The influence of recency and frequency on English comparatives

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Which would you say?

1) Children are *easier* to manipulate than adults.

2) Children are *more easy* to manipulate than adults.
Which would you say?

1) I was a national celebrity, *famouser* even than Captain Kangaroo.

2) I was a national celebrity, *more famous* even than Captain Kangaroo.
The less-preferable sentences occurred in the COCA corpus:

(a) Children are *more easy* to manipulate than adults.

(b) I was a national celebrity, *famouser* even than Captain Kangaroo.

Unlikely according to previous studies and intuition.
English has two comparative forms

1) Synthetic \textit{easier}

2) Analytic \textit{more famous}
What causes speakers to select the synthetic or analytic comparative form?

This talk examines the role of

1. prosodic shape
2. frequency
3. recency *NEW*
Previous studies say that the following influence comparative form preferences:

- Prosodic shape
  - Number of syllables
  - Word ending
  - Stress
- Frequency
Number of syllables influences comparative form preferences

Monosyllabic: synthetic

Disyllabic: it’s messy

Trisyllabic+: analytic
For disyllabic ADJs, some word endings are preferred with the **synthetic** comparative form

<table>
<thead>
<tr>
<th>Word Ending</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>–y</td>
<td>easier</td>
</tr>
<tr>
<td>–ly</td>
<td>lovelier</td>
</tr>
<tr>
<td>–le</td>
<td>simpler</td>
</tr>
<tr>
<td>–ow</td>
<td>narrower</td>
</tr>
</tbody>
</table>

For disyllabic ADJs, some word endings are preferred with the **analytic** comparative form

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<th>Word Ending</th>
<th>Example</th>
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<tr>
<td>–er</td>
<td><em>more clever</em></td>
</tr>
<tr>
<td>–nt</td>
<td><em>more brilliant</em></td>
</tr>
<tr>
<td>sibilant</td>
<td><em>more famous</em></td>
</tr>
<tr>
<td>&amp; final stress</td>
<td><em>more acute</em></td>
</tr>
</tbody>
</table>

There are exceptions to these preferences

Exceptions to preference for monosyllabic ADJs to occur in the synthetic form:

- *apter
- Some color words like *roser, *golder
  (but redder & greener are OK)
- *chicer

(Graziano-King 1999)
Frequency influences comparative form preferences

High frequency: smarter
   *more smart

Low frequency: *apter
   more apt

(Graziano-King 1999, Adams 2014)
Mondorf (2003): ‘MORE’-SUPPORT explains comparative preferences

IS ENVIRONMENT COGNITIVELY DEMANDING?

YES
Ex: more syllables
complex/repetitive ending
less frequent

- ANALYTIC
‘more’ signals comparative
has begun, ADJP will follow

NO
Ex: fewer syllables
simple ending
more frequent

- SYNTHETIC
‘-er’ is at the end
of the comparative
Mondorf (2003): Recency reduces processing load, allowing selection of synthetic

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ANALYTIC

‘more’ signals comparative
has begun, ADJP will follow

-er’ is at the end
of the comparative

SYNTHETIC

Ex: fewer syllables
    simple ending
    more frequent
    recent forms
Mondorf (2003): Recency reduces processing load, allowing selection of synthetic

“… an apt enough location for the lion of commerce to lie down with the lamb of archaeology. Or would it be apter to talk … [Times 1990]” (114)
PERSISTENCE: When a speaker re-uses a recent form

Szmrecsayni (2005) corpus study:
– Found persistence of analytic comparative
– Did not find persistence of synthetic comparative
HORROR-AEQUI: When a (very) recent form decreases persistence of that form

Ex:

– ?She looked upon this solution as
  \( \text{as}^1 \text{ as}^2 \text{ good as}^3 \text{ that one} \)
– ?bitterer
I address the following questions:

What causes speakers to prefer the synthetic or analytic comparative form?

Can recency increase preference for the synthetic comparative?
What causes speakers to select the synthetic or analytic comparative form?

1. Unprimed study-
   examines role of prosodic shape & frequency

2. Primed study-
   additionally examines role of recency
**Unprimed study:** Do the following factors influence comparative form selection?

1. Prosodic shape
2. Frequency
Unprimed study: Forced-choice acceptability-judgment task

Which would you say?

properer  more proper
Unprimed study: Target prosodic shapes

1) monosyllabic
2) disyllabic & ending in
   -y, -er,
   -ly, -nt
   -ow, a sibilant,
   -le, & final stress
Unprimed study: Target frequencies

high: ~10,000-20,000

low: ~100-1,000

instances in NYT2000-2010 & COCA
Unprimed study: Stimuli & Participants

180 adjective pairs:

- 60 target – half high & low frequency
- 120 fillers – ranged in acceptability

50 Mechanical Turk workers

- native English speakers, in U.S.
Result: Comparative form preferences differ by prosodic shape

![Graph showing comparative form preferences by prosodic shape]
Result: Some prosodic shapes are strongly preferred in the synthetic form.
Result: Some prosodic shapes are strongly preferred in the analytic form.
Result: Some prosodic shapes have moderate preference for either comparative form.
Result: Adjectives fall into 1 of 3 preference groups: ‘-er’, ‘more’, and no preference
Result: Frequency only influences preferences for monosyllabic ADJs and disyllabic –ly ADJs
**Result:** Adjectives fall into 1 of 3 preference groups: ‘-er’, ‘more’, and no preference.
Unprimed study: Conclusions

Comparative form preferences differ by prosodic shape

Some prosodic shapes are preferred more strongly with ‘–er’ or ‘more’

Frequency influences monosyllabic ADJs and disyllabic –ly ADJs only
What causes speakers to select the synthetic or analytic comparative form?

1. Unprimed study-
   examines role of prosodic shape & frequency

2. Primed study-
   additionally examines role of recency
**Primed study:** Does recency of the following increase selection of the synthetic form?

Ex: target = *famous*

1. Base only *famous*
2. Same synthetic *famouser*
3. Different synthetic *roomier*
Primed study: Forced-choice acceptability-judgment task with priming
Primed study: Forced-choice acceptability-judgment task with priming

priming screen
Primed study: Forced-choice acceptability-judgment task with priming

- **Priming screen**
  - proper
  - NEXT

- **Task screen**
  - Which would you say?
  - properer
  - more proper
Primed study: Target stimuli & primes

Same target ADJs as unprimed study

3 primes per target word:

Ex:  
  
  target = famous  
  base only: famous  
  same synthetic: famouser  
  different synthetic: roomier
**Primed study:** Primes were distributed across 3 versions of the experiment

<table>
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<th>Target</th>
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<th>Version 2</th>
<th>Version 3</th>
</tr>
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<tbody>
<tr>
<td>pure</td>
<td>pure</td>
<td>purer</td>
<td>rosier</td>
</tr>
<tr>
<td>firm</td>
<td>firmer</td>
<td>merrier</td>
<td>firm</td>
</tr>
<tr>
<td>weird</td>
<td>speedier</td>
<td>weird</td>
<td>weirder</td>
</tr>
</tbody>
</table>
Primed study: Participants

150 participants:

50 per 3 experiment versions

No participant completed more than 1 version of the experiment
Result: ‘Same synthetic’ prime influenced comparative selection for high-frequency ADJs

- increased preference
- decreased preference

$p < .001$
Result: ‘Different synthetic’ prime influenced comparative selection for high-frequency ADJs

\[ p < .002 \]
Result: ‘Base only’ prime did not influence comparative form selection
‘Same’ and ‘different’ synthetic primes affect ‘-er’ preference and ‘more’ preference ADJs differently.
Conclusion: Comparative form selection can be influenced by recency of ‘same’ or ‘different’ synthetic forms
Conclusion: Recency affects ‘-er’ and ‘more’ preference ADJs differently

- ‘more’ preference: ‘famouser’ becomes MORE preferable
- ‘-er’ preference: ‘easier’ becomes LESS preferable
We are left with two questions:

1. Why does recency affect ‘–er’ preference and ‘more’ preference ADJs differently?

2. Why are high frequency ADJs affected the most?
Why does recency affect ‘-er’ preference and ‘more’ preference ADJs differently?

‘-er’ preference ADJs:
- inhibition effect
  - = more “errors” and slower RTs

  decreased ‘-er’ preference

This happens too!
When unprimed, there is no difference in reaction times.
When primed with a synthetic prime, RTs were longer for ‘-er’ & no preference ADJs when participants selected the synthetic form.

Choosing synthetic comparative is more difficult!
When primed with a synthetic comparative, participants inhibit the synthetic option.
Inhibiting the synthetic option causes two effects: (1) slower RTs, (2) more analytic selection.

(1) slower RTs  
(2) increased selection

Which would you say?
- easier
- more easy

(1) inhibited
(2) easier
Why does recency affect ‘-er’ preference and ‘more’ preference ADJs differently?

‘more’ preference ADJs:
facilitation effect
= increased selection of prime
For ‘more’ preference ADJs, there is no difference in reaction times.
Recency affects selection processes differently depending on speaker’s experience with ADJ

ADJ often occurs in synthetic form:
recent synthetic forms inhibit selection of synthetic form
= Horror-aequi

ADJ doesn’t often occur in synthetic form:
recent synthetic forms facilitate selection of synthetic form
= Persistence
We are left with two questions:

1. Why does recency affect ‘–er’ preference and ‘more’ preference ADJs differently?

2. Why are high frequency ADJs affected the most?
Mondorf (2003): Frequent forms do not need ‘More’-Support

**IS ENVIRONMENT COGNITIVELY DEMANDING?**

**YES**
- Ex: more syllables
- complex/repetitive ending
- less frequent

**SYNTHETIC**
- ‘more’ signals comparative
- has begun, ADJP will follow

**NO**
- Ex: fewer syllables
- simple ending
- more frequent
- recent forms

**ANALYTIC**
- ‘-er’ is at the end of the comparative
What causes speakers to select the synthetic or analytic comparative form?

1. Unprimed study - examines role of prosodic shape & frequency

2. Primed study - additionally examines role of recency
This gives us insight into why less-preferable forms occur

Children are more easy to manipulate than adults.

I was a national celebrity, famouser even than Captain Kangaroo.
References


