

## LOCATIVES VS. INSTRUMENTALS IN KINYARWANDA\*

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### 1. Locatives and Instrumentals as objects.

In Kinyarwanda, as Kimenyi (1980) demonstrates, many “obliques”—such as the Locatives in (1) and the Instrumentals in (2)—can be expressed either as prepositional phrases, as in (1a) and (2a), or as objects in an applied construction, as in (1b) and (2b).<sup>1</sup>

- (1) a. Umugóre y-oohere-je umubooyi kw'iisóko.  
woman she-send-asp cook to market  
“The woman sent the cook to market.”
- b. Umugóre y-oohere-jé-ho isóko umubooyi.<sup>2</sup>  
woman she-send-asp-to market cook  
“The woman sent the cook to market.”
- (2) a. Umugabo a-ra-andik-a íbárúwa n'íkárámu.  
man he-pres-write-asp letter with pen  
“The man is writing a letter with the pen.”
- b. Umugabo a-ra-andik-iish-a íbárúwa íkárámu.  
man he-pres-write-instr-asp letter pen  
“The man is writing a letter with the pen.”

Kimenyi (pp. 81-82; 94-96) shows that the “obliques” in (1b) and (2b) are objects by a variety of tests, including passivization, pronoun incorporation, and relativization, as shown in (3) for Locatives and (4) for Instrumentals.

- (3) a. Iposita y-oohere-j-w-é-ho íbárúwa n'úmugabo.  
post office it-send-asp-pass-asp-to letter by man  
“The post office was sent a letter to by the man.”
- b. Úmwáalímu y-a-ry-oohere-jé-ho igitabo.  
teacher he-pst-it-send-asp-to book  
“The teacher sent the book to it.”
- c. íshuûri úmwáalímu y-oohere-jé-ho igitabo  
school teacher he-rel-send-asp-to book  
“the school that the teacher sent the book to”

- (4) a. Íkárámu i-ra-andik-iish-w-a íbárúwa n'úmugabo.  
 pen it-pres-write-instr-pass-asp letter by man  
 "The pen is used to write a letter by the man."
- b. Úmwáalímu a-ra-y-aandik-iish-a íbárúwa.  
 teacher he-pres-it-write-instr-asp letter  
 "The teacher is writing a letter with it."
- c. Dore íkárámu umugabo y-aandik-iish-a íbárúwa.  
 look pen man he-rel-write-instr-asp letter  
 "This is the pen that the man uses to write the letter."

The structure of (1b) and (2b) has sparked much discussion, since, as noted by Kimenyi, the initial direct object in (2b) retains its object properties. For example, it undergoes passivization, pronoun incorporation and relativization, as seen in (5).

- (5) a. Íbárúwa i-ra-andik-iish-w-a íkárámu.  
 letter it-pres-write-instr-pass-asp pen  
 "The letter is being written with a pen."
- b. Umugabo a-ra-y-andik-iish-a íkárámu.  
 man he-pres-it-write-instr-asp pen  
 "The man is writing it with a pen."
- c. íbárúwa umugabo y-aandik-iish-a íkárámu  
 letter man he-write-instr-asp pen  
 "the letter that the man is writing with a pen"

Since the Instrumentals in (2b) also show object properties, researchers (including Gary and Keenan (1977), Kimenyi (1980), and Bresnan and Moshi (1990)) have been led to the conclusion that such clauses have more than one direct object, thus violating the Stratal Uniqueness Law of Relational Grammar (Perlmutter and Postal (1983)). Informally, the SUL prohibits more than one nominal bearing the same term relation (1, 2, or 3) per stratum. In contrast, the initial direct object in (1b) loses its object properties, as the data in (6) show, and so has been claimed by Kimenyi (1980) to be a *chômeur*.

- (6) a. \*Ígitabo cy-oohere-j-w-é-ho íshuûri n'úmwáalímu.  
 book it-send-asp-pass-asp-to school by teacher  
 "The book was sent to school by the teacher."
- b. \*Úmwáalímu y-a-cy-oohere-jé-ho íshuûri.  
 teacher he-pst-it-send-asp-to school  
 "The teacher sent it to school."

c.\*igitabo úmwáalímu y-oohere-jé-ho íshuûri  
 book teacher he-send-asp-to school  
 "the book that the teacher sent to school"

No Stratal Uniqueness Law violation is posited in the case of Locative applicatives.<sup>3</sup>

Thus, for Kimenyi there are two types of oblique-to-object advancement in Kinyarwanda: those like Instr-to-object that result in double objects, as represented in the stratal chart in (7), and those like Loc-to-object that result in the chômage of the initial object, as represented in the stratal chart in (8).

(7)	1	P	2	INSTR	(8)	1	P	2	LOC
	1	P	2	2		1	P	<b>CHO</b>	2
	man	write	letter	pen		woman	sent	cook	market

Perlmutter and Postal (1983) and Perlmutter (1989) have made use of the fact that both direct and indirect objects exhibit "object" properties to support the claim that so-called double object constructions actually have one of each type of object. As Kimenyi (pp. 64-68) notes, both the direct object and the indirect object of ditransitive clauses like (9) exhibit object properties.

(9) Umuhuûngu y-a-haa-ye umukoôbwa igitabo  
 boy he-pst-give-asp girl book  
 "The boy gave the book to the girl."

As (10) and (11) show, both the direct object and the indirect object can passivize, appear as incorporated pronouns, and relativize.

- (10) a. Igitabo cy-a-haa-w-e umugóre n'ûmugabo  
 book it-pst-give-pass-asp woman by man  
 "The book was given to the woman by the man."  
 b. Umugabo y-a-ki-haa-ye umugóre.  
 man he-pst-it-give-asp woman  
 "The man gave it to the woman."  
 c. igitabo umuhuûngu y-a-haa-ye umukoôbwa  
 book boy he-pst-give-asp girl  
 "the book which the boy gave the girl"
- (11) a. Umugóre y-a-haa-w-e igitabo n'ûmugabo  
 woman she-pst-give-pass-asp book by man  
 "The woman was given the book by the man."

b. Umugóre y-a-mu-haa-ye igitabo.

woman she-pst-him-give-asp book

“The woman gave him a book.”

c. umukoôbwa umuhuûngu y-a-haa-ye igitabo

girl boy he-pst-give-asp book

“the girl to whom the boy gave the book”

Perlmutter and Postal (1983) propose that ditransitives like (9) involve the advancement of the initial 3 to 2 and the retreat of the initial 2 to 3, as represented in (12); both nominals exhibit object properties and no violation of the Stratal Uniqueness Law is involved.<sup>4</sup> Instrumental applicatives like (2b) are given a similar analysis, as in (13).

(12) 1 P 2 3  
 1 P 3 2  
 boy give book girl

(13) 1 P 2 INSTR  
 1 P 3 2  
 man write letter pen

In contrast, Locative-to-2 advancement results in the chômage of the initial 2, as represented in (8) above.

Whether the double object or the retreat approach is taken to Instr-to-object advancement, the question remains: why is this construction different from Loc-to-object advancement? Our paper seeks to answer this question. We propose that the applied constructions in (1b) and (2b) differ because the structures that underlie them (i.e. (1a) and (2a)) differ. Contrary to other researchers' assumptions that both Locatives and Instrumentals are “oblique” nominals in initial structure, we claim that only Locatives are “oblique” arguments of the predicate. Instrumentals, we claim, are not arguments of the main predicate in initial structure, but rather constitute a predicate domain of their own. In section 2, we give a number of ways in which Locatives and Instrumentals differ. In section 3, we make our analyses of initial Locatives and Instrumentals more precise and show how the effects in section 2 are predicted. Furthermore, we show how the different initial structures lead to applicatives with the different properties discussed above.

## 2. Locatives vs. Instrumentals.

This section presents six ways in which unadvanced Locatives and Instrumentals differ.

### 2.1 Oblique pronoun incorporation.

As illustrated above, object pronouns are incorporated into the verb complex in Kinyarwanda. An incorporated pronoun form -ha also exists to refer to Locatives:

- (14) Ba-ra-kí-há-shyir-a.  
they-pres-it-there-put-asp  
“They put it there.”

In contrast, incorporated pronouns cannot refer to unadvanced Instrumentals, but only to advanced Instrumentals in applicative structures like (2b).

## 2.2 Oblique Subjects.

Kimenyi (pp. 129-130) notes that Locatives can be directly passivized, without being first advanced to object. In such passives, as in (15), the Locative appears with its preposition in subject position and the verb takes locative agreement.

- (15) Kw'iiposita h-ooherej-w-e íbárúwa n'ûmugabo.  
to post office it-send-pass-asp letter by man  
“To the post office was sent the letter by the man.”

Instrumentals, however, do not appear as subjects in such constructions:

- (16) \*N'ífkárámu i-ra-andik-w-a íbárúwa n'ûmugabo.  
with pen it-pres-write-pass-asp letter by man  
“With the pen is written the letter by the man.”

Unlike Locatives, Instrumentals appear as subjects only in applied constructions, as in (4a).

## 2.3 Object/subject reversal.

Kimenyi (pp. 141-146) discusses a structure in which the word order of the subject and the object nominals is reversed, giving the sentence a “passive reading”. No passive morphology appears on the verb or on the postposed subject. The verb in such clauses agrees with the preposed object, as illustrated in (17b).

- (17) a. Umuhuûngu a-ra-som-a igitabo.  
boy he-pres-read-asp book  
“The boy is reading the book.”  
b. Igitabo cyi-ra-som-a umuhuûngu.  
book it-pres-read-asp boy  
“The book is being read by the boy.”

As Kimenyi (pp. 141-142) notes, Locatives behave like objects with respect to object/subject reversal, since they can appear in preverbal position, as in (18). In this case the verb takes locative agreement.

- (18) Kw'iishuûri ha-gii-ye umúnyéeshuûri.  
to school it-go-asp student  
“To school went the student.”

Unadvanced Instrumentals, however, cannot appear in preverbal position in a reversal construction, as (\*19) shows.

- (19) \*N'íkárámu i-ra-andik-a úmwáalímu.  
 with pen it-pres-write-asp teacher  
 "With pen writes the teacher."

#### 2.4 Topicalization strategies.

As Kimenyi (pp. 191-196) points out, Locatives and Instrumentals are topicalized using different strategies. Locatives, like subjects, objects, indirect objects, and benefactives, are topicalized directly: the phrase appears to the left of the clause and the verb takes agreement/incorporation cross-referencing the preposed element. An example of a topicalized direct object appears in (20) and of a topicalized Locative in (21).

- (20) Igitabo, úmwána a-ra-gi-som-ye.  
 book, child he-pres-it-read-asp  
 "The book, the child has just read it."  
 (21) Kuú ntebe, ábána ba-ra-h-iica-ye.  
 on chair children they-pres-there-sit-asp  
 "On the chair, the children are sitting on it."

The Locative appears with its preposition and the verb shows locative agreement.

In contrast, Instrumentals cannot be topicalized in this fashion:

- (22) \*N'íkárámu, umukoôbwa a-ra-y-andik-a íbárúwa.  
 pen girl she-pres-it-write-asp letter  
 "The pen, the girl is writing a letter with it."

Instead, a second strategy, involving a resumptive pronoun, is used to topicalize Instrumentals:

- (23) Íkárámu, umukoôbwa a-ra-andik-a íbárúwa ná yo.  
 pen girl she-pres-write-asp letter with it  
 "The pen, the girl is writing a letter with it."

This strategy is used to topicalize other elements, including possessors and nominals within relative clauses. However, Locatives cannot be topicalized in this manner, as (\*24) shows.

- (24) \*Íntebe, umukoôbwa a-z-iicar-a kúrí yo.  
 chair girl she-fut-sit-asp on it  
 "The chair, the girl will sit on it."

### 2.5 Possessor ascension hosts.

As discussed by Kimenyi (pp. 97-98), possessor ascension, where a possessor ascends to take on an object role, is possible in Kinyarwanda.<sup>5</sup> As seen in (25a), possessors typically follow their heads and are introduced by a preposition, but when they ascend to object, as in (25b), they precede their heads and appear without a preposition.

(25) a. Umuhuungu y-a-twaa-ye igitabo cy'umukoobwa.  
 boy he-pst-take-asp book of girl

“The boy took the book of the girl.”

b. Umuhuungu y-a-twaa-ye umukoobwa igitabo.  
 boy he-pst-take-asp girl book

“The boy took the girl’s book.”

In the above example, the object serves as the host for possessor ascension. Locatives can also host ascension, as (26b) shows.

(26) a. Umwáana y-a-andits-e izíná rye mu igitabo cy'umugabo.  
 child he-pst-write-asp name his in book of man

“The child wrote his name in the man’s book.”

b. Umwáana y-a-andits-e umugabo mu igitabo izíná rye.  
 child he-pst-write-asp man in book name his

“The child wrote his name in the man’s book.”

In contrast, unadvanced Instrumentals cannot serve as possessor ascension hosts:

(27) a. Umuhuungu y-a-andits-e íbárúwa n'íkárámu y'umukoobwa.  
 boy he-pst-write-asp letter with pen of girl

b.\*Umuhuungu y-a-andik-i-ye íbárúwa umukoobwa n'íkárámu.  
 boy he-pst-write-appl-asp letter girl with pen

“The boy wrote the letter with the girl’s pen.”

### 2.6 Derivational causatives.

Kimenyi (pp. 164-165) discusses causatives formed with the derivational affix *-iish*. In such causatives, the causee appears immediately after the verb.<sup>6</sup>

(28) ...Umugabo a-ra-som-eesh-a ábáana ibitabo.  
 man he-pres-read-caus-asp children books

“The man is making the children read the books.”

As (29) shows, derivational causatives can be formed on a clause containing a Locative.

- (29) Umugóre y-iica-j-e úmwána kuú ntebe.  
 woman she-sit-caus-asp child on chair  
 "The woman made the child sit on the chair."

In contrast, derivational causatives cannot be formed on clauses that contain Instrumentals:

- (30) \*Úmwáalímu a-ra-andik-iish-a umúnyéeshuûri n'íikárámu.  
 teacher he-pres-write-caus-asp student with pen  
 "The teacher made the student write with a pen."

### 2.7 Summary.

The data in the preceding sections show that Locatives and Instrumentals differ systematically in a variety of constructions. We see that Locatives behave as an argument of the predicate. Like other arguments—direct objects, indirect objects, and benefactives—they can appear as incorporated pronouns, subjects in passives, preposed nominals in object/subject reversal constructions, direct topics, and possessor ascension hosts. In contrast, instrumentals cannot, indicating that they are not arguments of the predicate.

### 3. Our analysis.

The discussion above has led to the conclusion that unadvanced Locatives, like those in (1a) above, are "oblique" arguments of the predicate, and thus are appropriately represented by the structure in (31).

- (31) 1 P 2 LOC  
 woman send cook market

The Locative applicative construction (1b) can be claimed to involve an advancement to object. To be precise, we posit that Locative advancement in applicatives like (1b) involves first an advancement to 3 and then an advancement to 2. Evidence for this claim comes from examples like (32b) where Locative advancement takes place in a clause which contains an initial indirect object.

- (32) a. Umugóre a-ra-he-er-a umuhuûngu ibitabo mw'iishuûri.  
 woman she-pres-give-appl-asp boy books in school  
 "The woman gave the boy books in school."  
 b. Umugóre a-ra-he-er-a-mo ishûûri umuhuûngu ibitabo.  
 woman she-pres-give-appl-asp-loc school boy books  
 "The woman gave the boy books in school."

Not only is the direct object placed en chômage, as in (7) above, but, as Kimenyi (p. 96) notes, the indirect object also loses its object properties. For example, it does not passivize (33a), nor is it referred to by an incorporated pronoun (33b).<sup>7</sup>



- (33) a. \*Umuhuungu a-rá-hé-er-w-á-mo ishuûri ibitabo n'ûmugóre.  
 boy he-pres-give-appl-pass-asp-in school books by woman  
 "The boy is given the books in the school by the woman."  
 b. \*Umugóre a-rá-mu-hé-er-á-mo ishuûri ibitabo  
 woman she-pres-him-give-appl-asp-loc school books  
 "The woman is giving him the books in the school."

Thus, we posit Loc-3-2 advancement for examples like (32b), as represented in the stratal chart in (34).

(34)	1	P	2	3	LOC
	1	P	2	CHO	3
	1	P	CHO	CHO	2
	woman	give	books	boy	school

In contrast, Instrumentals are not arguments of the main predicate in initial structure but rather constitute a predicate domain of their own that is linked to the main clause to form a sentence, as represented by the bracketed structure for (2a) given in (35).

- (35) [[Umugabo arandika íbárúwa][n'íkárámu.]]

Since Instrumentals are not arguments of the main predicate, they cannot appear as incorporated pronouns, subjects in passives, preposed nominals in object/subject reversal constructions, direct topics, and possessor ascension hosts. Furthermore, Instrumentals are predicted not to be able to form Causatives, since derivational causatives are not formed on complex structures.

With respect to Instrumental applicatives like (2b), we propose that, like the causatives discussed in section 2.6, these structures are multipredicate clauses in the sense of Davies and Rosen (1988).<sup>8</sup> For a Causative such as (36), we propose the structure in (37).

- (36) Umugabo á-r-úubak-iish-a abákozi inzu.  
 man he-pres-build-cause-asp workers house  
 "The man is making the workers build the house."

(37)		P		1	2
	1	Ĥ	P	3	2
	man	build	-iish	workers	house

In (37), the first predicate "build" has two arguments, a subject and a direct object. The Causative morpheme is the second predicate. Besides having a subject of its own (the "causer"), the second predicate also inherits the direct object. Furthermore, the subject of the first predicate is revalued as the indirect object of the

second predicate. Thus, the Causative morpheme has the effect of increasing the valency of “build” from a two-place predicate to a three-place one. This analysis is consistent with the fact that, as Kimenyi (pp. 170-171) points out, both the causee (cf. 38) and the initial direct object (cf. 39) have object properties; for example, they passivize and can appear as incorporated pronouns...

(38) a. Abákozi bá-r-úubak-iish-w-a inzu n’úmugabo.  
 workers they-pres-build-caus-pass-asp house by man  
 “The workers are made to build the house by the man.”

b. Umugabo a-rá-b-úubak-iish-a inzu.  
 man he-pres-them-build-caus-asp house  
 “The man is making them build the house.”

(39) a. Inzu í-r-úubak-iish-w-a abákozi n’úmugabo.  
 house it-pres-build-caus-pass-asp workers by man  
 “The house is being made to be built by the workers by the man.”

b. Umugabo a-rá-y-úubak-iish-a abákozi.  
 man he-pres-it-build-caus-asp workers  
 “The man is making the workers build it.”

We claim that Instrumental applicatives likewise involve a multipredicate clause.<sup>9</sup> Thus, we would also represent (2b) as in (40); the Instrumental is the subject of a first predicate that is revalued to 3, while the direct object of the first predicate inherits its role.

(40)

	P		1	2
1	Ĥ	P	3	2
man	write	-iish	pen	letter

The structure in (40), since it posits that both the Instrumental and the direct object are final objects, explains why both nominals have object properties (cf. (4) and (5) above).

There are several ways in which the Causee in derivational Causatives and the Instrumental in applicatives behave like indirect objects rather than direct objects, thereby supporting this analysis. To give one example, when both direct objects and indirect objects appear as incorporated pronouns, the indirect object follows the direct object, as (41):

(41) Umugabo y-a-yá-b-érets-e  
 man he-pst-them-them-show-asp  
 “The man showed them [pictures] to them [people].”

The incorporated pronoun referring to the Causee in (42) and the Instrumental in

(43) appears after the pronoun referring to the direct object, as predicted by (37)/(40).

(42) Umugabo a-rá-yi-b-uubak-iish-a.  
man he-pres-it-them-build-caus-asp  
"The man is making them build it."

(43) Umugabo a-ra-yi-y-aandik-iish-a.  
man he-pres-it-it-write-instr-asp  
"The man is writing it with it."

#### 4. Conclusion.

We have shown that Locatives and Instrumentals in Kinyarwanda have different structures: while Locatives are oblique nominal arguments of the main predicate, Instrumentals are not. This posited difference in structure explains why Locative applicatives and Instrumental applicatives differ. Locative applicatives involve the advancement of an oblique to object; the initial direct object is a *chômeur* as expected in Locative applicatives. Instrumental applicatives, however, are multipredicate clauses having the same structures as derivational Causatives in Kinyarwanda. Like multipredicate clauses in many languages (including French, Japanese, Tagalog, Telugu, and Tzotzil), the subject of the first predicate is revalued as the indirect object while the direct object inherits its role. Thus, multipredicate clauses are valence-increasing. Consequently, both the Instrumental or Causee and the direct object have object properties.

Our analysis has advantages over those previously posited for Kinyarwanda. Unlike Kimenyi's analysis (see (7) and (8)), our analysis is consistent with the Stratal Uniqueness Law. Unlike Perlmutter and Postal's analysis (see (12) and (13)), we need not posit a rule of 3-2 advancement nor a rule of 2-3 retreat. No evidence independent of the requirements of Stratal Uniqueness was offered for these rules. Furthermore, evidence from other languages for structures involving advancement to object and retreat to indirect object in the same stratum has not materialized. So neither language-internal nor cross-linguistic evidence has been offered to support such an analysis.

Finally, our analysis motivates a difference between Locative and Instrumental applicatives that follows from their initial structures. The difference between these structures under the analyses proposed by Kimenyi and by Perlmutter and Postal was merely stipulated. Under our analysis this difference is expected. Moreover, the constructions we posit for Kinyarwanda, namely oblique advancements creating *chômeurs* and valence-increasing multipredicate clauses, are well attested in languages of the world.

### Notes

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<sup>1</sup>Much of the data in this paper is from Kimenyi (1980). We have followed his system of interlinear glosses, which he gives on p. xv. The following Relational Grammar abbreviations are used: 1 subject, 2 object, 3 indirect object, CHO Chômeur, INSTR Instrumental, LOC Locative, P Predicate, and  $\hat{P}$  P-chômeur.

<sup>2</sup>Our Kinyarwanda consultant thinks that sentences like (1b) are somewhat artificial. He considers the sentences in (3) to be less so.

<sup>3</sup>In the parlance of Bresnan and Moshi 1990, Kinyarwanda is a symmetrical language if (2b) is considered but an asymmetrical language if (1b) is considered.

<sup>4</sup>This contrasts with an analysis which posits that ditransitives are monostratal structures. See Kimenyi (1980) and Dryer (1983).

<sup>5</sup>Bickford (1986) argues that inalienable possessors ascend to 2 while alienable possessors ascend to 3.

<sup>6</sup>A variety of forms mark the causative, including -esh and -j.

<sup>7</sup>Kimenyi's data and those of our consultant thus contradict the data in Dryer (1983).

<sup>8</sup>This claim is the RG equivalent of the structure for English instrumentals posited by Lakoff (1968).

<sup>9</sup>Noting that Instrumental applicatives and Causatives take the same verbal morphology -ish, Kimenyi (p. 164) claims: "Causatives and instrumentals are in fact drawn from the same structure, the only difference being that while subjects of causatives are always animate, those of instrumentals are inanimate."

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