

Polysemy, Distribution, and Variation in Kinyarwanda Verbal *ra-*

Child Language Proseminar

Adam An

A dark blue diagonal gradient bar that starts from the bottom left and extends towards the top right, covering the lower half of the slide.

- Bantu language
- [iciɲargwa:nda]
"ee-cheen-yar-gwan-da"
- ~ 10 million speakers
- Verbal morphology with many affixes



Morphological complexity

U-ra-gi-som-a-ho.

Morphological complexity

you (subject)
progressive
it (object)
read
incomplete action
there

U-ra-gi-som-a-ho.

2sg.SBJ-PROG-7.OBJ-read-IPFV-16.LOC

'You're reading it there.'

Morphological complexity

you (subject)
progressive
it (object) read incomplete action
there

U-ra-gi-som-a-ho.

2sg.SBJ-**PROG**-7.OBJ-read-IPFV-16.LOC

'You're **reading** it there.'

rd-

A large, stylized graphic of the letters 'ra' in a bold, sans-serif font. The 'r' is dark red and the 'a' is a lighter shade of red. They are positioned behind a horizontal grey band.

Five Reasons *ra-* is Hard to Acquire

Reason 1

ra- has (at least!)
**three different
functions.**

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**three different
functions.**

present progressive
proposition-finality
phonological

We've already seen the **progressive *ra-***

you (subject)
progressive
it (object)
read
incomplete action
there

U-ra-gi-som-a-ho.

2sg.SBJ-**PROG**-7.OBJ-read-APPL-IPFV-16.LOC

'You're **reading** it there.'

Proposition-finality

Proposition \approx "facts I'm stating about the world"

Proposition-finality

Proposition \approx "facts I'm stating about the world"

"You fortunately arrived early."

Proposition-finality

Proposition \approx "facts I'm stating about the world"

propositional content
corresponds to things in the world

"You fortunately arrived early."

Proposition-finality

Proposition \approx "facts I'm stating about the world"

not part of the proposition

propositional content
corresponds to things in the world

"You fortunately arrived early."

Proposition-finality

In Kinyarwanda, the proposition is reflected in **word order**

Wahageze

you arrived

kare

early

ku bw'amahirwe.

fortunately

Proposition-finality

In Kinyarwanda, the proposition is reflected in **word order**

The proposition has to stay together.

<i>Wahageze</i>	<i>kare</i>	<i>ku bw'amahirwe.</i>
you arrived	early	fortunately

Proposition-finality

ra- obligatorily appears on a verb that is **proposition-final**.

Warahageze

you arrived

ku bw'amahirwe.

fortunately

Reason 1

ra- has (at least!)
**three different
functions.**

present progressive

proposition-finality

phonological

Phonological

In some embedded contexts, a *ra-* appears that isn't progressive or proposition-final.



Phonological

I argue that this *ra-* is phonologically inserted for homophony avoidance: *wahageze* is “taken”. (curious? ask me!)

Kinyarwanda knowers probably aren’t computing homophony on the fly - they’re probably memorizing a semantically and structurally unmotivated exception.

Nsanga warahageze ejo.

I realize

you arrived

yesterday.

Reason 1

ra- has (at least!)
**three different
functions.**

present progressive

proposition-finality

phonological

FORMS

ra-

FUNCTIONS

present progressive

proposition-finality

phonological

A complicated form-function mapping

Reason 2

The different functions of *ra-* draw on different kinds of linguistic knowledge.

present progressive
proposition-finality
phonological

What do you know when you know *ra-*?

Present progressive

Only one that
corresponds to
something in the world

Aspect is a late
acquisition (Valian 2006
via Guasti 2016)

Proposition-finality

Requires **structural knowledge** of a
functionally-motivated
syntactic boundary

You can't get this right
if your structure isn't
right

Phonological

If it's computed on the
fly, requires
**morphophonological
knowledge**

If it's not computed on
the fly, requires
memorization of
exception unmotivated
by same reasons as
other two

Reason 3

Many morphosyntactic contexts **forbid** *ra-*.

A **present progressive**,
proposition-final, or
phonologically
disambiguated verb **does**
not always have *ra-*.

Present progressive

Barasoma ibitabo.
they are reading books

Proposition-finality

Barasomye rwose.
they read definitely

Phonological

Nsanga baraomye.
I realize they read

Negation forbids *ra-*

Present progressive

Barasoma ibitabo.
they are reading books

Ntibasoma ibitabo.
they aren't reading books

Proposition-finality

Barasomye rwose.
they read definitely

Ntibasomye rwose.
they didn't read definitely

Phonological

Nsanga baraomye.
I realize they read

Nsanga ntibasomye.
I realize they didn't read

Negation forbids *ra-*

Present progressive

Barasoma ibitabo.
they are reading books

Ntibasoma ibitabo.
they aren't reading books

Proposition-finality

and a whole slew of other environments...

relative clauses
embedded clauses
quotatives
subjunctives
imperatives
infinitives
jussives...

Phonological

Nsanga barasomye.
I realize they read

Nsanga ntibasomye.
I realize they didn't read

Reason 3

A Kinyarwanda-acquiring child does not get to rely on *ra-* as the **sole cue of any of the three functions.**

FORMS

ra-

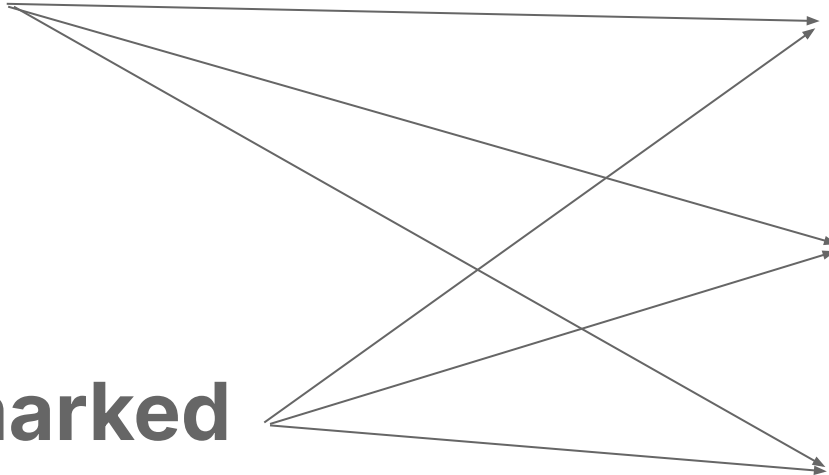
unmarked

FUNCTIONS

present progressive

proposition-finality

phonological



A very complicated form-function mapping

Reason 3

The unmarked verbs themselves have a host of other functions.

This frequently results in **ambiguity**.

POSITIVE

PROGRESSIVE

Barasomye ibitabo.

"They're reading books."

NOT
PROGRESSIVE

Basomye ibitabo.

"They're reading books."

In positive sentences, *ra-*
disambiguates present progressive
from other aspects.

POSITIVE

PROGRESSIVE

Barasomye ibitabo.

"They're reading books."

NOT
PROGRESSIVE

Basomye ibitabo.

"They're reading books."

But with *ra-* forbidden in negation, there's
nothing to disambiguate these two.

NEGATIVE

Ntibasomye ibitabo.

"They're reading books."

Ntibasomye ibitabo.

"They're reading books."

FORMS

ra-

unmarked

FUNCTIONS

present progressive

other meanings

proposition-finality

other meanings

phonological

other meanings

A very, very complicated form-function mapping

Reason 4

Ra- use is subject to **variation.**

Negation forbids *ra-*

Present progressive

Barasoma ibitabo.
they are reading books

Ntibasoma ibitabo.
they aren't reading books

Proposition-finality

Barasoma ibitabo.
they are reading books

Ntibasoma ibitabo.
they didn't read books

Phonological

Remember this slide?

Negation forbids *ra-*

Present progressive

Barasoma ibitabo.
they are reading books

Ntibasoma ibitabo.
they aren't reading books

Proposition-finality

Baraso
they

Ntibaso
they didn't read

Phonological

somye.
d

somye.
they didn't read

In other work, I show that **about 25% of Rwandans can in fact say *ra-* here:**

Ntibarasoma ibitabo.

Reason 4

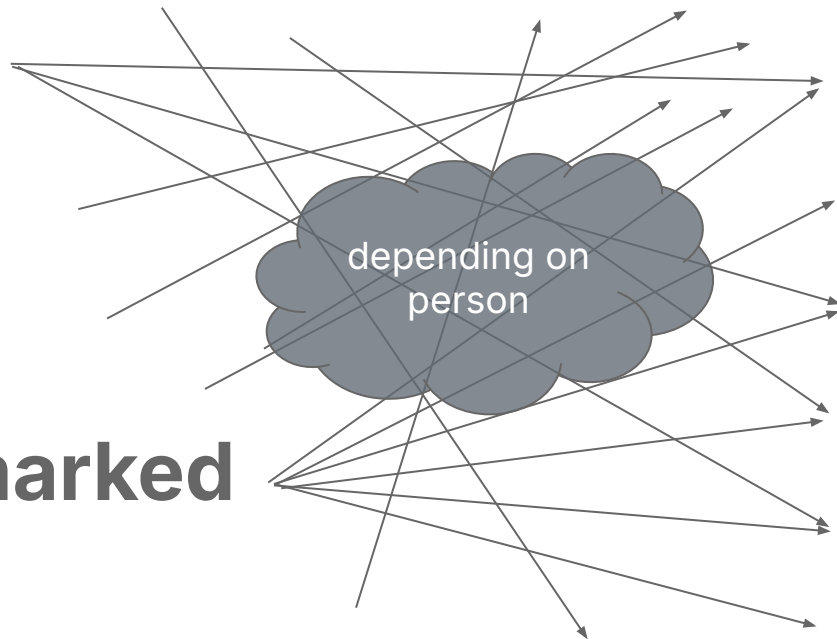
Ra- use is subject to **variation**.

→ Kinyarwanda-acquiring children are exposed to **conflicting grammars** in their input!

FORMS

ra-

unmarked



FUNCTIONS

present progressive

other meanings

proposition-finality

other meanings

phonological

other meanings

A very, very, very complicated form-function mapping

Reason 5

In practice, *ra-* is
infrequent.



"Rwandan beef, you'll find it here!"

The only *ra*- I saw in twelve days of being in Rwanda

Reason 5

Instances of *ra-* in the input are relatively infrequent.

These infrequent tokens are all a Kinyarwanda-acquiring child has to work with!

Five reasons why *ra-* is hard to acquire

1. *ra-* has different functions.
2. Those functions draw on different kinds of linguistic knowledge.
3. *ra-* does not consistently mark those functions.
4. *ra-* use is subject to variation.
5. *ra-* is infrequent.

A comprehensive literature review of Kinyarwanda acquisition

Let's talk!

What interests you? Teach me!

Language Acquisition, second edition: The Growth of Grammar - Guasti 2016

Young Children's Understanding of Present and Past Tense - Valian 2006

Thank you: Utako Minai

Murakoze!

Thank you!

Murakoze!

Thank you!