

Nominal licensing in Kirundi: No case for Case

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1 Introduction

The topic of nominal licensing and abstract Case in Bantu languages has been under a lot of discussion in the recent literature. Besides the general absence of overt morphological case markers, some Bantu languages have also been shown to lack the kind of restrictions on the distribution of nominals that have been attributed to abstract Case in languages like English. This has lead Diercks (2012) to propose that Bantu lack Case altogether. This claim has been then revised in Van der Wal (2015) and Sheehan and Van der Wal (2018) who show this proposal cannot be extended to all Bantu languages, some of which require retention of a nominal licensing mechanism.

In this paper, I critically discuss the licensing diagnostics listed in Sheehan and Van der Wal (2018) and propose that the test they use are actually not indicative of the licensing mechanisms a given language employs. My argument is threefold. First, I focus on one of the Case diagnostic, connected to the licensing of agents in passive constructions, and show that in Kirundi this test cannot provide evidence either for or against the presence of Case-licensing due to the properties of the prepositional head. Moreover, as the analysis I end up adopting can also be extended to other languages like English, it ends up undermining this tests on a general level. Secondly, I examine the three other diagnostics Sheehan and Van der Wal (2018) use in their discussion of the two other Bantu languages and show that the results of these tests do not align with each other, contra the assumption that they all are demonstrative of the same phenomenon. Finally, I examine the nature of the augment vowel, and argue that its properties cannot be taken as an explanation for the specifics of syntactic licensing in Kirundi, as it is done for some other Bantu languages, like Zulu and Lubukusu (Halpert, 2015; Sheehan & Van der Wal, 2018). I conclude the Kirundi data provides a novel empirical motivation for discarding the notion of Case in describing to nominal licensing in general.

The rest of the paper is structured as follows. Section 2 presents the general data about Kirundi's grammar that will be relevant for the following discussion. In Section 3 I provide an overview of the Case diagnostics presented in Sheehan and Van der Wal (2018), with a particular focus on how these tests can be interpreted on the basis of data from the Bantu languages. The results of these tests applied to Kirundi and their discussion are presented in Section 4. In Section 5, I summarize the implications of the Kirundi data for the discussion of nominal licensing in Bantu.

2 Background

Kirundi (Great Lakes Bantu, JD62 on Guthrie classification, Maho, 2009) is a Bantu language spoken by about 9 million people in Burundi and adjacent territory of Tanzania, Democratic Republic of the Congo and Uganda. It is part of the Rwanda-Rundi dialect continuum along with Kinyarwanda, spoken in Rwanda and neighbouring territories, and Kiha, spoken by the Ha people of the Kigoma region of Tanzania (Bastin, 2003).

The data presented in this paper was collected by the author through the fieldwork with three native speakers done from March 2022 to April 2023 in Montreal, Canada. All the participants are adult native speakers of Kirundi. One of the speakers is female and the other two are male. The judgements were collected through translation and felicity judgements tasks. In the rest of this section I will present some basic facts pertaining to Kirundi which will be relevant for the following discussion.

2.1 Nominal domain

The morphological structure of nouns in Kirundi is similar in its characteristic features to nominals in other Bantu languages. Most common nouns in Kirundi in citation form consist of an augment (V-), a noun class prefix (CV-, N- or null) and a noun stem.¹

dur

- | | | | | | | |
|-----|----|-------------|----|------------|----|-----------|
| (1) | a. | umugoré | b. | igikeré | c. | izúuba |
| | | u-mu-goré | | i-ki-keré | | i-Ø-zúuba |
| | | AUG-1-women | | AUG-7-frog | | AUG-5-sun |
| | | ‘woman’ | | ‘frog’ | | ‘sun’ |

Every noun in Kirundi belongs to a noun class, commonly thought to combine number and gender information (Carstens, 1991). The class features on the noun are realized as class prefixes. Most class prefixes have the CV form, with the exception for class 5, which can either be expressed as *-ri-* or as a null prefix, and classes 9 and 10, both of which have the form *-n-*. Classes 1-13 form singular-plural pairs, as can be seen in Table 1, with the classes in the left column marking singular, and classes in the right column marking plural nouns. Class 10 is a plural counterpart for both classes 9 and 11, which explains the gap across the class 11 form. Classes 14-16 are reserved for abstract nouns that only have singular forms.

¹Abbreviations: 1–16 = noun class; 1SG, 2SG = first person singular, second person singular; AFF = affirmation prefix; APPL = applicative; AUG = augment; CAUS = causative; COM = comitative; CJ = conjoint morpheme; COP = copula; DEM.1, etc. = class 1 demonstrative; DJ = disjoint morpheme; DUR = durative; EXT = extended aspect suffix; FV = final vowel; GOAL = goal; IMPF = imperfective; INF = infinitive; INSTR = instrumental; LK = linker; LOC = locative; NEG = negation; NOM = nominative; O = object; PASS = passive; PFV = perfective; PL = plural; PREP = preposition; PST = past tense; RI = morpheme *ri*; S = subject; T = tense (unspecified). Kirundi orthography generally corresponds to the IPA with the exception of <c> = /tʃ/, <j> = /dʒ/, <sh> = /ʃ/, and <y> = /j/. Tone and vowel length are not usually written in orthography, so long vowels are marked by doubling the vowel letter, high tones are marked with an acute accent <á>, and contour tones are marked as sequences of high and low tones.

1.	u-mu-goré	‘woman’	2.	a-ba-goré	‘women’
3.	u-mu-twe	‘head’	4.	i-mi-twe	‘heads’
5.	i-Ø-gí	‘egg’	6.	a-ma-buye	‘stones’
	i-ri-gí	‘egg’			
7.	i-gi-keré	‘frog’	8.	i-bi-keré	‘frogs’
9.	i-n-ká	‘cow’	10.	i-n-ká	‘cows’
11.	u-ru-syo	‘grinding stone’			
12.	a-ka-buúnda	‘puppy’	13.	u-tu-buúnda	‘puppies’
14.	u-bu-menyi	‘knowledge’			
15.	u-ku-ri	‘truth’			
16.	a-ha-ntu	‘location’			

Table 1: Kirundi noun classes

The noun class plays an important role as it determines the form of subject and object markers on the verb. For instance, in (2), the subject marker on the verb corresponds with the class of the subject *ingoma* ‘drum’.

- (2) Ingoma iravúzwa na Mizero unó muúsi.
i-n-goma i-ra-vúg-i-w-a na Mizero unó mu-úsi
AUG-9-drum 9S-DJ-play-CAUS-PASS-FV PREP Mizero DEM.EMPH.3 3-day
‘The drum is played by Mizero today.’

Noun class also controls the form of the concord markers which appear on nominal modifiers, such as possessive pronouns:

- (3) a. inká yaanje
i-n-ká i-aanje
AUG-9-cow 9-1SG.POSS
‘my cow’
b. inká zaanje
i-n-ká zi-aanje
AUG-10-cow 10-1SG.POSS
‘my cows’

The augment in Kirundi consists of a single vowel that is identical to the vowel of the corresponding noun class marker (1a)-(1b). When the noun class marker does not contain a vowel, like in the case of class 5, the augment is *i-* (1c). In Kirundi the augment is obligatorily present on most nouns in argument positions, with the exception of proper names, kinship terms and certain loanwords. In a lot of Bantu languages, the presence of the augment is usually associated with definite, specific or referential contexts (Halpert, [to appear](#)). However, in Kirundi the presence of the augment does not correlate with definiteness, as the augmented nouns are compatible with both definite and indefinite readings. In (4), the augment appears on nouns that have a definite interpretation without any other overt markers that could indicate definiteness. On the other hand, in (5), the noun *igitabu* ‘book’ can have both high and low scope relative the the quantification expression *umukoóbwa weesé* ‘every girl’. This is parallel to the behavior of indefinite expressions in other languages, which show scope interaction with quantificational elements. I discuss the distribution of the augment in more details in Section 4.5.

- (4) a. Umugoré yataambanye n'umugabo.
u-mu-goré a-a-taamb-an-ye na u-mu-gabo
AUG-1-woman 1S-PST-dance-COM-PFV PREP AUG-1-man
'The woman danced with the man.'
- b. Izúuuba ryaabónetse.
i-Ø-zúuba ry-a-a-bónetse
AUG-5-sun 5S-PST-DJ-appear.PFV
'The sun appeared.'

- (5) Umukoóbwa weesé yarasomye igitabu.
u-mu-koóbwa weesé a-a-ra-somye i-ki-tabu
AUG-1-girl 1.all 1S-PST-DJ-read.PFV AUG-7-book
'Every girl read a book.'

$\forall > \exists, \exists > \forall$

Nominals in argument positions usually appear without any additional morphology (6), but they can also be introduced either with the locative prefixes *mu*, *ku* and *i*, or with a preposition *na/AGR-a*.

- (6) Mucó yarungikiye amashurwe Keezá.
Mucó a-a-rungik-ir-ye a-ma-shurwe Keezá
Muco 1S-PST-send-APPL-PFV AUG-6-flower Keeza
'Muco sent flowers to Keeza.'

Locative phrases generally appear as adjunct to verbs (7a); this differentiates them from nouns, which can only be arguments (7b).

- (7) a. Kó abaansi bazoya vyari vyaanditse **ku ruhome**.
ko a-b-aansi ba-zo-za bi-a-ri bi-aanditse **ku ru-home**
that AUG-2-enemy 2S-FUT-come 8S-PST-COP 8S-write.PFV on 11-wall
'That enemies were coming was written on the wall.'
- b. Mugeenzi waanje aba ***(i) Buruundi**.
mu-geenzi u-a-anje a-ba **i Buruundi**
1-friend 1-LK-1SG.POSS 1S-be **in Burundi**
'My friend lives in Burundi.'

However, there are certain aspects in which bare nouns and locative phrases are similar to each other as they both can occupy argument positions. (8) shows that locative phrases can occupy subject positions in which case they trigger class 16 agreement on the verb.

- (8) Muri Montreal **harashísha**.
mu-ri Montreal **ha-ra-shísha**
in-RI Montreal **16S-DJ-annoying**
'Montreal is annoying.'

Prepositional phrases are associated with a certain range of semantic meanings; they can express agent in passive constructions (9a), comitative arguments (9b) and instruments (9c). They also occur in possessive (9d) and coordinative constructions (9e). I discuss the distribution of the prepositional phrases in more details in Section 4.1.1.

- (9) a. Ingoma iravúzwa **na** Mizero unó muúsi.
i-n-goma i-ra-vúg-i-u-a **na** Mizero unó mu-úsi
AUG-9-drum 9S-DJ-play-CAUS-PASS-FV **PREP** Mizero DEM.3 3-day
‘The drum is played by Mizero today.’
- b. Umugóre yatambanye **n’úmugabo**.
u-mu-goré a-a-tamb-an-ye **na** u-mu-gabo
AUG-1-woman 1S-PST-dance-COM-PFV **PREP** AUG-1-man
‘A woman danced with a man.’
- c. Nduguruye umuryango **n’urupfunguruzo**.
n-ra-ugurur-ye u-mu-ryango **na** u-ru-pfunguruzo
1SG.S-DJ-open-PFV AUG-1-door **PREP** AUG-11-key
‘I opened the door with the key.’
- d. Naráboonye akayaabu **k’úmugabo**.
n-a-ra-boonye a-ka-yaabu **k-a** ú-mugabo
1SG.S-PST-DJ-see.PFV AUG-7-cat **7-PREP** AUG-1-man
‘I saw the man’s cat.’
- e. Mucó **na** Kéézá baratwéenze.
Mucó **na** Kéézá ba-a-ra-twéenze
Mucó **PREP** Keeza 2S-PST-DJ-laugh.PFV
‘Mucó and Keeza laughed.’

2.2 Verbal domain

The verbs in Kirundi are highly inflected, encoding the information about agreement, tense, aspect, mood, valency-changing derivational morphology and focus. The order of the morphemes in the verbal structure is schematically shown in (10).

- (10) SUBJ.ARG-TENSE-DISJOINT-OBJ.AGR-√-VALENCY-ASPECT

Subject agreement is obligatory on all finite verbal forms and reflects the person or class features of the agreeing nominal (11a)-(11b). It is determined by the pre-verbal element occupying the Spec,TP (see also the discussion in Section 4.3 on the possible subject agreement controllers). The subjects are also free to be pro-dropped if they are discourse salient (11c).

- (11) a. Narungitse ikeéte.
n-a-rungitse i-keéte
1SG.S-PST-send.PFV 5-letter
‘I sent a letter.’
- b. Keeza yarungitse ikeéte.
Keeza **a-a-rungitse** i-keéte
Keeza **1S-PST-send.PFV** 5-letter
‘Keeza sent a letter.’

- c. Yarungitse ikeéte.
 a-a-rungitse i-keéte
 1S-PST-send.PFV 5-letter
 ‘She sent a letter.’

Kirundi also allows for expletive subject with certain verbs; in that case, the agreement on the verb takes the form of the default class 8, as in (12).

- (12) **V**yarashoboka kó ico giti kigwa.
 bi-á-ra-shoboka kó i-ki-o ki-tí ki-gwa
 8S-PST-DJ-be.possible that AUG-7-DEM 7-tree 7S-fall
 ‘It’s possible that the tree fell.’

Object markers are optional in Kirundi and usually do not occur together with the overt arguments (13a)-(13b). When the two are used together, the object gets a contrastive focus interpretation (13c); it is usually assumed that this interpretation is due to the focus-related right-dislocation of the object (Ndayiragije, 1999).

- (13) a. Kagabo yasomye igitabu.
 Kagabo a-a-somye i-ki-tabu
 Kagabo 1S-PST-read.PFV AUG-7-book
 ‘Kagabo read a book.’
 b. Kagabo yagisomye.
 Kagabo a-a-gi-somye
 Kagabo 1S-PST-7O-read.PFV
 ‘Kagabo read it.’
 c. Kagabo yagisomye igitabu.
 Kagabo a-a-gi-somye i-ki-tabu
 Kagabo 1S-PST-7O-read.PFV AUG-7-book
 ‘Kagabo read THE BOOK (not a journal).’

Finite matrix verbs in Kirundi also bear conjoint/disjoint marking, with only disjoint markers being expressed overtly on the verb. These markers, which are in complementary distribution with each other, are usually linked to the informational structure of the sentence (Nshemezimana & Bostoen, 2017). It is usually assumed that the disjoint marking is associated with the predicate focus, while the conjoint morphology is linked to the focus on the post-verbal constituent.

- (14) adapted from (Ndayiragije, 1999, p. 410)

- a. Abáana baáranyóoye amatá.
 a-ba-ana ba-á-**ra**-nyóoye a-ma-tá
 AUG-2-child 2S-PST-**DJ**-drink.PFV AUG-6-milk
 ‘The children DRANK MILK.’
 b. Abáana baányóoye amatá.
 a-ba-ana ba-á-Ø-njóoye a-ma-tá
 AUG-2-child 2S-PST-**CJ**-drink.PFV AUG-6-milk
 ‘The children drank MILK (not water).’

Disjoint verbal form

Conjoint verbal form

Kirundi distinguishes between finite and infinitival predicates. Infinitives in Kirundi do not exhibit subject agreement and are marked with the prefix *ku-*, homonymous with the class 15 nominal prefix.

- (15) Nshaaka **g**usoma igitabu.
 n-shaaka **ku**-soma i-ki-tabu
 1 SG.S-want **15/INF**-read AUG-7-book
 ‘I want to read a book’

3 Nominal licensing in Bantu

Argument licensing is a topic that has been fundamental to the development of the formal syntactic theory. In Chomsky (1965), it was argued that arguments are licensed via projection, that is, their appearance in the syntactic structure is determined by semantic properties of lexical heads. Projection was further restricted via the introduction of theta-roles: every argument had to be assigned a theta-role, and every theta-role could only be assigned once.

Consequently, however, this theory was not found to be restrictive enough as it did not predict that some theta-role bearing nominals would be still unlicensed. For example, in English the overt subject of the infinitive clause is only allowed in ECM raising constructions (16a), but not control ones (16b), albeit being both projected by a lexical head.

- (16) a. Rava wanted [Ken to leave].
 b. Rava decided [PRO/*Ken to leave].

Vergnaud (1977) in his famous letter observed that the distribution of nouns tracks the structural positions where nominals in richly inflected languages can get morphological case. This led to an idea that nominals have to receive structural case in order to be licensed, which was formalized under the name CASE FILTER.

In the modern generative literature, structural case assignment is oftentimes seen as an additional side effect of Agree, as proposed in Case-by-Agree model (Chomsky, 2000, 2001). According to it, Case gets assigned by a set of agreeing functional heads, which usually includes finite T, assigning nominative, *v*, assigning accusative, and for certain languages, D, assigning genitive. Formally, this is implemented through the valuation of the [uCase] feature on the DP which acts as the goal for the ϕ -probe of the agreeing functional head. One should note that under this approach, the specific notion of case becomes less crucial to the theory, as case is seen as an epiphenomenon of agreement rather than a separate grammatical principle (Baker, 2013). This aligns with the suggestion to use the more neutral term of VERGNAUD licensing when referring to the effects associated with the abstract Case (Pesetsky, 2013; Sheehan & Van der Wal, 2018).²

The data from Bantu languages is particularly interesting to the discussion of Case due to the recent claims about the parametrization of this property in this language family. In particular, Diercks (2012) suggests that at least some Bantu languages lack abstract Case licensing; i.e. the

²In the following discussion, I use the notion of abstract Case and Vergnaud licensing interchangeably.

nominals lack the [uCase] feature. This proposal is largely based on a number of structural contexts not licensed by abstract Case, along with the observation that Bantu languages generally do not exhibit morphological case marking. Formally, this idea is represented as in (17)-(18).

- (17) Case parameter
Uninterpretable Case features are/are not present in a language. (Diercks, 2012, p.254)
- (18) Case parameter, Bantu
Uninterpretable Case features are not present. (Diercks, 2012, p.254)

This discussion was later continued in Sheehan and Van der Wal (2018) who examine nominal licensing in languages without morphological case. They go over nine diagnostics of abstract Case, identifying a subset of them as the most reliable ones which are less likely to be misinterpreted due to various factors. Using four of those diagnostics, they compare two Bantu languages: Makhuwa (Southern Bantu) and Luganda (Great Lakes Bantu) and show that the former exhibits all the properties of a language with an abstract Case, while the latter behaves as a Case-less language. In the next section, I summarize their observations.

3.1 Diagnostics for the Vergnaud-licensing

Sheehan and Van der Wal (2018) critically discuss the status of Vergnaud licensing in six languages lacking morphological case. In this section, I focus on summarizing the four diagnostics they find to be applicable to the two other Bantu languages in the sample, Makhuwa and Luganda. These two languages are particularly interesting to examine side by side, as they exhibit different properties on all the tests in questions.

First, assuming that only finite verbs can license overt subjects, we expect that in languages with Vergnaud-licensing infinitival clauses could not have overt subject without the presence of an additional Case-licensor. Indeed, in English, overt subjects are ruled out in raising (19a) and non-ECM control complements of matrix verbs (19b), as well as in subject infinitival clauses (19c).

- (19) a. *It seems [**Dasha** to be busy].
b. *We hope [**Dasha** to get into McGill].
c. *[**Dasha** to get into McGill] would be great.

It then could be proposed that the availability of overt DPs in the position of the subject of an infinitive is indicative of the absence of Vergnaud licensing in a given language.

Sheehan and Van der Wal (2018) report that Luganda patterns exactly like that. Luganda allows for overt subjects across different infinitival clauses, which includes raising complements (20a), complements of a control predicate (20b) and infinitival subjects (20c).

- (20) Luganda (Sheehan & Van der Wal, 2018, p. 538)
- a. Ki-kkiriz-ibwa [**Tenhwa** okutambul-ira mu-mazzi]?
7SM-allow-PASS 1.**Tenhwa** 15.walk-APPL 18-6.water
'Is it allowed (for) Tenhwa to walk in the water?'

- b. N-dowooza [omuleenzi okwagala mucheere].
1SG.SM-think 1.boy 15.like 3.rice
'I believe the boy to like rice.'
- c. [(Joel) okukola eensobi] ki-bi.
1.Joel 15.make 9.mistake 7SM-bad
'For Joel to make mistakes is bad.'

On the other hand, Makhuwa does not permit overt DP subjects in any of the examined contexts. Makhuwa does not have raising predicates, but in control structures (21b) overt subjects are impossible; in order for it to be expressed, a finite embedded predicate must be used instead (21c). Infinitives in the subject position also cannot host overt subjects. This is shown in (22), where an overt nominal preceding the infinitive can only be interpreted as a vocative.

(21) Makhuwa (Sheehan & Van der Wal, 2018, p. 538)

- a. Ki-m-phéélá waapeyá.
1SG.S-PRS.CJ-want 15.cook
'I want to cook.'
- b. *Ki-m-phéélá [Amína waápéya nráma].
1SG.S-PRS.CJ-want 1.Amina 15.cook 3.rice
Int.: 'I want Amina to cook rice.'
- c. Ki-m-phéélá [Amína a-apéy-e nráma]
1SG.S-PRS.CJ-want 1.Amina 1SM-cook-OPT 3.rice
'I want Amina to cook rice.'

- (22) Mariá *(,) ócá nráma w-aánáa-réera.
1.Maria 15.eat 3.rice 15S-IMPF-be.good
1. 'Maria, to eat rice would be good.'
2. *'It would be good for Maria to eat rice.'

Makhuwa (Sheehan & Van der Wal, 2018, p. 539)

In sum, with regard to this diagnostic, Luganda behaves as a language lacking Vergnaud-licensing, while Makhuwa exhibits the features of a language with Vergnaud-licensing.

The second diagnostics concerns possible goals for subject agreement. In many languages high agreement on the verb will usually tracks the grammatical function of the subject despite the subject's linear position with respect to the predicate. For instance, in English, the verb agreement in locative inversion constructions is always determined by the nominative subject even though it is in a postverbal position.

- (23) In the room **were/*was** playing **three little kittens**.

On the other hand, if a language can feature non-agreeing subjects, then, based on the Case-by-Agree assumption, such subjects could be rendered to be not Vergnaud-licensed (unless there is some other licensing mechanism available).

It is famously noted that in a subset of Bantu languages subject agreement on the verb does not always track the logical subject. We see it in locative inversion constructions in Luganda, where

the verb agrees with the preceding locative phrase rather than with the logical subject (24b). Thus, in these constructions, the subjects are not licensed by the agreement with the predicate, which suggests that Luganda does not abide to the Vergnaud-licensing in general.

(24) Luganda (Sheehan & Van der Wal, 2018, p. 539)

- a. Omuwala a-beera mu-nyuumba eno.
1.girl 1S-live 18-9.house 9.DEM
'A/the girl lives in this house.'
- b. Mu-nyúumb' eeyó mú-béera-mú omuwála.
18-9.house 9.DEM 18S-live-18.LOC 1.girl
'In that house lives a/the girl.'

Makhuwa, however, behaves parallel to English in that the subject agreement on the verb always tracks the logical subject regardless of whether it is in the pre-verbal or post-verbal position.

(25) Makhuwa (Van der Wal, 2009, p. 194-195)

- a. Aléttó a-náá-phíyá wakisírwá.
2.guests 2S-PRS.DJ-arrive 16.island
'The guests arrive on the island.'
- b. Wakisírwá a-náá-phíyá alétto.
16.island 2S-PRS.DJ-arrive 2.guests
'On the island arrive guests.'
- c. *Wakisírwá wa-náá-phíyá alétto.
16.island 16S-PRS.DJ-arrive 2.guests
Int.: 'On the island arrive guests.'

Another diagnostic for Vergnaud-licensing is based on the Activity Condition, postulated in (Chomsky, 2000, 2001). According to it, a DP cannot be targeted for ϕ -agreement or A-movement once it has been Vergnaud-licensed. Formally, this is implemented through the valuation of the [uCase] feature on nominals. Once a nominal enters into agreement with the licensing head, its Case feature gets valued, which renders the nominal inactive for any further operations. We can see this condition being active in English from the comparison of A-movement of the subject from finite and non-finite embedded clauses. In (26a), the movement of the embedded subject to a higher clause is unmotivated, as the uninterpretable Case feature on this nominal gets valued locally. In (26b), however, the subject does not get Case in the embedded clause, and can move up to get licensed by the matrix T.

- (26) a. *Dasha seems [that ___ forgot about this meeting].
- b. Dasha seems [___ to have forgotten about this meeting].

If the language lacks the [uCase] features on nominals, however, we could potentially expect that any given nominal will always be active for ϕ -agreement or A-movement. This prediction is indeed borne out for languages like Luganda. In Luganda, we find hyperraising constructions, where the subject A-moves from the embedded to the matrix clause despite being licensed in the embedded clause, which results in its agreement with both predicates.

- (27) Abaana **ba**-labika **ba**-beera mu-nyuumba eno.
 2.children **2S**-seem **2S**-live 18-9.house 9.DEM
 ‘(The) children seem to live in this house.’
 Lit.: ‘(The) children seem live in this house.’

Luganda
 (Sheehan & Van der Wal, 2018, p. 541)

The same type of construction is not found in Makhuwa. Sheehan and Van der Wal (2018) note that the only type of structure resembling a hyperraising construction which is exemplified in (28) does not qualify as such, as the embedded verb does not have the properties of a finite verb.

- (28) Vánó **ki**-hááná **ki**-thel-áka.
 PTCL 1SG.S-have 1SG.S-marry-DUR
 ‘Now I have to marry.’

Makhuwa
 (Van der Wal, 2015, p.127)

The final diagnostic used in (Sheehan & Van der Wal, 2018) with respect to the Bantu languages concerns the licensing of agents in passive constructions. In passive constructions, the agent of the clause is demoted from the subject position, while still being a part of thematic structure. As it can no longer be licensed by the verb itself, in languages with abstract Case there needs to be another licenser for the agent nominal, like a preposition (29).

- (29) This book was written ***(by)** a Russian author.

With respect to this test, Luganda and Makhuwa pattern differently yet again. Luganda allows the overt expression of the agent without any preposition or licensing ‘linker’ (30). In Makhuwa, however, the agent of passive must be introduced by a preposition (31).

- (30) Ekitabo ky-aa-som-ebwa **abaana**.
 7.book 7S-PST-read-PASS **2.children**
 ‘The book was read (by) the children.’

Luganda
 (Sheehan & Van der Wal, 2018, p. 542)

- (31) Íi, koo-vár-íya ***(ni)** khwátte!
 Íi 1SG.S.PFV.DJ-grab-PASS **by** 1.fox
 ‘Íi, I am caught by the fox!’

Makhuwa
 (Sheehan & Van der Wal, 2018, p. 542)

Sheehan and Van der Wal (2018) conclude that these four diagnostics show that Makhuwa consistently behaves like a language where nominals need to be Vergnaud-licensed, while for Luganda this requirement does not hold.

They further discuss these diagnostics in a larger typological contexts by applying them to 4 other languages without morphological case: Mandarin, Thai, Yoruba and Jamaican Creole. They show that these languages pattern together with Makhuwa on 5 tests for Vergnaud-licensing, which allows them to argue for the existence of a licensing system across analytical languages. They conclude that if nominal licensing is present in the languages without morphological case, then the correct analysis of this effect should not be modeled on the notion of case.

The list of the diagnostics and their results applied to the languages in the sample is shown in Table 2.³ The diagnostics deemed to be reliable by Sheehan and Van der Wal (2018) are listed in the rows (i) through (v). Note, this also includes the diagnostic (v), the presence of grammatical-function-based asymmetries, which was not examined in the discussion above. Sheehan and Van der Wal (2018) mention that for Makhuwa and Luganda, they did not find any examples of such patterns, but the fact that two other languages in the sample show positive results on that test allows them to include it in the list of reliable diagnostics.

	Mandarin	Thai	Yoruba	JC	Makhuwa	Luganda
(i) Non-finite clauses	+	+	+	+	+	-
(ii) Agreement	n.a	n.a	n.a	n.a	+	-
(iii) Activity	+	+	+	+	+	-
(iv) Passive agent	n.a	n.a	n.a	+	+	-
(v) Case-based asymmetry	0	0	+	+	0	0
(vi) Morphology	0	0	+	0	0	0
(vii) Anaphors	-	-	+	+	n.a	n.a
(viii) Assigners (A/N vs. V/P)	+	+	+?	+?	+	0
(ix) Assignees (CP vs. DP)	n.a	n.a	+?	+?	?	?

Table 2: Case diagnostics (Sheehan & Van der Wal, 2018, p.575)

However, not all diagnostics for the Vergnaud-licensing suggested on the basis of English are found to be definitive in Sheehan and Van der Wal (2018). These tests are shown in the table in the lines (vi) through (ix). They note that these diagnostics are either theoretically problematic, yield contradicting results or are simply not applicable to the languages in the sample. While discussing the results of these tests in details is outside of the scope of this paper, it should be noted that these inconsistencies raise the question of whether the same consideration could be similarly applicable to the “more reliable” diagnostics if we widen the sample of languages. In Section 4, I show that this exact problem arises when we examine the data from Kirundi.

In their discussion of the results in Table 2, Sheehan and Van der Wal (2018) also note that the exceptional behavior of Luganda in their sample suggests that it is possible to retain the assumption about the universality of nominal licensing. Instead of the more simple Case parameterization account, proposed in Diercks (2012), they entertain the existence of an alternative Bantu-specific licensing mechanism. This idea has indeed been previously presented in the works of Claire Halpert on Zulu (Halpert, 2015), as well as in the following discussion of similar data (Carstens & Mletshe, 2016; Pietraszko, 2021). In the next section, I illustrate Halpert’s (2015) suggestion of an alternative licensing mechanism and its possible extensions to Luganda, and discuss how it can affect the results of the Case diagnostics.

³List of the abbreviations in the table: JC = Jamaican Creole, + = evidence of Vergnaud licensing, – = evidence for lack of Vergnaud licensing, 0 = compatible with either, n.a. = test cannot be applied, ? = no data or unclear data; shading = same value

3.2 The role of the augment

In her work, Halpert (2015) argues for the presence of a Vergnaud licensing in Zulu (Southern Bantu) but proposes that it is further obstructed by the existence of alternative licensing mechanisms, which are not observed in Indo-European languages. In Zulu, nominals can occur either with or without the initial augment vowel. Halpert (2015) demonstrates that augmentless nouns have a more restricted distribution compared to their augmented counterparts. First, augmentless nouns tend to have a limited interpretation as they are typically used to express either NPIs or *wh*-words. On top of the interpretive properties, augmentless nouns must appear *vP*-internally. For example, they can appear in the position of a non-agreeing object (32a) or a in-situ subject which has not undergone the movement to Spec,TP (32b). Yet in a position of an agreeing subject (33a) or a dislocated object (33b) augmented nominals are illicit.

(32) Zulu (Halpert, 2015, p.74)

- a. A-ngi-bon-anga **mu-ntu.**
 NEG-1 SG.S-see-NEG.PST **1-person**
 ‘I didn’t see anybody.’
- b. A-ku-fundis-anga **mu-ntu.**
 NEG-1 7S-teach-NEG.PST **1-person**
 ‘Nobody taught.’

(33) Zulu (Halpert, 2015, p.75)

- a. A-ngi-sho-ngo [ukuthi ***(u)-mu-ntu** u-ik-ile].
 NEG-1 SG.S-say-NEG.PST that **AUG-1-person** 1 S-arrive-PFV
 ‘I didn’t say that anyone came.’
- b. *A-ngi-m-bon-i *vP*] **mu-ntu.**
 NEG-1 SG.S-1 O-see-NEG **1-person**
 Int.: ‘I don’t see anybody.’

Halpert (2015) proposes that these distributional restrictions indicate that augmentless nouns require licensing inside *vP*. Augmented nouns, which are not subject to those restrictions are proposed to be licensed through the presence of the augment, which is suggested to have the structural status of the K head which takes a DP as its complement.

Inherent licensing of the augmented nouns is then expected to bleed the number of the positions where nominals are unlicensed. In other words, we should potentially be able to find cases where a nominal in a not Vergnaud licensed position is still licit due to the presence of the augment on it. Zulu indeed features some examples like that. For instance, it allows for non-agreeing subjects that do not undergo movement to Spec,TP and thus cannot get licensed through the agreement with the finite T head (34). This leads Halpert to propose that Zulu still abides with Vergnaud licensing, but the licensing nature of the augment makes it opaque in some contexts.

- (34) Ku-pheka **u-Zinhle** kahle.
 17S-cook **AUG-1Zinhle** well
 ‘Zinhle cooks well.’

Zulu (Halpert, 2015, p.76)

Sheehan and Van der Wal (2018) further note that Luganda shows similar patterns regarding the distribution of the augment, which could be analysed in the same vein. Luganda’s significant difference from the other languages in the sample could then be regarded as an epiphenomenon of the alternative licensing mechanism.

If licensing by the augment is a universal Bantu-specific licensing mechanism, one could then expect that only in languages like Zulu and Luganda, where the augment plays a licensing role, we would find discrepancies with the predictions of the Vergnaud-licensing. On the other hand, if a language shows no evidence of augment as a licensor, we would still expected to pattern similarly to Makhuwa on all of the Case diagnostics, if Vergnaud-licensing is universal. In Section 4.5 I will demonstrate that this prediction is not borne out for Kirundi, which does not use the augment as a licensor, but still exhibits some properties of a language without abstract Case.

4 Nominal licensing in Kirundi

The initial look at the data in Kirundi in Table 4 already shows that it does not pattern with either Makhuwa or Luganda on all the diagnostics. Diagnostics (i) and (iv) speak for the existence of structural Case in Kirundi, while the diagnostics (ii) and (iii) speak against the same conclusion. Crucially, this pattern is not predicted by the typology in Sheehan and Van der Wal (2018) which is based on the assumption that the licensing diagnostics summarized in Section 3.1 are indicative of the same phenomenon. In this section, I show that the data from Kirundi provides us with both theoretical and empirical evidence against this conjecture.

	Makhuwa	Luganda	Kirundi
(i) Non-finite clauses	+	-	+
(ii) Agreement	+	-	-
(iii) Activity	+	-	-
(iv) Passive agent	+	-	+

Table 3: Results of the Vergnaud-licensing diagnostics (to be revised)

I start with an in-depth exploration of diagnostic (iv) in Section 4.1. I demonstrate that the preposition *na* in Kirundi cannot be analyzed as a semantically-vacuous nominal licensor, contra previous analyses of similar elements in other Bantu languages. This conclusion entails that, for Kirundi, this test must be rendered as unindicative of Vergnaud-licensing in general. Furthermore, as the analysis I end up adopting can be potentially extended to all languages, it weakens the validity of this test on a broader scale. In sections 4.2-4.4 I go over the other three diagnostics individually, with each of them followed up by a discussion of whether they should be deemed reliable diagnostics of nominal licensing in general. Section 4.5 presents the data on the properties of the augment vowel in Kirundi and shows that the results of the Case diagnostics cannot be attributed to the nature of the augment (c.f. with the proposal in Halpert, 2015 for Zulu).

4.1 Agent of passive and the nature of the preposition *na*

In passive constructions in Kirundi, the agent of passive needs to be introduced by the preposition *na*; its absence results in ungrammaticality (35). Thus, on first glance, this diagnostics shows that Kirundi patterns with Vergnaud-licensing languages like Makhuwa in requiring an extra element that could license the agent DP.

- (35) Ingoma iravúzwa *(**na**) Mizero unó muúsi.
i-n-goma i-ra-vúg-i-w-a **na** Mizero unó mu-úsi
AUG-9-drum 9S-DJ-play-CAUS-PASS-FV PREP Mizero DEM.3 3-day
'The drum is played by Mizero today.'

However, Sheehan and Van der Wal (2018) also note that this diagnostic might not be indicative of Vergnaud-licensing if the function of the preposition is the *introduction* of the arguments into the theta-structure of the verb, rather than mere *licensing*. Indeed, they note that a subset of languages identified in Diercks (2012) as Case-less still require the agent in passive constructions to be introduced by a preposition-like element. At the same time, it is hard to verify this idea without additional research, as the syntax and semantics of prepositional elements in Bantu remains a largely unexplored topic, with the exceptions for the works of Baker and Collins (2006) and Schneider-Zioga (2015a, 2015b).

In this section, I thoroughly examine the functions of the preposition *na* in Kirundi to be able to provide a definite answer on this matter. I argue that the idea about the preposition being an argument-introducing element is a better fit for describing the Kirundi data. I start with discussion of the distribution of the preposition *na* in Section 4.1.1. In Section 4.1.2, I compare it to the linker in Kinande, which Baker and Collins (2006) analyse as a nominal licenser, and show that the preposition in Kirundi is crucially different and cannot be analyzed in the same vein. I propose that an account ascribing minimal semantic value to *na* is more well-suited for the Kirundi data and discuss the implications of this conclusion for the typology in Sheehan and Van der Wal (2018) in Section 4.1.3.

4.1.1 The distribution of prepositional phrases

Phrases headed by the preposition *na* in Kirundi are associated with a certain range of semantic meanings; they can express agent in passive constructions, instruments and comitative arguments. It also appears in coordination, as well as in possessive constructions. In this section, I provide examples of all of its uses.

4.1.1.1 Verbal arguments

Besides introducing the agent in passive constructions, as in (35), the preposition *na* can also introduce two other types of verbal arguments: comitative arguments and instruments.

One prominent context where the prepositional phrase can appear in is with the verbs marked with the polysemous suffix *-an*. Predicates with this marker have three possible meanings: reciprocal, associative, and antipassive (Henderson, [in print](#)). The particular reading arising with each

predicate depends on the semantics of the verbal stem as well as on the context of the whole sentence. *na*-phrase can only appear with verbs with the reciprocal and associative readings, but not in the antipassive contexts. For this reason, I ignore the latter in the following discussion.

The first reading of the verbal forms with the comitative marker is associative. In this context, a comitative participant is introduced by the preposition *na* to express a co-agent of the event.

- (36) Umugóre yatambanye ***(n')úmugabo.**
u-mu-goré a-a-tamb-**an**-ye **na** **u-mu-gabo**
AUG-1-woman 1S-PST-dance-COM-PFV **PREP** **AUG-1-man**
‘A woman danced with a man.’

Verbs with the comitative marker can also have reciprocal reading. This reading usually arises with the predicates expressing mutual relationships, such as *love*. These predicates require either their subject to be a entity consisting of multiple individuals (37a)-(37b). In cases where subject is a singular individual, an additional co-agent can be introduced by the preposition *na* (37c).

- (37) a. Umuryaango waanje urakúundana.
u-mu-ryaango u-aanje u-ra-kúund-an-a
AUG-3-woman 1-POSS.1SG 3S-DJ-love-COM-FV
‘The members of my family love each other.’
b. Umugoré n’úmuhuúngu arakúundana.
u-mu-goré na u-mu-huúngu a-ra-kúund-an-a
AUG-1-woman PREP AUG-1-man 1.S-DJ-love-COM-FV
‘The woman and man love each other.’
c. Umugoré arakúundana n’úmuhuúngu.
u-mu-goré a-ra-kúund-an-a na u-mu-huúngu
AUG-1-woman 1S-DJ-love-COM-FV PREP AUG-1-man
‘The woman and man love each other.’

The preposition *na* can also introduce arguments of the verbs that are not marked with the comitative marker *-an-* but still require their agent to be a plurality of participants. One example of that is the verb *meet*. This verb must either have a plural subject, or a singular subject (38a) and an obligatory *na*-phrase expressing the second participant of the event (38b).

- (38) a. Mucó na Keezá baahuuye.
Mucó na Keezá ba-a-huuye
Muco PREP Keeza 2S-PST-meet.PFV
‘Muco and Keeza met.’
b. Muco yahuuye ***(na Keezá).**
Mucó a-a-huuye na Keezá
Muco 1S-PST-meet.PFV PREP Keeza
‘Muco met with Keeza.’

na-phrases can also express instruments that were utilized by the agent to perform the action (39). Note, that in this case, there is no additional morphology on the verb; cf. it with the passive and comitative cases where predicates are marked with the *-u-* and *-an-* suffixes.

- (39) a. Nduguruye umuryango **n'úrufunguruzo.**
 n-ra-ugurur-ye u-mu-ryango **na** **u-ru-pfunguruzo**
 1SG.S-DJ-open-PFV AUG-1-door **PREP** **AUG-11-key**
 'I opened the door with the key.'
- b. Mucó yariíye umuceri **n'ífurusheti.**
 Mucó i-a-rií-ye u-mu-ceri **na** **i-furusheti**
 Muco 1S-PST-eat-PFV AUG-3-rice **PREP** **5-fork**
 'Muco ate rice with a fork.'
- c. Muco yatambutse **n'ínkoni.**
 Muco a-a-tambutse **na** **i-n-koni**
 Muco 1S-PST-walk.PFV **PREP** **AUG-9-cane**
 'Muco walked with a cane.'

4.1.1.2 Possessives

The preposition is also used to introduce possessors in the noun phrase. In that case the preposition differs morphologically, as it takes a concord marker corresponding to the class of the head noun.

- (40) a. inká **ya** Yohanni b. inká **za** Yohanni
 i-n-ká **i-a** Yohanni i-n-ká **z-a** Yohanni
 AUG-9-cow **9-PREP** Yohani AUG-10-cow **10-PREP** Yohani
 'Yohani's cow' 'Yohani's cows'

One piece of evidence that *na* and AGR-*a* are the same element comes from the tonal patterns we observe in the phrases headed by them. Both *na* and *-a* trigger the appearance of the high tone on the first vowel of the complement nominal, which is shown in (41). (41a) shows the nouns *umugabo* in an argument position; in this sentence, all the vowels in the noun are low tone. However, when this nominal occurs either as a complement of the preposition *na* (41b), or as a possessor (41c), we see a high tone appearing on the first vowel.

- (41) a. Naráboonye umugabo.
 n-a-ra-boonye u-mu-gabo
 1SG.S-PST-DJ-see.PFV AUG-1-man
 'I saw a man.'
- b. Natambanye **n'úmugabo.**
 n-a-tamb-an-ye **na** u-mu-gabo
 1SG.S-PST-dance-COM-PFV **PREP** AUG-1-man
 'I danced with a man.'
- c. Naráboonye akayaabu **k'úmugabo.**
 n-a-ra-boonye a-ka-yaabu ki-a **ú-mugabo**
 1SG.S-PST-DJ-see.PFV AUG--cat 7-PREP AUG-1-man
 'I saw the man's cat.'

Further on, the morphological form of *-a* is also dependent on the category of its complement, much like the form of *na* is. If the dependent of a preposition is a locative phrase or an infinitive,

the preposition takes the form of AGR-*ó* rather than AGR-*a* (42a)-(42b). We see that this is similar to how the preposition *na* changes to *nó* when its complement is a locative phrase or an infinitive (43a)-(43b).

- (42) a. inyoota yó kwiiga
i-ny-oóta i-ó ku-iíga
AUG-9-desire **9-PREP** 15/INF-learn
'desire to learn'
- b. umuhuungu wó mu gihugu caanje
u-mu-húngu u-ó ki-húgu ki-aanje
AUG-1-boy **1-PREP** in 7-country 7-1SG.POSS
'a boy from my country'
- (43) a. Numiwe nó / *na mu cuumba ca Kéezá.
n-a-umi-u-e no na mu ki-uumba ki-a Keezá
1SG.S-PST-astonish-PASS-PFV **PREP PREP** in 7-room 7-PREP Keezá
'I was shocked by the insides of Keeza's room.'
- b. Narabihiwe nó / *na kuba muri Montreal.
n-a-ra-bihi-u-e no na ku-ba mu-ri Montreal
1S-PST-DJ-annoy-PASS-PFV **PREP PREP** 15/INF-be in-RI Montreal
'I was annoyed by being in Montreal.'

4.1.1.3 Coordination

na is also used as a conjunctive coordinator for nouns (44). The question arises whether *na* in its coordinative function is inherently different from its other uses, or this function of the preposition can actually be unified with others.

- (44) a. Mucó **na** Kéezá baratwéeenze.
Mucó **na** Kéezá ba-a-ra-twéeenze
Muco **PREP** Keeza 2S-PST-DJ-laugh.PFV
‘Muco and Keeza laughed.’
- b. Igikere **n’inká** birashitse.
i-ki-kere **na** i-n-ká bi-ra-shitse
AUG-7-frog **PREP** AUG-9-cow 8S-DJ-arrive.PFV
‘A frog and a cow just arrived.’

Stassen (2000) proposes that there are two types of NP-conjunction: coordinate and comitative. The underlying distinction between these two types lies in the equity between the two conjuncts; coordinate strategy encodes that the coordinated constituents have an “equal structural rank”, while the comitative strategy encodes that the constituents have an “unequal structural rank”. The two strategies can be represented with the following English examples.

- (45) a. Thelma and Louise left. *coordinate*
b. Thelma left with Louise. *comitative*

The properties of the coordinator *na* indicate that it encodes the comitative strategy rather than the coordinate one. The first piece of evidence comes from its distribution. Paperno (2012) notes that comitative coordinators are typically only used to conjoin NPs, but rarely extend to conjoining arbitrary syntactic categories, like clauses. He suggests that this fact is due to comitative coordinators often being grammaticalized from adpositions, which typically only select for nominal complements. In Kirundi, we see that *na* is limited to the DP-coordination only; with the coordination of finite verbs and complement clauses, other coordination strategies arise instead.⁴ The coordination of matrix clauses is expressed with the introduction of a comitative referential DP in the second clause, as in (46a). In this sentence, we see a prepositional phrase *naawé* which refers to the subject of the first sentence and acts as a conjunct with respect to the subject of the second sentence. Crucially, coordination of the two clauses with *na* is ruled out (46b).⁵

- (46) a. Mucó yarátaamvye Keezá **naawé** yaráririmvye.
 Mucó a-a-ra-taamvye Keezá **na-wé** a-a-ra-ririmvye
 Mucó 1S-PST-DJ-dance.PFV Keezá **PREP-3SG** 1S-PST-DJ-sing.PFV
 ‘Mucó danced and Keeza sang.’
 Lit.: ‘Mucó danced and Keeza sang with him.’
- b. Mucó yarátaamvye na Keezá yaráririmvye.
 Mucó a-a-ra-taamvye na Keezá a-a-ra-ririmvye
 Mucó 1S-PST-DJ-dance.PFV PREP Keezá 1S-PST-DJ-sing.PFV
 *1. ‘Mucó danced and Keeza sang.’
 2. ‘Mucó danced, and **even** Keeza sang.’

Embedded clauses can be coordinated wither via conjoining verbal prefix *-ka-* appearing on the second predicate (47a), or with the coordinator *kaandi* (47b). Similarly to the last case, it is not possible to conjoin the two clauses with the preposition *na* (47c).

⁴In the coordination of locative phrases and infinitives, the alternative form *nó* is used instead (i)-(ii). If *na* and *nó* are the element of the same type, this might indicate that in Kirundi prepositions can actually be used for non-DP coordination. However, locative phrases and infinitives are in certain aspects similar to nouns. For example, locative phrases can occupy subject position and trigger non-default agreement on the verb, as shown in Section 2.1. Moreover, the infinitives have certain features of nominalizations as shown in Section 4.2. It is thus unclear whether the data in (i)-(ii) necessarily contradicts the assumption about *na* strictly being a DP-coordinator.

- (i) Nshaaka kurírimba nó gutáamba.
 n-shaaka ku-rírimba nó gu-táamba
 1SG.S-want 15/INF-sing PREP 15/INF-dance
 ‘I want to sing and dance.’
- (ii) Niicara mu cuumba nó kw’ibaraaza.
 N-iicara mu ki-uúmba nó ku i-baraaza
 1SG.S-sit in 7-room PREP on 5-porch
 ‘I sit in my room and on my porch.’

⁵The interpretation of the sentence in (46b) also shows that *na* can mean *even* in some contexts in Kirundi. This fact makes *na* similar to the particles in languages like Dharamsala Tibetan (Erlewine & Kotek, 2016) and Tamil (Iyer, 2017), that can act both as coordinators and additive scalar particles. I leave the discussion of this usage of the preposition *na* for further research.

- (47) a. Narákuunze kó Mucó yataámvye Keezá naawé
 n-a-ra-kuunze kó Mucó a-a-táamvye Keezá na-wé
 1 SG.S-PST-DJ-like.PFV that Muco 1 S-PST-dance.PFV Keeza PREP-3SG
 akarírimba.
 a-ka-rírimba
 1 S-ADD-sing
 ‘I liked that Muco danced and Keeza sang.’
- b. Narákuunze kó Mucó yataámvye **kaandi** kó Keezá
 n-a-ra-kuunze kó Mucó a-a-táamvye **kaandi** kó Keezá
 1 SG.S-PST-DJ-like.PFV that Muco 1 S-PST-dance.PFV **and** that Keeza
 yarírimvye.
 a-a-rírimvye
 1 S-PST-sing.PFV
 ‘I liked that Muco danced and Keeza sang.’
- c. *Narákuunze kó Mucó yataámvye **na** kó Keezá
 n-a-ra-kuunze kó Mucó a-a-táamvye **na** kó Keezá
 1 SG.S-PST-DJ-like.PFV that Muco 1 S-PST-dance.PFV **PREP** that Keeza
 yarírimvye.
 a-a-rírimvye
 1 S-PST-sing.PFV
 ‘I liked that Muco danced and Keeza sang.’

One further structural argument for the comitative nature of the coordinator *na* comes from its possible linear positions. The *na*-phrase can either be adjacent to the first conjunct (48a), or be placed in the end of the sentence (48b), much like comitative conjuncts in English. In the latter case, the verb only agrees with the noun in the subject position. Note that while these examples resemble comitative construction discussed in Section 4.1.1.1, there is no comitative marker on the verb in this context.

- (48) a. Mucó na Kéézá baratwéenze.
 Mucó na Kéézá ba-a-ra-twéenze
 Muco PREP Keeza 2S-PST-DJ-laugh.PFV
 ‘Muco and Keeza laughed.’
- b. Mucó yaratwéenze na Kéézá.
 Mucó a-a-ra-twéenze na Kéézá
 Muco 1S-PST-DJ-laugh.PFV PREP Keeza
 ‘Muco and Keeza laughed.’

Another reason to believe that *na* is a comitative coordinator is its interpretation. McNally (1993) has shown for Russian that ordinary and comitative coordinators have different meanings. The ordinary coordinator *i* ‘and’ forms mereological sums, while the comitative coordinator *s* ‘with’ forms groups and encodes relatedness of the two conjuncts. This distinction is reflected in the preference for either collective or distributive interpretation of the two types of coordinated phrases in Russian. In (49a), where the two conjuncts are conjoined with an ordinary coordinator *i*, both

collective and distributive interpretation of the predicate is available; the action of lifting the piano could have been done by Boris and Petya together or individually. In the example with a comitative coordinator *s* (49b), however, only collective interpretation is available; this is expected under the assumption that *s* obligatorily forms groups.

- (49) a. Boris i Petya podnjali rojal'.
 Boris.NOM and Peter.NOM lifted.PL piano
 1. 'Boris and Petya each lifted the piano.'
 2. 'Boris and Petya lifted the piano together.'
- b. Boris s Petej podnjali rojal'.
 Boris.NOM with Peter.INSTR lifted.PL piano
 *1. 'Boris and Petya each lifted the piano.'
 2. 'Boris and Petya lifted the piano together.'

Applying a similar test to Kirundi shows that *na* patterns as a comitative coordinator. Speakers note that the preferred interpretation of the sentence in (50) is collective; to trigger the distributive interpretation, they prefer to use two separate sentences.

- (50) Muco na Kéezá ba-a-teruye piano.
 Muco PREP Keeza 2S-PST-lift.PFV piano
 1. 'Muco and Keeza lifted the piano together.'
 ?2. 'Muco and Keeza each lifted the piano.'

Another data point suggesting that the idea about the comitative nature of *na* is on the right track comes from examples like (51). In this example, only the collective reading of the sentence is available where the two people brought one bottle of wine together. To express the distributive reading, where each person brought a bottle of wine, speakers prefer to add an overt distributive phrase *umwumwe wéése* 'each', as in (52).

- (51) Keezá na Mucó baraazánye icupa ry'úmuvinnyú.
 Keezá na Mucó ba-ra-a-zánye i-cupa ry-a u-mu-vinyú
 Keeza PREP Muco 2S-DJ-PST-bring.PFV 5-bottle 5-PREP AUG-3-wine
 1. 'Keeza and Muco brought a bottle of wine.' (1 bottle was brought)
 *2. 'Keeza and Muco brought a bottle of wine each.' (there are 2 bottles brought)
- (52) Keezá na Mucó baraazánye icupa ry'úmuvinnyú umwumwe
 Keezá na Mucó ba-ra-a-zánye i-cupa ry-a u-mu-vinyú u-mu-umwe
 Keeza PREP Muco 2S-DJ-PST-bring.PFV 5-bottle 5-PREP AUG-3-wine AUG-1-one
 wéése.
 u-éése
 1-all
 'Keeza and Muco each brought a bottle of wine.'

4.1.2 *na* as a Case-licensing linker element

The preposition *na* is in certain aspects similar to elements in other Bantu languages, which Baker and Collins (2006) call "linkers". In Kinande (Great Lakes Bantu), as well as in some Khosian

languages, like Ju|'hoansi and ꞤHoan, these elements obligatory appear between the two objects of double object constructions, as well as in certain other sentences with two or more predicate-internal nominal phrases. In Kinande, the linker also exhibits agreement with the noun phrase preceding it.

(53) Kinande, (Baker & Collins, 2006, p. 308)

- a. Mo-n-a-h-ere omukali y'- eritunda.
AFF-1 SG.S-T-give-EXT woman.1 LK.1 fruit.5
'I gave a fruit to a woman.'
- b. Omukali mo-a-gul-ire amatunda w'- omo-soko.
woman.1 AFF-1 S-buy-EXT fruits.6 LK.6 LOC.18-market
'The woman bought fruits in the market.'
- c. Kambale mo-a-seny-ir' olukwi lw'- omo-mbasa.
Kambale AFF-1 S.T-chop-EXT wood.11 LK.11 LOC.18-axe.9
'Kambale chopped wood with an axe.'

Baker and Collins (2006) propose that the linker forms its own projection under *v*P, with its complement being the VP, and with its specifier being obligatorily filled in by the movement of one of the VPs arguments. The specifier position can be filled by any of the verbs arguments which explains that the word order of the two nouns in the linker construction is flexible. This is shown in (54), where the linker may be preceded by either the direct or indirect subject.

(54) Kinande, (Baker & Collins, 2006, p. 311)

- a. Mo-n-a-hir-ire okugulu k'- omo-kihuna.
AFF-1 SG.S-T-put-EXT leg.15 LK.15 LOC.18-hole.7
'I put the leg in the hole.'
- b. Mo-n-a-hir-ire omo-kihuna m'- okugulu.
AFF-1 SG.S-T-put-EXT LOC.18-hole.7 LK.18 leg.15
'I put the leg in the hole.'

Baker and Collins (2006) argue that the linker plays an important role in Case licensing, as it checks the Case feature of a following DP, while also providing a landing site for DP movement that makes the DP accessible to a higher Case checking head, namely *v*.

The authors also argue for the presence of linker projection in languages like Chichewa. Chichewa does not feature a linker in double object construction (55). However, the second DP does not get licensed by *v*, which is evident from the fact that it cannot get expressed as an object clitic on the verb; Baker and Collins (2006) uses this fact to argue for the presence of an additional Case licenser in the form of a silent linker head.

(55) Chitsiru chi-na-gul-ir-a atsikana mphatso.
7-fool 7S-PST-buy-APPL-FV 2.girls 9.gift

'The fool bought a gift for the girls.'

Chichewa, (Baker & Collins, 2006, p. 347)

The same considerations cannot be extended to Kirundi. Kirundi, like Chichewa, does not have any elements that appear between the DPs in double object constructions, or in any other structures featuring two consequent arguments.

- (56) Naráruungikiye ikeéte (*na) Kéézá.
 n-a-rá-ruungik-ir-ye i-ki-eéte na Keezá
 1SG.S-PST-DJ-write-APPL-PFV AUG-7-letter PREP Keeza
 ‘I wrote a letter to Keeza.’

However, unlike in Chichewa, any objects in Kirundi can be expressed as object clitics on the verb, which, following the logic in Baker and Collins (2006) suggests that all objects get licensed by the verb itself rather than by a separate linker head.

- (57) a. Namukirungikiye.
 n-a-**mu-ki**-rungskik-ir-ye
 1SG.S-PST-**10-70**-send-APPL-PFV
 ‘I sent it (a letter) to him.’
 b. Nararimumenesheje.
 n-a-ra-**ri-mu**-men-ish-i-ye
 1SG.S-PST-DJ-**50-10**-break-APPL-CAUS-PFV
 ‘I made him break it.’

While the preposition *na* does not have the same distribution as the linkers in Kinande, the idea that it acts as a Case-licensor is still plausible. Indeed, we see the *na* appear in the positions where in other languages prepositions are usually inserted to Case-license a noun phrase. However a more intricate examination shows that *na* cannot be a licensor that gets inserted for purely syntactic reasons.

First, this preposition needs to introduce all types of phrases that act as agent of passive, including locative phrases and clauses. Locative phrases arguably do not require licensing unlike other DPs. For example, locative phrases can occur in adjunct positions, while DPs can only be arguments (see Section 2.2). Despite this, locative phrases must be introduced by a preposition in passive constructions, just like regular DPs (58).

- (58) Numiwe *(nó) mu cuúmba ca Kéézá.
 n-a-umi-u-e no mu ki-uúmba ki-a Keezá
 1SG.S-PST-astonish-PASS-PFV PREP in 7-room 7-PREP Keezá
 ‘I was shocked by the insides of Keeza’s room.’

In a similar way, clausal agents in passive constructions also require the presence of a preposition. Following the assumption that clauses do not need to be structurally licensed (Stowell, 1981), the obligatory insertion of preposition in (cf. (59) with (60)) is unexpected.

- (59) Kagabo yátangaajwe n’úukó Keeza yákoze
 Kagabo a-á-tangaaj-w-e na u-kó Keeza a-á-koze
 Kagabo 1S-PST-surprise-PASS-FV PREP AUG-**that** Keeza 1S-PST-work.PFV
 icuúmba cííwé.
 i-ki-uúmba ki-ííwé
 AUG-7-room 7-3SG.POSS
 ‘Kagabo was surprised that Keeza cleaned her room.’

- (60) *Kagabo yátangaaajwe kó Keeza yákoze icuúmba
 Kagabo a-á-tangaaaj-w-e kó Keeza a-á-koze i-ki-uúmba
 Kagabo 1S-PST-surprise-PASS-FV **that** Keeza 1S-PST-work.PFV AUG-7-room
 cíiwé.
 ki-íiwé
 7-POSS.3SG
 ‘Kagabo was surprised that Keeza cleaned her room.’

If *na* was a semantically vacuous licenser, we could also expect it to appear in a wider range of contexts, such as double object constructions. Double object constructions in Kirundi with inherently transitive verbs like *write* are only possible if an applicative suffix is present on the verb, like in (61a). In its absence, the second object is illicit either as a stand-alone DP or with the preposition *na* (61b). If *na* were a licenser, one could potentially expect it to be interchangeable with other argument licensers, like the applicative affix, contrary to the data in (61).

- (61) a. Naráruungikiye ikeéte Kéézá.
 n-a-rá-ruungik-**ir**-ye i-ki-eéte Keezá
 1SG.S-PST-DJ-write-**APPL**-PFV AUG-7-letter Keeza
 ‘I wrote a letter to Keeza.’
 b. *Naráruungitse ikeéte (na) Kéézá.
 n-a-rá-ruungitse i-ki-eéte na Keezá
 1SG.S-PST-DJ-write.PFV AUG-7-letter PREP Keeza
 ‘I wrote a letter to Keeza.’

More issues come from coordinate structures. As shown above in Section 4.1.1.3, *na* introduces the second conjunct. If *na* gets inserted to license the second conjunct that for some reason does not get Case-licensed as a part of the whole coordinated DP, we expect the preposition to obligatory introduce every non-first conjunct in coordinated phrases consisting of more than two conjuncts. This prediction is not borne out, as we find sentences like (62) in Kirundi, where *na* appears only on the last conjunct.

- (62) Keezá, Mucó, Kagabo **na** Ntoore baraazánye icupa ry’úmuvinýú.
 Keezá Mucó Kagabo **na** Ntoore ba-ra-a-zánye i-cupa ry-a
 Keeza Muco Kagabo **PREP** Ntoore 2S-DJ-PST-bring.PFV 5-bottle 5-PREP
 u-mu-vinyú
 AUG-3-wine
 ‘Keeza, Muco, Kagabo and Ntoore brought a bottle of wine.’

Finally, certain contexts where *na* appears also point to the idea that this element is not semantically vacuous. While in passive and comitative constructions we could posit that the observed semantics of the prepositional phrase comes from the presence of a specific head in the structure of the predicate, instrumental constructions raise some issues for the idea that *na* is semantically null, as there is no specific head in the verb that we could have attributed the instrumental semantics to.

- (63) Muco yatambutse **n’ínkoni**.
 Muco a-a-tambutse **na** i-n-koni
 Muco 1S-PST-walk.PFV **PREP** AUG-9-cane
 ‘Muco walked with a cane.’

Thus, we cannot adopt the account in Baker and Collins (2006) as *na* in Kirundi has a radically different distribution from linkers, and also seems to be not completely semantically-vacuous element.

4.1.3 *na* as a semantically meaningful preposition

I suggest that the pivotal observation about the preposition *na* is that its distribution in certain ways aligns with the contexts where we observe oblique marking in languages with morphological case. In particular, I propose that the poly-functionality of the preposition aligns with the recent discussion of the semantic similarity between oblique cases, discussed in details by Franco and Manzini (2017). In this section, I provide an overview of their account, which ascribes a minimal semantic denotation to oblique markers. I then show how this proposal can be extended to Kirundi and its relevance for the discussion of structural Case.

4.1.3.1 Franco and Manzini (2017)

In their discussion of the nature of oblique cases, Franco and Manzini (2017) propose that they have share a common semantic core and the grammatical function of enriching the argument structure. Formally, this is expressed by ascribing to oblique cases the meaning of elementary predicates expressing a zonal inclusion. The notion of zonal inclusion, as defined in Belvin and Den Dikken (1997), is provided in (64). Notably, Franco and Manzini (2017) propose that this basic semantics can be extended to all uses of oblique cases, both inside the verbal and nominal projections.

- (64) “Entities have various zones associated with them, such that an object/eventuality may be included in a zone associated with an entity without being physically contained in that entity”.
 (Belvin & Den Dikken, 1997, p. 170)

To see how this approach works, let us look at some illustrations from English. In English, possessive relations inside a DP may be realized with either by an *of*-phrase or by a *with*-phrase. *Of* introduces possessors (66), while *with* introduce possessums (67).

- (65) a. the children **of** the woman
 b. the woman **with** children

Franco and Manzini (2017) propose to label operators like *of*, which take possessors as their internal argument and possessum as their external argument, as \subseteq . The preposition *with* is a mirror image of that and is labeled as \supseteq ; it takes possessums as its internal argument and possessors as their external argument. Note, that as both \subseteq and \supseteq are meant to express zonal inclusion, this semantics does not entail that the two members of the relation need to be in a physical part-whole relation, which matches the range of meanings which can be expressed by possessive constructions in general.

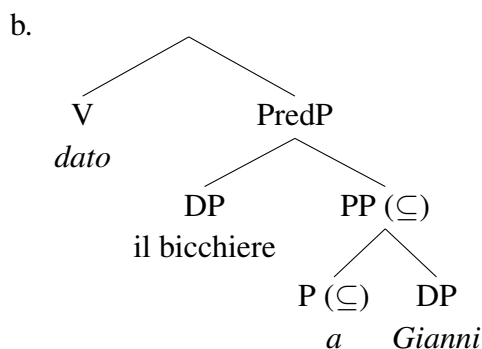
(66) $\llbracket \text{the children of the woman} \rrbracket = \text{the children} \subseteq \text{the woman}$

(67) $\llbracket \text{the woman with children} \rrbracket = \text{the woman} \supseteq \text{the children}$

It is further argued that the same semantics can be extended to the oblique cases/adpositions that introduce verbal arguments. Franco and Manzini (2017) propose a distinction between genitive/dative cases on the one hand, and instrumental cases (which can have instrument, comitative or causer readings) on the other. Following (Manzini & Franco, 2016; Manzini & Savoia, 2011; Manzini et al., 2015), the genitive/dative cases are postulated to introduce \subseteq relation either between two arguments of the verb (in low applicative constructions), or between the event and the argument (in high applicative constructions). For example, in (68a), the preposition *a* expresses that the object *il bicchiere* is in the domain of the inclusion of *Gianni*; pragmatically, this relation gets interpreted as a possession relation.

- (68) a. Ho dato il bicchiere a Gianni.
I.have given the glass to Gianni
'I gave the glass to Gianni.'

(Manzini & Franco, 2016, p.211)

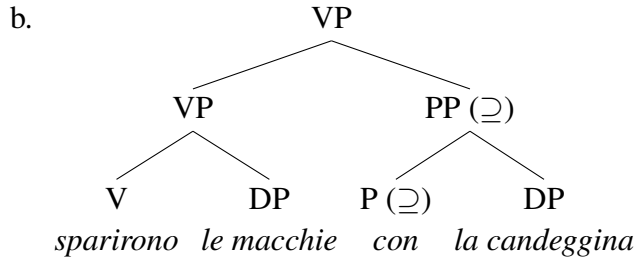


(Manzini & Franco, 2016, p.213)

The instrumental case, on the other hand, is argued to express \supseteq relation. In the paper, Franco and Manzini (2017) examine the full range of the meaning that can be expressed by the instrumental cases/adpositions, which includes causers, instrument and comitative readings and show that all of them can be reduced to the \supseteq relation. The particular meaning arising in each construction is derived by pragmatic enrichment, which includes the ranking of the event participants in the animacy hierarchy and the causative/resultative nature of the event. One example of this relation is illustrated in (69). The preposition *con*, expresses the \supseteq relation and signifies that the DP complement to P, *la candeggina* 'bleach', is included in the event denoted by the VP that the PP attaches to.

- (69) a. Le macchie sparirono con la candeggina.
the stains disappeared with the bleach
'The stains washed off with bleach.'

(Franco & Manzini, 2017, p.7)



The reverse nature of genitive/dative and instrumentals is supported by argument alternations in triadic constructions we observe in some languages. For example, in Persian, we see dative *be* alternating with instrumental/comitative *ba*.

(70) Persian, (Franco & Manzini, 2017, p.18)

- a. Pesar sangro **be** sag zad.
 boy stone **to** dog hit.PST.3SG
 ‘The boy hit the dog with the stone.’
- b. Pesar sagro **ba** sang zad.
 boy dog **with** stone hit.PST.3SG
 ‘The boy hit the dog with the stone.’

As *be* and *ba* are mirror images of each other, the transfer from one construction to another is pretty straightforward with the same relationship between the two noun phrases being preserved.

Finally, the authors show that in some languages, the same oblique marker can express both \subseteq and \supseteq relations. In Kristang (Malacca Creole Portuguese), marker *ku* can introduce both instrumentals and comitatives on the one hand and goals on the other.

(71) Kristang, (Franco & Manzini, 2017, p.25)

- a. Eli ja da **ku** Rita aké pesi.
 he PFV give **GOAL** Rita that fish
 ‘He gave the fish to Rita.’
- b. Eli ja kotrá aké kandri **ku** faka.
 he PFV cut that meat **INSTR** knife
 ‘He cut the meat with a knife.’

Franco and Manzini (2017) propose that Kristang does not differentiate between the two relations, simply resorting to an all purpose oblique. The interpretation of *ku* could then be hypothesised to be dependent on the structural position of the phrase and the contextual restrictions.

4.1.3.2 Extension to Kirundi

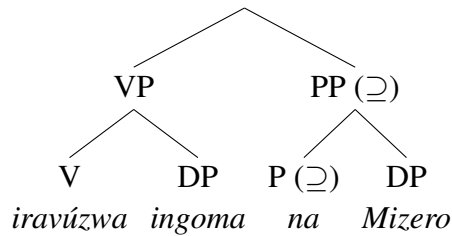
I propose that the function of the preposition *na/AGR-a* is parallel to that of the oblique cases, as proposed in Franco and Manzini (2017): they express the relation of zonal inclusion which allows them to introduce new semantic arguments to verbs and nouns. I further suggest that the preposition only introduces the nominals in those cases when there is no other semantic predicate that can take the nominal as its argument; in other words, the prepositional strategy is dispreferred as it entails

the introduction of a new lexical element in the sentence enumeration. This assumption explains why *na* does not introduce Goal arguments in ditransitive constructions. Finally, the preposition has a universal meaning in all the constructions it appears in: it introduces the relation of zonal inclusion. To show that this semantics aligns with each of the use of the preposition, I will go over each of them in this section.

First, I propose that in the prepositional phases that appear as verbal modifiers, that is agent of passives, comitatives and instruments, the preposition *na* expresses the \supseteq relation, which derives the reading where the nominal is a part of the event denoted by the verbal phrase. The specific reading of the *na*-phrase is then determined pragmatically. The examples below show the examples with passive (72) and instrumental constructions (73).

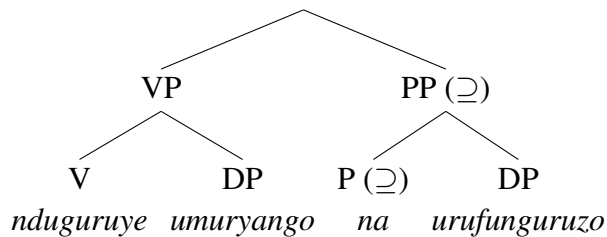
- (72) a. Ingoma iravúzwa na Mizero unó muúsi.
i-n-goma i-ra-vúg-i-w-a na Mizero unó mu-úsi
AUG-9-drum 9S-DJ-play-CAUS-PASS-FV PREP Mizero DEM.3 3-day
‘The drum is played by Mizero today.’

b.



- (73) a. Nduguruye umuryango n’úrufunguruzo.
n-ra-ugurur-ye u-mu-ryango na u-ru-pfunguruzo
1SG.S-DJ-open-PFV AUG-1-door PREP AUG-11-key
‘I opened the door with the key.’

b.



This proposal entails that passive and comitative morphemes do not introduce an additional semantic relation. While this is less controversial to propose for the passive morpheme, which reduces the valency of the verb, it might be more questionable for the comitative morpheme. I propose that the comitative *-an* does not introduce an additional semantic valency, but rather puts a requirement on the plurality of subject. In particular, for the reciprocal and comitative readings of an *-an*-marked verb to be licit, there must be more than one agentive individual. This requirement can then be met either using a plurality denoting subject, as in (74a)-(74b) or introducing an additional conjunct in the sentence, as in (74c).

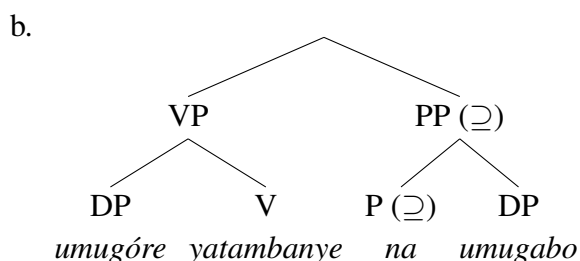
- (74) a. Umuryaango waanje urakúundana.
u-mu-ryaango u-aanje u-ra-kúund-an-a
AUG-3-woman 1-1SG.POSS 3S-DJ-love-COM-FV
‘The members of my family love each other.’
- b. Umugoré n’úmuhuúngu arakúundana.
u-mu-goré na u-mu-huúngu a-ra-kúund-an-a
AUG-1-woman PREP AUG-1-man 1S-DJ-love-COM-FV
‘The woman and man love each other.’
- c. Umugoré arakúundana n’úmuhuúngu.
u-mu-goré a-ra-kúund-an-a na u-mu-huúngu
AUG-1-woman 1S-DJ-love-COM-FV PREP AUG-1-man
‘The woman and man love each other.’

This idea is actually supported by the fact that *-an-* does not license the presence of a *na*-phrase in all contexts. In particular, the use of a *na*-phrase is ruled out if the verbal form with the *-an* marker has an antipassive reading (75a). This is shown in (75b), where the introduction of a *na*-phrase eliminates the antipassive reading of the verb.

- (75) a. Umwána yaatúkanye.
u-mu-ána a-a-túk-an-ye
AUG-1-child 1S-PST-insult-COM-PFV
‘A child insulted (some person)’
- b. Umwána yaatúkanye na Kéezá.
u-mu-ána a-a-túk-an-ye na Kéezá
AUG-1-child 1S-PST-insult-COM-PFV PREP Keeza
1. ‘A child and Keeza insulted each other.’
*2. ‘A child insulted Keeza.’

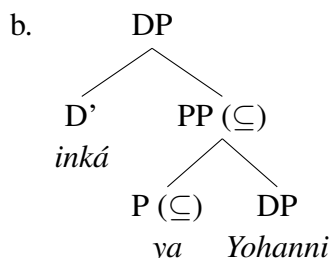
We could then propose that the comitative phrases compose with the VP in a manner similar to the examples above.

- (76) a. Umugóre yatambanye n’úmugabo.
u-mu-goré a-a-tamb-an-ye na u-mu-gabo
AUG-1-woman 1S-PST-dance-COM-PFV PREP AUG-1-man
‘A woman danced with a man.’



The same analysis applies to the preposition *-a* that introduces possessors of nouns. Notably, unlike in the previous structures, *-a* in possessive constructions expresses \subseteq relation instead.

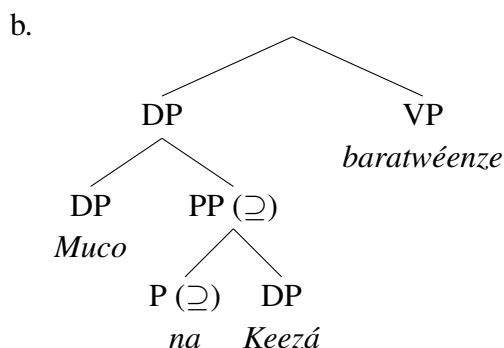
- (77) a. inká ya Yohanni
 i-n-ká i-a Yohanni
 AUG-9-cow 9-PREP Yohani
 ‘Yohani’s cow’



Keeping up with the assumption that *na* and *-a* are the same element, I propose that the concord marker on *-a* is due to the fact that it appears in the same DP phase as the head noun, which allows the agreement relationship to be established. *na*-phrases in the verbal domain, however, never attach to nouns; prepositional phrases only merge as adjuncts to VP, but they never occur in double object constructions, as shown above. Due to that, prepositions introducing additional verbal arguments can never enter into an agreement relationship with another noun, and a default form *na* arises instead.

Finally, this analysis can also be extended to the conjunctive uses of *na*. As shown in Section 4.1.1.3, *na* is a comitative coordinator that forms groups. I propose that in this case, *na* denotes the \supseteq relation. Thus, *na*-phrases in coordination express that the second conjunct is in the domain of the inclusion of the first conjunct. Informally, we can interpret it as if the first conjunct is a group largely determined by the entity expressed by the first conjunct, and that group also includes the entity expressed by the second conjunct. This proposal accounts for the comitative interpretation of the coordination in Kirundi, which is a welcome result.

- (78) a. Mucó na Kéézá baratwéenze.
 Mucó na Kéézá ba-a-ra-twéenze
 Muco PREP Keeza 2S-PST-DJ-laugh.PFV
 ‘Muco and Keeza laughed.’



The analysis spelled out in this section thus allows us to account for all the range of the uses of the preposition *na* in Kirundi, including its coordinative function. It thus seems there are reasonable grounds to assume that this element is non-vacuous semantically. This conclusion, however, has

significant consequences for the interpretation of the agent of passive diagnostic for the Vergnaud-licensing. As Sheehan and Van der Wal (2018) note, if the elements appearing on agents in passive construction have a argument-introducing function, the test under discussion essentially becomes insignificant to the discussion of nominal licensing. This is exactly the situation we observe in Kirundi.

This conclusion has significant consequences for the use of this specific licensing tests for all languages in general. First, the idea that the Kirundi preposition *na* has an argument-introducing function could only be confirmed through an in-depth investigation of its behavior. This in turn shows us that the agent of passive test for Vergnaud-licensing should not in generally be applied in languages before a thorough examination of the elements introducing agents in passive constructions. Furthermore, it should be noted that the analysis I adopt for Kirundi was originally suggested to be applicable for languages like English as well. If Franco and Manzini's (2017) approach to the semantics of prepositions is adopted on a universal level, then it follows that this specific test is not indicative of licensing in any language. Overall, it seems that the focus on the underlying functions of prepositions in languages of the world undermines the assumption that the agent of passive diagnostic is based on.

Crucially, even if we disregard this test for the sake of the discussion of abstract Case in Kirundi, we still do not get a unified picture based on the other diagnostics. As I show in details in Sections 4.2-4.4, the other tests do not align with each other, which further diminishes the assumption about their direct link with the nominal licensing mechanisms.

4.2 DP subject of a non-finite clause

As noted in Section 3.1, in a language abiding with the principles of Vergnaud-licensing overt subjects are ruled out in non-finite clauses where T is not a licensing head. In Kirundi, the presence of an overt subject is disallowed in the infinitival clauses in any structural position. (79) demonstrates that both preverbal and postverbal overt subjects cannot occur in the infinitival clauses in complement position.

- (79) a. *Nshaaka **Yóháani** gusoma igitabu.
 n-shaaka Yóháani ku-soma i-ki-tabu
 1SG.S-want Yohani 15/INF-read AUG-7-book
 Int.: 'I want Yohani to read a book.'
- b. *Nshaaka gusoma igitabu **Yóháani**.
 n-shaaka ku-soma i-ki-tabu Yóháani
 1SG.S-want 15/INF-read AUG-7-book Yohani
 Int.: 'I want Yohani to read a book.'

The same statement also applies to the infinitival clauses in the subject position. In (80), an overt nominal preceding the infinitive can only be interpreted as a vocative adjunct.

- (80) Keezá *(,) gukora amakósha ni bibi.
 Keezá *(,) ku-kora a-ma-kósha ni bi-bi
 Keeza 15/INF-make AUG-6-mistake COP 8S-bad

- *1. For Keeza, making mistakes is bad.
- 2. Keeza, making mistakes is bad.

The immediate conclusion that can be made based on these data is that in Kirundi the nouns cannot occur in the specifier of the non-licensing infinitival T head, and are thus subject to Vergnaud-licensing. However, this particular diagnostic was noted to face certain theoretical challenges in Sheehan and Van der Wal (2018).

One issue they point out concerns the fact that the availability of subject licensing is dependent on the type of the control clause. In obligatory control (OC) construction, where the controller must be in a local c-command relationship with the controllee, the two positions could be in different semantic relationship with each other. In EXHAUSTIVE OC clauses, the higher argument exhaustively determines the reference of the lower argument. PARTIAL OC constructions, on the other hand, allow for a superset reading of the lower position; an example of it is given in (81).

- (81) The chair₁ preferred [PRO₁₍₊₎ to gather at six].

This semantic distinction also reflect a syntactic difference between the two types of OC (Sheehan et al., 2018; Van Urk, 2010). In exhaustive OC, the subject has the properties of a trace; in partial OC clauses, however, the subject has its own features independent of the features of the controller and is arguably in a Vergnaud-licensed position. Crucially, in the latter case the ban on an overt referential subject cannot be attributed to the availability of a licensing head. Thus, in applying this diagnostic to any language, one needs to be sure that they examine exhaustive control structures, and not partial ones. At this stage, we do not have enough data to provide a full theoretical account for the Kirundi control structures, so the question of whether this issue could be affecting the results of this particular diagnostics remains open. Nevertheless, there are some additional considerations with respect to this test, both empirical and theoretical.

Kirundi data presents even more complication for the interpretation of this diagnostic, as the infinitives in certain aspects resemble nominalizations. As noted in Section 2, the form of the infinitival prefix *ku-* is homonymous with the nominal class 15 prefix *ku-*, which points to its nominal status. If infinitives are nominalizations, the question arises whether they have all the verbal projection of a regular verb in their structure. Initial data suggests that infinitives lack at least some of them. For example, infinitives, unlike finite verbs, cannot take perfective aspect suffixes, cf. (82) with (83). Given the reduced verbal structure of infinitives one cannot be sure if the unavailability of overt subject is due to the properties of the infinitival T or to some different structural aspects, such as the lack of an agent-introducing projection.

- (82) a. Nshaaka kwiiga.
 n-shaaka ku-iiga
 1SG.S-want 15/INF-study
 ‘I want to learn.’
 b. *Nshaaka kwiize.
 n-shaaka ku-iize
 1SG.S-want 15/INF-study.PFV
 Int.: ‘I want to have learned.’

- (83) a. Kagabo yiiga.
 Kagabo a-iiga
 Kagabo 1S-study
 ‘Kagabo studies.’
 b. Kagabo yiize.
 Kagabo a-iize
 Kagabo 1S-study.PFV
 ‘Kagabo has studied (today).’

Furthermore, some researchers have proposed that the Case-theory is inadequate to predict the distribution of subjects in non-finite clauses in general. Danon (2006) shows that in Hebrew indefinites which can appear in a variety of Caseless positions, are nevertheless banned from the position of the infinitival subject; this data thus supports the idea that the distribution of overt subjects is not related to Vergnaud-licensing but is driven by some separate grammar principles. Sundaresan and McFadden (2009) in the discussion of the free variation between overt DPs and PROs in the position of a subject of a non-finite clause in Tamil, show that the Case theory is unable to account for the presented data with or without theory-internal adjustments, and conclude that a separate account should be introduced.

Overall, it is hard to confidently state that this test indicates the presence of Vernaud-licensing in Kirundi until we know more about the nature of infinitival complements in general and more specifically about the properties of control clauses. This note becomes particularly important as we compare the result of this diagnostic with the other ones.

4.3 Agreement

Following the Case-by-Agree hypothesis (Chomsky, 2000, 2001), if a language with subject agreement can feature constructions with non-agreeing logical subjects, then it allows for non-licensed nominals. Turning to Kirundi, we find that parallel to Luganda it employs locative inversion, as well as object inversion and transitive expletive constructions. In all of these structures, the subject agreement on the verb is controlled by an element other than the logical subject of the sentence. Locative inversion is shown in (84b). In this sentence, the verb agrees not with the subject *umukoóbwa* ‘girl’ of class 1, but rather with the locative phrase *mu bumanuko* ‘in the south’ in the preverbal position.

- (84) a. Umukoóbwa aba mu bumanuko.
 u-mu-koóbwa a-ba mu bu-manuko
 AUG-1-girl 1S-live in 14-south
 ‘A girl lives in the south.’
 b. Mu bumanuko **ha**-ba u-mu-koóbwa.
 mu bu-manuko **ha**-ba u-mu-koóbwa
 in 14-south **16S**-live AUG-1-girl
 ‘In the south, lives a girl.’

(85) illustrates object inversion. In (85b), the subject agreement on the verb is controlled by the pre-verbal object *igitabu* ‘book’ of class 7, rather than by the logical subject *umukoóbwa* ‘girl’.

- (85) a. Umukoóbwa yasomye igitabu.
u-mu-koóbwa a-a-somye i-ki-tabu
AUG-1-girl 1S-PST-read.PFV AUG-7-book
‘A girl read a book.’
- b. Igitabu casomye umukoóbwa.
i-ki-tabu ki-a-somye u-mu-koóbwa
AUG-7-book 7S-PST-read.PFV AUG-1-girl
‘A girl read a book.’

Finally, (86b) shows a transitive expletive construction. In this sentence, the subject undergoes focus right-dislocation, and the subject agreement on the verb is class 16 instead, which Ndayiragije (1999) suggests to be controlled by an expletive *pro* in the subject position.

- (86) adopted from Ndayiragije (1999, p.435)
- a. Abáana báaranyóoye amatá.
a-bá-ana bá-a-ra-nyóoye a-ma-tá
AUG-2-children 2S-PST-DJ-drink.PFV AUG-6-milk
‘Children drank milk.’
- b. háanyóoye amatá abáana.
há-a-nyóoye a-ma-tá a-bá-ana
16S-PST-drink.PFV AUG-6-milk AUG-2-children
‘CHILDREN (not parents) drank milk.’

For all the listed constructions, Ndayiragije (1999) argues that the logical subject does not move to the Spec,TP position, occupying the specifier of an focus projection below T instead. His argument is two-fold. First, he shows that the logical subject occupying post-verbal position is always focused. One indication of that is that the verbs in inversion constructions obligatory use the conjoint morphology and not the disjoint marking (87). This indicates that in these structures, the focus marking is always on the postverbal subject and cannot be predicative.

- (87) adopted from Ndayiragije (1999, p.412)
- a. Ibitabo vyáguze Petero.
i-bi-tabo bi-á-guze Petero
AUG-8-book 8S-PST-buy.PFV Peter
‘PETER bought books.’
- b. *Ibitabo vyáraguze Petero.
i-bi-tabo bi-á-ra-guze Petero
AUG-8-book 8S-PST-DJ-buy.PFV Peter
Int.: ‘PETER bought books.’

He further shows that the element triggering the agreement on the verb occupies the Spec,TP position. First, the object movement in subject-object inversion does not exhibit the properties of

A'-movement (i.e., it does not trigger the choice of a negation marker used in constructions with A'-movement, this movement is clause-bound, etc.). Secondly, the preposed object behaves as a typical subject argument (i.e. it can be pro-dropped, can be clefted, and can be right-dislocated).

Taking on the assumption that agreement corresponds to licensing by the abstract Case, it thus seems that the subject in the inversion constructions is unlicensed, as it neither controls the subject agreement on the verb, nor does it behave as its object. Thus, following Diercks (2012) and Sheehan and Van der Wal (2018) it could be concluded that Kirundi also lacks abstract Case.

This conclusion, however, still faces certain theoretical issues. First, Diercks (2012) notes that even under the Case-by-Agree approach (Chomsky, 2000, 2001), it could still be explained how the subject gets licensed even when it does not trigger the agreement on the verb. For example, Carstens (2005) suggests that T agrees twice, both with the preposed phrase and the logical subject. Under this assumption, the logical subject would still be licensed through covert agreement with T despite not being the controller of the subject agreement. More theoretical possibilities arise if we adopt an approach that severs licensing from agreement in the spirit of the configurational theory of case assignment (Marantz, 2000). This approach does find support in some claims independently made for Bantu languages. In particular, Carstens (2005) proposes that agreement in Bantu languages tracks gender rather than case. If agreement and Case are independent, then this diagnostics essentially does not provide us with any information on the nature of licensing at all.

In sum, while this test points to the conclusion that Kirundi lacks Case, parallel to Luganda, it also seems that the interpretation of this test suggested in Sheehan and Van der Wal (2018) largely relies on the assumptions of the Case-by-Agree model (Chomsky, 2000, 2001). However, if the agreement is not defined on case features, as suggested in Carstens (2005), this test fails to speak either for or against Case features, contra Diercks (2012). This point becomes particularly relevant as we see a conflict between the results of the agreement diagnostics and the test discussed in the previous section. Under the assumptions in Diercks (2012) and Sheehan and Van der Wal (2018), the two tests should pattern in the same way, contrary to what we see. In the next section, I discuss the results of another diagnostic which is also formed on the Case-by-Agree model, and show that it raises concerns similar to the ones that were brought up in this section.

4.4 Activity

The Activity Condition states that a nominal that has already been licensed by a licensing head cannot be targeted for either ϕ -agreement or A-movement. If a language features constructions where the same nominal can appear in two different Case-licensed positions, it indicates that it does not follow the principles of Vergnaud-licensing. In this section I provide evidence that structures like that are licit in Kirundi, thus supporting the conclusion that it does not have abstract Case.

In Kirundi, some of the predicates that take a CP complement optionally allow for the raising of the embedded subject into the position of the matrix object. I exemplify this construction with the verb *gushaka* 'want'. This verb typically takes an infinitival complement when their matrix and embedded subjects are coreferential (88a); as shown in Section 4.2, embedded infinitives cannot have overt subjects (88b). The verb *want* can also take CP complements, as in (88c).

- (88) a. Nshaaka gusoma.
 n-shaaka ku-soma
 1 SG.S-want 15/INF-read
 ‘I want to read.’
- b. *Nshaaka umuhuúngu gusoma.
 n-shaaka u-mu-huúngu ku-soma
 1 SG.S-want AUG-1-boy 15/INF-read
 Int.: ‘I want the boy to read.’
- c. Nshaaka [kó umuhuúngu asoma igitabo].
 n-shaaka kó u-mu-huúngu a-soma i-ki-tabo
 1 SG.S-want that AUG-1-boy 1 S-read AUG-7-book
 ‘I want the boy to read a book.’

When the verb *want* takes a CP argument, it optionally allows for the raising of the matrix subject to the position between the matrix verb and the embedding complementizer (89).

- (89) Nshaaka **umuhuúngu** [kó ___ asoma igitabo].
 n-shaaka u-mu-huúngu kó a-soma i-ki-tabo
 1 SG.S-want AUG-1-boy that 1 S-read AUG-7-book
 ‘I want the boy to read a book.’

The claim that the extracted subject originates in the embedded clause is supported by the idiom tests. One of Kirundi idiomatic expressions is exemplified in (90).

- (90) Amaázi yareenze inkoombe.
 a-ma-ázi a-a-reenze i-n-koombe
 AUG-6-water 6S-PST-surpass.PFV AUG-10-shore
 1. ‘The waters overflowed the banks.’
 2. ‘The situation has gone overboard.’

This expression can be used to distinguish between raising and control constructions. In (91a), the verb *kurashobora* ‘be possible’ is compatible with both idiomatic and literal meanings, thus patterning like a raising verb. The verb *kwaanka* ‘refuse’, on the other hand, is only compatible with the literal reading, which is a typical behaviour of a control verb (91b).

- (91) a. Amaázi arashobora kureenga inkoombe.
 a-ma-ázi a-ra-shobo-ir-a ku-reenga i-n-koombe
 AUG-6-water 1S-DJ-be.possible-APPL-FV 15/INF-surpass.PFV AUG-10-shore
 1. ‘The water might overflow the banks.’
 2. ‘The situation might go overboard.’
- b. Amaázi aráanse kureenga inkoombe.
 a-ma-ázi a-rá-anse ku-reenga i-n-koombe
 AUG-6-water 1S-DJ-refuse-APPL-FV 15/INF-surpass.PFV AUG-10-shore
 1. ‘The water refused to overflow the banks.’
 2. *‘The situation refused go overboard.’

Having established this contrast between raising and control verbs, we can see that the hyper-raising construction in patterns together with the raising constructions in allowing for both readings of the embedded idiom, as shown in (92).

- (92) Nshaaka amaázi [kó ___ areenga inkoombe].
 n-shaaka a-ma-ázi kó a-a-reenga i-n-koombe
 1SG.S-want AUG-6-water that 6S-PST-surpass AUG-10-shore
 1. 'I want the waters overflowed the banks.'
 2. 'I want the situation to go overboard.'

Furthermore, the raised embedded object can also be promoted to the position of the matrix subject if the matrix verb is passivized (93); this fact thus indicates that the embedded subject raises into an argument position.

- (93) **Umuhuúngu** arashaakwa [kó ___ asoma igitabu].
u-mu-huúngu a-ra-shaak-u-a [kó a-soma i-ki-tabu]
 AUG-1-boy 1S-DJ-want-PASS-FV that 1S-read AUG-7-book
 'The boy is wanted to read a book.'

The idiom test also allows us to distinguish the raising of the embedded subject from the other types of movement out of the embedded clause. (94) shows that the object of the embedded clause can also appear in the position between the matrix verb and the complementizer, but only if the embedded verbs features an object marker of the corresponding class. The extraction of the embedded object is thus more similar to the topicalization, which obligatory triggers resumption (95).

- (94) Nshaaka **umwáana** [kó nyina a*(**mu**)zana ___].
 n-shaaka **u-mu-áana** kó nyina a-**mu**-zana
 1SG.S-want AUG-1-child that his.mother 1S-1O-bring
 'I want that his mother brings a child.'
- (95) Ico gitabu, Yóhaáni ya*(**gi**)somyé.
 i-ki-o ki-tabu Yóhaáni a-a-**gi**-somyé
 AUG-7-DEM 7-book Yohani 1S-PST-7O-read.PFV
 'This book, Yohani has read.'

Crucially, in sentences where the embedded object is moved out to the matrix clause headed by the verb *want*, the embedded clause loses its idiomatic meaning (96). This contrast between (92) on the one hand and (96) on the other thus indicates that the raising of the subject should not be viewed as a topicalization with the resumptive *pro* in the embedded clause.

- (96) Nshaaka inkoombe [kó amaázi azireenga ___].
 n-shaaka i-n-koombe kó a-ma-ázi a-zi-reenga
 1SG.S-want AUG-10-shore that AUG-6-water 6S-10O-surpass
 1. 'I want the waters overflowed the banks.'
 2. *'I want the situation to go overboard.'

Another potential case of hyper-raising is reported in Ndayiragije (2012). He notes that the subject of an embedded infinitive can A-move to the matrix Spec,TP in subject-object inversion. The baseline sentence is presented in (97a). This sentence uses a control verb *kuremera* ‘agree’ which takes two arguments: a subject and an infinitival complement. In (97b), the subject *Petero* undergoes A’-movement to the FocP underneath TP, in the way it was discussed in Section 4.3. The matrix Spec,TP then gets filled by the A-movement of the object of the embedded clause to that position.

(97) adapted from (Ndayiragije, 2012, p.291)

- a. Petero yaremeye [gusoma ico gitabo]
 Petero a-á-ra-remeye ku-soma i-ki-o ki-tabo
 Peter 1S-PST-DJ-agree.PFV 15/INF-read AUG-7-DEM 7-book
 ‘Peter agreed to read that book.’
- b. **Ico gitabo** caremeye [gusoma ____] Petero.
I-ki-o ki-tabo ki-áremeye gusoma Petero.
AUG-7-DEM 7-book 7S-PST-agree.PFV 15/INF-read Peter
 ‘PETER agreed to read that book.’

Although the acceptability of (97b) was not confirmed with the speakers I have worked with, the possibility of these constructions in the grammar of other speakers could provide further support to the idea that in Kirundi the movement from one licensed position to another is available.

In discussing parallel phenomena in other Bantu languages, Diercks (2012), following the proposal in Carstens (2005, 2011), suggests that the hyperraising constructions are available because Agree tracks gender rather than Case features. These features are formally different from each other: gender features are uninterpretable valued features, while Case features are uninterpretable unvalued features (see Pesetsky and Torrego, 2007 on the relation between interpretability and valuation of syntactic features). Carstens (2011) then proposes that the phrase could only be rendered inactive if it gets valued through agreement.

(98) Goal deactivation principle

Uninterpretable features are deactivated by valuation in the Agree relation.

hate (Carstens, 2011)

The fundamental difference of the gender features is that they come into the derivation already valued, and thus cannot get valued by other processes. Under the principle in (98), gender features thus cannot be deactivated, which allows nominals in Bantu to always be active for Agree.

However, as noted in the previous section, Agree being based on gender features does not necessarily entail the lack of the nominal licensing system in a given language. If the agreement does not track Case, this diagnostics does not tell us anything about the nature of it. Furthermore, more theoretical complications arise as we examine the reason why effects associated with the Activity Condition exist in the first place. This question was examined in details in Nevins (2004). He concludes that the structures posited to be ruled out by the Activity Condition can also be excluded based on other independently suggested locality principles. Addressing the A-movement out of finite clauses, he proposes that in languages like English this phenomenon can be explained

by the Phase Impenetrability Condition (PIC) (Chomsky, 2001) without appealing to the Activity Condition.

(99) Phase Impenetrability of CP:

No phrases in the complement of C^0 may Move to or Agree with phrases higher than CP.

To account for the availability of hyperraising in languages like Brazilian Portuguese, he proposes that PIC some languages can manage to avoid the embedded subject being trapped by the PIC, thus rendering structures previously described as violating the Activity Condition. If the Activity Condition is the reflect of the locality effects, rather than of the featural properties of nominals, then this diagnostics loses its power in the discussion of licensing in a given language. Taking this into account, we thus have to conclude that the Activity diagnostic cannot provide us with unambiguous results either.

Summarizing the results of the Vergnaud-licensing tests in Sections 4.2-4.4, we see an inconsistency between them; the diagnostic based on the availability of overt subject in non-finite clauses indicates that Kirundi has abstract Case features, while the tests based on the properties of agreement show the opposite. This contrast between the diagnostics suggests that they do not reflect on the same properties of the grammar, contra the assumptions in Sheehan et al. (2018). Further discussion has also shown that the results of all of the diagnostics could potentially be reinterpreted if the assumptions underlying each of them are proven to be wrong based on language specific properties. In the next section, I show that the incongruity of the Case diagnostics also cannot be explained by the properties of the augment, as it was suggested for Luganda in Sheehan and Van der Wal (2018).

4.5 The role of the augment

In Section 3.2, it was noted that the presence of the Vergnaud licensing could be further obstructed by the existence of other licensing mechanisms, like in Zulu. In this section, I demonstrate that the augment, which is argued to act as a licensing head in Zulu and Lubukusu (Halpert, 2015; Sheehan & Van der Wal, 2018), does not have this function in Kirundi, which is evident from its distribution, and thus cannot affect the results of the Case diagnostics.

The augment in Kirundi is generally present on most proper nouns in citation forms. There is a subset of nouns that are inherently augmentless and never take on an augment. It mostly includes referential expressions, such as names (100a) and kinship terms (100b)-(100c).

- | | | | |
|-------|---------------------------------|-------------------------------------|---|
| (100) | a. Kagabo
Kagabo
'Kagabo' | b. mawe
my.mother
'my mother' | c. mu-saz-aanje
1-brother-1SG.POSS
'my brother' |
|-------|---------------------------------|-------------------------------------|---|

The idea about the augment being a licensing head predicts that the nominals that are inherently augmentless will be more limited in their distribution compared to the augmented nouns; for example, we could expect that they could only be used ν P-internally, like augmentless nouns in Zulu.

However, we do not find any differences like that; both augmented proper names and augmentless referential expressions can occur in all possible argument positions.

Furthermore, under the assumption that augment has a licensing function, we would expect that it could be omitted if another nominal licenser is available, for example, *v* or T head. Crucially, we do not find any examples that could lead us to posit that, as augmentless nouns without any additional modifiers cannot appear in argument positions in Kirundi. To see this, let us look at the contexts where augmentless arguments in languages like Zulu and Xhosa usually appear. As noted in Halpert (2015), augmentless common nominals are limited in their interpretation and typically are used as NPIs in downward-entailing contexts. Thus, these contexts would be the most likely to feature augmentless nouns in other Bantu languages. Notably, in Kirundi, we do not find NPI augmentless nouns (101a); in fact, specific expressions used as NPIs in Kirundi also bear an augment (101b). It thus seems that even if we control for the interpretation of the noun, they still cannot be used without the augment in the argument position.

- (101) a. Keeza ntiyahaye *(a)maazi *(i)bitungwa
 Keeza nti-a-a-haye *(a)-ma-azi *(i)-bi-tungwa
 Keeza NEG-1S-PST-give.PFV AUG-6-water AUG-8-animal
 ‘Keeza didn’t give water to the animals.’
 b. Ntushobora gutaambuka **ahaantu** **na** **hamwe**.
 nti-u-shobora ku-taambuka **a-ha-ntu** **na** **ha-mwe**.
 NEG-2SG.S-be.able 15/INF-step AUG-16-thing even 16-one
 ‘You can’t walk anywhere’ (due to snow).

Rather, most contexts where augment is dropped include a certain element on the left periphery of the noun. For example, the augment is obligatorily dropped in DPs with demonstratives (102a) or the negative prefix (102b).

- (102) a. iki (*i)giti
 i-ki (*i)-gi-ti
 AUG-7 AUG-7-tree
 ‘this tree’
 b. Nta (*i)nkoko zihari
 Nta (*i)-n-koko zi-ha-ri.
 NEG AUG-10-chicken 10S-16O-COP
 ‘There are no chickens.’

The augment is also dropped in contexts where the nominal is immediately preceded by a coreferential expression. The sentence in (103) exemplifies a nominal construction similar to the English *We, the linguists*. In these contexts, the speakers prefer the augment on the second noun to be missing.

- (103) Yohani **mwiigiisha** ntaneezérewé
 Yohani **mu-iigiisha** nti-a-neezérewé
 Yohani **1-teacher** NEG-1S-be.happy
 ‘Yohani the teacher is not happy.’

In a similar manner, the presence of the augment can also be affected by a preceeding pronoun. In (104a), a copular construction is shown; in this sentence, the augment on the element on the right of the copula *ni* is obligatory. However, when there is a pronominal clitic on the copula, as in (104b), the following nominal must be augmentless.

- (104) a. Yohani ni *(u)muntu mwiza
 Yohani ni u-mu-ntu mu-iza
 Yohani COP AUG-1-person 1-good
 ‘Yohanni is a good person.’
 b. Yohani ni~~we~~ (*u)muntu mwiza
 Yohani ni-~~we~~ u-mu-ntu mu-iza
 Yohani COP-**3SG** AUG-1-person 1-good
 ‘Yohanni is a good person.’

The data on the distribution of the augment then seems to point out that its presence is linked to the nominal reference rather than the nominal licensing. While a full account on the distribution of the augment is outside the scope of this paper, the upshot of this section is that the unexpected results of the Vergnaud-licensing diagnostics can hardly be attributed to the nature of the augment, like it is can be done for Zulu (Halpert, 2015) or Luganda (Sheehan & Van der Wal, 2016, 2018).

5 Conclusion

In this paper, I examined the four diagnostics which have been previously used in Sheehan and Van der Wal (2018) and Diercks (2012) to argue for either presence or absence of Vergnaud-licensing in different Bantu languages and concluded that these tests cannot provide us with a unified view of the nominal licensing in Kirundi. First, I have established that the properties of the preposition *na* entail that the passive of agent diagnostic is not indicative of the properties of nominal licensing in Kirundi in general. I have also shown that the proposal for the semantics of prepositional elements suggested in Franco and Manzini (2017) undermines this specific test on a cross-linguistic level. Notably, even if we discard this diagnostic, there is still a mismatch between the results of test (i) on the one hand, and tests (ii)-(iii) on the other, as shown in Table 4 below. This pattern is not predicted under the typology proposed in (Sheehan & Van der Wal, 2018).

	Makhuwa	Luganda	Kirundi
(i) Non-finite clauses	+	-	+
(ii) Agreement	+	-	-
(iii) Activity	+	-	-
(iv) Passive agent	+	-	n.a.

Table 4: Case diagnostics (revised)

The discussion of each of the diagnostics has further shown that all of them resist a unequivocal interpretation. In general, either the account positing the presence of the Vergnaud-licensing or its

absence both need to postulate additional assumptions in order to account for all the data; due to that, it becomes essentially impossible to choose between them without being unprejudiced.

The data in this paper thus raises a question of whether the set of diagnostics for Vergnaud-licensing proposed in Sheehan and Van der Wal (2018) are indicative of the same underlying grammar principles. As pointed out above in Section 3.1, the fact that they discard some diagnostics but not the other based on whether they provide consistent result across different analytical languages already pointed to a possibility that these tests are inherently not connected to each other, contrary to what is predicted by the Case Theory. Kirundi provides a stronger support to this, showing that even the Case diagnostics found to be reliable for some languages may not pattern together in others.

In the end, the data in Kirundi suggests that the differences in the properties of Vergnaud-licensing across the Bantu languages are not binary, as proposed in Diercks (2012). Although one could potentially try to propose a more intricate system of parameter, that would allow us to capture the data from languages like Kirundi, I suggest that a more theoretically reasonable approach would be to reexamine our point of view and discard the notion of Case in describing to nominal licensing in general. While Sheehan and Van der Wal (2018) make a similar claim based on the fact that we see effects of Vergnaud-licensing in languages without morphological case, the data in Kirundi shows that this move is not a mere theoretical preference, but an empirical necessity, as we see the theoretical models based on the notion of Case making predictions which are not equally borne out in certain languages. This idea matches the proposal in Preminger (2017a, 2017b) who shows that neither of the existing theories of case-assignment are able to predict the properties of nominal licensing in general. In the end, the data in this paper thus provides a valid empirical support to the idea that the system of nominal licensing in Bantu should be modeled independently from the Case-based theories of licensing.

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