

Grammaticalization in Kinyarwanda mediated by age and gender despite ideologies about region

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Today we're
talking about...

What **morphosyntactic variation**
does Kinyarwanda have?

Today we're talking about...

Who says what differently?

Is there **ongoing change**?

What **facilitates** change?

Kinyarwanda

Bantu; ~10 million speakers

national lg. of Rwanda (East Africa)

agglutinative morphology



(1) Ba-aá-ra-gi-sóm-e-ye.

3pl.SBJ-DIST\PST-DJ-7.OBJ-DIST\read-APPL-PFV.PST

'They were reading it for someone (yesterday or earlier).'

"disjoint" marker (DJ)

(1) Ba-aá-**ra**-gi-sóm-e-ye.

3pl.SBJ-DIST\PST-**DJ**-7.OBJ-DIST\read-APPL-PFV.PST

'They were reading it for someone (yesterday or earlier).'

(Ngoboka & Zeller 2017,
van der Wal 2017) 6

"disjoint" marker (DJ)

(1) Ba-aá-**ra**-G

3pl.SBJ-DIST\PST-DJ-7.OBJ

'They were reading it for so

**distribution of disjoint
marker depends on...
a lot!**

information structure
TAM
constituency of vP
polarity
embeddedness...

(Ngoboka & Zeller 2017, van der Wal 2017,
Halpert 2012, Nshemezimana & Bostoen
2017)

er 2017,
al 2017)

ra- often encodes
near future / present progressive

(2) Ba-**ra**-gi-som-er-a.

3pl.SBJ-**FUT.near**-7OBJ-read-APPL-IPFV

'They are about to read it.'

previous fieldwork:

(An & Umuhiza 2023, An & Ngoboka 2025)

ra- use varies

previous fieldwork:

(An & Umuhiza 2023, An & Ngoboka 2025)

ra- use varies

four
“variables”
selected

1

near future / present progressive *ra-*
may be present or absent in:
negation

(3) **Nti**-ba-**(ra)**-som-á.

NEG-3pl.SBJ-FUT.near-NEG\read-NEG\IPFV

'They are not about to read.'

1

near future / present progressive *ra-*
may be present or absent in:
relativization

(4) a-b-áana ba-(*ra*)-som-á

AUG-2-children

3pl.SBJ-**FUT.near-REL\read-REL\IPFV**

'children who are not about to read'

1

near future / present progressive *ra-*
may be present or absent in:

participials

(an embedded category selected by a few lexical heads)

(5) N-saang-a bá-(*ra*)-som-a.

1sg.SBJ-CJ\realize-IPFV

PART\3plSBJ-FUT.near-read-IPFV

'I realize they are about to read.'

2

ra- may be obligatory or optional before *ngo* 'that'

(6) N-a-(*ra*)-vúz-e *ngo* haanze híjjimye.

1sg.SBJ-PST-DJ-say-PFV *that* it's dark outside

'I said that it's dark outside.'

3

present progressive *ra-*
competes with a **periphrastic**

(7) Ba-**ra**-som-a.

Ba-ri

gu-som-a.

3pl.SBJ-PRES.PROG-read-IPFV

3pl.SBJ-COP

INF-read-IPFV

'They are reading.'

4

ra- encodes
near future or present progressive

(8) Ba-**ra**-som-a.

3pl.SBJ-**FUT.near~PRES.PROG**-read-IPFV

'They are about to read ~ they are reading.'

1

near future / present
progressive *ra-*
may be present or absent in:
**negation, relativization,
participials**

2

ra- may be obligatory or
optional before
***ngo* 'that'**

3

present progressive *ra-*
competes with a
periphrastic

4

ra- encodes
**near future or present
progressive**

Who do Rwandans **think** use *ra-* differently?

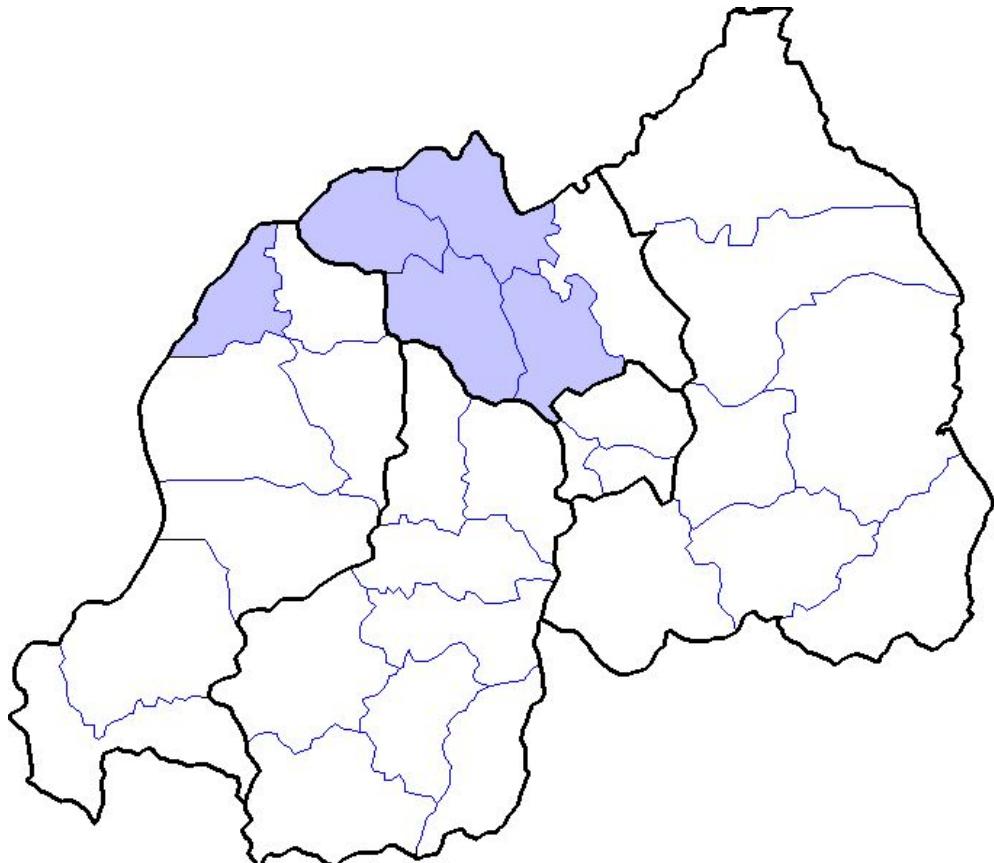
An & Ngoboka 2025:
expectations / ideologies
about these variables

(N = 15)

	aware at all	<i>ra-</i> is young	<i>ra-</i> is Northwestern	<i>ra-</i> is used by any gender
negated <i>ra-</i> 	13	4	3	0
<i>ra-</i> before <i>ngo</i> 	11	4	1	0
periphrastic 	13	3	1	0

Rwandans think
are **Northwestern**
and **young**





“NW dialects”

ikirera, ikigoyi

stigmatized

Who actually uses *ra-* differently?

survey of 65 respondents

ages 23-59

all five regions of Rwanda

17 self-reported users of NW
dialects

Who actually uses *ra-* differently?

Likert scales for sentences with / without *ra-* (White & Roberts 2022)

(worst) 1 - 5 (best)

preference

score with *ra-* minus score without *ra-*

max MPS 4 = max preference **for** *ra-*

min MPS -4 = max preference **against**

Who actually
uses *ra-*
differently?

1

2

3

4

1

near future / present
progressive *ra-*

may be present or absent in:

**negation, relativization,
participials**

1
NEG

1
REL

1
PART

showed preference for *ra-*
(Likert scores > 0 after scaling within participant)

64%

61%

41%

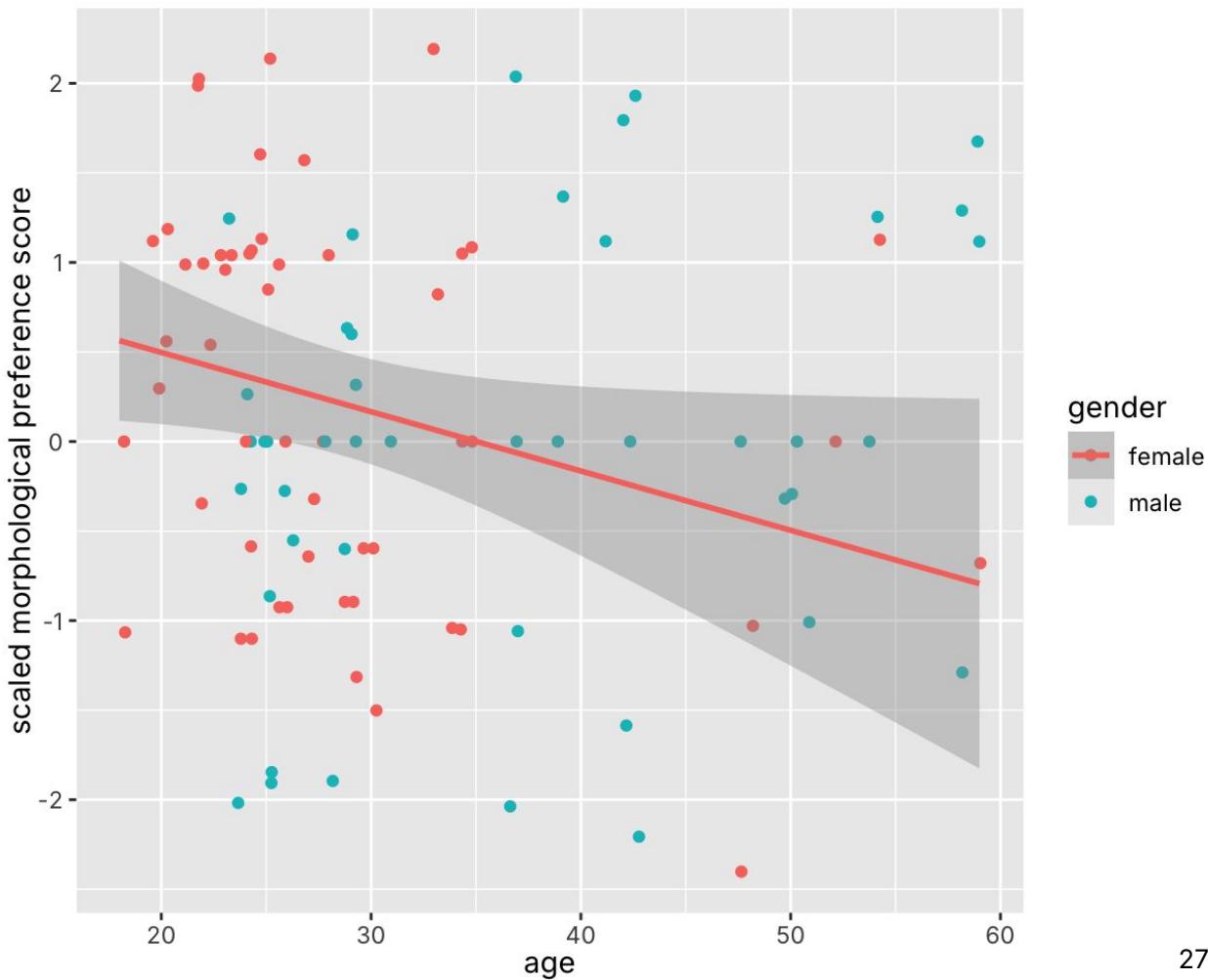


1

NEG

main effect of gender
 $(\beta = -2.084, p = 0.199)$
attenuated by
increasing age in
significant interaction
 $(\beta = 0.055, p = 0.038)$

**young women
prefer *ra-* in
negation**

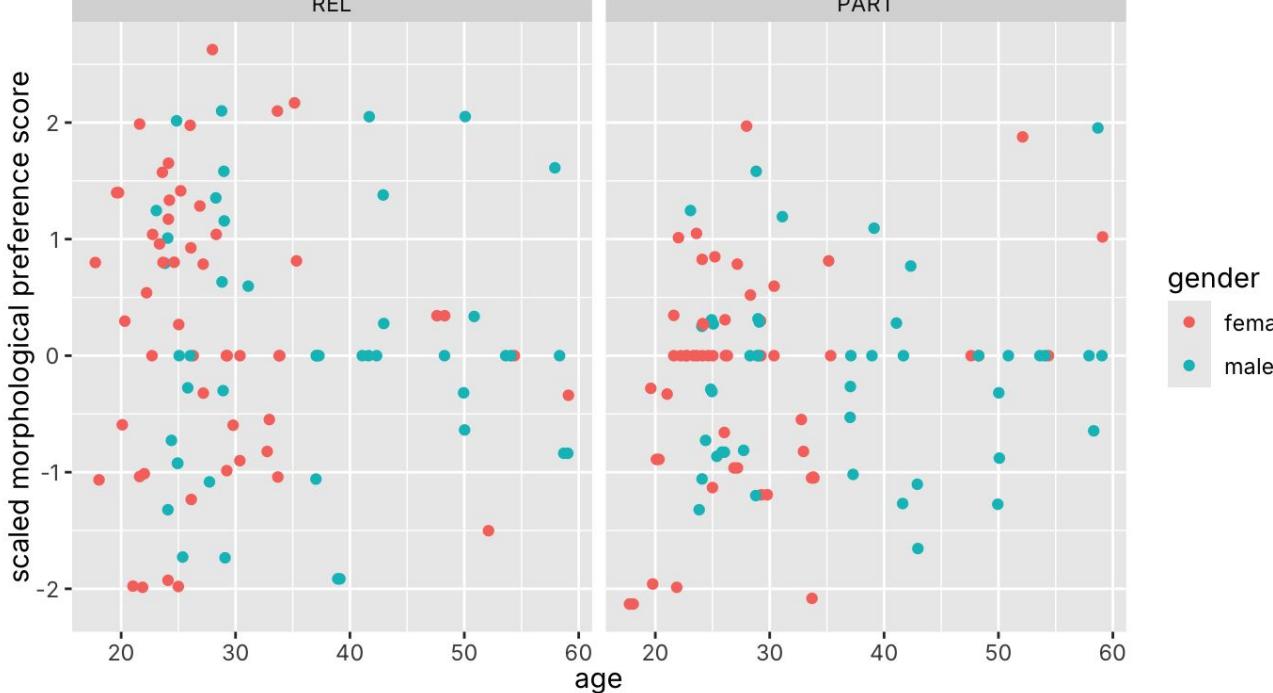


1

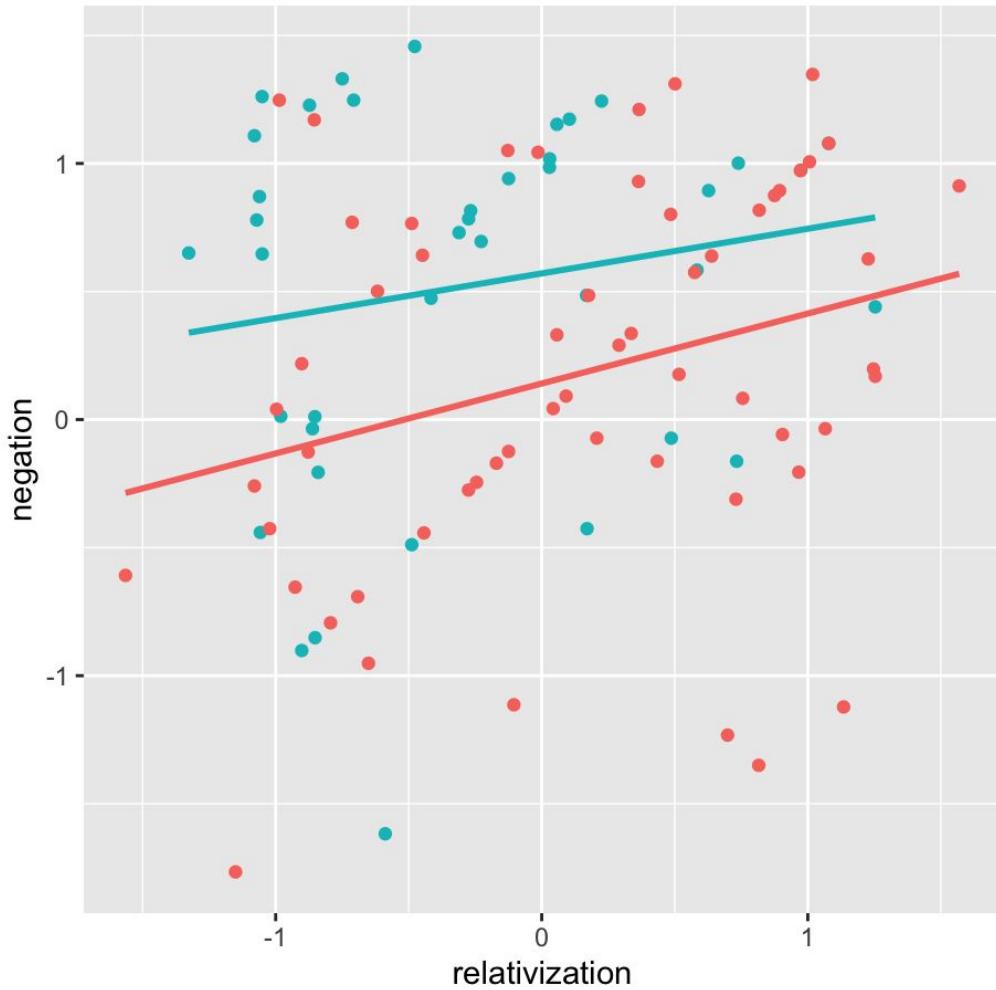
REL

1

PART



**no effects of
age, gender,
region, or
dialect**



TAM

- FUT
- PROG

post-hoc:
higher relativization
scores predict higher
negation scores
($\beta = 0.273$, $p = 0.026$)

change in favor of
ra- led by young
women

stable variation?

64%

61%

41%



2

women

($\beta = -1.449$, $p = 0.060$)

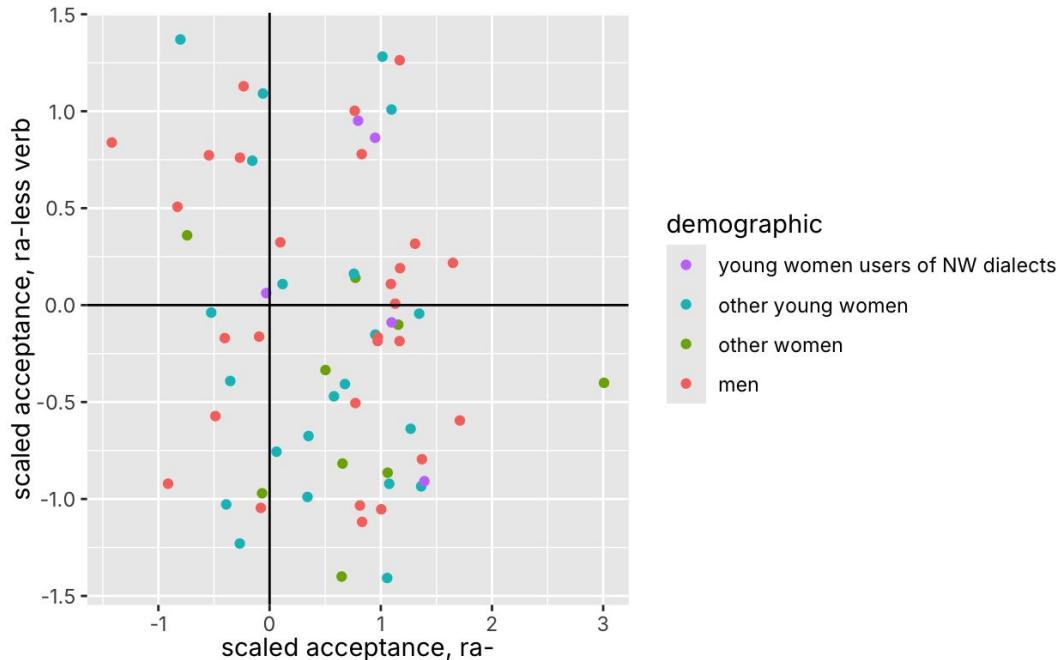
young women

($\beta = 0.046$, $p = 0.039$)

young women users of NW dialects

($\beta = -0.09$, $p = 0.034$)

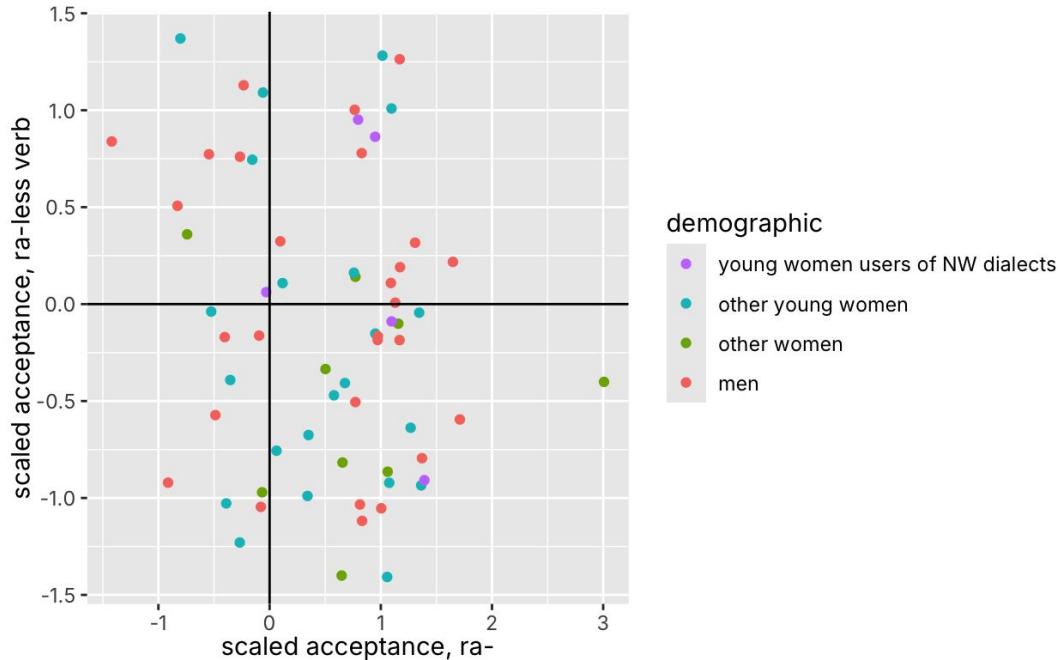
all rate *ra-* higher



2

**formerly optional *ra-*
becoming more
preferable**

change led by **young
women who use NW
dialects**



1

near future / present
progressive *ra-*
may be present or absent in:
**negation, relativization,
participials**

2

ra- may be obligatory or
optional before
***ngo* 'that'**

**young women users of NW
dialects, *ra-* more preferable**

3

present progressive *ra-*
competes with a
periphrastic

4

ra- encodes
**near future or present
progressive**

1

near future / present
progressive *ra-*
may be present or absent in:
**negation, relativization,
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2

ra- may be obligatory or
optional before
***ngo* 'that'**

**young women users of NW
dialects, *ra-* more preferable**

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present progressive *ra-*
competes with a
periphrastic

4

ra- encodes
**near future or present
progressive**

no effects of age, gender, region, or dialect

Discussion

Rwandans think
are **Northwestern**
and **young**



role of Northwest?

no clear pattern

sporadic effects, small sample size,
stigmatization → underreporting

In the IND-DP frame there was a significant interaction between gender and region ($\beta = 5.962$, $p = 0.046$) such that male Northwesterners preferred periphrastics; the interaction was attenuated by increasing age in a significant interaction ($\beta = -0.181$, $p = 0.027$) such that young male Northwesterners preferred periphrastics. In the REL frame there was a marginal main effect of gender ($\beta = 1.186$, $p = 0.098$) such that men preferred periphrastics; this effect was attenuated by region in a marginally significant interaction ($\beta = -5.514$, $p = 0.091$) such that male Northwesterners dispreferred periphrastics. In the PTCF frame there was a significant main effect of gender ($\beta = -2.185$, $p = 0.025$) such that men dispreferred periphrastics. This effect was attenuated by increasing age ($\beta = 0.058$, $p = 0.042$) such that young male Northwesterners preferred periphrastics.

evidence for change
led by young women

evidence for **stability**

all three crosslinguistically innovative, but...

change



stability



proposal:

**early change →
stability**



proposal:

later change
(picked up by our
sample)



early change →
stability



**what's so special
about these two?**



unmarked

(original distribution;
near-universal acceptance)

barasoma

(9a) unmarked

barasoma

(9b) REL

ba(ra)somá

(9c) PART

bá(ra)soma

surface similarity
facilitates analogy

(9a) unmarked

barasoma

(9b) REL

ba(ra)somá

(9c) PART

bá(ra)soma

(9d) NEG

ntiba(ra)somá

extra segments hinder analogy

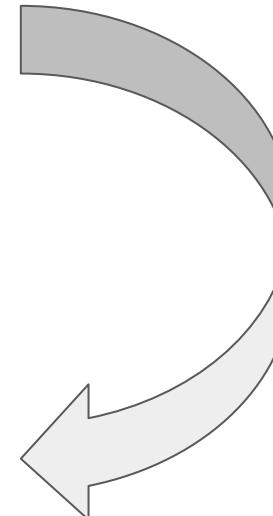
Periphrastic negation uses relativization

(10a) *Ntaabwo ba(ra)somá.*

NEG they.are.about.to.read.**REL**

'They are not about to read.'

(early change?)



(10b) *Nti-ba(ra)somá.*

NEG-they.are.about.to.read

'They are not about to read.'

(late change?)

additional
pressure
created by
REL?

surface similarity
facilitates analogical
morphological
change

→ currently testing this!
how? ask me / see handout!

why did one “settle” higher than the other?

61%

41%



frequent infrequent



frequency facilitates
leveling of competing
morphosyntactic
strategies (Bybee 1995,
Smith 2001)

maybe:

frequency facilitates
greater use if variation
reaches stability?

wrapping up

Rwandans use *ra-*
differently!

wrapping up



some *ra-* variation is
stable

wrapping up

ra- is expanding into
new syntactic
environments



wrapping up

surface similarity
facilitates analogical
change?

wrapping up

frequency facilitates
higher use in stable
variation?

Murakoze!

'Thank you!'

- An, Adam & Jean Paul Ngoboka. 2025. Variation and Awareness in Kinyarwanda Morphosyntax. Presented at the 56th Annual Conference on African Linguistics.
- An, Adam & Solange Umuhzoza. 2023. Grammaticalization in progress in Kinyarwanda. Poster, LSA Annual Meeting 2023.
- Bybee, Joan. 1995. Regular morphology and the lexicon. *Language and Cognitive Processes* 10(5). 425–455. <https://doi.org/10.1080/01690969508407111>.
- Halpert, Claire. 2012. Argument licensing and agreement in Zulu.
- Ngoboka, Jean Paul & Jochen Zeller. 2017. The conjoint/disjoint alternation in Kinyarwanda. In Jenneke Wal & Larry M. Hyman (eds.), *The Conjoint/Disjoint Alternation in Bantu*, 350–389. De Gruyter. <https://doi.org/10.1515/9783110490831-013>.
- Nshemezimana, Ernest & Koen Bostoen. 2017. The conjoint/disjoint alternation in Kirundi (JD62): A case for its abolition. In Jenneke van der Wal & Larry M. Hyman (eds.), *The Conjoint/Disjoint Alternation in Bantu*, 390–425. De Gruyter. <https://doi.org/10.1515/9783110490831-014>.
- Smith, K. Aaron. 2001. The role of frequency in the specialization of the English anterior. In Joan L. Bybee & Paul J. Hopper (eds.), *Typological Studies in Language*, vol. 45, 361–382. Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/tsl.45.18smi>.
- Wal, Jenneke van der. 2017. What is the conjoint/disjoint alternation? Parameters of crosslinguistic variation. In Jenneke van der Wal & Larry M. Hyman (eds.), *The Conjoint/Disjoint Alternation in Bantu*, 14–60. De Gruyter. <https://doi.org/10.1515/9783110490831-002>.
- White, Yosiane & Gareth Roberts. 2022. Variability in speaker expectations of morphosyntactic mutation in Welsh. *Glossa: a journal of general linguistics* 7(1). <https://doi.org/10.16995/glossa.8730>.

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