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13 The conjoint/disjoint alternation in Kinyarwanda

1 Introduction

This chapter provides a comprehensive discussion of the conjoint/disjoint (CJ/DJ) alternation in Kinyarwanda (D61), the mother tongue of one of the authors of this chapter (JPN). In Section 2, we show in which tenses the alternation is realised through segmental morphology and which tonal processes are associated with the alternation. Section 3 examines the syntactic environments in which the CJ and the DJ forms of verbs are licensed in Kinyarwanda. We will contrast two prominent approaches that have been proposed to explain their distribution in various Bantu languages: the idea that the alternation is determined by information-structural properties of the clause, and the alternative view, according to which the alternation is a reflex of syntactic constituency. In Section 4, we briefly discuss the fact that the morpheme *-ra-*, which marks the DJ form of verbs in various tenses, also seems to have a variety of other grammatical functions. Section 5 presents our conclusion.

2 Grammatical marking of the conjoint/disjoint alternation

In this section, we demonstrate how the CJ/DJ alternation is grammatically marked in Kinyarwanda, by providing examples from all tenses in which the alternation is expressed through segmental morphology, grammatical tone, or both. In addition, we present data on certain tone shift phenomena in Kinyarwanda, which are not directly related to the CJ/DJ alternation, but which are necessary to understand why surface tone realisation may occasionally obscure the effects of the tonal patterns that are associated with the CJ/DJ alternation. Throughout this section, we illustrate the CJ form in Kinyarwanda with examples in which the verb is followed by overt material; in the examples showing the DJ form, the

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verb is clause-final (see Section 3 for a more detailed discussion of the syntactic environments that license the CJ and the DJ forms).¹

2.1 Segmental marking and H tone deletion

2.1.1 Simple present and present perfective

In the simple present² and present perfective, the DJ form is marked segmentally by the morpheme *-ra-* in Kinyarwanda (see (2) and (4)). There is no segmental marking of the CJ verb form (see (1) and (3)). However, in the CJ form, the verb always has a low (L) tone, which means that lexical high (H) tones of verbs are deleted in the CJ form, (3). In the DJ form, L tone verbs remain low, (2); lexical H tones are retained, (4) (Sibomana 1974; Coupez 1980; Overdulse and Jacob 1998; Kimenyi 2002):

Toneless verb:

- (1) a. *Abáana basoma ibitabo.* [simple present CJ]
 a-ba-áana ba-som-a i-bi-tabo
 AUG-2-child 2SM-read-FV AUG-8-book
 ‘Children read books.’
- b. *Abáana basomye ibitabo.* [present perfective CJ]
 a-ba-áana ba-som-ye i-bi-tabo
 AUG-2-child 2SM-read-PFV AUG-8-book
 ‘Children have just read books.’
- (2) a. *Abáana barasoma.* [simple present DJ]
 a-ba-áana ba-ra-som-a
 AUG-2-child 2SM-DJ-read-FV
 ‘Children read.’
- b. *Abáana barasomye.* [present perfective DJ]
 a-ba-áana ba-ra-som-ye
 AUG-2-child 2SM-DJ-read-PFV
 ‘Children have just read.’

¹ We present each Kinyarwanda example by four lines. Line 1 represents vowel lengthening, surface tone, and phonologically conditioned sound changes. Line 2 presents the underlying morphemes and lexical tone; the interlinear glosses are in line 3; and line 4 provides a translation.

² The so-called narrative past in Kinyarwanda is morphologically identical to the simple present, but refers to past events. Since the CJ/DJ alternation is marked in the same way as in the simple present, we do not discuss the narrative past separately in this paper.

H-toned verb (H deleted in CJ form):

- (3) a. *Abáarimú bakora akazi keénshi.* [simple present CJ]
 a-ba-áarimú ba-kór-a a-ka-zi ka-iínshi
 AUG-2-teacher 2SM-work-FV AUG-12-work 12-many
 ‘Teachers do a lot of work.’
- b. *Abáarimú bakoze akazi keénshi.* [present perfective CJ]
 a-ba-áarimú ba-kór-ye a-ka-zi ka-iínshi
 AUG-2-teacher 2SM-work-PFV AUG-12-work 12-many
 ‘Teachers have just done a lot of work.’
- (4) a. *Abáarimú barakóra.* [simple present DJ]
 a-ba-áarimú ba-ra-kór-a
 AUG-2-teacher 2SM-DJ-work-FV
 ‘Teachers work.’
- b. *Abáarimú barakóze.* [present perfective DJ]
 a-ba-áarimú ba-ra-kór-ye
 AUG-2-teacher 2SM-DJ-work-PFV
 ‘Teachers have just worked.’

Although lexical H tones are retained in the DJ form, they may not always be realised on the verb radical. When an object marker is prefixed to the stem in Kinyarwanda, a lexical H tone of the verb shifts to the left and is realised on the object marker (see Goldsmith and Mpiranya 2010 for detailed discussion of leftward H tone shift in Kinyarwanda):

- (5) a. *Abáarimú baragákora.* [simple present DJ]
 a-ba-áarimú ba-ra-ka-kór-a
 AUG-2-teacher 2SM-DJ-12OM-work-FV
 ‘Teachers work (on) it.’
- b. *Abáarimú baragákoze.* [present perfective DJ]
 a-ba-áarimú ba-ra-ka-kór-ye
 AUG-2-teacher 2SM-DJ-12OM-work-PFV
 ‘Teachers have just worked (on) it.’

That the source of the H tone in (5) is indeed the verb radical is demonstrated by comparing (5) with similar examples with a toneless verb, in which no H tone appears on the object marker:

- (6) a. *Abáarimú barakareka.* [simple present DJ]
 a-ba-áarimú ba-ra-ka-rek-a
 AUG-2-teacher 2SM-DJ-12OM-leave-FV
 ‘Teachers leave it.’
- b. *Abáarimú barakaretse.* [present perfective DJ]
 a-ba-áarimu ba-ra-ka-rek-ye
 AUG-2-teacher 2SM-DJ-12OM-leave-PFV
 ‘Teachers have just left it.’

Lexical H tones are hence retained in the DJ form, although they may be realised on a different syllable as a result of leftward H tone shift.

2.1.2 Near past

The near past tense shows the same tone patterns with CJ and DJ forms as the simple present and the present perfective: The H tone of lexically H-toned verbs is deleted in the CJ verb form, but retained in the DJ form (Sibomana 1974; Kimenyi 2002). The difference between the near past and the tense/aspect forms discussed in Section 2.1.1 is that the DJ form is segmentally marked with the morpheme *-a-* in the near past (in the following, we provide examples of the near past both in the perfective aspect, marked with the suffix *-ye*, and the imperfective aspect, marked with the suffix *-aga*):

Toneless verb:

- (7) a. *Umwáana yasomye ibitabo.* [near past CJ (perf.)]
 u-mu-áana a-a-som-ye i-bi-tabo
 AUG-1-child 1SM-PST-read-PFV AUG-8-book
 ‘The child read books.’
- b. *Umwáana yasomaga ibitabo.* [near past CJ (impf.)]
 u-mu-áana a-a-som-aga i-bi-tabo
 AUG-1-child 1SM-PST-read-IPFV AUG-8-book
 ‘The child was reading books.’
- (8) a. *Umwáana yaasomye.* [near past DJ (perf.)]
 u-mu-áana a-a-a-som-ye
 AUG-1-child 1SM-PST-DJ-read-PFV
 ‘The child read/has read.’

- b. *Umwáana yaasomaga.* [near past DJ (impf.)]
 u-mu-áana a-a-a-som-aga
 AUG-1-child 1SM-PST-DJ-read-IPFV
 ‘The child was reading.’

H-toned verb (H deleted in CJ form):

- (9) a. *Umwáarimú yakoze akazi keénsi.* [near past CJ (perf.)]
 u-mu-áarimú a-a-kór-ye a-ka-zi ka-íinshi
 AUG-1-teacher 1SM-PST-work-PFV AUG-12-work 12-many
 ‘The teacher did a lot work.’
- b. *Umwáarimú yakoraga akazi keénsi.* [near past CJ (impf.)]
 u-mu-áarimú a-a-kór-aga a-ka-zi ka-íinshi
 AUG-1-teacher 1SM-PST-work-IPFV AUG-12-work 12-many
 ‘The teacher was doing a lot of work.’
- (10) a. *Umwáarimú yaakóze.* [near past DJ (perf.)]
 u-mu-áarimú a-a-a-kór-ye
 AUG-1-teacher 1SM-PST-DJ-work-PFV
 ‘The teacher worked.’
- b. *Umwáarimú yaakóraga.* [near past DJ (impf.)]
 u-mu-áarimú a-a-a-kór-aga
 AUG-1-teacher 1SM-PST-DJ-work-IPFV
 ‘The teacher was working.’

2.2 Segmental marking, H tone deletion and H tone addition: the remote past

As in the tense forms discussed in Section 2.1, the CJ form of the remote past tense (perfective and imperfective) is also marked through the deletion of lexical H tones (see (12)):

Toneless verb:

- (11) a. *Abáana baákinnye umupiíra.* [remote past (perf.) CJ]
 a-ba-áana ba-á-kin-ye u-mu-píira
 AUG-2-child 2SM-REM-play-PFV AUG-3-ball
 ‘Children played (with) the ball.’
- b. *Abáana baákinaga umupiíra.* [remote past (impf.) CJ]
 a-ba-áana ba-á-kin-aga u-mu-píira
 AUG-2-child 2SM-REM-play-IPFV AUG-3-ball
 ‘Children were playing (with) the ball.’

H-toned verb (H deleted in CJ form):

- (12) a. *Abakózi baámutemeye ibití.* [remote past (perf.) CJ]
 a-ba-kózi ba-á-mu-tém-ir-ye i-bi-tí
 AUG-2-worker 2SM-REM-1OM-cut-APPL-PFV AUG-8-tree
 ‘Workers cut trees for him.’
- b. *Abakózi baámutemeraga ibití.* [remote past (imperf.) CJ]
 a-ba-kózi ba-á-mu-tém-ir-aga i-bi-tí
 AUG-2-worker 2SM-REM-1OM-cut-APPL-IPFV AUG-8-tree
 ‘Workers were cutting trees for him.’

As illustrated by (13) and (14), the DJ form of the remote past tense is marked segmentally with the morpheme *-ra-*. However, in contrast to the simple present and the present perfective, the DJ form of the remote past also has special tonal properties: While the lexical H tone of the verb is retained, a H tone is *added* to lexically toneless verbs in the DJ form of the remote past tense (see (13)) (Bizimana 1998; Overdulse and Jacob 1998; Goldsmith and Mpiranya 2010):

Toneless verb (H added in the DJ form):

- (13) a. *Baáragúze.* [remote past (perf.) DJ]
 ba-á-ra-gur-ye
 2SM-REM-DJ-buy-PFV
 ‘They bought.’
- b. *Baáragúraga.* [remote past (imperf.) DJ]
 ba-á-ra-gur-aga
 2SM-REM-DJ-buy-IPFV
 ‘They were buying.’

H-toned verb:

- (14) a. *Baáratémye.* [remote past (perf.) DJ]
 ba-á-ra-tém-ye
 2SM-REM-DJ-cut-PFV
 ‘They cut.’
- b. *Baáratémaga.* [remote past (imperf.) DJ]
 ba-á-ra-tém-aga
 2SM-REM-DJ-cut-IPFV
 ‘They were cutting.’

Examples (13) and (14) show that in the remote past, the tonal distinction between H-toned and toneless verbs is neutralised in both the CJ and the DJ form. However, the addition of a H tone to the first syllable of the verb stem is not only attested in the DJ form of the remote past, but also in other grammatical contexts (viz. in the participial remote past and in headless present relatives; Kimenyi 2002: 200ff.); it is also found with certain TAM markers in other Bantu languages of the same region (Larry Hyman p.c.). We therefore follow Jouannet (1985) and Kimenyi (2002) and analyse the H tone in examples such as (13) as a floating H tone that is associated with certain TAM forms, but that is not specific to the CJ/DJ alternation.

The examples in (11)–(14) illustrate the tonal pattern of the CJ and the DJ form in the remote past with verbs that are prefixed with biphonic subject markers, which have a CV shape. When the subject marker is monophonic (a glide or a nasal), the remote tense marker *-á-* merges with the subject marker, and as a result, the H tone of the tense morpheme shifts to the verb radical, obscuring the effects of H tone deletion with H-toned verbs in the CJ form (Sibomana 1974; Overdulse and Jacob 1998). This H tone shift can be observed in (15):

H-toned verb (H deleted in the CJ form, but H of tense marker shifts to radical):

- (15) a. *Yakóze* *akazi.* [remote past (perf.) CJ]
 a-á-kór-ye a-ka-zi
 1SM-REM-work-PFV AUG-12-work
 ‘He did some work.’
- b. *Yakóraga* *akazi.* [remote past (impf.) CJ]
 a-á-kór-aga a-ka-zi
 1SM-REM-work-IPFV AUG-12-work
 ‘He was doing some work.’

Because of the H tone shift demonstrated by (15), a lexically toneless verb also carries a H tone in the CJ form when the subject marker is monophonic (Sibomana 1974):

Toneless verb (H of tense marker shifts to radical):

- (16) a. *Nasómye* *igitabo.* [remote past (perf.) CJ]
 n-á-som-ye i-ki-tabo
 1SG.SM-REM-read-PFV AUG-7-book
 ‘I read a book.’
- b. *Nasómaga* *igitabo.* [remote past (impf.) CJ]
 n-á-som-aga i-ki-tabo
 1SG.SM-REM-read-IPFV AUG-7-book
 ‘I was reading a book.’

When an object marker intervenes between the remote past tense marker and the verb stem, the H tone of the tense morpheme shifts to the object marker. As a result, the verb radical remains low with H-toned and toneless verbs:

H-toned verb (H deleted in the CJ form, H of tense marker shifts to object marker):

- (17) *Nagúkoreye* *akazi.* [remote past (perf.) CJ]
 n-á-ku-kór-ir-ye a-ka-zi
 1SG.SM-REM-2SG.OM-work-APPL-PFV AUG-12-work
 ‘I did the work for you.’

Toneless verb (H of tense marker has shifted to object marker):

- (18) *Nakúreebeye* *amafoto.* [remote past (perf. CJ)]
 n-á-ku-reeb-ir-ye a-ma-foto
 1SG.SM-REM-2SG.OM-look-APPL-PFV AUG-6-picture
 ‘I looked at the pictures for you.’

In the same way, monophonic subject markers affect the realisation of tones in the DJ form of the remote past. It was shown above that a H tone is added to toneless verbs in the DJ form in this tense. However, when the subject marker is monophonic, the H tone of the remote past tense marker shifts to the next syllable, which in the remote past is the DJ-marker *-ra-*. In this case, the H tone associated with verbs in the DJ form of the remote past is deleted as a result of Meeussen’s rule (see also Philippon 1998 for Kirundi; Kimenyi 2002):

H-toned verb (H of tense marker has shifted to *-ra-*; lexical H on radical is deleted):

- (19) a. *Yarákoze.* [remote past (perf.) DJ]
 a-á-ra-kór-ye
 1SM-REM-DJ-work-PFV
 ‘He worked.’
- b. *Yarákoraga.* [remote past (impf.) DJ]
 a-á-ra-kór-aga
 1SM-REM-DJ-work-IPFV
 ‘He was working.’

Toneless verb (H of tense marker has shifted to *-ra-*; H is added in DJ form, but is deleted):

- (20) a. *Yaráguze.* [remote past (perf.) DJ]
 a-á-ra-gur-ye
 1SM-REM-DJ-buy-PFV
 'He bought.'
- b. *Yaráguraga.* [remote past (impf.) DJ]
 a-á-ra-gur-aga
 1SM-REM-DJ-buy-IPFV
 'He was buying.'

The H tone of the DJ form resurfaces when an object marker intervenes between *-ra-* and the verb stem, because in this case, the H of the DJ-marker and the H of the verb radical are no longer adjacent:

H-toned verb (H of tense marker has shifted to *-ra-*; lexical H of verb is retained):

- (21) a. *Yarágakóze.* [remote past (perf) DJ]
 a-á-ra-ka-kór-ye
 1SM-REM-DJ-12OM-work-PFV
 'He worked (on) it.'
- b. *Yarágakóraga.* [remote past (impf.) DJ]
 a-á-ra-ka-kór-aga
 1SM-REM-DJ-12OM-work-IPFV
 'He was working (on) it.'

Toneless verb (H of tense marker has shifted to *-ra-*, H added to radical in DJ form):

- (22) a. *Yarábigúze.* [remote past (perf.) DJ]
 a-á-ra-bi-gur-ye
 1SM-REM-DJ-8OM-buy-PFV
 'He bought them.'
- b. *Yarábigúraga.* [remote past (impf.) DJ]
 a-á-ra-bi-gur-aga
 1SM-REM-DJ-8OM-buy-IPFV
 'He was buying them.'

In sum, the data show that the CJ/DJ alternation in the remote past is formally marked as in the simple present: H tones are deleted in the CJ form; the morpheme *-ra-* is added in the DJ form. In addition, a grammatical H tone is added to the

- b. *Ubíshaatse* *wareeba* *uyu mukino*. [con./hypo.mood CJ]
 u-bi-shaak-ye u-aa-reeb-a uyu mu-kino
 2SG.SM-8OM-want-PFV 2SG.SM-COND-look-FV 3.DEM 3-game
 'If you wanted it, you would watch this game.'
- (26) a. *Araza* *akiicara*. [subsec. mood DJ]
 a-ra-z-a a-ka-iicar-a
 1SM-DJ-come-FV 1SM-SUBS-sit-FV
 'He comes and sits down.'
- b. *Ubíshaatse* *wareeba*. [con./hypo. mood DJ]
 u-bi-shaak-ye u-aa-reeb-a
 2SG.SM-8OM-want-PFV 2SG.SM-COND-look-FV
 'If you wanted it, you would watch.'

These examples demonstrate that in the subsecutive and conditional/hypothetical, CJ and DJ forms are only distinguished with verbs which are lexically H. With toneless verbs, the alternation is not grammatically marked.

2.4 No grammatical marking of the alternation: all other tenses

The remaining tenses or moods in Kinyarwanda do not show the CJ/DJ alternation (but see Note 3 below for a possible exception). For example, in the remote future, the morphophonological shape of all verbs in phrase-medial position is identical to the form of phrase-final verbs (the realisation of the present progressive and the near future will be discussed in Section 4):

Toneless verb:

- (27) *Abáana* *bazaakina* *umupiira*. [remote future CJ]
 a-ba-áana ba-zaa-kin-a u-mu-piira
 AUG-2-child 2SM-RFUT-play-FV AUG-1-ball
 'The children will play (with) a ball.'
- (28) *Abáana* *bazaakina*. [remote future DJ]
 a-ba-áana ba-zaa-kin-a
 AUG-2-child 2SM-RFUT-play-FV
 'The children will play.'

H-toned verb:

- (29) *Abáana bazaakora ikizaami.* [remote future CJ]
 a-ba-áana ba-zaa-kór-a i-ki-zaami
 AUG-2-child 1SM-RFUT-work-FV AUG-7-exam
 ‘The children will work (on) the exam.’
- (30) *Abáana bazaakora.* [remote future DJ]
 a-ba-áana ba-zaa-kór-a
 AUG-2-child 1SM-RFUT-work-FV
 ‘The children will work.’

Notice that the remote future is marked segmentally by the tense morpheme *-zaa-*, and phonologically through deletion of lexical H tones in the affirmative indicative (H tones are retained in the negative) (Sibomana 1974; Overdulve and Jacob 1998; Kimenyi 2002).³ The fact that the lexical H tone is deleted in both (29) and (30) shows that this process is not related to the CJ/DJ alternation.⁴

Table 1 summarises the results for the tenses discussed in Sections 2.1–2.4 (note that this summary applies only to the affirmative system; as we show below, the CJ/DJ alternation is not marked in the negative):

³ As noted by a reviewer, Overdulve (1988: 37) lists examples of what he calls the “conjonctif futur”, which appears in subordinate clauses and which, like the remote future, is formed with the morpheme *-zaa-*. Interestingly, it seems that in this tense, lexical H tones are retained when the verb is not followed by overt material (cf. *nzáakora cyaane*, ‘I will work hard’ vs. *nzáakóra*, ‘I will work’). This contrast suggests that the “conjonctif futur”, in contrast to the remote future, also shows the CJ/DJ alternation, by marking the CJ form through H tone deletion.

⁴ This conclusion may be challenged by an alternative interpretation of the data. It could be argued that H tone deletion in the remote future tense and H tone deletion in the CJ form of the tenses discussed in the preceding sections are in fact the same process. From this perspective, (29) and (30) could be interpreted as showing that the remote future affirmative indicative obligatorily appears in the CJ form, regardless of whether or not the verb is followed by a complement. However, since neither of the two proposals about the function of the CJ/DJ alternation in Kinyarwanda that we discuss in Section 3 would explain this situation, we do not consider this possibility here and assume that the deletion of the H tone in the remote future is unrelated to the CJ/DJ alternation. Note that a similar issue arises with respect to the element *-ra-* in Kinyarwanda, which marks the DJ form in some tenses, but which can also express other grammatical functions, such as the progressive and the persistive. Again, this raises the question if, or to what extent, the grammatical role of *-ra-* in the progressive and the persistive is related to the grammatical function of *-ra-* in the CJ/DJ alternation. We return to this question in Section 4.

Table 1: Marking of the CJ/DJ alternation in Kinyarwanda.

Tense/mood	Segmental marking (DJ)	Tonal marking (CJ)
Simple present/narrative past	-ra-	H tone deletion
Present perfective	-ra-	H tone deletion
Near past	-a-	H tone deletion
Remote past	-ra-	H tone deletion
Subsecutive mood	none	H tone deletion
Conditional/hypothetical	none	H tone deletion
Other tenses/moods	none	none

3 The syntax and semantics of the conjoint/disjoint alternation

The CJ form in Kinyarwanda requires that the verb is followed by overt material in a main clause. If nothing follows the verb, the DJ form is obligatory:

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

As is well-known, the CJ/DJ alternation in Bantu languages is often described in terms of information-structural packaging (see for example, Nshemezimana & Bostoen this volume, Ndayiragije 1999 for Kirundi; Creissels 1996, this volume for Tswana; Givón 1975 for Bemba, Kinyarwanda and Zulu; Güldemann 2003; Voeltz 2004 for Zulu; Hyman and Watters 1984 for Kirundi, Bemba and Aghem; Van der Wal 2009, 2011 for Makhuwa). For Kinyarwanda, a focus-analysis has been proposed by Givón (1975). Givón analyses the DJ-marker *-ra-* in Kinyarwanda as a “VP-focus particle” whose presence signals that the verb is focused, or included within the scope of focus (see also Kimenyi 1980; Botne 1983; Goldsmith and Mpiranya 2010). In contrast, the CJ form must be used when a complement of the verb is focused. The data in (31) are

consistent with this approach: a possible reading of (31a) is with focus on the object; when the verbal predicate is in focus, as in (31c), the DJ form must be chosen.

However, the data in (31) are also compatible with an alternative account, which treats the CJ/DJ alternation as a reflex of constituency. For example, Van der Spuy (1993), Buell (2006) and Halpert (2015) argue that in the Bantu language Zulu, the CJ form must be used when the verb is followed by XP-internal material (with XP = vP or AgrSP/IP), while the DJ form is required in all other contexts. This type of analysis seems to underlie the description of the CJ/DJ alternation in Coupez (1980), who notes that in Kinyarwanda, “le disjoint s’emploie en fin de syntagme verbal et le conjoint [...] si le verbe est suivi d’au moins un mot appartenant à son syntagme” (p. 393) [“the disjoint is used at the end of the verb phrase and the conjoint when the verb is followed by at least one word in its phrase”]; our translation, JPN & JZ].⁵ Clearly, the distribution of the CJ and DJ forms in (31) also follows from this type of analysis.

In this section, we discuss in detail the syntactic contexts which license the CJ/DJ alternation in Kinyarwanda. In our discussion, we investigate to what extent the data follow from an analysis of the CJ/DJ alternation in terms of information structure, and whether data which are problematic for this view can be explained by the alternative analysis, according to which the alternation is determined by the constituent structure of the sentence.

3.1 Contexts in which the CJ/DJ alternation does not occur

In our discussion of the CJ/DJ alternation in Kinyarwanda in Section 2, we have provided examples from affirmative main clauses. However, as the following examples illustrate, verbs in relatives, negatives, and in most subordinate clauses in Kinyarwanda do not show the tonal or segmental distinctions that characterise the CJ/DJ alternation (Kimenyi 2002):⁶

⁵ Kimenyi (2002) seems to be more ambivalent regarding the functional role of the CJ/DJ alternation. Although he occasionally refers to the element *-ra-* as a “focus marker” (e.g. Kimenyi 2002: 179), he also characterises the DJ-marker as a “morpheme which shows that the verb is complementless” (Kimenyi 2002: 173).

⁶ Negated, relative and subordinate clauses in the simple present in Kinyarwanda are marked with a grammatical H tone which may appear on different syllables of the verb stem (see Kimenyi 2002).

Relative clauses: toneless verb

- (32) a. *umwáana usóma ibitabo*
 u-mu-áana u-som-a -bi-tabo
 AUG-1-child 1SM.REL-read-FV AUG-2-book
 ‘a child who reads books’
- b. *umwáana usóma*
 u-mu-áana u-som-a
 AUG-1-child 1SM.REL-read-FV
 ‘a child who reads’

Relative clauses: H-toned verb

- (33) a. *umwáana ubáza ibibázo*
 u-mu-áana u-báz-a i-bi-bázo
 AUG-1-child 1SM.REL-ask-FV AUG-8-question
 ‘a child who asks questions’
- b. *umwáana ubáza*
 u-mu-áana u-báz-a
 AUG-1-child 1SM.REL-ask-FV
 ‘a child who asks’

Negative clauses: toneless verb

- (34) a. *Abaána ntibakiná amakaríta.*
 a-ba-áana nti-ba-kin-a a-ma-karíta
 AUG-2-child NEG-2SM-play-FV AUG-6-card
 ‘Children do not play cards.’
- b. *Abaána ntibakiná.*
 a-ba-áana nti-ba-kin-a
 AUG-2-child NEG-2SM-play-FV
 ‘Children do not play.’

Negative clauses: H-toned verb

- (35) a. *Umwáana ntaakorá akazi.*
 u-mu-áana nti-a-kór-a a-ka-zi
 AUG-1-child NEG-1SM-work-FV AUG-12-work
 ‘A child does not do work.’

- b. *Umwáana ntaakorá.*
 u-mu-áana nti-a-kór-a
 AUG-1-child NEG-1SM-work-FV
 ‘A child does not work.’

Embedded clauses introduced by complementiser *kó*: toneless verb

- (36) a. *Avuze kó asomá ibitabo.*
 a-vúg-ye kó a-som-a i-bi-tabo
 1.SM-say-PFV that 1SM-read-FV AUG-8-book
 ‘He says that he reads books.’
- b. *Avuze kó asomá.*
 a-vúg-ye kó a-som-a
 1.SM-say-PFV that 1SM-read-FV
 ‘He says that he reads.’

Embedded clauses introduced by complementiser *kó*: H-toned verb

- (37) a. *Avuze kó abazá ibibázo.*
 a-vúg-ye kó a-báz-a i-bi-bázo
 1SM-say-PFV that 1SM-ask-FV AUG-8-question
 ‘He says he asks questions.’
- b. *Avuze kó abazá.*
 a-vúg-ye kó a-báz-a
 1SM-say-PFV that 1SM-ask-FV
 ‘He says he asks.’

The examples illustrate that the DJ-marker *-ra-*, which appears in the simple present in main clauses, does not appear in embedded, relative or negated clauses. There is also no tonal distinction between CJ and DJ forms in these morphosyntactic contexts.

In the literature, the fact that the CJ/DJ alternation in Kinyarwanda and other Bantu languages is not attested in the above contexts is generally explained on the basis of the assumption that the alternation is determined by information structure, and in particular that the DJ form expresses verb/VP or “auxiliary focus” (a notion introduced by Hyman and Watters 1984; see Section 3.2 below).⁷

⁷ The analysis of the CJ/DJ alternation based on information structure can be stated in two different ways. As noted in the text, the DJ form could be interpreted as a marker of verb/auxiliary focus, but alternatively, it could instead be claimed that the CJ form marks focus on a post-verbal element (see Buell 2006 for a discussion of both views in relation to the CJ/DJ alternation in Zulu). Since the first interpretation seems to be the common analysis for Kinyarwanda and related Kirundi, we are mainly concerned with this alternative here, but see Van der Wal (2011) for an analysis of the CJ form in Makhuwa as a marker of post-verbal term focus.

For example, based on this view, Givón (1975) accounts for the absence of the CJ/DJ alternation from negatives by postulating that a negative statement presupposes its affirmative counterpart. The negation itself is therefore the focus of a negative statement, which means that the negated verb is outside the scope of the focus. Consequently, the DJ form is not licensed in negatives.

The absence of the alternation from subordinate clauses is taken to follow from the fact that only main clauses typically present foregrounded information and create what Hyman and Watters (1984: 254) call the “assertive environment” necessary for focus marking (focus being the asserted information presented against a presupposed background). In contrast, relatives and other types of embedded clauses usually present presupposed information and are non-, or only weakly, assertive (Hyman and Watters 1984; Güldemann 2003). Therefore, a grammatical marker for verb/VP or auxiliary focus is not expected to occur in these environments.⁸

The CJ/DJ alternation is not banned from all complementiser-introduced clauses in Kinyarwanda. In sentences following the quotative complementiser *ngo*, CJ and DJ verb forms are distinguished:

Clauses introduced by complementiser *ngo*: toneless verb

- (38) a. *Aravúze ngo asoma ibitabo.*
 a-ra-vúg-ye ngo a-som-a i-bi-tabo
 1SM-DJ-say-PFV that 1SM-read-FV AUG-8-book
 ‘He says that he reads books.’
- b. *Aravúze ngo arasoma.*
 a-ra-vúg-ye ngo a-ra-som-a
 1SM-DJ-say-PFV that 1SM-DJ-read-FV
 ‘He says that he reads.’

Clauses introduced by complementiser *ngo*: H-toned verb

- (39) a. *Aravúze ngo abaza ibibázo.*
 a-ra-vúg-ye ngo a-báz-a i-bi-bázo
 1SM-DJ-say-PFV that 1SM-ask -FV AUG-8-question
 ‘He says that he asks questions.’

⁸ According to the explanations described here, the CJ/DJ alternation is not attested in negatives, relatives, and certain subordinated clauses because the unmarked focus conditions of these constructions are pragmatically in conflict with the focus marking expressed by the DJ form. According to Hyman and Watters (1984), if a particular focus form is systematically excluded from certain environments, focus is “grammatically controlled” in these contexts, and no longer determined by the discourse. However, as Hyman and Watters (1984: 244, fn. 5) note, “the relationship between pragmatic and grammatical determinants of focus marking is a non-arbitrary one: what *tends* to be semantically in focus comes to be grammatically focused”.

- b. *Aravúze ngo arabáza.*
 a-ra-vúg-ye ngo a-ra-báz-a
 1SM-DJ-say-PFV that 1SM-DJ-ask-FV
 ‘He says that he asks.’

It seems that, in contrast to the embedded clauses introduced by *kó*, *ngo*-clauses create the assertive environment necessary for the CJ/DJ alternation to be licensed.⁹ We speculate that this is because a speaker does not commit him/herself to the truth of the proposition expressed by the *ngo*-clause, and directly reports somebody else’s statement. Whereas *kó* is a genuine subordinating complementiser, *ngo* rather behaves like a clause-initial sentence-type particle that introduces root clauses. (We return to *ngo*-clauses in Section 3.4 below.)

An interesting contrast is illustrated by the following examples:¹⁰

- (40) a. *Twaaboonye kó yasannyé inzu.*
 Tu-a-bón-ye kó a-a-sán-ye i-n-zu
 1PL.SM-PST-see-PFV that 1SM-PST-repair-PFV AUG-9-house
 ‘We realized that he repaired a house.’
- b. *Twaaboonye kó yasannyé.*
 Tu-a-bón-ye kó a-a-sán-ye
 1PL.SM-PST-see-PFV that 1SM-PST-repair-PFV
 ‘We realized that he repaired.’
- (41) a. *Twaaboonye yásannye inzu.*
 Tu-a-bón-ye a-a-sán-ye i-n-zu
 1PL.SM-PST-see-PFV 1SM-PST-repair-PFV AUG-9-house
 ‘We realized he repaired a house.’
- b. *Twaaboonye yásánnye.*
 Tu-a-bón-ye a-a-a-sán-ye
 1PL.SM-PST-see-PFV 1SM-PST-DJ-repair-PFV
 ‘We realized he repaired.’

In (40), the verb *bón-*, ‘see’, selects an embedded clause introduced by the complementiser *kó*, and as in (36) and (37), the CJ/DJ alternation is not realised in the

⁹ Note that the verb *vúg-*, ‘say’, in (38) and (39) appears in the DJ form, whereas the complement clauses in (36) and (37) trigger the CJ form. This suggests that the *ngo*-clauses in (38) and (39) may not be subordinated. We return to this point in Section 3.4. The same applies to direct quotes introduced by the complementiser *-ti*, which can also follow verbs in the DJ form in Kinyarwanda (see Coupez 1980).

¹⁰ We are indebted to an anonymous reviewer for making us aware of these data.

embedded clause (the segmental marker *-a-* does not appear in (40b)). However, the verb *bón-* in (40) and (41) (in contrast to the verb *vúg-*, ‘say’ in (36) and (37)) allows for the complementiser of a following clause to be dropped. Curiously, without the complementiser, the clause following *bón-* shows the CJ/DJ alternation. It is not clear to us at present why the omission of the complementiser produces the appropriate environment for the CJ/DJ alternation. We therefore have to leave the analysis of the contrast between (40) and (41) as a topic for further investigation.

3.2 The CJ/DJ alternation and information structure

As noted above, the CJ form in Kinyarwanda can only be used when the verb is followed by at least one postverbal constituent. No pause is allowed between the verb and the material immediately following it, which suggests that the postverbal material is located in a syntactically low, clause-internal position. The postverbal element that licenses the CJ form can be an object-NP, a sentential complement, a postverbal subject-NP, an adjunct, or a clitic:

NP-complement:

- (42) a. *Abáana baányooye amatá.* [monotransitive verb]
 a-ba-áana ba-á-nyó-ye a-ma-tá
 AUG-2-child 2SM-REM-drink-PFV AUG-6-milk
 ‘The children drank milk.’
- b. *Baáhaaye Yohaáni igitabo.* [ditransitive verb]
 ba-á-há-ye Yohaáni i-ki-tabo
 2SM-REM-give-PFV 1.John AUG-7-book
 ‘They gave John a book.’

Clausal complement:

- (43) a. *Baávuze kó mwaákoze.* [finite clause]
 ba-á-vú-ye kó mu-á-kór-ye
 2SM-REM-say-PFV that 2PL.SM-REM-work-PFV
 ‘They said that you worked’
- b. *Aba bagabo baákuundaga kudusuura.* [infinitive]
 Aba ba-gabo ba-á-kúund-aga ku-tu-suur-a
 2.DEM 2-man 2SM-REM-like-IPFV 15-1PL.OM-visit-FV
 ‘These men liked to visit us.’

Postverbal (VP-internal) subject NP:

- (44) a. *Murí iyo münsi hügaga abáana baké.* [expl const.]
 murí iyo mi-nsi ha-á-üig-aga a-ba-áana ba-ké
 18.LOC 4.DEM 4-day EXPL-REM- AUG-2- 2-few
 study-IPFV children
 ‘In those days few children studied.’
- b. *Mu Rwanda inkokó zaáryaga abakuúngu.* [subj-obj reversal]
 mu Rwanda i-n-kokó zi-á-rí-aga a-ba-kuúngu
 18.LOC 9.Rwanda AUG-10- 10SM-REM- AUG-2-rich
 chicken eat-FV people
 ‘In Rwanda it is rich people who used to eat chicken.’

Adjunct:

- (45) a. *Abáarimú baákoze néézá.* [manner adverb]
 a-ba-áarimú ba-á-kór-ye néézá
 AUG-2-teacher 2SM-REM-work-PFV well
 ‘The teachers worked well.’
- b. *Abáarimú baákoze vubá.* [manner adverb]
 a-ba-áarimú ba-á-kór-ye vubá
 AUG-2-teacher 2SM-REM-work-PFV quickly
 ‘The teachers worked quickly.’
- c. *Abáarimú baákoze ejó.* [temporal adverb]
 a-ba-áarimú ba-á-kór-ye yesterday
 AUG-2-teacher 2SM-REM-work-PFV yesterday
 ‘The teachers worked yesterday.’
- d. *Baábitoranyije n’ ímáshiní.* [instrumental PP]
 ba-á-bi-tóorany-ye n’ i-máshiní
 2SM-REM-8OM-sort-PFV with AUG-9,pen
 ‘They sorted them with a machine.’

Clitic:

- (46) *Twaányuzeyó.* [locative clitic]
 Tu-á-nyúr-ye-yó
 1PL.SM-REM-pass-PFV-LOC19
 ‘We passed there.’

All examples in (42)–(46) are compatible with narrow term focus on the element following the verb.¹¹ For example, (42a) can be an appropriate answer to the question “What did the children drink?”; the object can also be modified by the focus marker *gusa*, ‘only’, (47a), and it can be a wh-phrase, (47b):

- (47) a. *Abáana baányooye amatá gusa.*
 a-ba-áana ba-á-nyó-ye a-ma-tá gusa
 AUG-2-child 2SM-REM-drink-PFV AUG-6-milk only
 ‘The children drank only milk (not juice).’
- b. *Abáana baányooye ikí?*
 a-ba-áana ba-á-nyó-ye ikí
 AUG-2-child 2SM-REM-drink-PFV what
 ‘What did the children drink?’

The above data are therefore consistent with the idea that the CJ form in Kinyarwanda must be used when focus is on a complement.¹²

In contrast, in sentences where nothing follows the verb in Kinyarwanda, the DJ form must be used:

- (48) a. *Abáana baáraryóoye.*
 a-ba-áana ba-á-ra-nyó-ye
 AUG-2-child 2SM-REM-DJ-drink-PFV
 ‘The children drank.’
- b. *Abáana baárayanyóoye.*
 a-ba-áana ba-á-ra-ya-nyó-ye
 AUG-2-child 2SM-REM-DJ-6OM-drink-PFV
 ‘The children drank it.’
- c. *Amatá abáana baárayanyóonye.*
 a-ma-tá a-ba-áana ba-á-ra-ya-nyó-ye
 AUG-6-milk AUG-2-child 2SM-REM-DJ-6OM-drink-PFV
 Lit: ‘The milk, children drank it.’

¹¹ Focusing the post-verbal element is even possible if this element is a locative clitic, as in example (46), which can be used as an answer to a question such as “Where did you pass?”. Notice that locative clitics do not necessarily incorporate into the verb in the syntax, but can be analysed as (morphologically complex) heads of independent phrasal constituents inside the verb’s complement which are linearly adjacent to the verb (see Ngoboka 2016).

¹² Notice that strictly speaking, postverbal subjects, adverbials and clitics are not complements. However, we interpret Givón’s notion of “complement” in a broad sense here, to refer to any postverbal, clause-internal element.

- B. *Yarákoze.*
 a-á-ra-kór-ye
 1SM-REM-DJ-work-PFV
 ‘He *worked*.’

Narrow verb focus:

- (51) A. *Yohaáni yarákoze cyáangwá yaráryaamyé?*
 Yohaáni a-á-ra-kór-ye cyáangwá a-á-ra-ryáam-ye?
 1.John 1SM-REM-DJ-work-PFV or 1SM-REM-sleep-PFV
 ‘Did John work or did he sleep?’
- B. *Yarákoze.*
 a-á-ra-kór-ye
 1SM-REM-DJ-work-PFV
 ‘He *worked*.’

Sometimes an element can follow the DJ form of the verb in Kinyarwanda, but only if there is a clear intonational break after the verb, signaled by a pause (“comma intonation”). This suggests that postverbal material that follows the DJ verb form is not part of the core clause:

- (52) *Abáarimú baáarakóze *(,) ejó.*
 a-ba-áarimú ba-á-ra-kó-ye yesterday
 AUG-2-teacher 2SM-REM-DJ-work-PFV
 ‘Teachers worked, yesterday.’

As Givón (1975: 197) notes, an adverb separated from the main clause by a pause in Kinyarwanda is a right-dislocated afterthought topic, which represents given information. Since the preverbal subject-NP is also interpreted as given, the verb in (52) represents the new information, which according to Givón (1975) explains the use of the DJ marker *-ra-*.

When the extraposed element is an object-NP, comma intonation is required again, and in addition, an object marker corresponding to the postverbal NP is obligatory:

- (53) *Abáana baára*(ya)nyóoye , amatá.*
 a-ba-áana ba-á-ra-ya-nyó-ye a-ma-tá
 AUG-2-child 2SM-REM-DJ-6OM-drink-PFV AUG-6-milk
 ‘The children drank it, the milk.’

The status of the postverbal NP in (53) as a clause-external afterthought is further confirmed by the fact that the NP cannot be followed by a temporal or manner adverb:

- (54) **Abáana baárayanyóoye* (,) *amatá* *ejó.*
 a-ba-áana ba-á-ra-ya-nyó-ye a-ma-tá ejó
 AUG-2-child 2SM-REM-DJ-6OM-drink-PFV AUG-6-milk yesterday
 ‘The children drank it, the milk, yesterday.’
- (55) **Yohaáni yarázoogeje* (,) *imódoká* *néézá.*
 Yohaáni a-á-ra-zi-óoy-ye i-módoká néézá
 1.John 1SM-REM-DJ-10OM-wash-PFV AUG-6-milk well
 ‘John washed them, the cars, well.’

Examples (54) and (55) show that Kinyarwanda differs from Bantu languages such as Zulu, where object-marked NPs following the DJ form of the verb can be right-dislocated to a VP/vP-external, but clause-internal, position to the left of temporal and manner adverbs (see Cheng and Downing 2009; Zeller 2012, 2015).

3.3 Problems for a focus-based account

The Kinyarwanda data discussed in the preceding section are consistent with the idea that the CJ/DJ alternation is determined by the information-structural properties of the sentence. However, what does not follow straightforwardly from this idea is the observation that in most contexts, the CJ and the DJ form in Kinyarwanda are in complementary distribution (but see Section 3.4 below for exceptions). For example, all sentences in (42)–(46) become ungrammatical when the DJ instead of the CJ form is used:

- (56) a. **Abáana baárayanyóoye* *amatá.*
 a-ba-áana ba-á-ra-nyó-ye a-ma-tá
 AUG-2-child 2SM-REM-DJ-drink-PFV AUG-6-milk
 ‘The children drank milk.’
- b. **Baáraháaye* *Yohaáni* *igitabo.*
 ba-á-ra-há-ye Yohaáni i-ki-tabo
 2SM-REM-DJ-give-PFV 1.John AUG-7-book
 ‘They gave John a book.’
- (57) a. **Baáravúze* *kó* *mwaákoze.*
 ba-á-ra-vúg-ye kó mu-á-kór-ye
 2SM-REM-DJ-say-PFV that 2PL.SM-REM-work-PFV
 ‘They said that you worked’

- b. **Aba bagabo baáarakúundaga kudusuura.*
 Aba ba-gabo ba-á-ra-kúund-aga ku-tu-suur-a
 2.DEM 2-man 2SM-REM-DJ-like-IPFV 15-1PL.OM-visit-FV
 ‘These men liked to visit us.’
- (58) a. **Murí iyo miinsi háariigaga abáana baké.*
 murí iyo mi-nsi ha-á-ra-íig-aga a-ba-áana ba-ké
 18.LOC 4.DEM 4-day EXPL-REM-DJ-study-IPFV AUG-2-children 2-few
 ‘In those days few children studied.’
- b. **Mu Rwanda inkokó zararyaga abakuúngu.*
 mu Rwanda i-n-kokó zi-ra-rí-aga a-ba-kuúngu
 18.LOC 9.Rwanda AUG-10-chicken 10SM-DJ-eat-IPFV AUG-2-rich people
 ‘In Rwanda it is rich people who used to eat chicken.’
- (59) a. **Abáarimú baáarakóze néézá.*
 a-ba-áarimú ba-á-ra-kór-ye néézá
 AUG-2-teacher 2SM-REM-DJ-work-PFV well
 ‘The teachers worked well.’
- b. **Abáarimú baáarakoze vubá.*
 a-ba-áarimú ba-á-ra-kór-ye vubá
 AUG-2-teacher 2SM-REM-DJ-work-PFV quickly
 ‘The teachers worked quickly.’
- c. **Abáarimú baáarakóze ejó.*
 a-ba-áarimú ba-á-ra-kór-ye yesterday
 AUG-2-teacher 2SM-REM-DJ-work-PFV yesterday
 ‘The teachers worked yesterday.’
- d. **Baárabitóoranyije n’ ímáshiní.*
 ba-á-ra-bi-tóorany-ye n’ i-máshiní.
 2SM-REM-DJ-8OM-sort-PFV with AUG-9.machine
 ‘They sorted them with a machine.’
- (60) **Twaáraryúzeyó.*
 tu-á-ra-nyúr-ye-yó
 1PL.SM-REM-DJ-pass-PFV-19.LOC
 ‘We passed there.’

The examples in (56)–(60) show that the DJ form is generally not possible when the verb is followed by postverbal clause-internal material. This is surprising under an account that attributes the choice of the verb to information structure: if the DJ form expresses that the verb is part of the focus, then we would expect the DJ form to be licensed with postverbal material whenever the whole VP-predicate is in the scope of focus, i.e. when the verb plus its complement present the new information. For example, (56a) would be expected to be grammatical as an answer to the question “What did the children do?”. However, (56a) is not acceptable under this (or any other) reading.

The ungrammaticality of examples such as (56a), in which the DJ verb form is followed by an object, constitutes a major difference between Kinyarwanda and Kirundi, which is otherwise very similar to Kinyarwanda with respect to the CJ/DJ alternation. As noted in Meeussen (1959), Ndayiragije (1999), and Nshemezimana and Bostoen (this volume), verbs in the DJ form may be followed by object-NPs in Kirundi:

- (61) a. *A-bâna ba-â-ra-nyô-ye amatá.*
 AUG-child 2SM-REM-DJ-drink-PFV milk
 ‘Children drank milk.’
- b. *A-bâna ba-â-(*ra)-nyô-ye amatá.*
 AUG-2.child 2SM-REM-DJ-drink-PFV milk
 ‘Children drank milk (not water).’
- c. *A-bâna ba-â-(*ra)-nyô-ye iki?*
 AUG-child 2SM-REM-DJ-drink-PFV what
 ‘What did children drink?’
 (Kirundi; Ndayiragije 1999: 406; glosses adapted)

The absence of an object marker in (61a) suggests that the object is not dislocated, but has remained in complement position. This view is supported by the fact that objects following the DJ form in Kirundi can still appear to the left of manner adverbs, which shows that they are part of the core sentence.¹⁴

¹⁴ If object right dislocation in Kirundi is possible without an object marker, then it could be that in (62), both the object and the adverb are dislocated. In this case, the word order of (62) would not constitute an argument for the assumption that the object is in complement position. However, note that according to the data in Ndayiragije (1999), the opposite word order Adv > Obj is ungrammatical in Kirundi:

- (i) **Yohani a-â-ra-oógeje nézâ imiduga.*
 1.John 1SM-REM-DJ-wash.PFV well cars
 ‘John washed cars well.’
 (Kirundi; Ndayiragije 1999: 410)

If Kirundi indeed allowed object dislocation without an object marker, then (i) should be grammatical (the adverb in (i) could either be right-dislocated, or in its base position). The ungrammaticality

- (62) *Yohani a-á-ra-oógeje imiduga néézá.*
 1.John 1SM-REM-DJ-wash.PFV cars well
 'John washed cars well.'
 (Kirundi; Ndayiragije 1999: 410)

Ndayiragije notes that a sentence such as (61a) is incompatible with an interpretation of the object as new information (see (61b) and (61c)). According to Nshemezimana and Bostoen (this volume), a verb in the DJ form that is followed by an object (or other clause-internal material) is licensed in Kirundi in two possible contexts: (i) inthetic ('out-of-the-blue'; all new) sentences, and (ii) in predicate focus (topic-comment) constructions, in which the whole VP, including the verb and postverbal material, is focused. These facts are predicted by an analysis such as the one proposed by Givón (1975), according to which the DJ element *-ra-* marks the verb as being part of the focus. In contrast, in Kinyarwanda an object complement can *never* follow the DJ form of the verb clause-internally (see e.g. (56)), even if the information structure corresponds to the contexts identified by Nshemezimana and Bostoen (this volume). In order to expressthetic sentences or predicate focus in Kinyarwanda, the CJ form is required; therefore, the sentences in (42)–(46) above with the verb in the CJ form can be used in "all new"-contexts (and can serve as answers to a question like "What happened?"), and they can also express predicate (VP-) focus (e.g. (42a) is appropriate as an answer to the question "What did the children do?" etc.).¹⁵

The fact that the DJ form in Kinyarwanda can never be used with an object complement suggests that the CJ/DJ alternation is not exclusively determined by the focus-properties of a sentence. Rather, it seems that the choice between the CJ and the DJ form is at least in part determined by the syntactic configuration (see Coupez 1980; Overdulse 1988; Kimenyi 2002). In fact, all examples discussed thus far are compatible with the view that the CJ form in Kinyarwanda is associated with the presence of overt postverbal material within VP (or some larger constituent, such as IP/AgrSP), while the DJ form appears when there is no overt material inside this constituent (either because the verb is the last word of the sentence, or because postverbal material is extraposed to a position outside the relevant constituent).

of (i) therefore supports the claim that the object in (62) is in its base position. However, it needs to be noted that according to a reviewer, (i) is actually grammatical in Kirundi, contrary to what is claimed by Ndayiragije. If this is the case, then the syntax of (61a) and (62) is more difficult to diagnose.

¹⁵ Givón (1975: 195) postulates a "discourse strategy", which stipulates that, whenever a complement is present in Kinyarwanda, it is obligatorily interpreted as focused and therefore automatically triggers the CJ verb form. However, this proposal does not seem compatible with our observation that transitive constructions with a CJ-verb form followed by a complement can express focus on the whole VP-predicate, and even contrastive focus on the verb (see (63) below).

A syntactic account of the CJ/DJ alternation that is based on these assumptions has been put forward for the Bantu language Zulu by Van der Spuy (1993) and Buell (2006). Buell (2006) argues against the view that the DJ form in Zulu expresses verb focus, and one of the arguments he puts forward can be replicated for Kinyarwanda. In a Zulu sentence in which the verb is followed by postverbal material that typically licenses the CJ form, the verb can nevertheless be contrastively focused. The same holds for Kinyarwanda:

- (63) *Siniigisha néézá aríko mvuga néézá.*
 si-n-iiigish-a néézá aríko n-vúg-a néézá
 NEG-1SG.SM-teach-FV well but 1SG.SM-speak-FV well
 ‘I don’t teach well, but I speak well.’

The first conjunct in (63) determines that the verb in the second conjunct is contrastively focused. According to the focus account of the CJ/DJ alternation, this interpretation should trigger the DJ form. However, since the adverb *néézá* follows the verb, the CJ form must be chosen; in fact, the use of the DJ form would make (63) ungrammatical. This suggests that the form of the verb in (63) is not determined by the information structure, but by the syntax, of the sentence.

The hypothesis that the CJ/DJ alternation in Kinyarwanda is determined by constituency is also supported by the following discourse:

- (64) Q: *Uteekereza ikí kurí Yohaáni?*
 u-téekerez-a ikí kurí Yohaáni
 2SG.SM-think-FV what 17.LOC 1.John
 ‘What do you think about John?’

A1: *Yohaáni? Ndamwáanga.*
 Johaáni? n-ra-mu-áang-a
 1.John? 1SG.SM-DJ-1OM-hate-FV
 ‘John? I hate him.’

A2: *Yohaáni? Naanga uríya muhuúngu.*
 Johaáni? n-áang-a u-ríya mu-huúngu
 1.John? 1SG.SM-hate-FV 1-DEM 1-boy
 ‘John? I hate that guy.’

The pronominal object marker in (64A1) refers to the topic of the discourse, John, and is hence interpreted as given. Consequently, the new information is provided by the verb, and the use of the DJ form is hence expected under both a focus and a finality account (compare (48b) above). However, the information-structural

properties of (64A2) are identical to those of (64A1). The only difference is that the discourse topic is not referenced by means of an object marker, but by means of a full NP (an epithet referring to John). If the choice of the DJ form in (64A1) was fully determined by the information structure, then we would expect the verb in (64A2) to be in the DJ form as well. However, the DJ form is impossible in this example. This suggests that it is the presence of an overt object complement that determines the use of the CJ in (64A2), while the DJ in (64A1) must be used because the verb is the final element of the clause.

3.4 Problems for a syntactic account

In the examples discussed in the preceding sections, postverbal, clause-internal material was shown not to be possible when the verb is in the DJ form. If this situation held as a general rule in Kinyarwanda, then it would provide support for an analysis of the CJ/DJ alternation based on constituency. However, as we show in this section, there are a number of exceptions to this generalisation that are problematic for the syntactic account. One exception is the focus marker *gusa*, ‘only’. This focus marker can only appear after the DJ form in Kinyarwanda; the CJ form is not possible (see also Meeussen 1959 for Kirundi):

- (65) a. *Arakóra* *gusa*.
 a-ra-kór-a *gusa*
 1SM-DJ-work-FV only
 ‘He only works.’
- b. **Akora* *gusa*.
 a-kór-a *gusa*
 1SM-work-FV only
 Intended: ‘He only works.’

There is no evidence that *gusa* in (65) is extraposed; in contrast to the examples with right-dislocated adverbs discussed in Section 3.2, there is no pause that separates the verb from the focus marker in (65a). A syntactic account of the CJ/DJ alternation therefore has trouble explaining (65): since *gusa* is not in a clause-external position, the verb should be in the CJ form. One could perhaps approach this problem by suggesting that the syntactic domain relevant for the CJ/DJ alternation is not established by the whole clause, but by a smaller constituent, which includes complements, clitics as well as temporal and manner adverbs, but excludes *gusa*. A potential candidate for this constituent could be the IP- (AgrS-) node, which arguably includes all arguments and most adjuncts,

but the analysis would then require the assumption that *gusa* is base-generated in a *clause-internal* position *outside* IP. This assumption seems slightly ad hoc, as it is only supported by the data that are to be explained. In contrast, (65) follows straightforwardly and without stipulations from the focus-based account of the CJ/DJ alternation that was discussed in Sections 3.1 and 3.2: since the verb in (65) presents new information, we expect it to be marked by the DJ form, which according to the analysis in Givón (1975) marks the verb as focused.

Other elements that behave like *gusa* in that they must follow the DJ verb form in Kinyarwanda are adverbs such as *nyíne*, ‘indeed’, *kókó*, ‘really’, and *rwóose*, ‘truly’. These adverbs contrast with manner adverbs such as *néézá*, ‘well’, and *vubá*, ‘quickly’ (which are verbal modifiers and require the CJ form; see (45) and (59) above) in that they emphasise the polarity of the sentence and hence mark auxiliary focus. Therefore, the focus account also predicts correctly that these adverbs can only combine with verbs in the DJ form.

Furthermore, some postverbal material is compatible with both the CJ and the DJ form of the verb in Kinyarwanda. As already noted in Section 3.1, clauses introduced by the complementiser *ngo* can combine with verbs in the DJ form, (66a), but they can also appear after CJ verb forms, (66b):¹⁶

- (66) a. *Aravúga ngo ni mutó.*
 a-ra-vúg-a ngo ni mu-tó
 1SM-DJ-say-FV that be 2-young
 ‘He says that he is young.’
- b. *Avuga ngo ni mutó.*
 a-vúg-a ngo ni mu-tó
 1SM-say-FV that be 2-young
 ‘He says that he is young.’

Recall that clauses introduced by *ngo* express “reported speech”. It is possible that this fact is reflected by the syntactic relation between the verb and the *ngo*-clause. Coupez (1980) analyses the relation between the *ngo*-clause and the preceding verb as parataxis, which means that *ngo*-clauses are not subordinated sentences, i.e. they are not represented as syntactic complements of the verb. Possibly, they are higher level adjuncts. The fact that *ngo*-clauses can follow the DJ form of the verb would be consistent with a syntactic approach if sentences introduced by *ngo* are indeed adjoined outside the phrasal category that is relevant for the CJ/DJ alternation. However, it is not quite clear why Kinyarwanda speakers also accept examples such as (66b), where the *ngo*-clause follows the CJ form of the verb. An

¹⁶ Notice that the CJ/DJ alternation is always attested in an *ngo*-clause (see Section 3.1), regardless of whether it follows the CJ or the DJ form of the verb.

account of the CJ/DJ alternation based on constituency would require the assumption that a clause introduced by *ngo* can appear in different syntactic positions, i.e. both outside and inside the phrasal category that determines the use of the CJ or the DJ form. (We return to this point briefly in Section 5).¹⁷

Certain adverbial elements in Kinyarwanda can also combine with both the CJ and the DJ form of the verb. One example already discussed in Givón (1975: 194) is the adverb *cyaane*, ‘much, hard, a lot’:

- (67) a. *Arakóra* *cyaane*.
 a-ra-kór-a *cyaane*
 1SM-DJ-work-FV hard
 ‘He works hard.’
- b. *Akora* *cyaane*.
 a-kór-a *cyaane*
 1SM-work-FV hard
 ‘He works hard.’

According to Givón (1975), an example such as (67a) expresses predicate (VP-) focus; it can answer a yes-no question or can be used in “all new” contexts. In contrast, in (67b), focus is on the adverb; the example can hence be used as an answer to a question such as “How does he work?”. This means that with respect to adverbs like *cyaane*, Kinyarwanda behaves exactly as predicted by an analysis which treats the DJ form as a marker of verb/VP focus.¹⁸ In contrast, a syntactic account would have to stipulate that adverbs like *cyaane*, like *ngo*-clauses, can appear in different syntactic positions. However, this stipulation raises the question why this possibility does not exist with other manner adverbs such as *néézá*, ‘well’, and *vubá*, ‘quickly’, which seem to be restricted to one position in the syntax and always require the CJ form.

¹⁷ With respect to the alternation in (66), *ngo*-clauses in Kinyarwanda behave like argument clauses in Zulu and Makhuwa, which may also follow both the CJ and the DJ form of the matrix verb (see Halpert 2015 for Zulu; Van der Wal 2014 for Makhuwa). Buell (2006) and Halpert (2015) show that the CJ/DJ alternation in Zulu is determined by constituency. Zulu therefore provides independent support for the assumption that certain argument clauses can indeed appear in different positions in Bantu languages.

¹⁸ While the first author agrees with the meaning difference observed by Givón, he also notes that this contrast is very subtle. The (non-linguist) Kinyarwanda speakers we consulted could not detect any semantic or pragmatic difference between the use of the CJ or the DJ form before the adverb. However, most speakers preferred the DJ form when the examples were presented to them out of context. This presumably follows from the fact that the most neutral, or unmarked, interpretation that speakers assign to isolated sentences is a topic-comment structure, in which the subject-NP is interpreted as the topic and the VP-predicate as the focus (Lambrecht 1994). As discussed above, the focus account correctly predicts the choice of the DJ form in this case.

Other elements that can follow both the CJ and the DJ form of the verb in Kinyarwanda are adverbials that begin with the class 8 prefix *bi-*:¹⁹

- (68) a. *Mariya araseenga bikábije.*
 Mariya a-ra-seeng-a bi-káby-ye
 1.Mary 1SM-DJ-pray-FV 8-exaggerate-PFV
 ‘Mary prays too much.’
- b. *Mariya aseenga bikábije.*
 Mariya a-seeng-a bi-káby-ye
 1.Mary 1SM-pray-FV 8-exaggerate-PFV
 ‘Mary prays too much.’

As in the examples in (67), the choice between (68a) and (68b) seems to be determined by the focus properties of the sentences: while (68a) expresses VP-focus, (68b) is most appropriate with a reading in which focus is on the adverb.

In sum, a purely syntactic account of the CJ/DJ alternation is also not without problems. While an analysis based on constituency seems suitable to account for the data discussed in the previous section, the examples in (65)–(68) are more difficult to explain from a purely syntactic perspective. In contrast, these data follow straightforwardly from an analysis according to which the CJ/DJ alternation is determined by the focus-properties of the sentence.

4 The morpheme *-ra-*

In the preceding section, we have compared two accounts of the CJ/DJ alternation, one which explains the alternation in terms of the information structure of the sentence, and one which regards it as a grammatical reflex of constituency. Before we turn to the conclusions that we draw from this comparison, we briefly address the fact that the morpheme *-ra-*, which marks the DJ verb form in the simple present, present perfective, and remote past tense, also seems to be associated with other grammatical functions in Kinyarwanda, such as tense and aspect (see Coupez 1980; Botne 1983; Shimamungu 1991; Bizimana 1998; Overdulve and Jacob 1998; Kimenyi 2002):

- (69) *Abáana barasoma ikinyarwaanda.*
 a-ba-áana ba-ra-som-a ikinyarwaanda
 AUG-2-child 2SM-PROG/FUT-read-FV 7.Kinyarwanda
 ‘Children are reading Kinyarwanda (now).’ [present progressive]
 ‘Children will read Kinyarwanda (later today).’ [near future]

¹⁹ We are indebted to a reviewer for making us aware of these examples.

As the translations show, the sentence in (69) can be interpreted as expressing the present progressive or the near future. Importantly, the use of *-ra-* in (69) does not seem to be governed by the same conditions that determine the use of *-ra-* as a DJ-marker: recall that object-NPs in complement position are never licensed with verbs in the DJ form in Kinyarwanda (see Section 3.3); in contrast, the verb in (69) can be followed by an object-NP. Moreover, this object-NP can even be narrowly focused: (69) is an appropriate answer to an object question (“What are the children reading?”; “What will the children read?”), the object can be modified with the focus marker *gusa*, ‘only’, (70), and it can be realised as a wh-phrase, (71):

- | | | | | |
|--|---|--|--|------------------------------|
| (70) | <i>Abáana</i>
a-ba-áana
AUG-2-child | <i>barasoma</i>
ba-ra-som-a
2SM-PROG/FUT-read-FV | <i>ikinyarwanda</i>
ikinyarwanda
7.Kinyarwanda | <i>gusa.</i>
gusa
gusa |
| | | | | [present progressive] |
| | | | | [near future] |
| ‘Children are reading only Kinyarwanda.’ | | | | |
| ‘Children will read only Kinyarwanda.’ | | | | |
-
- | | | | |
|----------------------------------|---|--|----------------------------|
| (71) | <i>Abáana</i>
a-ba-áana
AUG-2-child | <i>barasoma</i>
ba-ra-som-a
2SM-PROG/FUT-read-FV | <i>ikí?</i>
ikí
what |
| | | | [present progressive] |
| | | | [near future] |
| ‘What are the children reading?’ | | | |
| ‘What will the children read?’ | | | |

Since the syntactic context in which *-ra-* is licensed in (69)–(71) is different from the contexts which license the DJ form in Kinyarwanda, authors such as Kimenyi (2002) and Ntwari (undated) assume that *-ra-* in examples such as (69)–(71) is not the DJ-marker, but instead has a temporal or aspectual function (a view that is reflected by our glosses in (69)–(71), which represent *-ra-* as a present progressive or future tense marker). According to this analysis, *-ra-* in Kinyarwanda is polysemous: it marks the DJ form when used in the simple present, the present perfective and the remote past, but it can also express progressive aspect or future tense.

However, the view that progressive aspect or future tense in Kinyarwanda are encoded by the morpheme *-ra-* is not entirely unproblematic. As (72) shows, embedded, negated or relative clauses can also be in the present progressive or near future, but crucially, the morpheme *-ra-* does not appear in these contexts:²⁰

²⁰ Notice that, because of the omission of *-ra-*, the examples in (72) also have translations in the simple present, e.g. (72a) can mean ‘He says that the children read books.’

- (72) a. *Avuze kó abáana basomá ikinyarwaanda.*
 a-vúg-ye kó a-ba-áana ba-som-a ikinyarwaanda
 1SM-say-PFV that AUG-2-child 2SM-read-FV 7.Kinyarwanda
 ‘He says that children are reading Kinyarwada (now).’ [present progressive]
 ‘He says that children will read Kinyarwanda (later today).’ [near future]
- b. *abáana basomá ikinyarwaanda*
 a-ba-áana ba-som-a ikinyarwaanda
 AUG-2-child 2SM-read-FV 7.Kinyarwanda
 ‘children who are reading Kinyarwanda (now)’ [present progressive]
 ‘children who will read Kinyarwanda (later today)’ [near future]
- c. *Abáana ntibasomá ikinyarwaanda.*
 a-ba-áana nti-ba-som-a Ikinyarwaanda
 AUG-2-child NEG-2SM-read-FV 7.Kinyarwanda
 ‘Children are not reading Kinyarwanda (now).’ [present progressive]
 ‘Children will not read Kinyarwanda (later today).’ [near future]

The examples in (72) demonstrate that a present progressive or near future reading does not require the presence of *-ra-* in Kinyarwanda. This casts doubt on the view that these functions are directly encoded by this morpheme in examples such as (69). Furthermore, recall from Section 3.1 that relative clauses, negatives and many embedded clauses in Kinyarwanda also block the use of the DJ-marker *-ra-*. This parallel is clearly not accidental, but rather suggests that *-ra-* in examples such as (69) and the DJ-marker *-ra-* are closely related, or even the same element. The latter position seems to be advocated by Overdulse (1988) and by Coupez (1980). For example, Coupez (1980: 384) states that “[l]e conjoint est exclu aux sens de présent et de future d’aujourd’hui, pour lesquels on emploie toujours le disjoint” [“the conjoint is excluded in the present and near future, in which the disjoint is always used”; our translation, JPN & JZ]. According to this view, the progressive and the near future always require the DJ form and therefore are systematic exceptions to the rules that govern the distribution of the DJ-marker *-ra-* in Kinyarwanda in the simple present, the present perfective and the remote past tense. No matter whether the DJ form in the latter contexts is licensed by clause finality or by information structure, the examples in (69)–(71) suggest that there is a second, independent licenser of the DJ form, which is responsible for its occurrence in constructions such as (69)–(71).

It seems difficult to think of a way in which an analysis of the CJ/DJ alternation based on constituency could explain the obligatory occurrence of the DJ marker *-ra-* in the progressive and the near future. In contrast, a focus account of the alternation offers a possible explanation. Hyman and Watters (1984) and Güldemann (2003) discuss a number of African languages in which the marker

of the progressive is formally identical to the marker of auxiliary focus (which according to the focus account of the CJ/DJ alternation is expressed by the DJ form in Kinyarwanda). Hyman and Watters (1984) explain this isomorphism through their assumption that the progressive is an “intrinsically focused” auxiliary category, which must therefore be marked by the relevant auxiliary focus marker.²¹

Following Hyman and Watters (1984), Güldemann (2003: 351) also analyses the progressive as “a category which combines aspect with focality” and proposes that the progressive developed as a result of a historical process in which an element with the pragmatic function of expressing verb or polarity focus gained the additional semantic property of imperfectivity. Moreover, Güldemann (2003: appendix) speculates about a further grammaticalisation path from the progressive to the near future (see also Nshemezimana and Bostoen (Chapter 14) on the relation between the progressive and the near future in Kirundi). According to these proposals, the analysis of the DJ form as a marker of auxiliary or verb focus ultimately also explains the occurrence of *-ra-* in examples such as (69).

It should be noted that the element *-ra-* in Kinyarwanda also appears obligatorily in other grammatical constructions, such as the persistent, the optative, and in various compound tenses (Sibomana 1974; Kimenyi 2002). In each of these constructions, a verb form marked by *-ra-* can co-occur with a focused object complement. While the persistent has also been analysed as an intrinsically focused category by Hyman and Watters (1984) and Güldemann (2003), it remains an open question if an account in terms of intrinsic focus can also be developed for the other contexts in which *-ra-* appears. We leave it as a topic for future research to establish whether *-ra-* in these constructions is identical, or historically related, to the DJ-marker *-ra-*, or if an entirely different function of *-ra-* has to be postulated to account for its occurrence in some of these contexts.

5 Conclusion

This chapter has provided a wide range of data that document phonological, morphological, syntactic and semantic/pragmatic aspects of the CJ/DJ alternation in Kinyarwanda. We have shown that the alternation is attested in the simple

²¹ Güldemann (2003) notes the existence of languages in which the progressive is excluded from constructions in which narrow focus is on a complement. It seems that in these languages, the inherent focality of the progressive prevents the use of this aspect in constructions in which the verbal predicate is not part of the focus. In contrast, as shown in (70) and (71), the element *-ra-* in the present progressive and the near future in Kinyarwanda is possible even if a narrowly focused object complement is present. According to the analysis proposed by Hyman and Watters (1984), this means that its appearance is not pragmatically, but grammatically, controlled (see also note 8).

present, present perfective, near past and remote past tense, as well as in the subsecutive and conditional/hypothetical mood. While the CJ form is marked tonally through the deletion of lexical H tones, the DJ verb form is marked segmentally by the morpheme *-ra-* in the simple present, the present perfective, as well as the remote past, and by *-a-* in the near past tense.

Throughout our discussion, we have addressed the question of whether the CJ/DJ alternation is a reflex of syntactic constituency or information structure. Our description of the conditions which determine the choice between the CJ and the DJ verb form in Kinyarwanda has not yielded an entirely conclusive answer to this question. On the one hand, it is clear that at least some of the properties of the alternation are determined by the scope of focus. In constructions with a verbal complement in Kinyarwanda, the complement typically provides the new information, and the CJ form is obligatory. In contrast, sentences without a verbal complement are interpreted with verb/VP or auxiliary focus and require the DJ form (see Section 3.2). The strongest argument for a focus-based analysis comes from the data discussed in Section 3.4, which show that certain adverbial elements can follow both the CJ and the DJ form, with the choice being determined by whether focus is on the adverb only, or on the whole VP-predicate. In addition, we have shown that the CJ/DJ alternation is systematically excluded from weakly or non-assertive environments and that the DJ marker *-ra-* obligatorily appears in main clause affirmatives in the present progressive and the near future. As we discussed in Sections 3.1 and 4, it seems that only a focus-based analysis can offer plausible explanations for these latter observations.

On the other hand, we also discussed some aspects of the CJ/DJ alternation in Kinyarwanda that rather support an account based on constituency. As was shown in Section 3.3, it is not possible in Kinyarwanda to combine the DJ verb form with a genuine complement of the verb, even when the intended interpretation would be compatible with the scope of focus normally established by the DJ form (i.e. VP-focus). These data suggest that the alternation is at least in part determined by the syntax, in that the CJ verb form is required in Kinyarwanda when clause- or IP-internal material follows the verb in a sentence, while the DJ form is used in all other contexts.

These two approaches are not incompatible, and there are obvious ways in which the focus account and the syntactic account can be reconciled. As is probably true for many grammatical phenomena that show complex and sometimes contradictory properties, the hybrid status of the CJ/DJ alternation in Kinyarwanda could be viewed as the result of an ongoing historical development. It is possible that at an earlier stage, the CJ/DJ alternation in Kinyarwanda was systematically used as a focus-marking strategy; it was probably

more like present-day Kirundi, which still allows verbs to appear in the DJ form before complements (see Section 3.3). Nshemezimana and Bostoen (this volume) show that in Kirundi, the DJ marker is optional in “neutral” topic-comment constructions: the DJ form can be used in these constructions, but as in Kinyarwanda, the CJ form is also possible in Kirundi when the whole VP-predicate (verb plus complement) is in the scope of focus. This means that in Kirundi, the neutral interpretation of a sentence in which the subject is the topic and the VP the focus can be expressed by two alternative verb forms. In contrast, other types of focus (complement focus; verb/auxiliary focus) are more restrictive and require either the CJ or the DJ form. It seems that in Kinyarwanda, the restrictiveness of the latter focus constructions was re-interpreted in syntactic terms; speakers re-analysed the choice between the CJ and the DJ form as being controlled by constituency. As a consequence, the optionality of the DJ form in verb-complement constructions was lost, and the CJ form became the compulsory form in all contexts where a complement is present, regardless of the discourse properties of the construction. According to this view, the CJ/DJ alternation in Kinyarwanda is first and foremost a marker of information structure, but it is grammatically controlled in environments with clause-/IP-internal postverbal material.²²

Finally, we consider it noteworthy that those postverbal elements that can still follow both the CJ and the DJ form in present-day Kinyarwanda are certain types of clauses and adverbs, i.e. categories that can be realised in different syntactic positions: clauses can be complements as well as adjuncts; they tend to be extraposed and obligatorily appear in the right clausal periphery in many languages. Adverbs can appear in high and low positions and may or may not be selected by the verb (cf. Cheng and Downing 2014). It would be interesting to test whether the interpretation of a clause with an adverb such as *cyaane* in Kinyarwanda (which depends on whether the adverb follows the CJ or the DJ form of the verb) is also correlated with the adverb’s syntactic position. The hypothesis would be that the adverb is in a IP-external position when it follows the DJ form (VP-focus), but inside the IP when the verb is in the CJ form (adverb focus) (see our brief discussion in Section 3.4). We have to leave the examination of this hypothesis, as well as the exploration of other issues raised by our description of the Kinyarwanda data, as objectives for future research.

²² See Güldemann (2003) who proposes an analysis along these lines for the use of the DJ form in Zulu.

Abbreviations and symbols

High tone is marked by an acute accent on the syllable; low tone is unmarked. Following the standard practice in the Bantu literature, we mark Bantu noun class prefixes and the corresponding agreement markers through numbers.

1,2 SG/PL first, second person singular/plural

APPL	applicative	LOC	locative
AUG	augment	NEG	negative
CJ	conjoint verb form	OM	object marker
COND	conditional	PFV	perfective aspect
DEM	demonstrative	PROG	present progressive
DJ	disjoint verb form	PST	near past tense
EXPL	expletive	REL	relative marker
FUT	near future tense	REM	remote past tense
FV	final vowel	RFUT	remote future tense
H	high tone	SM	subject marker
IPFV	imperfective aspect	SUBS	subsecutive
L	low tone		

References

- Bizimana, Simon. 1998. *Imiteerere y'ikinyarwanda I* [The structure of Kinyarwanda I]. Kigali: Pallotti-Press.
- Bostoen, Koen & Ernest Nshemezimana (this volume). The conjoint/disjoint alternation in Kirundi (JD62): A case for its abolition.
- Botne, Robert D. 1983. The semantics of tense in Kinyarwanda. *Studies in African Linguistics* 14. 235–263.
- Buell, Leston. 2006. The Zulu conjoint/disjoint verb alternation: Focus or constituency. *ZAS papers in Linguistics* 43. 9–30.
- Cheng, Lisa Lai-Shen & Laura J. Downing. 2009. Where's the topic in Zulu? *The Linguistic Review* 26. 207–238.
- Cheng, Lisa Lai-Shen & Laura Downing. 2014. The problem of adverbs in Zulu. In Johanneke Caspers, Yiya Chen, Willemijn Heeren, Jos Pacilly, Niels O. Schiller & Ellen van Zanten (eds.), *Above and beyond the segments: Experimental linguistics and phonetics*, 42–59. Amsterdam: John Benjamins.
- Coupez, André. 1980. *Abrégé de grammaire rwanda*. Butare: Institut de Recherche Scientifique et Technologique.
- Creissels, Denis. 1996. Conjunctive and disjunctive verb forms in Setswana. *South African Journal of African Languages* 16 (4). 109–115.
- Creissels, Denis (this volume). Conjoint and disjoint verb forms in Tswana.

- Givón, Talmy. 1975. Focus and the scope of assertion: some Bantu evidence. *Studies in African Linguistics* 6(2). 185–205.
- Goldsmith, John A. & Fidèle Mpiranya. 2010. Rythm, quantity and tone in the Kinyarwanda verb. In John A. Goldsmith, Elizabeth Hume & Leo Wetzels (eds.), *Tones and features: phonetic and phonological perspectives*, 25–49. Berlin & Boston: Walter de Gruyter.
- Güldemann, Tom. 2003. Present progressive vis-à-vis predication focus in Bantu: A verbal category between semantics and pragmatics. *Studies in Language* 27 (2). 323–360.
- Halpert, Claire. 2015. *Argument licensing and agreement*. Oxford: Oxford University Press.
- Hyman, Larry M. & John R. Watters. 1984. Auxiliary focus. *Studies in African Linguistics* 15(3). 233–273.
- Jouannet, Francis. 1985. La variation tonale en Kinyarwanda. In Yves Cadiou (ed.), *Le Kinyarwanda: Etudes de morpho-syntaxe*, 105–139. Paris: Société pour l'information grammaticale.
- Kimenyi, Alexandre. 1980. *A relational grammar of Kinyarwanda*. Berkeley: University of California Press.
- Kimenyi, Alexandre. 2002. *A tonal grammar of Kinyarwanda: An autosegmental and metrical analysis*. Lewiston, N.Y: The Edwin Mellen Press.
- Lambrecht, Knud. 1994. *Information structure and sentence form. Topic, focus and the mental representations of discourse referents*. Cambridge: Cambridge University Press.
- Meeussen, Achiel E. 1959. *Essai de grammaire Rundi*. Tervuren: Annales du musée royal du Congo Belge, Série Sciences de l'Homme, Vol. 24.
- Ndayiragije, Juvénal. 1999. Checking economy. *Linguistic Inquiry* 30(3). 399–444.
- Ngoboka, Jean Paul. 2016. *Locatives in Kinyarwanda*. Durban: University of KwaZulu-Natal PhD thesis.
- Ntwari, Gérard (undated). L'inversion du sujet en Kinyarwanda. Ms., Université Laval.
- Overdulve, Cornelis-Marinus. 1988. *Précis de grammaire Kinyarwanda*. Kabgayi: Imprimerie de Kabgayi.
- Overdulve, Cornelis-Marinus & Irénée Jacob. 1998. *Twige Ikinyarwanda: Manuel d'apprentissage de la langue rwandaise*. Kigali: Pallotti Press.
- Philippson, Gérard. 1998. Tone reduction vs. metrical attraction in the evolution of Eastern Bantu tone systems. In Larry Hyman & Charles W. Kisseberth (eds.), *Theoretical aspects of Bantu tone*, 315–329. Stanford: CSLI.
- Shimamungu, Eugène-Marie. 1991. *Systématique verbo-temporelle du Kinyarwanda*. Lille: Ecole Nationale des Arts et Métiers.
- Sibomana, Leonidas. 1974. *Deskriptive Tonologie des Kinyarwanda*. Hamburg: Helmut Buske Verlag.
- Van der Spuy, Andrew. 1993. Dislocated noun phrases in Nguni. *Lingua* 90. 335–355.
- Van der Wal, Jenneke. 2009. Word order and information structure in Makhuwa-Enahara. Utrecht: University of Leiden Ph.D. thesis (LOT dissertation series).
- Van der Wal, Jenneke. 2011. Focus excluding alternatives: Conjoint/disjoint marking in Makhuwa. *Lingua* 121. 1734–1750.
- Van der Wal, Jenneke. 2014. Subordinate clauses and exclusive focus in Makhuwa. In Rick van Gijn, Jeremy Hammond, Dejan Matić, Saskia van Putten & Ana Vilacy Galucio (eds.), *Information structure and reference tracking in complex sentences*, 45–70. Amsterdam: John Benjamins.
- Voeltz, F.K.E. 2004. Long and short verb forms in Zulu. Ms., University of Cologne.

- Zeller, Jochen. 2012. Object marking in isiZulu. *Southern African Linguistics and Applied Language Studies* 30 (2). 219–235.
- Zeller, Jochen. 2015. Argument prominence and agreement: Explaining an unexpected object asymmetry in Zulu. *Lingua* 156. 17–39.