

# 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-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**-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**-**Q**

3pl.SBJ-DIST\PST-**DJ**-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)

2017,  
al 2017)

*ra-* often encodes  
**near future / present progressive**  
(but not always)

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

3pl.SBJ-**FUT.near**-OBJ-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 híijimye.

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'**

4

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

3

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

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

An & Ngoboka 2025:  
**expectations / ideologies**  
about these variables

(N = 15)

	aware at all	<i>ra-</i> is <b>young</b>	<i>ra-</i> is <b>Northwestern</b>	<i>ra-</i> is used by <b>any gender</b>
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 accepts *ra*- differently?

survey of 65 respondents

ages 23-59

all five regions of Rwanda

17 self-reported users of NW  
dialects

# Who actually accepts *ra-* differently?

**Likert scales** for sentences with / without *ra-* (White & Roberts 2022)  
(worst) 1 - 5 (best)

**Morphological Preference Score  
(MPS)**

score with *ra-* minus score without *ra-*  
max MPS 4 = max preference **for** *ra-*  
min MPS -4 = max preference **against**

Who actually  
**accepts** *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

crosslinguistic evidence:  
*ra-* is **innovative** in these environments

→ change in favor of *ra-*?



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

**64%**

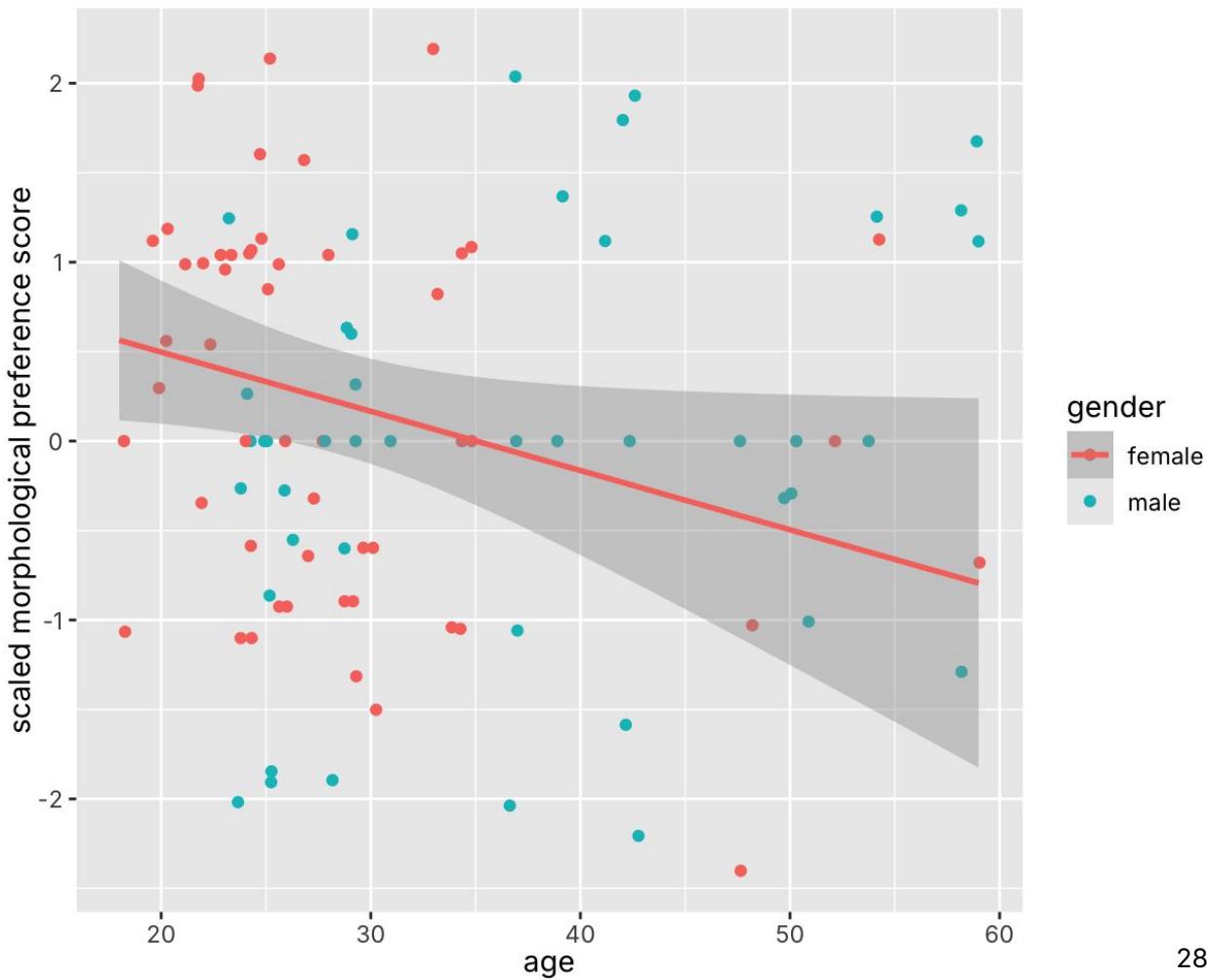
**61%**

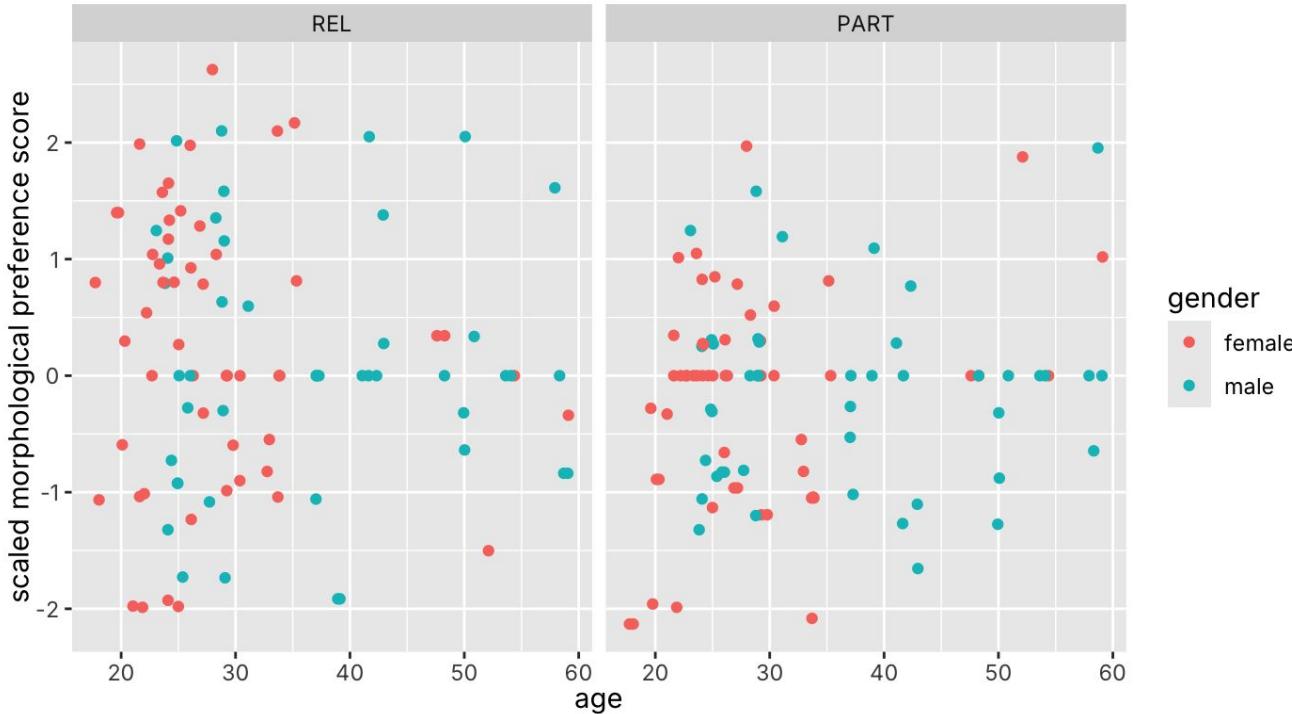
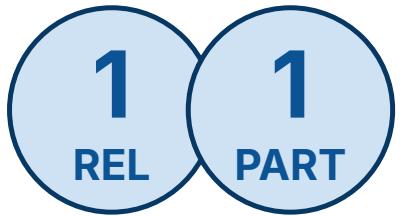
**41%**



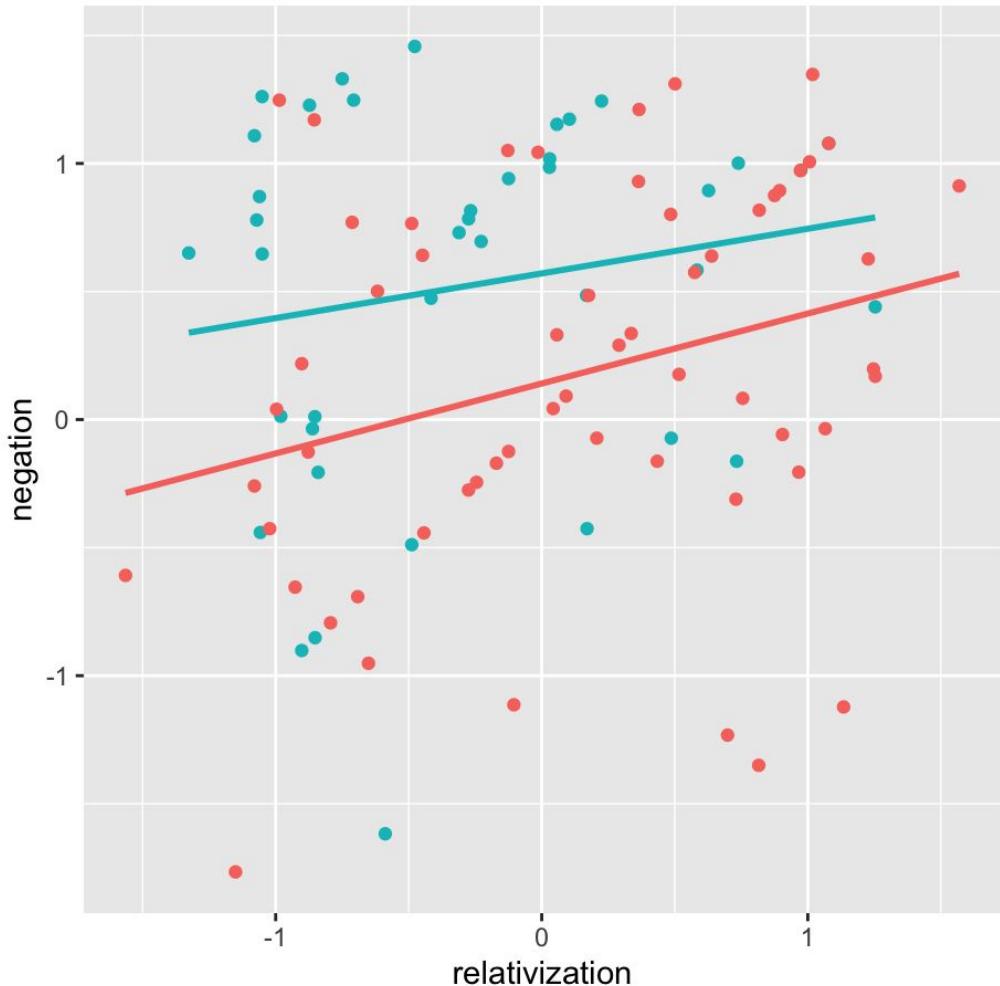
main effect of gender  
( $\beta = -2.084$ ,  $p = 0.199$ )  
attenuated by  
increasing age in  
significant interaction  
( $\beta = 0.055$ ,  $p = 0.038$ )

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





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



TAM

■	FUT
■	PROG

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

change in favor of  
ra- led by young  
women

stable variation?

**64%**

**61%**

**41%**



2

*ra-* is obligatory or  
optional before  
**ngo 'that'**

# 2

women

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

young women

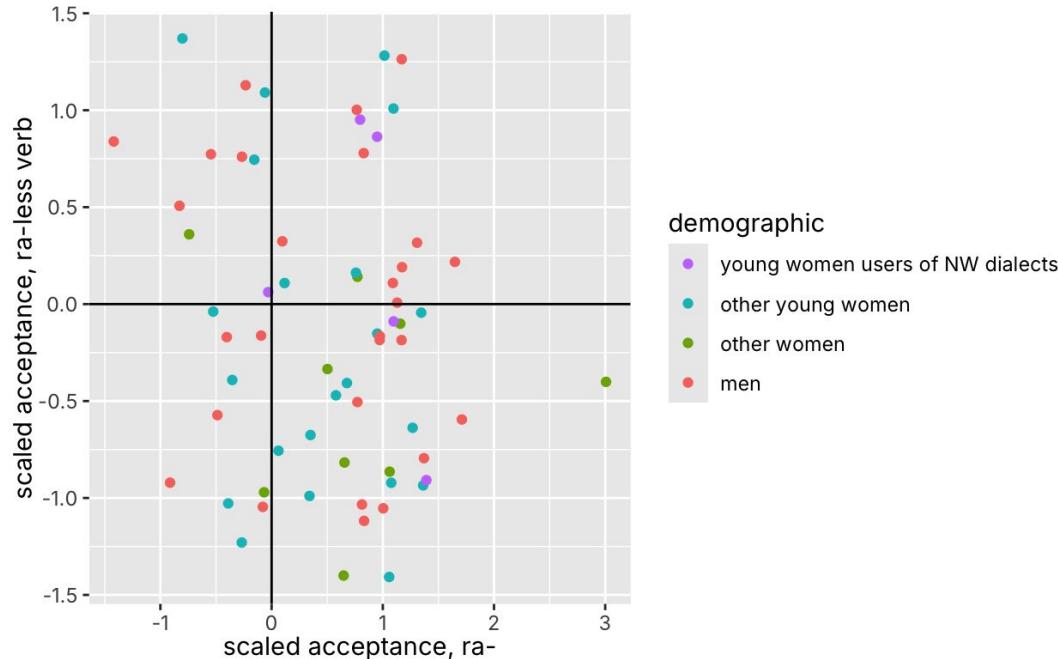
$(\beta = 0.046, p = 0.039)$

young women users of NW dialects

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

**all rate *ra-* higher**

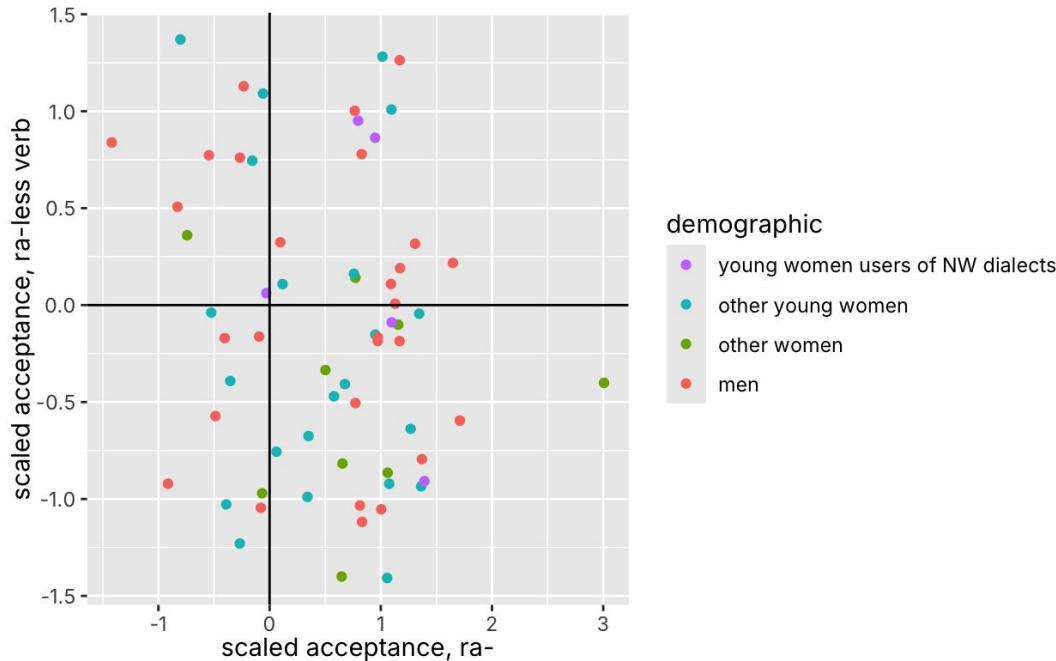
**no patterns re: *ra-less* counterparts**



# 2

**optional *ra-* becoming  
more acceptable  
but not more obligatory**

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,  
participials**

**young women, *ra-* in  
negation only**

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**

**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 PTCP 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 one:

**later** change?  
**slower** change?  
→ visible change



**early** change?  
**faster** change?  
→ stability

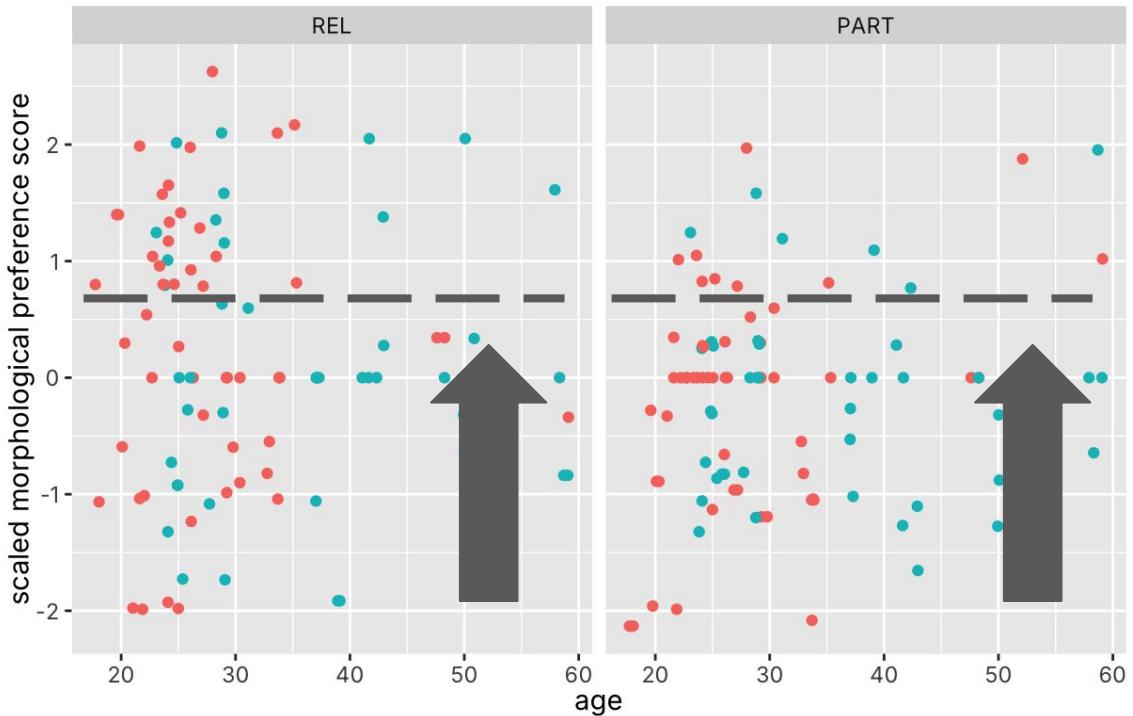


proposal two:

# community change

adults in communities undergoing change may “participate in the change themselves” (Sankoff 2019)

1  
REL  
1  
PART



(idealized  
lines!)

raised  
acceptance  
among older  
people  
removes age  
effects

gender  
female  
male

both proposals:  
**more susceptible**  
to change. why?



**(9a) unmarked**

*barasoma*

original distribution  
(near-universal acceptance)

**(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.*

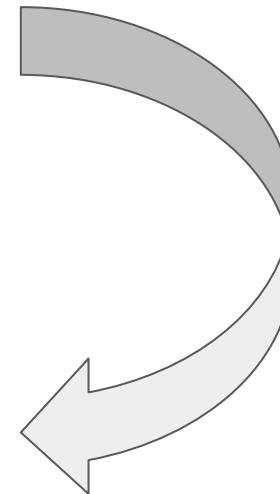
NEG      they.are.about.to.read.REL

'They are not about to read.'

(10b) *Nti-ba(ra)somá.*

NEG-they.are.about.to.read

'They are not about to read.'



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!'

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