A method for detecting superlative interpretations of positive adjectives

Pamela Sugrue and Elizabeth Coppock
Initial Data
Joseph proposes to have a contest and see who can climb the tallest cacao tree.
Storyboard for eliciting superlatives

Among the three children, Joseph was the one who climbed the tallest tree.
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Kati ya watoto, hawa watatu Joseph ndiye aliyepanda m-ti m-refu kuliko y-ote.

tree agr-tall above agr-all
Typology of superlative constructions

- **M**: morphological superlative marker
  (e.g. *tall-est*)

- **PERIPH**: periphrastic superlative marker, in some cases optional
  (e.g. Turkish *en leziz `most delicious`*)

- **DEF**: superlative indicated via definiteness alone
  (e.g. French *la plus belle `the more beautiful`*)

- **CMPR**: no formal distinction between comparative and superlative
  (e.g. as in *Irish*)

- **ALL**: superlative indicated with "of/than all"
  (e.g. Russian *vyš-e vse-x `tall-er all-of`*)

- **ANY**: superlative indicated with "of/than some/any"
  (e.g. Khmer *klang ciang kee: `strong exceed someone`*)

- **VERY or ABS**: intensifiers are used, or there is only an 'absolute' (i.e. 'elative') superlative
  (e.g. Maori *teitei rawa atu `tall indeed away`*)

Coppock (2016); Bobaljik (2012); Gorshenin (2012)
Swahili is classified as an ALL language

Typological database of superlative constructions

Elizabeth Coppock · October 2016
Superlative → Positive

**En:** Joseph proposes to have a contest and see who can climb the tallest cacao tree.

**Sw:** Joseph akapendekeza kua na mashindano kuona nani anaweza kupanda mti m-refu wa kokoa.
Superlative → Positive

En: Joseph proposes to have a contest and see who can climb the **tallest** cacao tree.

Sw: Joseph akapendekeza kua na mashindano kuona nani anaweza kupanda **mti** m-refu wa kokoa.

Consultant: “m-refu can mean *tallest* in Swahili.”
Observation

English superlatives can be translated to Swahili as positive-form adjectives.
Research Question

What kind(s) of meanings do unmarked forms of Swahili adjectives have?
Hypotheses
Hypotheses

1. The bare form adjective only has a superlative interpretation.
2. The bare form adjective is ambiguous between a superlative meaning and a positive meaning.
3. The bare form adjective only has a positive meaning.
Bare forms as superlatives: Samoan

Hohaus (2015) demonstrates that bare forms mean only *superlative* in Samoan.

Iosefo is fat.

#Ioane is fat.
Bare forms as superlatives: Samoan

In a context where Mary is 190 cm tall and Temukisa is 185 cm tall:

#Mary is taller than Temukisa, but Temukisa is also tall.
Bare forms as superlatives: Samoan

#June is hot.
Prediction

If Swahili adjectives are unambiguously superlative as in Samoan, speakers should reject application of a gradable predicate to a non-maximal entity.
### Displays

#### Weight

- Dar es Salaam: 4,364,000
- Mwanza: 2,773,000
- Dodoma: 2,084,000
- Mafinga: 34,958

#### Height

#### Population
Results

John ni mnene.

‘John is fat.’

Accepted
Results

Mwezi wa saba ni joto kuliko mwezi wa sita lakini mwezi wa sita pia ni joto.

‘July is hotter than June, but June is also hot.’

Accepted
Results

Sio watu wengi wanaishi Dodoma. ‘Not a lot of people live in Dodoma.’

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dar es Salaam</td>
<td>4,364,000</td>
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Rejected
Hypotheses

1. The bare form adjective only has a superlative interpretation.
2. The bare form adjective is ambiguous between a superlative meaning and a positive meaning.
3. The bare form adjective only has a positive meaning.
Creating a field test for ambiguity

Under what circumstances would a superlative adjective be true/felicitous and positive form false/infelicitous?
Creating a field test for ambiguity

Under what circumstances would a superlative adjective be true/felicitous and positive form false/infelicitous?

Maximum-standard adjectives!
Types of adjectives

Relative: tall, fat, hot....

Absolute maximum-standard: full, empty

Absolute minimum-standard: open, wet
Relative adjectives: Contextual standard

What counts as a tall ladder?
Relative adjectives: Contextual standard

What counts as a tall ladder?
Absolute adjectives: Maximum standard

What counts as an empty box?
Absolute adjectives: Maximum standard

What counts as an empty box?
Absolute adjectives: Maximum standard

What counts as a full jar?
Absolute adjectives: Maximum standard

What counts as a full jar?
Absolute adjectives: Maximum standard

What counts as a full jar?

Fullest, but not full!

I.e. superlative but not positive.
Prediction

If bare form adjectives in Swahili have a superlative interpretation, then speakers should accept the application of a maximum standard adjective to non-maximal entities.
Caveat

There is vagueness about what counts as full enough to be ‘full’.

Fact: Exposure to precise standards encourages precision.
Syrett et al. (2009): Presupposition Assessment Task

Point to the full jar. (Infelicitous request)

Rejection: “Neither ONE is full!”
Syrett et al. (2009): Presupposition Assessment Task

Point to the full jar. (Infelicitous request)

Rejected by adults 88% of the time. Rejected by kids 30-40% of the time.
Syrett et al. (2009): Presupposition Assessment Task

Point to the full jar. *(Felicitous request)*

Always accepted
Syrett et al. (2009): Effect of order

High rejection rate
(100% for adults, 67% kids)

Lower rejection rate
(70-75% for adults, 0-18% kids)
Lesson

Prior exposure to precise maximal exemplars increases rejection rate for maximum standard adjectives applied to non-maximal entities.
Survey procedure

Participants are asked to judge display-sentence pairs as true or false (*kweli* or *si kweli* in Swahili).

**Phase I:** Precise maximal settings

**Phase II:** Non-maximal settings
Example: acclamation

*Boksi la upande wa kushoto ni tupu.*
‘The box on the left is empty.’
Kweli/ si kweli?

![Three boxes with different contents](image-url)
More acclamation items

‘Closed’
*Mfuko wa upande wa kulia umefungwa.*

‘Transparent’
*Dirisha la upande wa katikati ni angavu.*
More acclamation items

‘Full’

Gudulis la upande wa kushoto limejaa.

‘Whole’

Duara la upande wa kushoto lipo kamili.
Example: Non-maximal context

*Boksi la upande wa katikati ni tupu.*
‘The box in the middle is empty.’

*Kweli/si kweli?*
Elicitation materials
We apply this test with predicates including empty, full, closed, whole, and clean.

Because some English adjectives are translated as verbs in Swahili, we tested both verbal (e.g. closed) and adjectival (e.g. empty) maximum-standard predicates.
Stimuli

‘Clean’
Dirisha la upande wa kulia ni safi.

‘Closed’
Mfuko wa upande wa kulia umefungwa.
Stimuli, cont’d

‘Full’
Chombo cha upande wa kushoto kimejaa.

‘Whole’

_Duara la upande wa kushoto lipo kamili._
Prediction (again)

If Swahili bare forms have a superlative meaning, a positive-form maximum standard adjective can be used to describe, for example, the most full box in a context where no boxes are full.
Prediction (again)

If Swahili bare forms only have a positive meaning, maximum-standard adjectives should be judged not to apply to objects that do not instantiate the maximum possible degree of a property.
Participants

- 1 native Swahili speaker in person in Boston
- 1 fluent Swahili speaker over email
- 2 native Swahili speakers over Prolific.ac
Results
Data

Mfuko wa upande wa kulia umefungwa. ‘The bag on the right is closed.’

Rejected across the board
Conclusions

1. The bare form adjective only has a superlative interpretation.
2. The bare form adjective is ambiguous between a superlative meaning and a positive meaning.
3. The bare form adjective only has a positive meaning.
Further applications

A non-exhaustive list of languages to which our method could be applied:
Extensions?

What other tools for semantic fieldwork can we gain from the experimental literature?
References


Kim, Christina, Andrea Beltrama, Kristen Syrett, Ming Xiang and Chris Kennedy. 2013. Sensitivity to local v. global discourse context in gradable adjectives. CUNY poster.

Matters of perspective: bugs

Which window is the cleanest?

Can’t a circle be whole without a filled-in center?