflected lexical verb (see Morris & Kirwan 1972 and Taylor 1985 for overviews). These are not taken into account here.

<b>H toned V, H object</b>	<b>final</b>	<b>non-final</b>	<b>translation</b>
present habitual	batééka	bateeka búrahaanda	they cook (pancakes)
present progressive	nibatééka	nibateeká búrahaanda	they are cooking (pancakes)
near past	báátéeka	baateeka búrahaanda	they have cooked (pancakes)
yesterday past	bateekíre	bateekire búrahaanda	they cooked (pancakes)
remote past	bakatéeka	bakateeka búrahaanda	they cooked (pancakes)
infinitive	okutéeka	okutéeka búrahaanda	to cook, bake (pancakes)
remote future	baryáátéeka	baryáátéeka búrahaanda	they will cook (pancakes)

Table 2 – Rukiga tonal reduction for H-toned verb with H-toned object

What can be observed in Table 2 is that the lexical H tone of the verb is absent when preceding an object that contains a H tone (*búrahaanda* ‘pancakes’), leaving a completely low verb, except in the present progressive, where a H is added on the final vowel of the verb.

The tones are slightly different when the object does not contain a H tone (*muha* ‘fox’), in which case the final vowel of the preceding verb will be H in all five of the alternating basic tenses, as illustrated in Table 3.

<b>H-toned V, L object</b>	<b>final</b>	<b>non-final</b>	<b>translation</b>
present habitual	babóha	babohá muha	they tie (the fox)
present progressive	nibabóha	nibabohá muha	they are tying (the fox)
near past	báábóha	baabohá muha	they have tied (the fox)
yesterday past	babohíre	babohiré muha	they tied (the fox)
remote past	bakabóha	bakabohá muha	they tied (the fox)
infinitive	okubóha	okubóha muha	to tie (the fox)
remote future	baryáábóha	baryáábóha muha	they will tie (the fox)

Table 3 – Rukiga tonal reduction for H-toned verb with L-toned object

The same paradigms with a L-toned verb (*-reeba* ‘to see’) reveal that here, only the present habitual, near past, and yesterday past show an alternation on the stem; the other basic tenses have the same tone pattern, whether clause-finally or preceding the object. Table 4 and Table 5 exemplify with a H-toned and L-toned object, respectively.

<b>L-toned V, H object</b>	<b>final</b>	<b>non-final</b>	<b>translation</b>
present habitual	baréeba	bareeba búrahaanda	they see (pancakes)
present progressive	nibaréeba	nibarééba búrahaanda	they are seeing (pancakes)
near past	bááreeba	baareeba búrahaanda	they have seen (pancakes)
yesterday past	baréébire	bareebire búrahaanda	they saw (pancakes)
remote past	bakareeba	bakareeba búrahaanda	they saw (pancakes)
infinitive	okureeba	okureeba búrahaanda	to see, watch (pancakes)
remote future	baryááreeba	baryááreeba búrahaanda	they will see (pancakes)

Table 4 – Rukiga tonal reduction for L-toned verb with H-toned object

<b>L-toned V, L object</b>	<b>final</b>	<b>non-final</b>	<b>translation</b>
present habitual	baréeba	bareebá muha	they see (the fox)

present progressive	nibaréeba	nibarééba muha	they are seeing (the fox)
near past	bááreeba	baareebá muha	they have seen (the fox)
yesterday past	baréébire	bareebiré muha	they saw (the fox)
remote past	bakareeba	bakareebá muha	they saw (the fox)
infinitive	okureeba	okureebá muha	to see, watch (the fox)
remote future	baryááreeba	baryááreeba muha	they will see (the fox)

Table 5 – Rukiga tonal reduction for L-toned verb with L-toned object

Significantly, the same tenses do not show a tonally reduced form in the negative, where both the final and non-final form show the same tonal pattern:

H toned V, H object, negative	final	non-final	translation
infinitive	okutéeka	okutéeka búrahanda	to cook, bake (pancakes)
present habitual	tibáteeka	tibáteeka búrahanda	they do not cook (pancakes)
present progressive	tibaríkutéeka	tibaríkutéeka búrahanda	they are not cooking (pancakes)
near past	tíbaateeka	tíbaateeka búrahanda	they have not cooked (pancakes)
yesterday past	tibateekíre	tibateekiré búrahanda	they didn't cook (pancakes)
remote past	tibaráteekire	tibaráteekire búrahanda	they didn't cook (pancakes)

Table 6 – No tonal reduction in negative of H-toned verb

L-toned V, H object, negative	final	non-final	translation
infinitive	okureeba	okureeba búrahanda	to see, watch (pancakes)
present habitual	tibaréeba	tibarééba búrahanda	they see (pancakes)
present progressive	tibaríkureeba	tibaríkureeba búrahanda	they are seeing (pancakes)
near past	tíbaareeba	tíbaareeba búrahanda	they have seen (pancakes)
yesterday past	tibaréébire	tibaréébire búrahanda	they saw (pancakes)
remote past	tibaráreebire	tibaráreebire búrahanda	they saw (pancakes)

Table 7 – No tonal reduction in negative of L-toned verb

As is typical for the conjoint/disjoint alternation, the conjoint verb form cannot appear in final position in a main clause, illustrated for the habitual, progressive, and yesterday past in (4).

- (4) a. A-b-áana                      ba-záana / \*ba-zaana.                      [present habitual]  
       AUG-2SM-children    2SM-play  
       ‘Children play.’
- b. Ni-ba-téeka / \*Ni-ba-teeká.                      [present progressive]  
       PROG-2SM-cook  
       ‘They are cooking.’

- c. Ekikópo, Hélen akitwííre / \*akitwiiré. [yesterday past]  
 e-ki-kopo Helen a-ki-twar-ire  
 AUG-7-cup 1.Helen 1SM-7OM-take-PFV  
 ‘The cup, Helen took it.’

While the tonally reduced form has so far been illustrated with a following object, it is equally acceptable with a following adverb, as shown in (5).

- (5) a. TR W-a-iruka munoonga.  
 2SG.SM-N.PST-run much  
 ‘You have run fast.’
- b. TR Tukutegyeeriize nyómwéébázo.  
 tu-ku-tegyerez-ire nyomwebazo  
 1PL.SM-2SG.OM-wait-PFV yesterday  
 ‘We waited for you yesterday.’

The tonal reduction thus clearly shows the sentence-final restrictions, a defining feature of the conjoint/disjoint alternation, and furthermore the alternation is restricted to five conjugational categories, as is also typical of the conjoint/disjoint alternation. Now that the formal properties are presented, we can turn to the interpretational properties of tonal reduction in Rukiga.

### 3. Focus or finality?

In the Bantu languages that have the conjoint/disjoint alternation, it is directly or indirectly related to focus. In languages like Kirundi and Makhuwa, the form of the verb is directly related to the focus interpretation, whereas in languages like Zulu the form of the verb depends on whether it is final in its constituent or not. We briefly illustrate this before testing the focus predictions for Rukiga.

In Kirundi, the disjoint verb form expresses predicate focus (Nshemezimana & Bostoen 2017), and the conjoint form is the default. Predicate-centred focus can be subdivided into state-of-affairs focus (focus on the lexical verb itself, as in (6)), TAM focus (7), and truth focus (8). All three are expressed by the disjoint form in Kirundi, regardless of the constituent-final or non-final position of the verb.

Kirundi (JD62, Nshemezimana & Bostoen 2017: 408, 409, 410)

- (6) Ehe ntaa co turiiyé, turanyóoye gusa.  
 Ehe ntaa ki-ó tu-rí-ye<sup>H</sup> tu-ø-ra-nyó-ye gusa  
 so NEG.COP 7-REF 1PL.SM-eat-PFV.REL 1PL.SM-PRS-DJ-drink-PFV only  
 ‘So, there is nothing that we eat, we DRINK ONLY.’ (Agashitsi, drama, 1990s)

- (7) Q: Nooné yaamaze gushika?

A: Oya aracákúba igoónzi.

nooné a-a-a-mar-ye ku-shik-a  
 so 1SM-N.PST-DJ-finish-PFV 15-arrive-FV  
 oya a-ra-cáa-kúb-a i-ø-goónzi  
 no SC1-DJ-PERS-tremble-IPFV AUG5-NP5-convulsion

Q: “So, HAS he ALREADY PASSED AWAY?”

A: “No, he IS STILL IN AGONY.” (*Gikenye*, theatre, 1970s)

(8) Q: Nooné murí aya magúme, abashíingaántahe hári icó baáfashije?

A: Abashíingantaáhe kóko baárafashije.

nooné	mu-rí	a-a	ma-gúme	a-ba-shíingantaáhe	ha-ø-ri
QW	18LOC	6-DEMa	6-crisis	AUG-2-traditional.councillor	16SM-PRS-be
i-ki-ó	ba-á-ø-fásh-ye				
AUG-7-REF 2SM-REM.PST-help-PFV.REL					
a-ba-shíingaántahe			kóko	ba-á-ra-fásh-ye	
AUG-2-traditional.councillor			obviously	2SM-REM.PST-DJ-help-PFV	

Q: “Were the traditional councillors by any means helpful during that crisis?”

A: “The traditional councillors DID OBVIOUSLY HELP.” (*Mushingantahe*, peace, 2000s)

In Makhuwa, the conjoint verb form expresses focus on the element following the verb, and the disjoint is the elsewhere form. This can for example be seen when the postverbal noun is the potentially indefinite noun ‘person’: because of the focus on the postverbal element, this object cannot be interpreted as a non-specific indefinite when it follows a conjoint verb form, instead resulting in a generic reading (9). The disjoint verb form is perfectly fine when followed by a non-specific indefinite, showing that the form of the verb is not determined by finality of the verb, but by the focus interpretation of the element following the verb.

Makhuwa (P31, Van der Wal 2011: 1740)

(9) a. DJ Ko-m-wéha ntthu.  
1SG.SM.PERF.DJ-1OM-look 1.person  
‘I saw someone.’

b. CJ \*Ki-m-weh-álé ntthú.  
1SG.SM-1OM-look-PERF.CJ 1.person  
int: ‘I saw someone.’

c. CJ Ki-m-weh-álé ntthú, nki-weh-álé enáma.  
1SG.SM-1OM-look-PERF.CJ 1.person NEG.1SG-look-PERF 9.animal  
‘I saw a person/human being, not an animal.’

In Zulu, focused elements need to occupy a position within the vP (Buell 2006, Cheng & Downing 2009). When such an element is present in a postverbal position, this entails that the verb is not final in its vP constituent. This non-finality in turn is what selects the conjoint form of the verb – even if the element following the verb is not in focus, the conjoint form will still appear, as in (10). Conversely, the disjoint form is chosen when the verb is final, regardless of whether it is in (one type of) predicate-centred focus. Cheng and Downing (2009) show that phonological phrasing also marks constituency: the right boundary of a phonological phrase is marked by lengthening of the penultimate syllable. The right-dislocation of an object thus affects the phonological phrasing as well as the form of the verb, as seen in (11). The relation with focus is therefore an indirect one in Zulu, mediated by constituent-finality (12) (Van der Spuy 1993, Buell 2006, Buell 2009, Halpert 2017).

Zulu (S42, Buell 2005: 64, 66)

(10) CJ A-ngi-dans-i kahle, kodwa ngi-cul-a kahle.  
NEG-1SG.SM-dance-FV well but 1SG.SM-sing-FV well  
‘I don’t dance well, but I sing well.’

- (11) a. DJ Abafana [ba-ya-si-hlu:pha] isaluka:zi.  
 2.boys 2SM-PRES.DJ-7-annoy 7.old.woman  
 b. CJ Abafana [ba-hlupha isaluka:zi.]  
 2.boys 2SM-annoy 7.old.woman  
 ‘The boys are annoying the old woman.’

- (12) a. [V<sub>CONJOINT</sub> X]<sub>VP</sub> (Y)  
 b. [V<sub>DISJOINT</sub>]<sub>VP</sub> (X) (Y)

We now want to test whether the observed tonal alternation in Rukiga is sensitive to focus or constituency. If the pattern of tonal reduction in Rukiga were determined by focus, there could be 4 possible correlations (based on Buell 2006, see also Van der Wal 2017):

1. predicate-centred focus requires the non-reduced (‘disjoint’) form;
2. no tonal reduction (‘disjoint’) entails predicate-centred focus;
3. tonal reduction (‘conjoint’) entails focus on the postverbal element;
4. a focused postverbal element requires tonal reduction on the verb (‘conjoint’ form).

These correlations will be tested in turn in the next subsections, illustrated with verbs inflected in the near past and yesterday past tense.

### 3.1. PCF requires no TR

While it is true that in many cases of predicate-centred focus the verb is indeed in its non-reduced (disjoint) form, the verb is also in the majority of those cases in a constituent-final position. In (13) and (14), the lexical verb is contrasted, while (15) focuses on the truth value.

- (13) (What did father do with the beans and the carrots?)  
 Tááta e-bi-híimbá a-bi-teek-íre, károt y-áá-zí-koota.  
 1.father AUG-8-beans 1SM-8OM-cook-PFV 10.carrot 1SM-N.PST-10OM-eat.raw  
 ‘Father, the beans he cooked; the carrots he ate raw.’

- (14) Tí-ba-a-karaanga e-bi-nyóobwa, bá-á-bi-shékura.  
 NEG-2SM-N.PST-roast AUG-8-groundnuts 2SM-N.PST-8OM-pound  
 ‘They didn't roast the groundnuts, they pounded them.’

- (15) (The cook didn't come.)  
 Iizíre!  
 a-ij-ire  
 1SM-come-PFV  
 ‘He came. / He did come.’

However, as soon as the verb is not constituent-final, but still in focus, tonal reduction (conjoint) is required. In (16) and (17), a contrast is created between two lexical actions creating state-of-affairs focus, while an adverb follows the verb. Only the tonally reduced form is acceptable.

- (16) a. TR E-nyonyi tí-z-a-taambura júba koonká z-aa-guruka júba.  
 AUG-10.birds NEG-10SM-N.PST-walk quickly but 10SM-N.PST-fly  
 quickly  
 ‘The birds didn't walk quickly, they flew quickly.’

- b. H \*Enyonyi tízatambura júba konká zááguruka júba.
- (17) a. TR E-i-shóki ti-n-aa-ri-shokoza gye  
 AUG-5-hair NEG-1SG.SM-N.PST-5OM-comb well  
 koonká n-aa-ri-sibá gye.  
 but 1SG.SM-N.PST-plait well  
 ‘The hair, I did not comb it well but I plaited it well.’
- b. H \*Eishóki tinaarishokoza gye konká náárisibá gye.

The first correlation thus does not hold; instead we find a relation with constituent-finality.

### 3.2. No TR entails PCF

The second possible correlation is that the absence of tonal reduction (‘disjoint’) entails predicate-centred focus. This again seems to hold true at first glance, but again those verb forms are also always constituent-final. In (18), the postverbal object is right-dislocated, leaving the verb in a structurally final position.

- (18) a. H Ba-mu-kom-íré o-mu-shúma.  
 2SM-1OM-tie-PFV AUG-1-thief  
 ‘They caught him, the thief.’
- b. TR \*Bamukomire omushúma.

We know that in (18) the object is dislocated because of the presence of the coreferring object marker – since in Rukiga object markers function as pronouns and cannot co-occur in the same domain with their coreferring DP object (19), we know that the DP object forms a separate constituent.

- (19) a. \*Píta y-áá-ka-téeka a-ka-húúnga e-ri-zóoba.  
 1.Peter 1SM-N.PST-12OM-cook AUG-12-posho AUG-5-day  
 int. ‘Peter cooked posho today.’
- b. Píta y-áá-ka-téek' e-ri-zóob' a-ka-húúnga.  
 1.Peter 1SM-N.PST-12OM-cook AUG-5-day AUG-12-posho  
 ‘Peter cooked it today, posho.’

Another environment to test the correlation is when an agreeing subject appears in a linearly postverbal position. This is not a case of agreeing inversion (one of the subject inversion constructions listed in Marten & Van der Wal (2014)), for two reasons. First, unlike in locative inversion and default agreement inversion (DAI), the tonally reduced verb form is in fact unacceptable with a postverbal agreeing subject, as seen in the comparison between DAI in (20) and the agreeing subject in (21).

- (20) a. TR Ha-a-shohora Píta. (default agreement inversion)  
 16SM-N.PST-move.out 1.Peter  
 ‘Peter left.’ / ‘It’s Peter who left.’
- b. H \*Hááshohora Píta.



- (21) a. H B-áá-shek' á-bá-ana. (agreeing subject)  
 2SM-N.PST-laugh AUG-2-children  
 ‘Children have laughed.’
- b. TR \*Baasheka abáana.

Second, the postverbal agreeing subject can scope over negation, which is impossible in default agreement inversion, as seen in (22). Assuming that the postverbal logical subject is in-situ in default agreement inversion, the possibility of the subject scoping higher suggests that the agreeing postverbal subject in (22b) has moved out of the vP.

- (22) a. Tíhaayeesyaamur' énte zóona. (default agreement inversion)  
 ti-ha-a-esyamura e-n-te z-ooná  
 NEG-16SM-N.PST-sneeze AUG-10-cows 10-all  
 \*‘All cows did not sneeze.’  
 ‘Not all cows sneezed.’
- b. Tízaayeesyaamur' énte zóona. (agreeing subject)  
 ti-zi-a-esyamura e-n-te z-ooná  
 NEG-10SM-N.PST-sneeze AUG-10-cows 10-all  
 ‘All cows did not sneeze.’  
 ‘Not all cows sneezed.’

This indicates that the verb is left as the only constituent in the vP, that is, it is constituent-final. We conclude that there is no convincing evidence that the second potential correlation between verb form and focus would hold in Rukiga.

### 3.3. TR entails postverbal focus

The third potential correlation is that tonal reduction (‘conjunct’) entails focus on the postverbal element. This correlation does not hold; there are plenty of counterexamples. If the element following the tonally reduced verb form would necessarily be in focus, we would predict cognate objects, parts of idioms, and indefinite non-specifics to be ungrammatical. This is because each of these cannot trigger alternatives and is therefore ‘unfocussable’. The opposite is true: tonal reduction is obligatory for each of these, as shown in (23) to (26).

- (23) a. TR Naayeeyaguz' órugusyo.  
 n-aa-eyaguza o-ru-gusyo  
 1SG.SM-N.PST-scratch.CAUS AUG-11-shard  
 ‘I was in a bad situation.’
- b. H \*nááyééyaguz' orugúsyó
- (24) a. TR N-aa-zin' é-ki-zíno.  
 1SG.SM-N.PST-dance AUG-7-dance  
 ‘I danced a dance.’
- b. H Náázína.  
 1SG.SM-N.PST-dance  
 ‘I danced.’

- c. H \*Náázín' ékizíno.
- (25) a. TR M-byaam-ir' ó-tú-ro.  
1SG.SM-sleep-PFV AUG-13-sleep  
'I slept a sleep.'
- b. H \*Mbyaamír' ó-tú-ro / \*mbyaamíre otúro.  
1SG.SM-sleep-PFV AUG-13-sleep  
'I slept a sleep.'
- (26) a. TR N-aa-reeb' ó-muu-ntu.  
1SG.SM-N.PST-see AUG-1-person  
'I saw someone.'
- b. H \*Nááréeb' omuuntu.
- c. TR Mpulír' ómuuntu.  
n-hulír-ire o-mu-ntu  
1SG.SM-hear-PFV AUG-1-person  
'I heard someone.'
- d. H \*Mpulír' ómuuntu.

Furthermore, as already illustrated in (20), default agreement inversion requires tonal reduction, and does so even when the subject is not in narrow focus. When the sentence has a thetic interpretation, that is, everything is presented as one piece of (new) information (27), tonal reduction applies.<sup>4</sup>

- (27) TR Hiiǵ' ómuuntu.  
ha-a-ija o-mu-ntu  
16SM-N.PST-come AUG-1-person  
'Someone has come.'

There is one indication that tonal reduction does have a focus effect on the following element, which is the case of an adverb and a right-dislocated object, as in (28). As indicated in the translations, the adverb that directly follows the verb does not have a special interpretation when preceded by a non-reduced form (28a), but is in focus when the verb is tonally reduced (28b).

- (28) a. H Píta y-áá-ka-téek' e-ri-zóob' a-ka-húúnga.  
1.Peter 1SM-N.PST-12OM-cook AUG-5-day AUG-12-posho  
'Peter cooked it today, posho.'
- b. TR Píta y-aa-ka-teek' é-ri-zóob' á-ka-húúnga.  
1.Peter 1SM-N.PST-12OM-cook AUG-5-day AUG-12-posho  
'Peter cooked posho TODAY.'

<sup>4</sup> It is interesting to note that liaison between the verb and postverbal object does still apply. We leave this "mismatch" between tonal phrasing and liaison to one side for now.

### 3.4. Postverbal focus requires TR

The last potential correlation between the verb form and focus is true for all languages with the conjoint/disjoint alternation: postverbal focused elements require the tonally reduced form. Wh words, answers to wh questions, and DPs with an exhaustive focus particle ‘only’ or an additive particle ‘even/also’ all require the tonally reduced form, as shown in (29) to (32).

- (29) a. TR Jéin yaakorá ki?  
 1.Jane 1SM-N.PST-do what  
 ‘What did Jane do?’
- b. H \*Jéin y-áá-kóra kí?
- (30) a. TR Hélen atwiiré ki?  
 Helen a-twar-ire ki  
 1.Helen 1SM-take-PFV what  
 ‘What did Helen take?’
- b. TR Hélen atwiir’ ékikópo.  
 Helen a-twar-ire e-ki-kopo  
 1.Helen 1SM-take-PFV AUG-7-cup  
 ‘Helen took a cup.’
- c. H \*Hélen atwíire/atwíire ekikópo.
- (31) a. TR Píta y-aa-teeká a-ka-húunga k-ónka.  
 1.Peter 1SM-N.PST-cook AUG-12-posho 12-only  
 ‘Peter cooked only posho.’<sup>5</sup>
- b. H \*Píta y-áá-téeká a-ka-húunga k-ónka.
- (32) (Have you seen an old car?)
- a. TR yeego, n-aa-reeba n' é-n-sya.  
 yes 1SG.SM-N.PST-see and AUG-9.new  
 ‘Yes, and I also saw a new one.’
- b. H yeego n' é-mótoká n-sya n-áá-gí-reeba.  
 yes and AUG-9.car 9-new 1SG.SM-N.PST-9OM-see  
 ‘Yes, and the new car I have also seen.’

However, this can alternatively be explained as an indirect relation, similar to Zulu. As in Zulu, focused postverbal phrases in Rukiga prefer to be adjacent to the verb, as exemplified for the wh object in (33): the intervening recipient object is left- or right-dislocated in order for the interrogative theme object to be adjacent to the verb.

- (33) a. Káák’ á-bá-ana y-aa-ba-há ki?  
 1.grandmother AUG-2-children 1SM-N.PST-2OM-give what  
 ‘What has grandmother given the children?’

<sup>5</sup> *Posho* is the Ugandan equivalent of *ugali*, a stiff mass made from corn flour.

- b. Kááka y-aa-ba-ha ky' á-bá-ana?  
 1.grandmother 1SM-N.PST-2OM-give what AUG-2-children  
 ‘What has grandmother given the children?’
- c. \*Kááka y-aa-h' á-b-áána ki?  
 1.grandmother 1SM-N.PST-give AUG-2-children what  
 int. ‘What has grandmother given the children?’

This implies that focused elements need to occupy a position internal to the verb phrase, and as a result the verb is not phrase-final, therefore undergoing tonal reduction. This also explains the focus interpretation of the adverb in (28): when ‘yesterday’ is focused, it occurs inside the vP and therefore the verb undergoes tonal reduction.

### 3.5. Finality

The tests in the previous subsections do not provide evidence for a direct relation between verb form and focus; instead, most of the data argue against a focus-based account of the alternating tonal forms in Rukiga. The only relevant factor seems to be whether the verb occurs in a constituent-final position or not. This is also clear in the minimal pair in (34). When preceded by a tonally reduced form, *na-we* ‘and-1.PRO’ is part of the same phrase and hence translated as ‘with him/her’, whereas a preceding non-TR form triggers the interpretation ‘and him, he too’, referring back to the subject. This is the same as the pattern Creissels (1996) describes for the (equally constituency-sensitive) conjoint/disjoint alternation in Setswana.

- (34) a. TR Dániel a-gaamb-ire ná-we.  
 1.Daniel 1SM-talk-PFV and-1.PRO  
 ‘Daniel spoke with him.’
- b. H Dániel a-gaamb-íre ná-we.  
 1.Daniel 1SM-talk-PFV and-1.PRO  
 ‘Daniel also spoke.’

The overall picture, then, is that there is never a true minimal choice between applying TR or not, that is, there is no alternation depending on information structure, but rather a tonal rule that is sensitive to constituency boundaries. There is no direct tonal marking of focus (see Hyman 1999). The options available to the speaker are to phrase a postverbal element within or outside of the same constituent as the verb, and the form of the verb follows automatically.

Considering the conclusion that tonal reduction in Rukiga is sensitive to constituency, we can now return to our overall research question: should the opposition between tonal reduction and retaining H tones on verbs in Rukiga be analysed as encoding the conjoint/disjoint alternation?

## 4. Conjoint/disjoint or just phonology?

For Bemba, Kula (2017) discusses a similar question. Bemba has a number of alternating tenses with two segmentally marked forms, and in addition H tones can spread in a bounded fashion (when not final in the phonological phrase) or unbounded (when final in the phonological phrase). The resulting tonal differences for final vs. non-final verbs are reminiscent of the Haya and Rukiga situation, but there is a crucial difference: the tonal rules in Bemba, that is, bounded vs. unbounded H tone spreading, apply across the board, leading Kula to conclude that “tone does not encode the cj/dj alternation in Bemba”. In contrast, tonal

reduction in Rukiga is only present in 5 conjugational categories (or ‘tenses’). Since it does not apply in infinitives and the far future tense, as seen in Table 2 and (35), TR cannot be analysed as a general phonological rule that marks any and all phonological phrases.

- (35) a. Kat' á-ryáá-reeba.  
 1.Kato 1SM-FUT-see  
 ‘Kato will see.’
- b. Kat' á-ryáá-reeb' óó-ha?  
 1.Kato 1SM-FUT-see 1-who  
 ‘Who will Kato see?’

The system is therefore more similar to the tonal marking of the conjoint/disjoint alternation as found in Setswana, which is also restricted in the number of conjugational categories where it applies (Creissels 1996, 2017).

Having said this, there are two facts that may make the alternation unstable in Rukiga, apart from the fact that there is no segmental marking. The first factor that the alternation is absent/invisible in the present progressive and the remote past when the verb does not have a lexical H tone (see Table 4 and Table 5), which reduces the input that acquirers receive to discover the alternation. The second is that the domain where TR applies might be extending. Hyman & Watters (1984) observe that focus on terms (arguments, adjuncts) is often incompatible with ‘marked’ tense-aspect categories. The progressive is a prototypically marked aspect, which has been related to predicate-centred focus (Hyman & Watters 1984, Güldemann 2003), and it is therefore seldom part of the conjugational categories that have the alternation. Yet in Rukiga, the present progressive also shows the alternation between a tonally reduced and a H-retaining form, suggesting that TR may be spreading as a general phonological rule, from basic tenses that originally had the alternation to marked categories.

If it is true that the conjoint/disjoint alternation existed in the ancestor of the Eastern Bantu languages (Nurse 2008, Güldemann 2003, Van der Wal & Hyman 2017), this suggests that Rukiga has lost the segmental morphology, while so far retaining the tonal distinction as a marker of the conjoint/disjoint alternation.

It remains to be seen how tonal reduction on verbs compares to the tonal behaviour within the nominal domain, where a closer or looser relation between nouns and modifiers is also observed (see Poletto 1988 for Rukiga, and Hyman 1999 for Haya, Kula 2017 for Bemba).

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### Abbreviations and symbols

We write all vowel length (phonemic and automatic) with 2 vowels; orthographic |k| and |g| before [i], as well as |ky| and |gy| before other vowels, are pronounced [tʃ] and [dʒ], respectively. Liaison between words is indicated by an apostrophe. When surface morphology is not transparent, a second line is added in examples, showing the underlying morphemes. High tones are indicated by an acute accent, low tones are unmarked.

APPL        applicative  
 AUG        augment

CJ	conjoint
COP	copula
DAI	default agreement inversion
DEM	demonstrative
DJ	disjoint
FPST	far past
FUT	future tense
FV	final vowel
H	high tone
int.	intended meaning
L	low tone
NEG	negation
N.PST	near past
OM	object marker
p1	
PFV	perfective aspect
PROG	progressive aspect
PRS	present tense
REF	reference
REM	remote (past)
SM	subject marker
TR	tonal reduction

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