

**Anaphora in the African Languages  
Questionnaire Response for Kirundi, Burundi dialect, version 1.3**

The language reported on is Kirundi, as it is spoken in Burundi. Kirundi is Ethnologue code RUN. It's also known as Rundi or Ikirundi, and is also spoken in Rwanda, Tanzania and Uganda.

The consultant, Juvénal Ndayiragije, is an Associate Professor of French Linguistics at the University of Toronto and has a PhD in linguistics from Montreal-UQAM. He is intimately familiar with GB syntax and has some experience with typological linguistics (especially with Kwa and Bantu languages), and formal semantics.

His parents spoke Kirundi natively and at home. He learned Kirundi and French in school. He is reporting on his own judgments.

Contact Information:

Juvénal Ndayiragije  
Department of Humanities  
University of Toronto  
Scarborough Campus  
1265 Military Trail  
Toronto, Ontario M1C 1A4

[juvenal@utsc.utoronto.ca](mailto:juvenal@utsc.utoronto.ca)

## PART 2 An inventory of reflexive and reciprocal strategies

### 2.1 Coreference in a single clause

2.1.1 "Primary" reflexive strategy - Translate the following example to your language, and indicate the element (if any) that expresses the reflexive relationship. If the verb *see* is somehow unusual in your language, use a more typical transitive verb instead.

- A1) John saw himself.  
Yohaáni a-à-i-bon-ye STRATEGY A  
John 3s-pst-RFM-saw-pf  
"John saw himself"

2.1.2 Is there another way, or are there other ways, to express coreference in A1 (that is, with the verb see held constant)?  
Comment: No

2.1.3. Do any of the following (or any other verbs you can think of) involve a strategy that you have not listed already? If so, give an example now and label it with a new name (or letter).

- A2a) John washed himself.
- i. Yohaáni a-a-ôg-ye. ?OBJECT-NULL  
John 3s-pst-wash-pf  
"John washed/swam"
- ii. Yohaáni a-a-i-ôg-ye. STRATEGY A  
John 3s-pst-RFM-wash-pf  
"John washed himself/\*swam"

Comment: Sentences (i-ii) are actually intransitive; hence, no null object involved in (i), strictly speaking. Indeed, (i) becomes ill-formed if an overt direct object is merged in as (iii) shows. Note also that there is no hidden causative extension –i- in the verb morphology of (ii). Likewise, (ii) crashes if the reflexive anaphor is replaced by a direct object pronoun, as shown by (iv):

- iii.\* Yohaáni a-a-ôg-ye Mariya.  
John 3s-pst-wash-pf  
"John washed Mary"
- iv.\* Yohaáni a-a-mu-ôg-ye.  
John 3s-pst-her-wash-pf  
"John washed her"

Comment: The presence of the reflexive anaphor in (ii) is linked to inalienable possession. As a matter of fact, (iii) becomes well-formed if the direct object refers to body parts as shown in (v).

- v. Yohaáni a-a-ôg-ye amabóko/amaguru/umutwe.  
John 3s-pst-wash-pf arms/legs/head  
"John washed his arms/legs/head"

Furthermore, Kirundi verbs of the *wash*-type allow reflexivization and body parts objects as in (ii) and (v) while those of the *dress*-type don't, as shown by the ungrammaticality of (vii) and (viii):

vi.	Yohaáni John “John dressed”	a-a-ambar-ye. 3s-pst-dress-pf	?OBJECT-NULL
vii.*	Yohaáni John “John dressed himself”	a-a-i-ambar-ye. 3s-pst-RFM-dress-pf	STRATEGY A
viii.*	Yohaáni John “*John dressed his head’	a-a-ambar-ye 3s-pst-dress-pf	umutwe. head

Finally, dress-type verbs may take a direct object to convey the “wear” meaning as in (ix):

ix.	Yohaáni John “John was wearing shoes’	a-a-ambar-ye 3s-pst-dress-pf	ibirato. shoes
b)	Mary cut herself. Mariya Mary “Mary cut herself”	a-a-i-kat-ye. 3s-pst-RFM-cut-pf	
c)	John is ashamed of himself. Yohaáni John “John is ashamed of himself”	a-a-i-téer-i-ye 3s-pst-RFM-throw-caus-pf	isóni shame
d)	John killed himself. Yohaáni John “John killed himself”	a-a-i-îc-ye 3s-pst-RFM-kill-pf	
e)	We hate ourselves. (tweebwé) (we) “We hate ourselves”	tu-ø-ra-i-ank-a 1pl-pres-ra-RFM-hate-ipf	

Comment: Examples (b-e) use STRATEGY A, as illustrated below:

2.1.3 Obliques and other argument types - Many languages use a different coreference strategy for oblique arguments. Does yours?

Comment: No.

A3

ai.	Yohaáni John “John sent a letter to Mary”	a-a-rungik-ir-ye 3s-pst-send-appl-pf	ikete letter	Mariya Mary	DATIVE
aii.	Yohaáni John “John sent himself a letter”	a-a-i-rungik-ir-ye 3s-pst-RFM-send-appl-pf	ikete. letter		STRATEGY A

- bi. Yohaáni a-a-gur-ir-ye imodoká Mariya GENITIVE/DATIVE  
 John 3s-pst-buy-appl-pf car Mary  
 “John bought a car from/for Mary”
- bii. Yohaáni a-a-i-gur-ir-ye imodoká STRATEGY A  
 John 3s-pst-RFM-buy-appl-pf car  
 “John bought a car for himself”
- ci. Yohaáni a-a-suk-ye amâzi ku bantu  
 John 3s-pst-pour-pf water on people  
 “John poured water on people”
- cii. Yohaáni a-a-i-suk-ye-ko amâzi STRATEGY A  
 John 3s-pst-RFM-pour-pf-on water  
 “John poured water on himself”

Comment: The PP in A3cii is subcategorized. There are two other PPs that function as true arguments: those introduced by mu “in” and i “at”. An illustration is given in (ciii).

Reflexivisation produces the effet P-incorporation seen in (cii) as illustrated by (civ).

- ciii. Yohaáni a-a-suk-ye amâzi mu mpuzu / i muhira  
 John 3s-pst-pour-pf water in clothes / at home  
 “John poured/dropped water into clothes / at home”
- civ. Yohaáni a-a-i-suk-ye-mwo amâzi STRATEGY A  
 John 3s-pst-RFM-pour-pf-on water  
 “John poured/dropped water into himself”

As for prepositional adjuncts and adjuncts more generally, they use strong pronoun forms as in (d’). For clarity purpose, the latter will be described in section 2.2.

- d. Mariyá a-a-bon-ye igitabo inyuma ya Yohaáni  
 Mary 3s-pst-see-pf children the-behind of John  
 “Mary saw a book behind John”
- d'. Mariyá a-a-bon-ye igitabo inyuma y-îwe STRONG PRONOUN  
 Mary 3s-pst-see-pf children the-behind of-her/him  
 “Mary saw a book behind her/him” (her/him=Mary or X”)

(A4) Also consider things like experiencer subject verbs, non-nominative subjects, etc., which have unusual argument structures in many languages. Some verb meanings you might try:

Comment: All involve STRATEGY A

- a. Zita a-ø-ra-i-kund-a  
 Zita a-pres-ra-RFM-like-ipf  
 “Zita likes herself”
- b. Zita a-ø-ra-i-téer-a ubwôba  
 Zita a-pres-ra-RFM-throw-ipf fear  
 “Zita scares herself” (Lit: “Etta throws fear to herself”)
- c. Zita a-ø-ra-i-tiny-a

Zita a-pres-ra-RFM-be:afraid-ipf  
 "Zita is afraid of herself"

2.1.5 Person and number - Some languages use different strategies depending on person or number.

Consider the preceding sentences with first and second person subjects, and also with plurals. Do any of these allow the use of a strategy we have not yet seen?

Comment: Neither Person nor Number specifications trigger new strategies.

- A5a. N-à-i-bon-ye  
 1s-pst-RFM-see-pf  
 "I saw myself"
- b. u-à-i-kat-ye (accidentally or not)  
 2s-pst-RFM-cut-pf  
 "You cut yourself"
- c. tu-zoo-ku-i-og-a  
 1pl-fut-inf-RFM-wash-ipf  
 "We will wash ourselves"
- ci. tu-zoo-ku-og-a  
 1pl-fut-inf-wash-ipf  
 "We will wash ourselves"
- d. mu-zoo-ku-i-fash-a  
 2pl-fut-inf-RFM-help-ipf  
 "You will help yourselves"

Note that the first 3 sentences above may also take a body part object as shown below:

- e. N-à-i-bon-ye amaguru gusa  
 1s-pst-RFM-see-pf legs only  
 "I saw only my legs"
- f. u-à-i-kat-ye urutoki (accidentally or not)  
 2s-pst-RFM-cut-pf finger  
 "You cut your finger"
- g. tu-zoo-ku-i-og-a umubiri wose  
 1pl-fut-inf-RFM-wash-ipf body all  
 "We will wash our entire body"

2.1.4 Strategies for other clausemate environments.

Comment: The –NYÉNE STRATEGY: a combination of a strong pronoun form and –NYÉNE. This strategy is used only for emphasis.

- |       |        |                            |              |                           |
|-------|--------|----------------------------|--------------|---------------------------|
| (i)   | Mariya | a-à-tamb-ye.               |              | INTRANSITIVE              |
|       | Mary   | 3s-pst-dance-pf            |              |                           |
|       |        | "Mary danced"              |              |                           |
| (ii)  | Mariya | a-à-i-kat-ye               | wé-nyéne.    | STRATEGY A+NYÉNE STRATEGY |
|       | Mary   | 3s-pst-RFM-cut-pf          | 3sg-NYÉNE    |                           |
|       |        | "Mary HERSELF cut herself" |              |                           |
| (iii) | Mariya | wé-nyéne                   | a-à-tamb-ye. | -NYÉNE STRATEGY           |

Mary            3sg-NYÉNE    3s-pst-dance-pf  
 “Mary herself danced”

Note that in non-reflexive sentences, the pronoun-NYENE phrase is always adjacent to the NP it emphasizes if it,s not a coargument (see section C). Dislocation of the two leads to less acceptability as in (iv-v).

- (iv)\*    Mariya            a-à-tamb-ye    wé-nyéne.                            -NYÉNE STRATEGY  
           Mary                3s-pst-dance-pf      3sg-NYÉNE  
           “Mary danced herself”
- (v)\*    Mariya            a-à-ri-ye        ifi            wé-nyéne.                            -NYÉNE STRATEGY  
           Mary                3s-pst-dance-pf      fish      3sg-NYÉNE  
           “Mary ate fish herself”

(a) Is there any strategy which is only possible with some special aspectual class of a verb?  
 Comment: No. STRATEGY A is the only possibility for examples A6 below:

A6a) Peter knows himself.

Peetéro            a-ra-i-zi  
 Peter                3s-pres-RFM-know  
 “Peter knows himself”

b) Peter (habitually) criticizes himself.

Peetéro            a-ra-i-gay-a  
 Peter                3s-pres-RFM-dislike-ipf  
 “Peter dislikes himself”

c) Peter is likely to praise himself.

Peetéro            a-ra-i-shiimir-a  
 Peter                3s-pres-RFM-praise-ipfef  
 “Peter praises himself”

(b) Do quantificational constructions involve a separate strategy?  
 Comment: No. They too use STRATEGY A.

- A7    a.            Umuhuúngu    weése a-à-i-raab-a  
           Boy                every    3s-pst-RFM-look-ipf  
           “Every boy looked at himself”
- b.            Abagoré        boóse ba-à-i-bwir-ye            Yohaáni  
           women            all        3p-pst-RFM-tell-pf      J.  
           “All women talked about themselves to John”  
           “All women figured out John by themselves”
- c.            umwârimú      weése a-à-i-erek-ye            abavyêyi.  
           Teacher            every    3s-pst-RFM-show-pf      parents  
           “Every teach introduced himself to parents”
- d.            abâna            bake    gusa    ba-ra-i-fash-a  
           Children            some    only    3p-pst-RFM-help-ipf  
           “Some children only help themselves”

(c) If your language has a system of grammaticized honorifics, do some types of honorific allow a strategy that has not been listed yet?

Comment: Kirundi doesn't have grammaticized honorifics. It uses plural agreement markers or pronouns instead, and the latter do not instantiate any new strategy.

(d) Experiment with placing both coreferring arguments in various types of subordinate clauses, as your language allows. For example, consider tensed complements, subjunctives, infinitivals, purpose clauses, or any other embedding construction your language provides.

A9a)

b) Sol required that Alice praise herself.

Solo a-saba ko Alice a-i-shiimir-a  
S 3s-ask that A. 3s-pres-RFM-praise-ipfef  
"Solo asks that Alice praise herself"

c) Sol thought Alice should praise herself.

Solo a-ibajije ko Alice a-o-i-shiimir-a  
S 3s-thought that A. 3s-cond-RFM-praise-ipfef  
"Solo thought that Alice should praise herself"

d) Sol asked Alice to praise herself.

Solo a-savye Alice ku-i-shiimir-a  
S 3s-asked A. Inf-RFM-praise-ipfef  
"Solo asked Alice to praise herself"

e) Sol wants to praise himself.

Solo a-shaka ku-i-shiimir-a  
S 3s-asked Inf-RFM-praise-ipfef  
"Solo wants to praise himself"

f) Sol expects Alice to praise herself.

Solo a-rindiriye ko Alice a-i-shiimir-a  
S 3s-wait that A. 3s-RFM-praise-ipfef  
"Solo is waiting for Alice to praise herself"

g) Sol heard Alice praising herself.

Solo a-umvise Alice a-i-shiimir-a  
S 3s-hear A. 3s-RFM-praise-ipfef  
"Solo heard Alice praising herself"

## 2.2 Ordinary (potentially independent) pronouns

2.2.1 First, show that the pronouns can be independent by using them in a sentence where they do not have an antecedent.

A10a. n-à-hámagar-ye Yohaáni mu gitôndo. A-à-bon-ye Leila  
1s-pst-call-pf John in morning he-pst-see-pf Leila  
"I called John this morning. He saw Leila".

- b. Yohaáni a-ri hé? N-à-mu-bon-ye ku isokó.  
 John 3s-be where 1s-pst-him-see-pf on market  
 “Where is John? I saw him in the market”
- c. Tu-à-ku-bon-ye. (Wewé) w-à-tu-bon-ye?  
 1pl-pst-2sg-see-pf You.sg 2s-pst-1pl-see-pf  
 “We saw you. Did you see us?”

2.2.2 If your language has more than one type of pronouns (e.g., null, clitic and nonclitic pronouns, strong, or stressable pronouns, etc.), list each type with examples.

Comment: Kirundi has both clitic and nonclitic pronouns.

Clitic pronouns appear in three different environments: (i) as subject markers, (ii) as object pronouns, and (iii) as possessive pronouns introduced by the genitive marker á.

<u>Person</u>	<u>Number</u>	<u>Subject</u>	<u>Direct/Indirect Obj</u>	<u>Possessive pronouns</u>
1 <sup>st</sup>	Sg	n-	-n-	-anje
2 <sup>nd</sup>	Sg	u-	-ku-	-aawe
3 <sup>rd</sup>	Sg	a-	-mu-	-îwe
1 <sup>st</sup>	Pl.	tu-	-tu-	-âcu
2 <sup>nd</sup>	Pl.	mu-	-ba-	-ânyu
3 <sup>rd</sup>	Pl.	ba-	-ba-	-âbo

Subject and Obj clitics are illustrated in 10(a-c). The following examples illustrate Possessive clitics (note the tonal change on the genitive marker, a trivial matter for the present purpose):

- (i) ibitabo bi-a Yohaáni  
 books pl-of John  
 [lit: “books the-of John”]  
 “John’s books”
- (ii) ibitabo bi-anje/-aawe/îwé/-âcu  
 books pl-of:me/-of:you/-of:his/-of:us  
 “my/your/his/our books”

Nonclitic pronouns are:

<u>person</u>	<u>singular</u>	<u>plural</u>
1 <sup>st</sup>	jeewé	tweébwe
2 <sup>nd</sup>	wewé	mweébwe
3 <sup>rd</sup>	wé	bó

Their distribution is similar to that of full NPs. Thus, they may appear in (i) subject and object positions, with a specificational focus effect, or (ii) in complement of P.

- (i) (Wewé) w-à-tu-bon-ye (tweebwé)?  
 you 2s-pst-1pl-see-pf us  
 “(You specifically), did you see us?”
- (ii) Yohaáni a-à-gi-ye kubera jeewé

John            3s-pst-go-pf    because        you  
 “John left because of you”

Note that the subject-verb agreement marker is mandatory in (i-ii), irrespective of the occurrence of a strong pronoun subject (i) or a full DP (ii). On the other hand, object clitic in (i) may be omitted in the presence of the strong object pronoun and vice versa. In my view, cooccurrence of object clitic and lexical object or strong pronoun object is an instance of right/left-dislocation. As shown in (iii), clitic-doubled strong pronoun object may be left-dislocated, but non-doubled ones may not (iv\*). Same with clitic-doubled lexical objects.

- (iii) a.        (tweebwé)    (wewé)        w-à-tu-bon-ye ?  
               us            you            2s-pst-1pl-see-pf  
               “(As for us), (you specifically), did you see us?”
- b.        (wewé) (tweebwé)    w-à-tu-bon-ye ?  
               you    us            2s-pst-1pl-see-pf  
               “same”
- (iv) a.\*        (tweebwé)    (wewé)        w-à-bon-ye ?  
               us            you            2s-pst-see-pf
- b.\*        (wewé)        (tweebwé)    w-à-bon-ye ?  
               you            us            2s-pst-see-pf

It follows that object clitic and lexical object or strong pronoun object are in complementary distribution.

2.2.3 Null arguments - If your language allows argument drop (null pronouns, or prodrop) as a pronominalization strategy in simple (single clause) sentences, then name it here as an additional pronominalization option.

Comment: Kirundi is indeed a pro-drop language. Subjects and objects may be dropped, but not object of P (10f\*), unless a resumptive Det –o is merged with P and P is incorporated on the verb (10g).

Comment: Note that resumption and P-incorporation are mandatory with overt object clitic as well, or reflexive marker (10h). (10i) illustrates strong reflexive form strategy.

- A10 d.        a-à-ri-ye        ifí  
               3s-pst-eat-pf    fish  
               “He/she ate fish”
- e.        Haári a-à-ri-ye.  
               Henry 3s-pst-eat-pf  
               “Henry ate (something/\*it)”
- f. \*        Haári a-à-shir-ye        ku.  
               Henry 3s-pst-put-pf        on  
               “Henry dressed”
- g.        Haári a-à-shir-ye-ko.  
               Henry 3s-pst-put-pf -on  
               “Henry dressed”

- h. Haári a-à-ku/i-shir-ye-ko.  
Henry 3s-pst-2s/refl-put-pf-on  
“Henry dressed you / dressed himself”
- i. Haári a-à-shir-ye-ko wé-(nyéne).  
Henry 3s-pst-put-pf-on him(self)  
“Henry put him(self)”

Comment: *nyéne* may be attached to a nominal without the strong pronoun to convey the meaning of English *very* as in *uno mwána nyéne* /this-child-nyene/ “this very child”.

#### 2.2.4 The use of otherwise independent pronouns for clausemate anaphora

(A10j-q) are ungrammatical if weak pronoun *mu* “him”=Ali. More generally, object clitics are never bound locally. On the other hand, (A10r-s) allow coreference between Ali and the strong pronoun *wé* “him”.

#### A10

- j. Ali a-á-mu-shiim-ye.  
Ali 3s-pst-him-praise-pf  
“Ali praised him”
- k. Ali a-á-mu-kund-ye.  
Ali 3s-pst-him-like-pf  
“Ali liked him”
- l. Ali a-á-mu-bon-ye.  
Ali 3s-pst-him-see-pf  
“Ali saw him”
- m. Ali a-á-mu-vug-ish-ye.  
Ali 3s-pst-him-talk-caus-pf  
“Ali talked to him”
- n. Ali a-á-mu-rungik-ir-ye igitabo.  
Ali 3s-pst-him-send-app-pf book  
“Ali sent a book to him”
- o. Ali a-á-mu-fash-ye.  
Ali 3s-pst-him-help-pf  
“Ali helped him”
- p. Ali a-á-mu-tangaz-ye.  
Ali 3s-pst-him-surprise-pf  
“Ali surprised him”
- q. Ali a-á-mu-gur-ir-ye igitabo.  
Ali 3s-pst-him-praise-pf book  
“Ali bought a book for him”
- r. Ali a-á-andik-ye igitabo kuri wé.  
Ali 3s-pst-write-pf book on 3sg  
“Ali wrote a book about him (him=Ali or X)”
- s. n-á-toor-ye na Ali kubéra wé.  
1s-pst-find-pf with Ali because him  
“I played with Ali because of him (him=Ali or X)”

**2.3 Reciprocal Readings:** The previous sections asked about strategies for reflexive coreference. We now consider reciprocals.



ungrammaticality of (d'-e'):

- di. abapâtîri w̃ ba-à-umv-ye amakuru kuri bo  
 priests 3pl-pst-hear-pfnews on them  
 “The priests heard news on/about them (them = priests or X)”
- dii. \* abapâtîri w̃ ba-à-umv-an-ye amakuru (kuri bo)  
 priests 3pl-pst-hear-RCM-pf news (on them)  
 “The priests money each other”
- ei. abapâtîri ba-à-sig-ye udushimwe imbere ya bo  
 priests 3pl-pst-leave-pf presents in:front of them  
 “The priests left presents in front of them (them = priests or X)”
- eii. \* abapâtîri ba-à-sig-an-ye udushimwe imbere (ya bo)  
 priests 3pl-pst-leave-RCM-pf presents in:front of them  
 “The priests left presents in front of each other”

Comment: For all those adjuncts, periphrastic constructions of the *one P the other*-type are used instead:

- f. Shira izo imodoka imwé imwé imbere y'iyindi.  
 Put those cars one one behind of-the other  
 “Park those cars one behind the other”
- g. Manika ayo mafoto imwé imwé munsu y'iyindi  
 hand those pictures one one under of-the other  
 “Hang those pictures each one under the other.”

Comment: reduplication of *imwé* “one” is not mandatory. When applied, it contributes strong distributivity, along the lines of English *each* as opposed to *one*.

2.3.4 Other persons and numbers, etc. If another, so far unknown strategy is used in some persons or numbers, or special aspectual classes etc., name it here.

- A13 a. tu-á-bon-an-ye.  
 1p-pst-see-RCM-pf  
 “we saw each other”
- b. mu-fash-an-i-e.  
 2p-help-RCM-caus-sub  
 “You must help each other”
- c. tu-zoo-oog-i-an-i-a.  
 1p-fut-wash-caus-RCM-caus-ipf  
 “we will wash each other”
- d. ba-kunda ku-tuk-an-a.  
 3p-like Inf-insult-RCM-ipf  
 “they like to insult each other”

- e. abahuúngu ba-inshi ba-à-timb-an-a.  
 3p-like agr-many 3p-pst-kick-RCM-ipf  
 “Many boys kicked each other”

Comment: Sentence (c) contains two copies of the causative marker around the reciprocal. This is a phonological filter which also occurs with applicatives, but has no semantic effect and has nothing to do with the fact that “wash” is intransitive. Transitive verbs do show reduplication.

2.3.5 Other clause types, and other strategies: Briefly consider various types of reciprocal embedded clauses; if a new coreference strategy can be used with some of them, name it here.

A14a) Sol says that the girls love each other.

Solo a-vuze ko abo bakobwa ba-kund-an-a.  
 S 3sg.-said that those girls 3p-like-RCM-ipf  
 “Solo said that those girls like each other”

b) Sol required that the girls praise each other.

Solo a-savye ko abo bakobwa ba-kund-an-a.  
 S 3sg.-require that those girls 3p-like-RCM-ipf  
 “Solo required that those girls like each other”

c) Sol thought the girls should praise each other. NO NEW STRATEGY HERE

Solo a-ibajje ko abo bakobwa ba-kund-an-a.  
 S 3sg.-think that those girls 3p-like-RCM-ipf  
 “Solo thought that those girls like each other”

d) Sol asked the girls to praise each other.

Solo a-savye abo bakobwa ku-kund-an-a.  
 S 3sg.-ask those girls Inf-like-RCM-ipf  
 “Solo asked those girls to like each other”

e) The girls want to praise each other.

abo bakobwa ba-shaka ku-kund-an-a.  
 those girls 3pl.-want 3p-like-RCM-ipf  
 “Those girls want to like each other”

f) Sol expects the girls to praise each other.

Solo a-ashaka ko abo bakobwa ba-kund-an-a.  
 S 3sg.-want that those girls 3p-like-RCM-ipf  
 “Solo wants that those girls like each other”

g) Sol heard the girls praising each other.

Solo a-umvise abo bakobwa ba-shim-an-a.  
 S 3sg.-heard those girls 3p-praise-RCM-ipf  
 “Solo required that those girls praising each other”

## 2.4 Other types of local coreference

2.4.1 Possessives, alienable and inalienable - Please translate these sentences and provide the best gloss that you can. Is one of the strategies described above used?

A15

- a. Poolo a-á-tay-ye ibiraato (vyîwé)  
 Paul 3s-pst-lose-pf shoes his

“Paul lost (his) shoes”

- b. Poolo a-á-kiriz-ye ukuboko NO POSSESSIVE/REFLEXIVE  
 Paul 3s-pst-raise-pf arm  
 [Lit: “Paul raised arm”]  
 “Paul raised his hand”
- c. Poolo a-á-ci-ik-ye ukuboko  
 Paul 3s-pst-cut-middle-pf arm  
 “Paul’s arm got cut accidentally”

Comment: (A15c) is not a transitive sentence but a middle one, witness the occurrence of the suffix *-ik-*, an intransitivizer marker used in middle formation.

Comment: Note also that the possessum arm is a true argument rather than, say, an adjunct with null inalienable possessor. Indeed, it may be replaced by an incorporated OM as shown by (d).

- d. Poolo a-á-gu-ci-ik-ye  
 Paul 3s-pst-OM-cut-middle-pf  
 “Paul got it cut accidentally”
- f. Poolo a-á-i-pim-ye ukuboko STRATEGY A/NO POSSESSIVE  
 Paul 3s-pst-RFM-examine-pf arm  
 [Lit: “Paul examined himself the arm”]  
 “Paul examined his hand”

2.4.2 Reflexives in nominals - Some languages use a different affix or form to establish a reflexive relationship inside of a nominal. Identify any strategies that can apply to nouns rather than verbs. (Other possibilities: self-destruction, self-help, etc.)

A16) uku-i-emer-a ku-a Andre ku-a-tangaz-ye Mariyá  
 Inf-RFM-accept-fv agr-of Andrew agr-pst-surprise-pf Mary.  
 “Andrew’s self esteem surprised Mary”.

A17) uku-i-soner-a ku-a Andre ku-a-tangaz-ye Mariyá  
 Inf-RFM-respect-fv agr-of Andrew agr-pst-surprise-pf Mary.  
 “Andrew’s respect of himself surprised Mary”.

Comment: Much like English *–self*, the RFM *–i-* may be found in derived nominals such as *ubwishime* “self-advertisement”, *inyifato* (lit: self-taking) “behaviour”, *imyimenyerezo* “self-exercising”, etc. with no antecedent around or, if any, no c-command as in *inyifato ya Yohani* /self-taking of John/ “John’s behaviour”.

Finally, note that the RFM *-i-* occurs on V as do object clitics, hence can’t be used in genitive structures of the kind “John’s picture of himself”. To convey that meaning, Kirundi uses the emphatic strategy as in *ifoto ya Petero wé-nyéne* [lit: picture of John himself].

### Part 3 General details about the strategies

#### STRATEGY A

##### 3.1 Marking

Comment: Like other object clitics, the reflexive clitic used in STRATEGY A is prefixed to the verbal stem as illustrated below:

- 3.1A a. Yohaáni a-zoo-i-ubak-ir-a inzu  
John 3s-fut-RFM-built-appl-ipf house  
“John will built himself a house”

Comment: The reflexive anaphor is a true argument. It appears in the position occupied by clitic pronouns, namely direct and indirect objects, as well as clitic forms of subcategorized PPs. Therefore, the reflexive clitic cannot appear on intransitive verbs as illustrated below:

- b.\* Yohaáni a-zoo-na-i-tamb-a  
John 3s-fut-even-RFM-dance-ipf  
“John will even dance himself”

### 3.2 Productivity

3.2.1 How productive is this strategy, with respect to which verbs or predicates allow it?

Comment: STRATEGY A is "extremely productive". It applies to nearly every transitive verb.

3.2.2 Is the use of this strategy lexically restricted to certain verb classes, or is it unrestricted (applies across all verb classes)?

Comment: No. It is unrestricted.

### 3.3 Context of Use

Comment: STRATEGY A is the most unmarked way to express reflexivization. It doesn't involve any extra marking such as intonation or tone assignment of the verb.

### 3.4 Morphology

3.4.1 Does the reflexive element, in its entirety, have a stateable lexical translation?

Comment: The reflexive clitic *-i* is nothing more than a reflexive marker.

### 3.5 The agreement paradigm

Comment: The reflexive clitic *-i* is invariant irrespective of the person, number, or gender of its antecedent.

- a. n-á-i-bon-ye.  
1s-pst-RFM-see-pf  
“I saw myself”
- b. tu-á-i-bon-ye.  
1p-pst-RFM-see-pf  
“I saw myself”
- c. u-á-i-bon-ye.  
2s-pst-RFM-see-pf  
“you (sg) saw yourself”
- d. mu-á-i-bon-ye.  
2p-pst-RFM-see-pf  
“you (pl) saw yourselves”

- e. a-á-i-bon-ye.  
3s-pst-RFM-see-pf  
“he/she (sg) saw him/herself”
- f. abâna ba-á-i-bon-ye.  
Children 3p-pst-RFM-see-pf  
“children saw themselves”
- g. ibiti bi-á-i-gu-ish-ye.  
trees 3p-pst-RFM-fall-caus-pf  
“trees fell by themselves”

### 3.6 Interaction with verb morphology - Incompatibilities

Comment: As the reflexive clitic *-i-* is always an argument, it can't occur with a lexical NP or object pronoun of the same theta-role or grammatical function, as shown in (a) below. Furthermore, the reflexive clitic is incompatible with passive (b), middle/stative (c), and non-associative reciprocal (d), but may cooccur with associative reciprocal (e).

- a.\* abâna ba-á-i-ba-bon-ye.  
Children 3p-pst-RFM-them-see-pf  
“children saw them themselves”
- b.\* abâna ba-á-i-bon-ik-ye.  
Children 3p-pst-RFM-see-stat-pf  
“children were themselves visible”
- c.\* abâna ba-á-i-bon-u-ye.  
Children 3p-pst-RFM-them-see-pass-pf  
“children were seen by themselves”
- d.\* abâna ba-á-i-bon-an-ye.  
Children 3p-pst-RFM-them-see-pf  
“children saw each other themselves”
- e. abâna ba-á-i-tamb-an-ye.  
Children 3p-pst-RFM-dance-RCM-pf  
[lit: “children danced with themselves”]  
“children danced alone”

Comment: Sentence (e) above calls for clarification. Note first that the verb *-tamb-* 'dance' is intransitive. Importantly, Kirundi RCM *-an-* (contrary to, say, Chichewa one) may attach to an intransitive verb, providing the *together*-meaning. Thus, in sentence (e), the RFM *-i-* may be dropped and the sentence would mean that children danced together (associative meaning) like French sentences of the type *les enfants dansaient les uns avec les autres*. When the RFM is added, the result is the *alone*-meaning: each child danced alone, that is, with no partner. Literally, he/she danced with him-/her-self.

### 3.7 Uses that are not coreference

Comment: The reflexive clitic may appear in some nominalization forms as shown in (b) below:

- a. abâna ba-ø-i-meny-ir-ir-i-a  
children 3p-pres-RFM-know-appl-appl-caus-ipf.  
“Children exercised themselves”
- b. imi-i-meny-ir-ir-i-o  
cl4-RFM-know-appl-appl-caus-Nom.  
“self-exercising”

Incidentally, verbs of the *eat*-type occur with a null object as in English, but never with a reflexive reading.

- c. abâna ba-a-ri-ye  
children 3p-pst-eat-pf.  
“Children ate/\*themselves”

with null object that there is no reflexi

### 3.8 Proxy readings

The RFM allows proxy reading in very marked contexts, such as those involving pictures or authors’work.

B8

- a. Perezida a-à-shim-ye a-à-i-bon-ye mu biro vyanje  
President 3-pst-happy-pf3s-pst-RFM-see-pf in office of-me  
“The president was glad when he saw himself in my office (himself = his picture or John in person)
- b. Yohaáni a-à-ronder-ye hose ariko a-à-i-bur-ye  
John 3-pst-search-pf everywhere but 3-pst-RFM-miss-pf  
“The president was searching everywhere but couldn’t find himself (himself= his picture/writings)

Proxy readings are also possible in cases like B10a/B11b where locality is still preserved by coindexation of the proxy-interpreted pronoun with its antecedent.

B10

- a. Perezida a-ø-vug-ye ko a-ø-boneka néza mu biro  
President 3s-pres-say-pf C 3s-pres-look well in office  
“The President said he looked handsome in office. (a = picture of the president)

B11

- b. Peetéro na Rwasa nti-ba-ø-shak-a ku-bon-a ariko ba-ø-ma  
Peter & Rwasa neg-3p-pres-want-ipf inf-see-ipf but 3p-pres-keep  
ba-à-bon-an-ye ku rugamba  
3p-pst-see-RCM-pf on battlefield  
“Peter and Rwasa do not want to see each other, but they always see each other on the battlefield (ba= they= their armies)

### 3.9 Ellipsis

- B12 b. Yohaáni a-ra-i-kund-a ku-rut-ish-a Peetéro.

- John                    3s-pres-RFM-like-ipf    inf-exceed-caus-ipf    Peter  
 “John likes himself more than Peter does (i.e. more than Peter likes himself)”.  
 No other reading is possible. Sentence © below allows two readings.
- b.    Yohaáni            a-ra-kund-a    inka ziwe            ku-rut-ish-a                    Peetéro.  
 John                    3s-pres-like    cows his            inf-exceed-caus-ipf    Peter  
 “John likes John’s cows more than Peter likes John’s cows”.  
 “John likes John’s cows more than Peter likes Peter’s cows”

## OBJECT-NULL STRATEGY

### 3.1 Marking

None. Verbs participating in this strategy involve inalienable possession.

- a.    Yohaáni            a-à-oog-ye    (amaguru)  
 John                    3s-pst-wash-pf  
 “John washed himself/(his legs)”
- b.    Yohaáni            a-à-sokoz-ye                    umushatsi  
 John                    3s-pst-comb-pf                    hair  
 “John combed his hair”

### 3.2 Productivity

It is restricted to a limited set of verbs of grooming such as *dress, wash, or comb*.

- c.    Yohaáni            a-à-ambar-ye  
 John                    3s-pst-dress-pf  
 “John dressed himself”
- d.    Yohaáni            a-à-sokoz-ye  
 John                    3s-pst-comb-pf  
 “John combed himself”

### 3.3 Context of Use

Comment: See 3.2. above.

### 3.4 Morphology

Comment: None.

### 3.5 The agreement paradigm

Comment: None.

### 3.6 Interaction with verb morphology - Incompatibilities

Comment: This strategy is incompatible with any grammatical function changing operation (passivization, causativisation, reciprocalization, middle formation, applicativization, etc.). For instance, causativization of the verb wash in (a) requires the presence of the causee, witness the ungrammaticality of (b).

- a.    Yohaáni            a-á-oog-i-ye                    abâna.  
 John                    3s-pst-wash-caus-pf    children  
 “John washed children”
- b.\*    Yohaáni            a-á-oog-i-ye.

John            3s-pst-wash-caus-pf  
 “John washed them”

### 3.7 Other uses which are not reflexive

### 3.8 Proxy readings

None.

- c.     Perezida        a-à-sokoz-ye  
 President        3s-pst-comb-pf  
 “The president combed himself (not a statue of himself)”

### 3.9 Ellipsis

- d.     Yohaáni        a-à- sokoz-ye            ku-rut-ish-a                            Peetéro.  
 John            3s-pst-comb-ipf        inf-exceed-caus-ipf     Peter  
 “John combed himself more than Peter does (i.e. more than Peter combed himself)”.

Comment: Same reading as in STRATEGY A. No other reading is possible.

## -NYÉNE STRATEGY

### 3.1 Marking

Comment: A complex form made of a strong pronoun which agrees in phi-features with the antecedent and *-nyéne*, an emphatic word meaning “very/same”. This complex form may modify a lexical NP as in (c) much like English emphatic reflexive *himself* in sentences like *John himself came*. Furthermore, pronoun *-NYENE* may be used in object position when the subject is not the antecedent, as in (d).

- a.     Yohaáni        a-ø-kund-a                            wé-nyéne  
 John            3s-pres-like-ipf                        him-NYENE  
 “John<sub>i</sub> likes him<sub>ij</sub>”
- b.     abaminisiri    ba-ø-iyumvir-a                        bó-nyéne     gusa.  
 ministers       3s-pres-think-ipf                        them-NYENE    only  
 “Ministers (usually) think of only them<sub>ij</sub>”
- c.     Yohaáni        wé-nyéne     a-a-je  
 John            him-NYENE    3s-pst-come  
 “John himself came”
- d.     Yohaáni        a-ø-kund-a                            bó-nyéne  
 John            3s-pres-like-ipf                        them-NYENE  
 “John likes them themselves”

Comment: Finally, note that NYENE may be attached to a noun without the presence of the strong pronoun, as in (e).

- e.     uwo    mumsi nyéne.  
 that    day    NYENE  
 “that very day”

### 3.2 Productivity

Comment: Pronoun-NYENE is "fairly productive", mostly for emphatic purpose. Furthermore, it is used in every context where Strategy A is not permitted, namely with intransitive verbs and adjuncts.

- c. Yohaáni a-zoo-z-a wé-nyéne  
John 3s-pres-come-ipf him-NYENE  
"John HIMSELF will come"
- d. abantu ba-zoo-tor-a muri bo-nyéne  
people 3p-pres-choose-ipf among them-NYENE  
"People<sub>i</sub> will choose among them<sub>ij</sub>"

### 3.3 Context of Use: see 3.2.

### 3.4 Morphology: see 3.1

### 3.5 The agreement paradigm

Comment: As hinted in section 3.1. above, the pronominal party of this strategy agrees in phi-features with its co-referent. The *nyéne* portion is invariant

### 3.6 Interaction with verb morphology - Incompatibilities

Comment: No restriction w.r.t. verb morphology (passive, stative, causative, reciprocal, etc.).

### 3.7 Uses that are not coreference

Comment: Generally, coreference is always optional. The strategy may even apply in cases where no antecedent is available.

- a. bó-nyéne ba-zoo-z-a  
Them-NYÉNE 3p-fut-come-ipf.  
[Lit: "themselves will come"]  
"They themselves will come"

### 3.8 Proxy readings

Comment: Proxy readings are impossible with this strategy.

- b.\* Perezida a-à-shim-ye a-bon-ye wé-nyéne mu biro vyanje  
President 3-pst-happy-pf 3s-see-pf 3s-NYÉNE in office of-me  
"The president was glad to see himself in my office (himself = his picture)

### 3.9 Ellipsis

- c. Mariya a-ø-kund-a wé-nyéne ku-rut-ish-a Peetéro.  
Mary 3s-pres-like-ipf her-NYÉNE inf-exceed-caus-ipf Peter  
"Mary likes HERSELF more than she likes Peter"  
"Mary likes HERSELF more than Peter likes himself"

Comment: No other reading is possible.

## PART 4 Exploration of syntactic domains

- X1 a.\* Yohaáni a-à-kubit-ye.  
John 3s-pst-hit-pf  
"John hit"

bi. Yohaáni a-à-i-kubit-ye.  
John 3s-pst-RFM-hit-pf  
“John hit himself”

Comment: Strategy A and the –NYÉNE strategy may cooccur for emphatic reasons.

bii. Yohaáni a-à-i-kubit-ye wé-nyéne.  
John 3s-pst-RFM-hit-pf HIM-NYÉNE  
“John HIMSELF hit himself”

biii. Yohaáni wé-nyéne a-à-i-kubit-ye  
John HIM-NYÉNE 3s-pst-RFM-hit-pf  
“John HIMSELF hit himself”

Comment: The –NYÉNE strategy may occur alone in transitive sentences to convey intensifier reading to reflexivity.

biv. Yohaáni a-à-kubit-ye wé-nyéne.  
John 3s-pst-hit-pf HIM-NYÉNE  
“John hit HIMSELF (e.g. he didn,t hit anybody else)”

bv. Yohaáni wé-nyéne a-à-kubit-ye.  
John HIM-NYÉNE 3s-pst-hit-pf  
“John HIMSELF hit”

c.\* Abahuúngu ba-à-kubit-ye.  
boys 3p-pst-hit-pf  
“The boys hit”

d/e. Abahuúngu ba-à-kubit-an-ye.  
boys 3p-pst-hit-pf  
“The boys hit each other”

f.\* Yohaáni a-à-mu-kubit-ye.  
John 3s-pst-Obj-hit-pf  
“John hit him (him=John)”

X2 ai. Yohaáni a-à-oog-ye.  
John 3s-pst-wash-pf  
“John washed”

Comment: (X2a) is inherently intransitive. When transitivized by causativization, it becomes ill-formed under a reflexive reading. Compare (x2a-b) and (i)-(ii) below:

aii. Yohaáni a-à-oog-i-ye.  
John 3s-pst-wash-caus-pf  
“\*John washed himself”  
“John washed something” (he did the washing)

aiii. Yohaáni a-à-i-oog-i-ye.  
John 3s-pst-RFM-wash-caus-pf  
“John washed himself”

b. Yohaáni a-à-i-oog-ye.  
John 3s-pst-RFM-wash-pf  
“John washed himself”

c. Abahuúngu ba-à-oog-ye.  
 boys 3p-pst-wash-pf  
 “The boys washed/swam”

d/ei. Abahuúngu ba-à-oog-an-ye.  
 boys 3p-pst-wash-RCM-pf  
 “The boys swam together (i.e. with each other)”

Comment: (X2d/e) is intransitive with or without the reciprocal marking. And it has a comitative reading. To obtain a reciprocal reading such as *they washed each other*, the verb must be transitivized first, by causativization (d/eii):

d/eii. Abahuúngu ba-à-oog-i-an-i-ye.  
 boys 3p-pst-wash-caus-RCM-caus-pf  
 “The boys washed each other / one another”

f.\* Yohaáni a-à-mu-oog-ye.  
 John 3s-pst-RFM-wash-pf  
 “John washed himself”

X3 a.\* Yohaáni a-à-i-bon-ye nyina.  
 John 3s-pst-see-pf his:mother  
 [Lit: “John saw himself his mother”]  
 “John saw himself’s mother”

b.\* Yohaáni a-à-oog-ye nyina.  
 John 3s-pst-wash-pf his:mother  
 “\*John washed his mother”

c/di.\* Yohaáni na Bill ba-à-bon-an-ye nyina.  
 John and Bill 3p-pst-see-RCM-pf his:mother  
 “\*John and Bill saw each other’s mother”

Comment: (X3c/di) becomes a bit acceptable when an applicative is added to the verb morphology as in (i). This allows some kind of possessor raising necessary for reciprocalization to apply as the latter targets argument positions. I also used a different direct object in (c/dii) as the one in (c/di) is inherently possessive (see gloss):

c/dii. Yohaáni na Bill ba-à-vur-ir-an-ir-ye abavyèyi.  
 John and Bill 3b-pst-treat-app-RCM-pf parents  
 “John and Bill took care of each other’s parents”

e. Yohaáni na Bill ba-à-bon-ye nyina.  
 John and Bill 3b-pst-see-pf their:mother  
 “John and Bill saw their mother”

f. Yohaáni a-à-bon-ye nyina.  
 John 3s-pst-see-pf his:mother  
 “John saw his mother”

Comment: Note that nyina in (e-f) above can refer to someone’s mother other than John and/or Bill’s.

#### 4.1 Clausemate coconstrual

#### 4.1.1 Verb class restrictions

Comment: STRATEGY A applies to transitive verbs exclusively.

**4.1.1.1 Canonical transitives** - Can this strategy be used with ordinary transitive verbs, such as the verb meaning "see"? Give some examples, including the following.

- C1 a. Yohaáni a-à-i-bon-ye.  
John 3s-pst-RFM-see-pf  
"John saw himself"
- b. abagoré ba-à-i-vug-ye.  
women 3p-pst-RFM-say-pf  
"women talked about themselves"
- c. mu-i-kubit-ye  
3p-RFM-hit-pf  
"You hit yourselves"
- d. ba-i-shim-ye  
3p-RFM-praise-pf  
"They praised themselves"

*Remark:* OBJECT NULL and –NYÉNE STRATEGIES are ruled out for each of (a-e) above.

**4.1.1.2 Commonly reflexive predicates** - Can this strategy be used with verbs of grooming, inalienable possession objects, etc?

Yes. STRATEGY A can be used.

- C3 a. Donna a-à-i-oog-ye  
Donna 3s-pst-RFM-wash-pf  
"Donna washed himself"

Comment: OBJECT NULL and –NYÉNE STRATEGIES too are allowed, and the position of the reflexive in (b-c) may be filled by a OM such as -mu- "him", with a reading like "Donna combed his hair".

- b. Donna a-à-i-mo-ye umushatsi  
Donna 3s-pst-RFM-cut-pf hair  
"Donna cut himself's hair"
- c. Donna a-à-i-kat-ye.  
Donna 3s-pst-RFM-cut-pf.  
"Donna cut himself (unintentionally or not)"

Comment: OBJECT NULL and –NYÉNE STRATEGIES are ruled out in (C3b-c).

#### 4.1.1.3 Psychological predicates.

Comment: STRATEGY A and –NYENE STRATEGY are the only options allowed with psych-verbs.

- C4 a. Johaáni a-ø-ra-i-tiny-a  
John 3s-pres-AF-RFM-fear-ipf

“John is afraid/ fears/worries about himself”

- b. Johaáni a-ø-tiny-a wé-nyéne  
John 3s-pres-fear-ipf him-NYÉNE  
“John is afraid/ fears/worries about HIMSELF”

Comment: Note that the *-ra-* particle on the verb in (C4a) always drops when a postverbal constituent (argument or adjunct) requires a focus reading, as in (C4b). This focus effect is orthogonal to binding as it applies to any sentence with any verb.

**4.1.1.4 Creation and destruction predicates.** Provide examples in addition to (C5) using verbs of creation (e.g., "sew", "make", "form") or destruction (e.g. "kill", "eliminate", "make disappear").

Comment: STRATEGY A and *-NYENE* STRATEGY are the only options allowed here.

- C5 ai. abagoré ba-zoo-i-ic-a  
women 3p-fut-RFM-kill-ipf  
“The women will kill themselves”
- aii. abagoré ba-zoo-ic-a bó-nyéne  
women 3p-fut-RFM-kill-ipf them-NYÉNE  
“The women will kill THEMSELVES”

Comment: Only STRATEGY A applies if the subject is [-human] as in the following cases:

- bi. amamashini nti-a-zoo-i-kor-a  
machines not-3p-fut-RFM-make-ipf  
“The machines will not make themselves”
- bii.\* amamashini nti-a-zoo-kor-a  
machines not-3p-fut-RFM-make-ipf  
“The machines will not make themselves”
- c. nzu nti-zi-zoo-i-ubak-a  
houses not-3p-fut-RFM-built-ipf  
“House will not built themselves”

#### 4.1.1.4 Verbs of representation.

Comment: These all require applicative insertion.

- C6 a. abahuúngu ba-à-i-seruk-ir-ye  
boys 3p-pst-RFM-show up-appl-pf  
“The boys represented themselves”
- b. abahuúngu ba-à-i-vug-ir-ye  
boys 3p-pst-RFM-speak-appl-pf  
“The boys spoke for themselves”

#### 4.1.2 Argument position pairings

##### 4.1.2.1 Subject-indirect object -

Comment: STRATEGY A applies only to indirect objects that allow clitic pronouns. Thus compare (C7a-b):

- C7a i. Yohaáni a-à-rungik-ye amashúrwé kwa Peetéro

		John	3s-pst-send-pf	flowers	to	Peter
		"John sent flowers to Peter"				
ii.*	Yohaáni	a-à-mu-rungik-ye		amashûrwé		
	John	3s-pst-IO-send-pf		flowers		
	"John sent him (him=Peter) flowers"					
iii.*	Yohaáni	a-à-i-rungik-ye		abâna		
	John	3s-pst-RFM-pf				
	"John sent himself flowers"					
C7b	i.	Yohaáni	a-à-shir-ye	amashûrwé	kuri	Mariyá
		John	3s-pst-put-pf	flowers	on	Mary
	"John put flowers on Mary"					
	ii.	Yohaáni	a-à-mu-shir-ye-ko	amashûrwé		
		John	3s-pst-IO-put-pf-on	flowers		
	"John put flowers on her"					
	iii.	Yohaáni	a-à-i-shir-ye-ko	amashûrwé		
		John	3s-pst-RFM-put-pf-on	flowers		
	"John put flowers on himself"					

For comparison, also provide judgments for the following:

C8	a.	Yohaáni	a-à-i-ha-ye	amashûrwé		
		John	3s-pst-RFM-give-pf	flowers		
	"John gave himself flowers"					
	b.	Yohaáni	a-à-i-erek-ye	abantu		
		John	3s-pst-RFM-show-pf	people		
	"John showed himself to people"					
	"John showed people to himself"					

#### 4.1.2.2 Oblique arguments -

C9a	i.	Yohaáni	a-à-shir-ye	amashûrwé	kuri	Peetéro
		John	3s-pst-put-pf	flowers	on	Peter
	"John put flowers on Peter"					
	ii.	Yohaáni	a-à-mu-shir-ye-ko	amashûrwé		
		John	3s-pst-IO-put-pf-on	flowers		
	"John put flowers on him (him= X, but not John)"					
	iii.	Yohaáni	a-à-i-shir-ye-ko	amashûrwé		
		John	3s-pst-RFM-put-pf-on	flowers		
	"John put flowers on himself"					
	iv.	Yohaáni	a-à-shir-ye	amashûrwé	kuri	wé
		John	3s-pst-put-pf	flowers	on	him
	"John put flowers on him (him = X or John under emphasis)"					

- v. Yohaáni a-à-shir-ye amashûrwé kuri wé-nyéne  
 John 3s-pst-put-pf flowers on him-NYÉNE  
 “John put flowers on HIMSELF (himself = John or X under emphasis)”
- C9b i. Yohaáni a-à-icar-ye kuri Peetéro  
 John 3s-pst-sit-pf on Peter  
 “John sat on Peter”
- ii. Yohaáni a-à-mu-icar-ye-ko  
 John 3s-pst-OM-sit-pf-on  
 “John sat on him (him= Peter or X)”
- iii. Yohaáni a-à-i-icar-ye-ko  
 John 3s-pst-RFM-sit-pf-on  
 “John sat on himself”
- iv. Yohaáni a-à-icar-ye kuri wé  
 John 3s-pst-sit-pf on him  
 “John sat on him (him= John or X under emphasis)”
- v. Yohaáni a-à-icar-ye kuri wé-nyéne  
 John 3s-pst-sit-pf on him-NYENE  
 “John sat on HIMSELF (himself= emphasized John or X)”

#### 4.1.2.3 Subject and adjunct -

Comment: Recall that STRATEGY A never applies to adjuncts. The –NYENE STRATEGY does.

- C10 a. Yohaáni a-o-toor-u-a na wé-nyéne  
 John 3s-cond-elect-pass-ipf by him-NYENE  
 “John would be elected only by himself”

Comment: This strategy seems appropriate in passive sentences, under strong focus reading. Other adjunct configurations are like (b).

- b. Yohaáni a-à-ank-ye gu-toora Peetéro kubêra wé-nyéne.  
 John 3s-pst-refuse-pf Inf-choose Peter because him-NYENE  
 “John refused to choose Peter because of himself (himself=John, Peter or X)”

Comment: The P category is not productive in Kirundi. English PP adjuncts such as behind or because of X are expressed by genitive structures. Strong pronouns within those structures don’t corefer with subject/object. Possessive ones do. Thus compare (c-d):

- C10 c.\* Yohaáni a-à-bon-ye inzóka inyuma ya wé  
 John 3s-pst-see-pf snake behind of him  
 “John saw a snake behind him (him=X, not John)”
- d. Yohaáni a-à-bon-ye inzóka inyuma yîwé  
 John 3s-pst-see-pf snake behind of-him  
 “John saw a snake behind him (him=John or X)”

4.1.2.4 Ditransitives and double complements- Can the strategy be used to indicate coreference between the two non-subject arguments of a verb? Neither. The reflexive –i- is a subject-oriented anaphor.

C11a/bi.	Yohaáni John “John put flowers on Peter”	a-à-shir-ye 3s-pst-put-pf	amashûrwé flowers	kuri on	Peetéro Peter
ii.	Yohaáni John “John put flowers on himself”	a-à-i-shir-ye-ko 3s-pst-RFM-put-pf-on	amashûrwé flowers		
C11c/di.	Yohaáni John [Lit: “John gave flowers Peter”] “John gave Peter flowers / gave flowers to Peter”	a-à-ha-ye 3s-pst-give-pf	amashûrwé flowers	Peetéro Peter	
ii.	Yohaáni John [Lit: “John gave Peter flowers”] “John gave Peter flowers / gave flowers to Peter”	a-à-ha-ye 3s-pst-give-pf	Peetéro Peter	amashûrwé flowers	
iii.	Yohaáni John “John gave flowers to himself/gave himself flowers”	a-à-i-ha-ye 3s-pst-RFM-show-pf	amashûrwé flowers		
C11c/di.	Yohaáni John “John showed Peter flowers”	a-à-erek-ye 3s-pst-show-pf	amashûrwé flowers	Peetéro Peter	
ii.	Yohaáni John “John showed flowers to himself”	a-à-i-erek-ye 3s-pst-RFM-show-pf	amashûrwé flowers		

Comment: Sentences like (C11e) –*Mary told/asked the boys about themselves/each other*—will be expressed by periphrastic structures, such as the following:

C11 e.	Mariyá Mary	a-à-sab-ye 3s-pst-ask-pf	abâna children	ko that	ba-i-vug-a 3p-ref-say-ipf
					[Lit: “Mary asked children that they speak themselves”] “Mary asked children to talk about themselves”

Comment: Sentences like (C11f) –*Mary showed/introduced/presented the boys to each other*—are hard to obtain in Kirundi for a simple reason: reciprocal and reflexive strategies always link an argument position to the SUBJECT. Coreference between two object positions may occur in very limited cases like derived objects of causative structures:

C11f i.	Abâna children	ba-zoo-kund-an-a 3p-will-like-RCM-ipf			
					“Children will like each other”
ii.	Mariyá Mary	a-zoo-kund-an-ish-a 3s-fut-like-RCM-caus-ipf	abâna children		
					“Mary will make children like each other”

Reflexive and reciprocal may cooccur but only under the comitative reading of –an-. Compare (iv) and (v). Finally, Causativization of a Reflexive+RCM is extremely hard to obtain.

- |      |                   |   |                   |  |
|------|-------------------|---|-------------------|--|
| iii. | Abâna<br>children | ba-zoo-tamb-an-a<br>3p-will-dance-RCM-ipf         |                   |  |
|      |                   |   |                   | “Children will dance together (one with another)”  |
| iv.  | Abâna<br>children | ba-zoo-i-tamb-an-a<br>3p-will-RFM-dance-RCM-ipf   |                   |  |
|      |                   |   |                   | “Children will dance alone”(i.e. they as a group will dance alone, with no group partner, or each of them will dance alone, with no partner) |
| v.*  | Mariyá<br>M       | a-zoo-i-tamb-an-ish-a<br>3s-will-RFM-like-RCM-ipf | abâna<br>children |  |

#### 4.1.2.5 Two internal arguments or adjuncts -

Comment: See Remark 2 of section 4.1.2.4 above.

#### 4.1.2.6 Clausemate noncoarguments

Possessives - Give examples based on the following sentences, and/or by constructing analogous examples from reflexive sentences from the previous sections. For each of (C13) and (C14), X = Nick.

- |     |    |                 |                                  |                     |  |
|-----|----|-----------------|----------------------------------|---------------------|--|
| C13 | a. | Yohaáni<br>John | a-à-hamagar-ye<br>3s-pst-call-pf | nyina<br>his-mother |  |
|     |    |                 |                                  |                     | “John called his mother (his mother=John’s or X’s mother)” |

Comment: As illustrated above, the word *nyina* has an inherent possessive component meaning “his/her mother”. Other kinship expressions of that kind include *nyoko* “your mother”, *maáma* “my mother”, *data* “my father”, *so* “your father”, and *sé* “his/her father”.

Importantly those kinship words have pronominal rather than anaphoric properties. Indeed, they don’t have to be locally bound, as the following sentence shows:

- |      |    |                                  |                     |                           |
|------|----|----------------------------------|---------------------|---------------------------|
| C13a | i. | n-à-hamagar-ye<br>1s-pst-call-pf | nyina<br>his-mother |                           |
|      |    |                                  |                     | “I called his/her mother” |

Comment: possessive pronoun may be added to those kinship words without any change in coreference options:

- |      |     |                 |                                  |                     |  |
|------|-----|-----------------|----------------------------------|---------------------|--|
| C13a | ii. | Yohaáni<br>John | a-à-hamagar-ye<br>3s-pst-call-pf | nyina<br>his-mother | wîwé<br>of-him   |
|      |     |                 |                                  |                     | “John called his mother (his mother=John’s or X’s mother)” |

- |     |                                  |                     |                       |
|-----|----------------------------------|---------------------|-----------------------|
| ii. | n-à-hamagar-ye<br>1s-pst-call-pf | nyina<br>his-mother | (yîwé)<br>of-him      |
|     |                                  |                     | “I called his mother” |

- |      |    |                 |                                |                        |
|------|----|-----------------|--------------------------------|------------------------|
| C13b | i. | Yohaáni<br>John | a-à-sokoz-ye<br>3s-pst-comb-pf | umushatsi<br>hair      |
|      |    |                 |                                | “John combed his hair” |

Note that (i) above may also be used in a situation where “John combed someone’s hair”.

- ii. Yohaáni a-à-sokoz-ye umushatsi wîwé  
 John 3s-pst-comb-pf hair of-him  
 “John combed his hair (his= John or X’s hair)”
- C13 c. Yohaáni a-à-icar-ye ku intébe wîwé  
 John 3s-pst-sit-pf on chair of-him  
 “John sat on his chair (his= John or X’s chair)”
- d. Yohaáni a-à-shir-ye igitabo cîwé ku mêtá  
 John 3s-pst-put-pf book of-him on table  
 “John put his book on the table (his= John or X’s book)”
- e. umwaámi a-à-erek-ye inka Peetéro mu rugó rwîwé  
 king 3s-pst-show-pf cow Peter in yard of-him  
 “The king showed cows to Peter in his frontyard (his= King, Peter or X’s yard)”
- f. Abâna a-à-oog-ye mu mâso  
 children 3p-pst-wash-pf in eyes  
 [Lit: “Children washed in eyes”]  
 “Children washed their faces”
- C14 a. Sé wa Yohaáni a-ra-i-kund-a  
 His-father of John 3s-pres-RFM-like-ipf  
 “John’s father likes himself” (himself = father, not John)
- b. Ishaka rya Peetéro ri-oo-mu-ic-a  
 determination of Peter 3s-cond-OM-kill-ipf  
 “Peter’s determination may kill him (him= Peter or X)”
- c. Nyina wa Yohaáni a-à-gurish-a imodoka yîwé  
 His-mother of John 3s-pres-RFM-like-ipf car of-him  
 “John’s mother sold his car (his = John’s mother, John or X)”

4.1.2.7 Demoted arguments - Refer back to the range of grammatical function-changing operations (such as passive, antipassive, applicative, possessor ascension, dative alternation) that you considered for section 3.6 (if you did that). For each one, construct some representative nonreflexive examples.

- C15 a. Yohaáni a-zoo-i-toor-a  
 John 3s-fut-RFM-choose-ipf  
 “John will choose himself”
- a'. Yohaáni a-zoo-toor-a Peetéro  
 John 3s-fut-choose-ipf Peter  
 “John will choose Peter”
- b. Yohaáni a-zoo-i-kor-ish-a  
 John 3s-fut-RFM-work-caus-ipf  
 “John will make himself work”

- b'. Yohaáni a-zoo-kor-ish-a abâna  
 John 3s-fut-work-caus-ipf children  
 "John will make children work"
- c. Yohaáni a-zoo-i-kor-ir-a  
 John 3s-fut-RFM-work-appl-ipf  
 "John will work for himself"
- c'. Yohaáni a-zoo-kor-ir-a abâna  
 John 3s-fut-work-appl-ipf children  
 "John will work for children"
- d. Yohaáni a-zoo-toor-u-a na Peetéro  
 John 3s-fut-choose-ipf by Peter  
 "John will be chosen by Peter"
- d'.\* Yohaáni a-zoo-i-toor-u-a  
 John 3s-fut-RFM-choose-ipf  
 "John will be chosen by himself"

Comment: Recall that STRATEGY A is not compatible with demote/adjunct arguments, hence (d'\*).

#### 4.1.3 Properties of antecedents

##### 4.1.3.1 Pronouns, person and number –

Comment: As already hinted, the reflexive is insensitive to phi-features of its antecedent:

- C16 a. n/u/a/tu/mu/ba-à-l-bon-ye  
 I/you/he/we/you/they-pst-RFM-see-pf  
 [Lit: "I/you/(s)he/we/you(pl)/they saw self"]
- C17 a. n-à-i-oog-ye  
 I-pst-RFM-wash-pf  
 "I washed myself"
- b. n-à-i-ank-ye  
 I-pst-RFM-hate-pf  
 "I hate myself"
- c. n-à-i-bwir-ye Yohaáni  
 I-pst-RFM-tell-pf John  
 "I introduced myself to John or I told myself John"
- d. n-à-bon-ye inzóka inyuma yanje  
 1s-pst-see-pf snake behind of-me  
 "I saw a snake behind myself"
- e.\* n-ø-kund-u-a na jêwe  
 1-pres-like-pass-ipf by me-NYÉNE

- f. n-à-hamagar-ye maáma (wanje)  
 1s-pst-call-pf mother of-mine  
 “I called my mother”
- g. data a-à-n-nkund-a  
 myfather 3s-pst-OM-love-ipf  
 “my dad loved me”

#### 4.1.3.2 Animacy or humanity

- C18a i. inzu nti-zi-zoo-i-ubak-a  
 houses neg-3p-fut-RFM-built-ipf  
 “Houses will not built themselves”
- ii.\* inzu nti-zi-zoo-ubak-a zó-nyéne  
 houses neg-3-fut-built-ipf them-NYÉNE  
 “Houses will not built THEMSELVES”
- C18b i. intebe nti-zi-zoo-i-kor-a  
 chairs neg-3p-fut-RFM-built-ipf  
 “chairs will not make themselves”
- ii.\* intebe nti-zi-zoo-ubak-a zó-nyéne  
 chairs neg-3p-fut-built-ipf them-NYÉNE  
 “chairs will not built THEMSELVES”
- C18c i. Ubwênge nti-bu-zoo-i-zan-a  
 knowledge neg-3s-fut-RFM-bring-ipf  
 “knowledge will not bring itself up”
- ii.\* Ubwênge nti-bu-zoo-zan-a bwó-nyéne  
 knowledge neg-3s-fut-bring-ipf it-NYÉNE  
 “knowledge will not bring itself up”

#### 4.1.3.4 Quantifiers

- C19 a. Umukobwa weese a-à-i-bon-ye  
 girl every 3s-pst-RFM-see-pf.  
 “Every girl saw herself”
- b. Umukobwa weese a-à-i-oog-ye  
 girl every 3s-pst-RFM-wash-pf.  
 “Every girl washed herself”
- c. Umukobwa weese a-zoo-i-ank-a  
 girl every 3s-pst-RFM-hate-ipf.  
 “Every girl will hate herself”
- C19d i. Umukobwa weese a-à-bony-ye inzoka inyuma ya wé  
 girl every 3s-pst-see-pf snake behind of her.  
 “Every girl saw a snake behind her”
- ii. Umukobwa weese a-à-bony-ye inzoka inyuma ya wé-nyéne

- girl every 3s-pst-see-pf snake behind of her-NYENE  
 “Every girl saw a snake behind herself”
- iii. Umukobwa weese a-à-bony-ye inzoka inyuma yîwé  
 girl every 3s-pst-see-pf snake behind of-her.  
 “Every girl saw a snake behind her (yîwé = girl or X)”
- e. Umukobwa weese a-à-hamagar-ye nyina / nka ziwé  
 girl every 3s-pst-RFM-call-pf his:mother cow of-her.  
 “Every girl called her mother/cows (her= girl or X)”
- f. Umuvyeyi wa umukobwa weese a-zoo-i-tor-a  
 parent of girl every 3s-pres-RFM-choose-ipf  
 “Every girl’s parent will choose himself”
- g. Umuvyeyi wa umukobwa weese a-zoo-mu-tor-a  
 parent of girl every 3s-pres-OM-choose-ipf  
 “Every girl’s parent will choose her”

Repeat, replacing the quantifier "Every N" with "No N", and if any quantified antecedents behave differently from these, please provide the same paradigm.

Comment: No effect.

- h. nta mukobwa a-à-i-bon-ye  
 no girl 3s-pst-RFM-see-pf  
 “no girl saw herself”
- i. nta mukobwa a-à-i-oog-ye  
 no girl 3s-pst-RFM-see-pf  
 “no girl washed herself”
- etc.

4.1.3.5 Questioned antecedents - X is coreferent with the wh-word in all of the following (if C20e is possible in your language).

- C20 ai. ni ndé a-à-i-bon-ye?  
 is who 3s-pst-RFM-see-pf  
 “who saw himself?”
- aii.\* ni ndé a-à-bon-ye wényéne?  
 is who 3s-pst-see-pf himNYENE  
 “who saw herself?”
- b. ni ndé a-à-i-oog-ye?  
 is who 3s-pst-RFM--pf  
 “who washed himself?”
- ci.\* ni ndé a-à-bon-ye inzoka inyuma ya wényéne  
 is who 3s-pst-see-pf snake behind of himself.  
 “who saw a snake behind herself”
- cii. ni ndé a-à-bon-ye inzoka inyuma yîwé  
 is who 3s-pst-see-pf snake behind of-him

“who saw a snake behind him (him=who or X)”

- d. ni ndé a-à-hamagar-ye nyina / inka yiwe  
 is who 3s-pst-RFM-call-pf his:mother cow of-him  
 “who called his mother/cow (his= who’s mother/cow or X’s)”
- e. ni sé wa ndé a-zoo-i-tor-a  
 is father of who 3s-pres-RFM-choose-ipf  
 “whose father will choose himself”

The ungrammaticality of (C20aii) and (C20ci) follows from the observation already made that pro-NYENE must occur next to the NP it modifies (or its trace). Compare with (f) below:

- f. ni ndé wényéne a-à-bon-ye ifi?  
 is who herNYENE 3s-pst-see-pf fish  
 “who himself saw a fish?”

4.1.3.6 Reverse binding - In the following examples, the full NP ('antecedent') appears in the lower (prototypically, object) position. Assume X = Fred unless otherwise marked.

- C21 a.\* wé(nyéne) a-á-bonye Fred  
 He(-NYÉNE) 3s-pst-see-pf Fred
- b.\* tweebwé(nyéne) tu-á-tu-bonye  
 we(-NYÉNE) 1p-pst-us-see-pf
- c.\* wé(nyéne) a-à-bony-ye inzoka inyuma ya Fred  
 he(-NYÉNE) 3s-pst-see-pf snake behind of F  
 “HIMSELF saw a snake behind Fred (we = Fred)”
- d.\* wé(nyéne) a-á-bonye Fred  
 He(-NYÉNE) 3s-pst-see-pf Fred
- e/f.\* Mariya a-à-shir-ye wényéne kuri Peetéro  
 Mary 3s-pst-put-pf him-NYÉNE on Peter  
 “Mary put himself on Peter”
- g.\* wé(nyéne) a-á-bony-u-e na Fred  
 He(-NYÉNE) 3s-pst-see-pass-pf by Fred
- h. wéwe(nyéne) u-á-bony-u-e na wéwé  
 you(-NYÉNE) 2s-pst-see-pass-pf by you  
 “YOU were seen by YOU”

If the current strategy permits a possessive position to be coreferent with its antecedent, please indicate if an anaphor or a pronoun is possible in the position of X, which should correspond to George in all of these examples.

- C22 a.\* wé(nyene) a-à-hamagar-ye nyina wa George  
 him(self) 3s-pst-call-pf his-mother of G.  
 “Himself called George’s mother”

- b.\* nyina wa wé(nyene) a-shak-a ku-gaburira-a George  
 His:mother of him(self) 3s-want-ipf inf-feed-ipf G.  
 “His mother wants to feed George”
- c.\* nyina wa wé(nyene) a-à-tangar-i-ye George  
 His:mother of him(self) 3s-pst-impress-caus-ipf G.  
 “His mother impressed George (him=George)”
- d.\* Mariya a-tum-ye nyina wa wé(nyene) kuri George  
 Mary 3s-pst-send His:mother of him(self) on G.  
 “Mary sent his mother to George (his=George)”
- d/e.\* ifoto ya nyina wa wé(nyene) a-à-gu-ye kuri George  
 picture of his:mother of him(self) 3s-pst-fall-pf on G.  
 “A picture of his mother fell on George (him=George)”

In some languages, it is possible to scramble the positions of argument nominals so that objects can precede subjects, or perhaps the order of arguments in the VP is less fixed.

Comment: Kirundi allows inverse construction (OVS), also known as subject-object-reversal, which scrambles the position of the subject and the direct object: the form appears in a postverbal position where it receives a contrastive focus reading, while the latter raises to the subject position and agrees with the verb as illustrated in (ii). (see Ndayiragije 1999 for an extensive discussion of the construction).

- i. George a-à-som-ye ibitabo. SVO  
 G 3s-pst-read-pf books.  
 “George read books”
- ii. ibitabo bi-à-som-ye George . OVS  
 books 3p-pst-read-pf G.  
 [Lit: “books read George”]  
 “George (e.g. not Bill) read books”

Comment: Inverse destroys coreference between Subj and Obj, as illustrated below:

- iii. George a-à-kund-a wé-nyene  
 G 3s-pst-like-ipf him-NYÉNE.  
 “George liked HIMSELF (not somebody else)”
- iv.\* wé(nyene) a-à-kund-a George  
 him(self) 3s-pst-like-ipf G.  
 “Himself called George’s mother”
- v. abarimu ba-ø-som-a ibitabo vyâbo.  
 teachers 3s-pst-read-ipf books of them.  
 “teachers read their books”
- vi.\* ibitabo vyâbo bi-à-som-a abarimu.  
 books of-them 3p-pst-read-ipf teachers.  
 [Lit: “their books read teachers”]

“teachers (e.g. not students) read their books (their = teachers)”

#### 4.1.4 Some matters of interpretation

4.1.4.1 Distribution, reflexivity and reciprocity - Select and translate a simple example illustrating the using a clausemate coreference strategy successfully, such as (C23).

C23) Abagoré       ba-à-i-fash-ye.  
      Women       3p-pst-help-pf.  
      “The women helped themselves”

Which of the following meanings can this example have? Say which it can have and which it can't have. We will say that if the form in place of X permits at least (C24a) or (C24f) as a reading, then the form in question permits a reciprocal interpretation.

- C24a) Each woman helps all (or almost all) of the women, excluding herself. **NO**
- b) Each woman helps all of the women, including herself. **NO**
- c) Each woman helps at least some of the other women. **NO**
- d) Each woman helps herself. **YES**
- e) The women together as a group help the women together as a group. **YES**
- f) Each woman helps one of the women other than herself, such that all of the women are helped by one of the others. **NO**

Translate each of the following examples, which are compatible with collective action, and state their possible interpretations as above.

- C25 a.       Abagoré       ba-à-i-shim-ye.  
          Women       3p-pst-RFM-praise-pf.  
          “The women praised themselves” (**d,e**)
- b.       Abagoré       ba-zoo-fash-an-a.  
          Women       3p-pst-help-RCM-pf.  
          “The women will help each other” (**a,c,e,f**)
- c.       Abagoré       ba-à-i-fotor-ye.  
          Women       3p-pst-RFM-photograph-pf.  
          “The women photographed themselves” (**d,e**)
- d.       Abagoré       ba-à-i-fat-ish-ye.  
          Women       3p-pst-RFM-catch-caus-pf.  
          [Lit: “the woment got themselves caught”]  
          “The women betrayed themselves” (**d,e**)

Comment: The RFM can never be used to pick up an antecedent in a higher clause.

In light of these observations, which of the local coreference strategies in your language permit only reciprocal readings, which ones permit only reflexive readings, and which ones permit both?

Comment: STRATEGY A and –NYENE STRATEGY derive reflexive readings while RECIPROCAL permits reciprocal reading. To the best of my knowledge, there is no case where one of those strategies may trigger both readings.

4.1.4.2 Reciprocal readings - Complete this section only if your strategy allows a reciprocal

reading (i.e., permits a reading like those in (C24a) or (C24f). If the strategy is ambiguous, make sure to use verbs that allow the reciprocal interpretation.

a) Which of the following verbs can the strategy be applied to?

C26) "meet", "see", "fight", "speak", "hit"

- i. tu-à-hu-an-ye  
we-pst-meet-RCM-pf  
"we met each other"
- ii. tu-à-bon-an-ye  
we-pst-see-RCM-pf  
"we saw each other"
- iii. tu-à-gw-an-ye  
we-pst-fight-RCM-pf  
"we fought each other"
- iv. tu-à-hur-ye  
we-pst-meet-pf  
"we met"

Comment: Only the verb in (i) may be used alone and still convey a reciprocal interpretation, without *-an-*, as in (iv); those in (i-ii) may not, hence are not inherently reciprocal, i.e. their reciprocal meaning is contingent upon *an-*insertion. Therefore, they cannot permit Strategy A.

- v. tu-à-vug-an-ye  
we-pst-talk-RCM-pf  
"we spoke to each other"
- vi. tu-à-tikur-an-ye  
we-pst-hit-RCM-pf  
"we hit each other"

b) Does the strategy allow the constructions where X is understood to be a reciprocal which has a plural antecedent consisting of John and Bill (i.e., it would be understood as "John and Bill saw each other"). Are both "see" and "meet" possible in (C27), or is only one sort of verb acceptable?

C27) John met/saw X with Bill (Meaning: "John and Bill met/saw each other.")

Comment: NO.

c) Is there any difference in the range of interpretations permitted for (C28a) as opposed to (C28b), or any difference in reciprocal strategies that support these interpretations? If so, tell us what you think the problem is and provide pairs like these for subsequent tests in this section (and let us know if male/female gender pairings introduce any complications).

C28a) John and Mary praised X.

b) The women praised X.

Comment: No difference on distributivity or plurality grounds.

d) Can the strategy express reciprocity between a subject and an indirect object?

29 a) John and Mary spoke to X. **YES**

b) John and Mary met with X. **YES** (for an independent reason: the verb *meet* is inherently reciprocal in Kirundi).

c) John and Mary gave this book to X. **YES** (see example below)

i. Yohaáni a-à-ha-ye amashûrwé Peetéro  
 John 3s-pst-give-pf flowers Peter  
 [lit: "John gave flowers Peter"]  
 "John gave Peter flowers / gave flowers to Peter"

ii. Yohaáni na Peetéro ba-à-ha-an-ye amashûrwé  
 John and Peter 3p-pst-give-RCM-pf flowers  
 "John and Peter gave each other flowers"

Comment: Kirundi reciprocals permit a generic/quantificational reading as illustrated below: The generic reading is compatible with other tenses and aspectual classes of transitive verbs, including resultative/telic verbs like "kill".

i. Yohaáni na Mariyá ba-zoo-kund-an-a  
 John and Mary 3p-fut- like-RCM-ipf  
 "John and Mary will love each other"

ii. Yohaáni na Mariyá ba-zoo-kund-an-a  
 John and Mary 3p-fut- like-RCM-ipf  
 "John and Mary will love people"

iii. Yohaáni a-zoo-kund-an-a  
 John 3s-fut- like-RCM-ipf  
 "John will love people/\*each other"

Comment: Kirundi reciprocal permits an associative meaning when suffixed to intransitive verbs or transitive verbs whose direct object is overtly realized.

iv. Yohaáni na Mariyá ba-zoo-tamb-an-a  
 John and Mary 3p-fut- dance-RCM-ipf  
 "John and Mary will dance together (i.e. with each other)"

v. Yohaáni na Mariyá ba-zoo-kor-an-a ikibazo  
 John and Mary 3p-fut- pass-RCM-ipf exam  
 "John and Mary will pass the exam together (i.e. with each other)"

e) Long distance reciprocal readings - For any of the strategies that permit a reciprocal reading, can the following sentence be translated to mean "Bill thinks he likes Mary, and Mary thinks she likes Bill"?

C30) Bill and Mary think that they like X.

v. Yohaáni na Mariyá ba-a-vug-ye ko ba-ø-kund-an-a  
 John and Mary 3p-pst-say-pf C 3p-fut-pass-RCM-ipf  
 "John said that he likes Mary, and Mary said she likes John"

Comment: Yes.

## 4.2 Crossclausal binding

### 4.2.1 Coreference relations across typical tensed clausal complement

4.2.1.1 Tensed complement, long distance relations, anaphor in situ - Please provide translations for all of these sentences where X is Jack.

- D1
- a. Jack a-à-vug-ye ko wé(nyéne) a-zi ubwênge  
 J. 3s-pst-say-pf C he(NYENE) 3s-know knowledge  
 “Jack said that HE is smart (wé= Jack or Y)
- b. Jack a-zi ko George a-ø-mu-kund-a  
 J. 3s-know C G 3s-pres-OM-like-ipf  
 “Jack knows that George likes him (mu= Jack or Y)
- c. Jack a-zi ko Bill a-á-vug-ye ko wé(nyéne) a-zi ubwênge  
 J. 3s-know C B 3s-pst-say C he(NYENE)3s-know knowledge  
 “Jack knows that Bill said that HE is smart (wé= Bill, Jack)
- d. Jack a-ibaza ko Lisa a-zi ko Wendy a-ø-mu-kund-a  
 J. 3s-think C L 3s-know C W3s-pres-OM-like-ipf  
 “Jack thinks that Lisa knows that Wendy likes him (mu= Jack, Lisa or Y)
- e. Jack a-ibaza ko Lisa a-zi ko wé(nyéne) a-ø-kund-a Alice  
 J. 3s-think C L 3s-know C he(NYENE) 3s-pres-like-ipf A.  
 “Jack thinks that Lisa knows that (S)HE likes Alice (wé= Lisa, Jack)
- f. Sarah a-à-bwiye Jack ko Lisa a-ø-mu-kund-a  
 S. 3s-pst-tell J C G 3s-pres-OM-like-ipf  
 “Sarah told Jack that Lisa likes him/her (mu=Jack, Sarah or Y)
- g. Sarah a-à-bwiye Jack ko wé(nyéne) a-ø-kund-a Wendy  
 S. 3s-pst-tell J C he(self) 3s-pres-love Wendy.  
 “Sarah told Jack that S/HE likes Wendy (wé= Jack, Sarah)

Comment: Note that the pron-NYENE strategy in the examples above may also refer to some salient person in the discourse other than those mentioned in the high clause(s). No special long distance strategy in Kirundi.

- D2
- a. Jack a-à-emeye ko Mariya a-ø-mu-kund-a  
 J. 3s-pst-admit C M 3s-pres-OM-like-ipf  
 “Jack admitted that Mary likes him (mu= Jack or X)
- b. Jack a-à-ikeeka ko Mariya a-ø-mu-kund-a  
 J. 3s-pst-suspect C M 3s-pres-OM-like-ipf  
 “Jack suspected that Mary likes him (mu= Jack or X)

Please also test adjuncts, such as those in (D3), where X = Jeff.

- D3
- a. Jef a-à-idooger-a Mariya aho Elia a-a-mu-hamagar-a  
 J. 3s-pst-complain-ipf M when E 3s-pst-OM-call-ipf  
 Jeff complained about Mary when Ella called him
- b. Jef a-à-subir-ye muhira aho a-umvir-ye iyo nkuru  
 J. 3s-pst-suspect-pf home when 3s-hear-pf that news  
 Jeff returned home when he heard the news
- c. aho Mariya a-a-mu-andikir-a, Jef a-à-subir-ye muhira

when M 3s-pst-OM-write-ipf J. 3s-pst-return-pf home  
 When Mary wrote him, Jeff returned home

d. Jef a-à-gi-ye Mariya a-ta-mu-bon-ye  
 J. 3s-pst-go-pf M 3s-neg-OM-see-pf  
 Jeff left without Mary seeing him

e. Mariya a-à-ikeek-a Jef a-ta-mu-bon-ye  
 M 3s-pst-suspect-ipf J 3s-negt-OM-see-pf  
 Mary suspected Jeff without seeing him

**Comment: No new contrast arises from adjuncts.**

#### 4.2.2 Long distance relations and the variety of clausal embedding types

Consider what a list of major clause embedding types in your language would include.

Comment: For infinitives, their null subject is controlled by either the matrix subject or a matrix object if any, with possible ambiguities as illustrated below:

X12 a. n-ø-ifuza ku-gend-a  
 I-pres-wish inf-leave-ipf  
 "I wish to leave"

b. n-à-ank-ir-ye Yohaáni ku-gend-a  
 I-pst-refuse-appl-pf John inf-leave-ipf  
 [Lit: "I refused to/for John to leave"]

Comment: Sentence (b) is ambiguous. The embedded null subject may refer to 'I' or to 'John'. Coreference relations (whether reflexive or reciprocal) within embedded infinitives are determined by the interpretation of the controller of the null subject. Hence, no new contrast to expect here. No ECM constructions in Kirundi.

#### 4.2.3 Backwards anaphora

Comment: Kirundi does not permit tensed clauses in subject position.

#### Section 4.3 Principle C-type effects

For all of these examples, give judgments that indicate whether or not it is possible in normal discourse circumstances for the pronoun to be either Malik or the boy.

E1a) He criticized Malik. NO

a-a-neguye Malik  
 3s-pst-criticize Malik

b) He said Mariam criticized Malik. NO

a-a-vuze ko Mariam a-a-neguye Malik  
 3s-pst-say C M. 3s-pst-criticize M.

c) He criticized the boy. NO

a-a-neguye umuhungu  
 3s-pst-criticize boy

d) He said Mariam criticized the boy. NO

a-a-vuze	ko	Mariam	a-a-neguye	umuhungu
3s-pst-say	C	M.	3s-pst-criticize	boy

E2a) His mother criticized Malik. ??YES

Nyina	a-a-neguye	Malik
his-mother	3s-pst-criticize	Malik

b) His mother said Mariam criticized Malik. NO

Nyina	a-a-vuze	ko	Mariam	a-a-neguye	Malik
his-mother	3s-pst-say	C	M.	3s-pst-criticize	M.

c) His mother criticized the boy. ??YES

Nyina	a-a-neguye	umuhungu
his-mother	3s-pst-criticize	boy

d) His mother said Mariam criticized the boy. NO

Nyina	a-a-vuze	ko	Mariam	a-a-neguye	umuhungu
his-mother	3s-pst-say	C	M.	3s-pst-criticize	boy

E3a) The man who he liked criticized Malik NO

Umugabo	a-ø-kunda	a-a-neguye	Malik
man	3s-pres-like	3s-pst-criticize	Malik

b) The man who he liked criticized the boy. NO

Umugabo	a-ø-kunda	a-a-neguye	umuhungu
man	3s-pres-like	3s-pst-criticize	boy

c) The man who liked him criticized the boy. NO

Umugabo	a-ø-mu-kunda	a-a-neguye	umuhungu
man	3s-pres-him-like	3s-pst-criticize	boy

Now consider whether or not, in place of the pronoun, the name Malik could work as the antecedent for either Malik or the boy could work as the antecedent for the boy in the following sentences, again, paying attention to whether special discourse circumstances must be appealed to make the sentence sound natural.

E4a) Malik criticized Malik. YES (under similar discourse circumstances)

b) Malik said Mariam criticized Malik. NO

c) The boy criticized the boy. YES

d) The boy said Mariam criticized the boy. NO

E5a) Maliks mother criticized Malik. YES

b) Maliks mother said Mariam criticized Malik. YES

c) The boys mother criticized the boy. YES

d) The boys mother said Mariam criticized the boy. YES

E6a) The man who Malik liked criticized Malik YES

b) The man who the boy liked criticized the boy. YES

c) The man who liked the boy criticized the boy. YES

Now consider whether the boy = Malik for the following examples

E7a) The boy criticized Malik. NO

- b) The boy said Mariam criticized Malik. NO
- c) Malik criticized the boy. NO
- d) Malik said Mariam criticized the boy. NO
- E8a) The boys mother criticized Malik. NO
  - b) The boys mother said Mariam criticized Malik. NO
  - c) Malik's mother criticized the boy. YES
  - d) Malik's mother said Mariam criticized the boy. YES
- E9a) The man who the boy liked criticized Malik. NO
  - b) The man who Malik liked criticized the boy. YES
  - c) The man who liked Malik criticized the boy. YES
  - d) The man who liked the boy criticized Malik NO

#### 4.4 More on long distance anaphor strategies

Strategies that allow coreference across tensed clause boundaries, but where the marked argument is one that is not a typical pronoun, we will call LDA strategies

**Comment:** Kirundi doesn't have any logophoric pronoun.

4.4.1 Position of the antecedent - Long distance coreference is often constrained in ways that local coreference is not (especially: subject-orientation). Construct examples and give judgments where X = Zeke.

- D11 a. Larry a-à-bwiye Zeke ko Mike a-ta-ø-mu-kund-a  
 L. 3s-pst-tell Z that M 3s-neg-pres-OM-like-ipf  
 "Larry told Zeke that Mike doesn't like him (mu=Zeke, Larry, or Y)
- b. Zeke a-à-bwiye Larry ko Mike a-ta-ø-mu-kund-a  
 Z 3s-pst-tell L that M 3s-neg-pres-OM-like-ipf  
 "Zeke told Larry that Mike doesn't like him (mu=Larry, Zeke, or Y)
- c. Zeke a-à-bwiye Larry ko wé a-ta-ø-kund-a Mike  
 Z 3s-pst-tell L that HE 3s-neg-pres-like-ipf M  
 "Zeke told Larry that HE doesn't like Mike (he=Larry, Zeke, or Y)
- d. Larry a-à-bwiye Zeke ko wé a-ta-ø-kund-a Mike  
 L 3s-pst-tell Z that HE 3s-neg-pres-like-ipf M  
 "Larry told Zeke that HE doesn't like Mike (he=Larry, Zeke, or Y)
- e. Larry a-zi ko Zeke a-ibaza ko Mike a-ta-ø-mu-kunda  
 L 3s-know Z 3s-pres-think that M 3s-neg-pres-OM-like  
 "Larry knows that Zeke thinks that Mike doesn't like him (mu=Larry, Zeke, or Y)
- f. Zeke a-zi ko Larry a-ibaza ko Mike a-ta-ø-mu-kunda  
 Z 3s-know L 3s-pres-think that M 3s-neg-pres-OM-like  
 "Zeke knows that Larry thinks that Mike doesn't like him (mu= Zeke, Larry, Y)
- D12 a. Nyina wa Zeke a-ibaza ko Mike a-ta-ø-mu-kunda  
 mother of Zeke 3s-pres-think that M 3s-neg-pres-OM-like  
 "Zeke's mother thinks that Mike doesn't like him (mu=Zeke's mother, Zeke, Y)
- b. Nyina wa Zeke a-ibaza ko wé a-ta-ø-kunda Mike  
 mother of Zeke 3s-pres-think C S/HE 3s-neg-pres-ike M

“Zeke’s mother thinks that S/HE doesn’t like Mike (wé=Zeke’s mother, Zeke, Y)

- c. Zeke a-ibaza ko Mike a-ta-ø-mu-kunda  
 Z 3s-pres-think that M 3s-neg-pres-OM-like  
 “Zeke thinks that Mike doesn’t like him (mu= Zeke, or Y)
- d. ikete wa Zeke ri-vuga ko Mike a-ta-ø-mu-kunda  
 letter of Zeke 3s-pres-say C M 3s-neg-pres-OM-like  
 “Zeke’s letter thinks that S/HE doesn’t like Mike (mu=Zeke, Y)
- e. Zeke a-à-umvise ko Mike a-ta-ø-mu-kunda  
 Z 3s-pst-hear that M 3s-neg-pres-OM-like  
 “Zeke heard that Mike doesn’t like him (mu= Zeke, or Y)
- f. Zeke a-à-bwir-u-ye ko Mike a-ta-ø-mu-kunda  
 Z 3s-pst-tell-pass-pf that M 3s-neg-pres-OM-like  
 “Zeke was told that Mike doesn’t like him (mu= Zeke, or Y)

- D13 a. Zeke a-à-vug-ye ko wé a-à-i-ambik-ye  
 Z 3s-pst-say-pf that HE 3s-pst-RFM-dress-pf  
 “Zeke said that HE had dressed himself(wé= Zeke, or Y)
- b. Zeke a-à-vug-ye ko wé a-à-i-komerek-i-ye  
 Z 3s-pst-say-pf that HE 3s-pst-RFM-wound-caus-pf  
 “Zeke said that HE had wounded himself (wé= Zeke, or Y)
- c. Zeke a-à-vug-ye ko wé a-à-i-rab-ye  
 Z 3s-pst-say-pf that HE 3s-pst-RFM-tatoo-pf  
 “Zeke said that HE had tatooed himself (wé= Zeke, or Y)

Consider potential antecedents in other non-subject syntactic positions, as allowed by your language (e.g., in English, John related to Bill that Mary had slandered him where Bill = him).

- d. Zeke a-à-bwiye Larry ko Mike a-ta-ø-mu-kund-a  
 Z 3s-pst-tell L that M 3s-neg-pres-OM-like-ipf  
 “Zeke told Larry that Mike doesn’t like him (mu=Larry, Zeke, or Y)
- e. Zeke a-à-bwiye Larry ko wé a-ta-ø-mu-kund-a  
 Z 3s-pst-tell L that HE 3s-neg-pres-OM-like-ipf  
 “Zeke told Larry that HE doesn’t like him (wé=Larry, Zeke, or Y, mu ≠ wé)

#### 4.4.2 Antecedent properties

4.4.2.1 Person - Please replace Zeke in the Zeke paradigm of 4.4.1 with first and second person pronouns, and report the results.

4.4.2.2 Quantified antecedents -

Comment: No new contrast.

- i. umwarimu umwe umwe a-zi ko umunyeshule wese a-ibaza  
 teacher one one 3-knows C student every 3-think  
 ko n-ta-ø-mu-kund-a  
 that 1s-neg-pres-him-like-ipf  
 “Each teacher knows that every student thinks that I don’t like him (mu= student,

teacher, or Y.

- ii. umwarimu umwe umwe a-zi ko umunyeshule wese a-ibaza  
teacher one one 3-knows C student every 3-think  
ko wé a-ta-zoo-menya  
that 1s-neg-pres-him-like-ipf  
“Each teacher knows that every student thinks that HE will fail (he= student,  
teacher, or Y).

4.4.2.3 Split antecedents - Please provide examples that correspond to those in the Ozzie (male) and Harriet (female) paradigm. In all cases, X = Ozzie and Harriet (together).

- D14 a.\* Ozzie a-à-kur-ye Harriet kuri bó  
O 3-pst-take-pf H from them  
“Ozzie separated Harriet from them (bó = Ozzie&Harriet)
- b.\* Ozzie a-à-kur-ye bó kuri Harriet  
O 3-pst-take-pf them from H  
“Ozzie separated them from Harriet (bó = Ozzie&Harriet)
- c. Ozzie a-à-bwiye Harriet ko bó ba-ta-zoo-genda-a  
O 3s-pst-tell H that THEM 3p-neg-fut-go-ipf  
“Ozzie told Harriet that THEY will not go (bó=Ozzie&Harriet, or Y)
- d. Ozzie a-à-bwiye Harriet ko Bill a-ta-ø-ba-kund-a  
O 3s-pst-tell H that B 3s-neg-pres-OM-like-ipf  
“Ozzie told Harriet that Bill doesn’t like them (ba=Ozzie&Harriet)
- d. Ozzie a-à-vuze ko Harriet a-ibaza ko Bill a-ta-ø-ba-kunda  
O 3s-pst-say that H 3s-think that B 3s-neg-pres-OM-lika  
“Ozzie said that Harriet thinks that Bill doesn’t like them (ba=Ozzie&Harriet or Y)

#### 4.4.3 Blocking Effects

4.4.3.1 Features of intervening subjects - The following examples test for an intervening subject that is mismatched for person, gender, or number. In each case in (D19), X = Larry, unless designated otherwise.

- D19 a. Larry a-ibaza ko Bill a-ø-mu-ubaha  
Larry 3s-pres-think that B 3s-pres-OM-respect  
“Larry thinks that Bill respects him (mu=Larry, or Y)
- b. Larry a-ibaza ko n-ø-mu-ubaha  
Larry 3s-pres-think that 1s-pres-OM-respect  
“Larry thinks that I respect him (mu=Larry, or Y)
- c. Larry a-ibaza ko Mariya a-ø-mu-ubaha  
Larry 3s-pres-think that M 3s-pres-OM-respect  
“Larry thinks that Mary respects him (mu=Larry, or Y)
- d. Larry a-ibaza ko abahuúngu ba-ø-mu-ubaha  
Larry 3s-pres-think that boys 3p-pres-OM-respect  
“Larry thinks that the boys respect him (mu=Larry, or X)

- e. Abagabo ba-ibaza ko abahuúngu ba-ø-ba-ubaha  
 men 3p-pres-think that boys 3p-pres-OM-respect  
 “The man think that the boys respect him (-ba- = men or Y)

Same tests, with the intervening subject in an intermediate clause:

- D20 a. Larry a-ibaza ko Bill a-zi ko Dave a-ø-mu-ubaha  
 Larry 3s-pres-think that B 3s-know that D 3s-pres-OM-respect  
 “Larry thinks that Bill knows that Dave respects him (mu=Bill, Larry, or Y)
- b. Larry a-ibaza ko n-zi ko Dave a-ø-mu-ubaha  
 Larry 3s-pres-think that 1s-know that D 3s-pres-OM-respect  
 “Larry thinks that I know that Dave respects him (mu=Bill, or Y)
- c. Larry a-ibaza ko Mariya a-zi ko Dave a-ø-mu-ubaha  
 Larry 3s-pres-think that M ss-know that D 3s-pres-OM-respect  
 “Larry thinks that Mary knows that Dave respects him (mu=Bill, Mary, or Y)
- d. Larry a-ibaza ko abahuungu ba-zi ko Dave a-ø-mu-ubaha  
 Larry 3s-pres-think that boys 3p-know that D 3s-pres-OM-respect  
 “Larry thinks that the boys know that Dave respects him (mu=Larry, or Y)
- e. Abagabo a-ibaza ko abahuungu ba-zi ko Dave a-ø-ba-ubaha  
 men 3p-pres-think that boys 3p-know that D 3s-pres-OM-respect  
 “The men that the boys know that Dave respects him (-ba=boys, men, or Y)

#### 4.4.3.2 Positions of the intervener -

The following examples rely only on person mismatches (where X = Walter). If you also found number or gender mismatches above, give some examples.

- D21a. Larry a-ibaza ko Bill a-bwiye Harry ko Dave a-ø-mu-ubaha  
 Larry 3s-pres-think that B 3s-tell H that D 3s-pres-OM-respect  
 “Larry thinks that Bill told Harry that Dave respects him (mu=B, H, L, or Y)
- b. Larry a-ibaza ko Bill a-n-bwiye ko Dave a-ø-mu-ubaha  
 Larry 3s-pres-think that B 3s-OM-tell that D 3s-pres-OM-respect  
 “Larry thinks that Bill told Harry that Dave respects him (mu=B, L, or Y)
- c. Larry a-n-bwiye ko Dave a-ø-mu-ubaha  
 Larry 3s-OM-tell that D 3s-pres-OM-respect  
 “Larry told me that Dave respects him (mu=Larry, or Y)
- d. Larry a-n-bwiye ko Dave a-ø-mu-ubaha  
 Larry 3s-OM-tell that D 3s-pres-OM-respect  
 “Larry told me that Dave respects him (mu=Larry, or Y)

**4.4.4 Islands** - Do syntactic islands affect the acceptability of the current strategy? For all the examples in this section, Ira = X.

- D22 a. Ira a-ø-abaz-u-a na uko Mariya a-ø-mu-ank-a  
 Ira 3s-pres-bother-pass-ipf by the-that M. 3s-pres-OM-hate-ipf  
 “Ira is bothered by the fact Mary hates him (mu=Ira)
- b. Ira a-ø-ubah-a umugabo a-ø-mu-kund-a

Ira 3s-pres-respect-ipf man 3s-pres-OM-hate-ipf  
 "Ira respects the man who hates him (mu=Ira)"

c. Ira a-à-vuze ko umugabo a-ø-mu-kund-a a-à-je  
 Ira 3s-pst-said that man 3s-pres-OM-hate-ipf 3s-pst-come  
 "Ira said that the the man who hates him came (mu=Ira)"

d. Ira a-à-bajije ko Bill a-à-mu-bonye  
 Ira 3s-pst-ask that B 3s-pst-OM-see  
 "Ira asked whether Bill saw him (mu=Ira)"

e. Ira a-a-shaka kumenya umuúsi Bill a-à-mu-bonye  
 Ira 3s-pst-ask to-know day B 3s-pst-OM-see  
 "Ira wants to know the day Bill saw him (mu=Ira)"

f. Ira nti-a-à-menye ko Bill a-à-mu-kwirikiye  
 Ira neg-3s-pst-know that B 3s-pst-OM-follow  
 "Ira didn't know that Bill followed him (mu=Ira)"

g. Ira a-à-vuze ko Mariya a-à-ri mwiza kandi ko a-oo-mu-rongoye  
 Ira 3s-pst-say that M 3s-pst-be pretty and that 3s-pst-OM-marry  
 "Ira said that Mary was pretty and that she would marry him"

#### 4.4.5 De se reading

Sometimes an interpretation of identity with an antecedent is tinged by a different meaning distinction.

**Comment: No distinction in Kirundi.**