



# Chinese *gèng* Expresses Implicit Comparison

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## Overview

- Chinese does not make a morphological distinction between the positive and comparative use of a gradable adjective.
- In Chinese, the particle *gèng* often appears in constructions of comparison. What is its meaning contribution?
- We propose that:

- Gèng*-sentences express implicit comparison (not explicit comparison), involving a positive use (not comparative use) of gradable adjectives;
- Gèng* semantically introduces a new positive threshold between the items (target & standard) under comparison;
- For a *gèng*-sentence, the evaluative inference that the standard already reaches the regular positive threshold is an implicature, not entailed meaning (cf. the semantics of *even*).

## Data

- Chinese lacks an *er*-like morpheme. (1) is ambiguous between a positive and a comparative reading:

(1) John hé Mary, shéi gāo?  
and who tall(er)  
✓ Positive: 'Who is tall, John and Mary?'  
✓ Comparative: 'Who is taller, John and Mary?'

- Gèng* can optionally appear, guaranteeing a seemingly comparative meaning. This is actually an implicit comparison.

(2) John hé Mary, shéi *gèng* gāo?  
and who *GENG* tall(er)  
#Positive: 'Who is tall, John and Mary?'  
✓ Comparative: 'Who is taller, John and Mary?'

- Evidence 1:** Incompatible with numerical differentials.

(3) John bǐ Mary *gèng* gāo (\*wǔ límǐ).  
STDD *GENG* tall(er) 5 cm  
'Compared to Mary, John is (\*5 cm) tall.'

Abbreviations: 1 = first person, NEG = negative, PFV = perfective, PRT = particle, SG = singular, STDD = standard marker.  
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## Data (Cont'd)

- Evidence 2:** Incompatible with 'crisp judgment' context.
- (5)'s infelicity under (4) argues against the view that *gèng* works in the same way as *even* (pace LIU 2010, CHEN 2023). (6) is felicitous under this 'crisp judgment' context.

(4) Context: John is 6' tall; Mary is 5'11" tall. Both are tall.  
(5) John bǐ Mary *gèng* gāo.  
STDD *GENG* tall  
Compared to Mary, John is tall. [Infelicitous under (4)]  
(6) John is even taller than Mary. [Felicitous under (4)]

- Evidence 3:** Similar to implicit comparison (but not explicit comparison, see KENNEDY 2007, SAWADA 2009), a comparison with the use of *gèng* has evaluative inferences.

(7) Evaluative inference of (5)/(6): Mary is already tall.

- (8, 9) show that this kind of evaluative inference for a *gèng*-sentence can be suspended or cancelled, suggesting that it's an implicature (cf. for (6), this inference is a presupposition, see ZHANG 2022).

(8) Wǒ bù zhīdào Mary gāo-bù-gāo, dàn John kěndìng  
1SG NEG know tall-NEG-tall but John definitely  
bǐ Mary *gèng* gāo.  
STDD *GENG* tall  
'Though I don't know whether Mary is tall, compared to her, John is definitely tall.' ['Mary is tall' suspended]  
(9) Mary gàn-de bù hǎo, dàn yě méi rén gàn-de bǐ  
do-PRT not well but still NEG person do-PRT STDD  
Mary *gèng* hǎo-le.  
*GENG* well-PFV  
'Mary didn't do well, but still, compared to her, no one did well.' ['Mary did well' explicitly cancelled]



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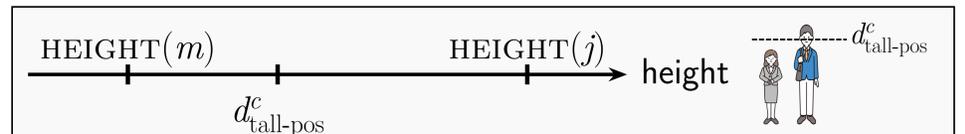


## Analysis

- Following Zhang & Zhang-Yukun (2024), we argue that gradable adjectives encode inequality *per se*.
- A gradable adjective takes two degree arguments & an individual argument, and returns an update function (10).
- E.g. variable  $i_{\text{tall}}$  maps to the positive threshold  $d_{\text{tall-pos}}$  (11).
- In comparatives, the reference is the measurement of the standard, and the difference can be accommodated (12) or numerically specified (13).

(10)  $[[\text{gāo}]] = \lambda d_{\text{DIFF}}. \lambda d_{\text{STDD}}. \lambda x. \lambda C. [d_{\text{DIFF}} > 0].$   
 $\{\langle w, g \rangle \in C \mid \text{HEIGHT}_w(x) \geq d_{\text{STDD}} + d_{\text{DIFF}}\}.$   
(11)  $[[\text{POS}^{i_{\text{tall}}} \text{gāo}]] = \lambda x. \lambda C. [d_{\text{DIFF}} > 0].$   
 $\{\langle w, g \rangle \in C \mid \text{HEIGHT}_w(x) \geq d_{\text{tall-pos}} + d_{\text{DIFF}}\}.$   
(12)  $[[\text{bǐ Mary gāo}]] = \lambda x. \lambda C. [d_{\text{DIFF}} > 0].$   
 $\{\langle w, g \rangle \in C \mid \text{HEIGHT}_w(x) \geq \text{HEIGHT}_w(m) + d_{\text{DIFF}}\}.$   
(13)  $[[\text{bǐ Mary gāo 5cm}]] = \lambda x. \lambda C.$   
 $\{\langle w, g \rangle \in C \mid \text{HEIGHT}_w(x) \geq \text{HEIGHT}_w(m) + 5\text{cm}\}.$

- A *gèng*-sentence is an implicit comparison, which involves the positive use of the adjective.
- Gèng* (i) introduces a degree *dref* which maps to a new threshold, and (ii) restricts it to a degree value above the standard.



(14)  $[[\text{gèng}^{i_{\text{tall}}}]] = \lambda \mathcal{G}. \lambda d_{\text{STDD}}. \lambda x. \lambda C. \{\langle w, g \rangle \mid \langle w, g \rangle \in \mathcal{G}(d_{\text{DIFF}})(d_{\text{tall-pos}}^c)(x)(C), d_{\text{tall-pos}}^c > d_{\text{STDD}}, d_{\text{DIFF}} > 0\}.$   
(15)  $[[\text{gèng}^{i_{\text{tall}}} \text{gāo}]] = \lambda d_{\text{STDD}}. \lambda x. \lambda C. \{\langle w, g \rangle \mid \langle w, g \rangle \in C, \text{HT}_w(x) \geq d_{\text{tall-pos}}^c + d_{\text{DIFF}}, d_{\text{tall-pos}}^c > d_{\text{STDD}}, d_{\text{DIFF}} > 0\}.$   
(16)  $[[\text{(bǐ M.) gèng}^{i_{\text{tall}}} \text{gāo}]] = \lambda x. \lambda C. \{\langle w, g \rangle \mid \langle w, g \rangle \in C, \text{HT}_w(x) \geq d_{\text{tall-pos}}^c + d_{\text{DIFF}}, d_{\text{tall-pos}}^c > \text{HT}_w(m), d_{\text{DIFF}} > 0\}.$

- Note that using *gèng* does not change the regular threshold.

## Selected References

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