

# What we don't say matters

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## Introduction

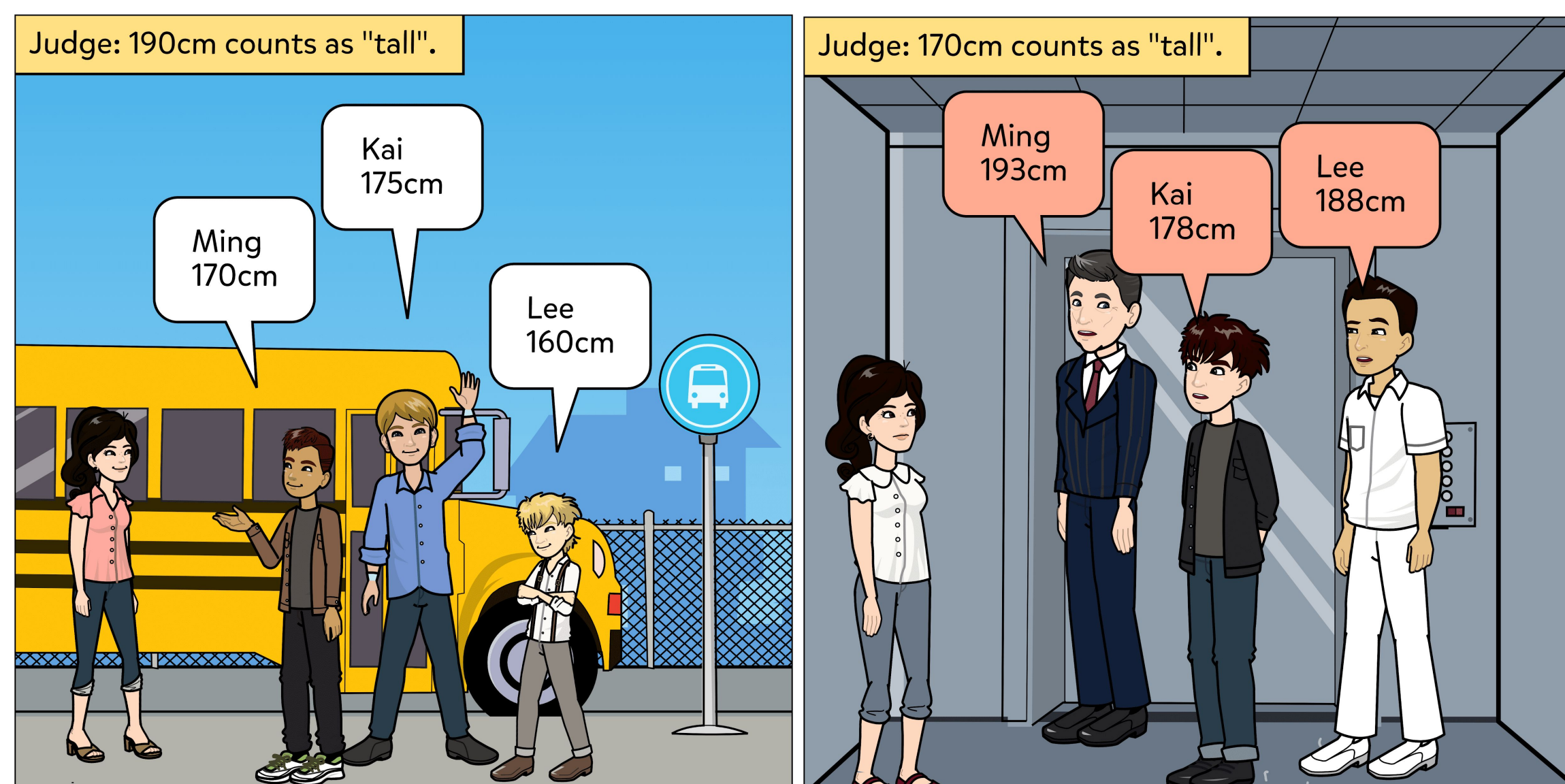
- Utterances compete with each other
- Speakers and listeners reason about utterances  
*I'll invite Anna or Kai. (alternative: I'll invite A and K.)*  
→ implies that the speaker won't invite both.
- What counts as an **alternative** of a given utterance
- Scalar Implicature (SI); Non-Scalar Implicature (NSI)

## Data

(1) *Kai gao.*

Kai tall

- (1) has a salient **comp** reading
- but as data (e.g. (2)) and our offline experiments show, (1) can also have a **pos** reading
- (1) is **ambiguous** “K is tall [**pos**]/taller [**comp**].”



(2) (*Zhe.xie haizi li*) *Kai gao Lee ye gao.*

(These kid among) Kai tall Lee also tall

“Among these kids Kai is tall and Lee is tall too.”

## Basic proposal

Following Geurts (2010) and Zhang&Ling (2020):

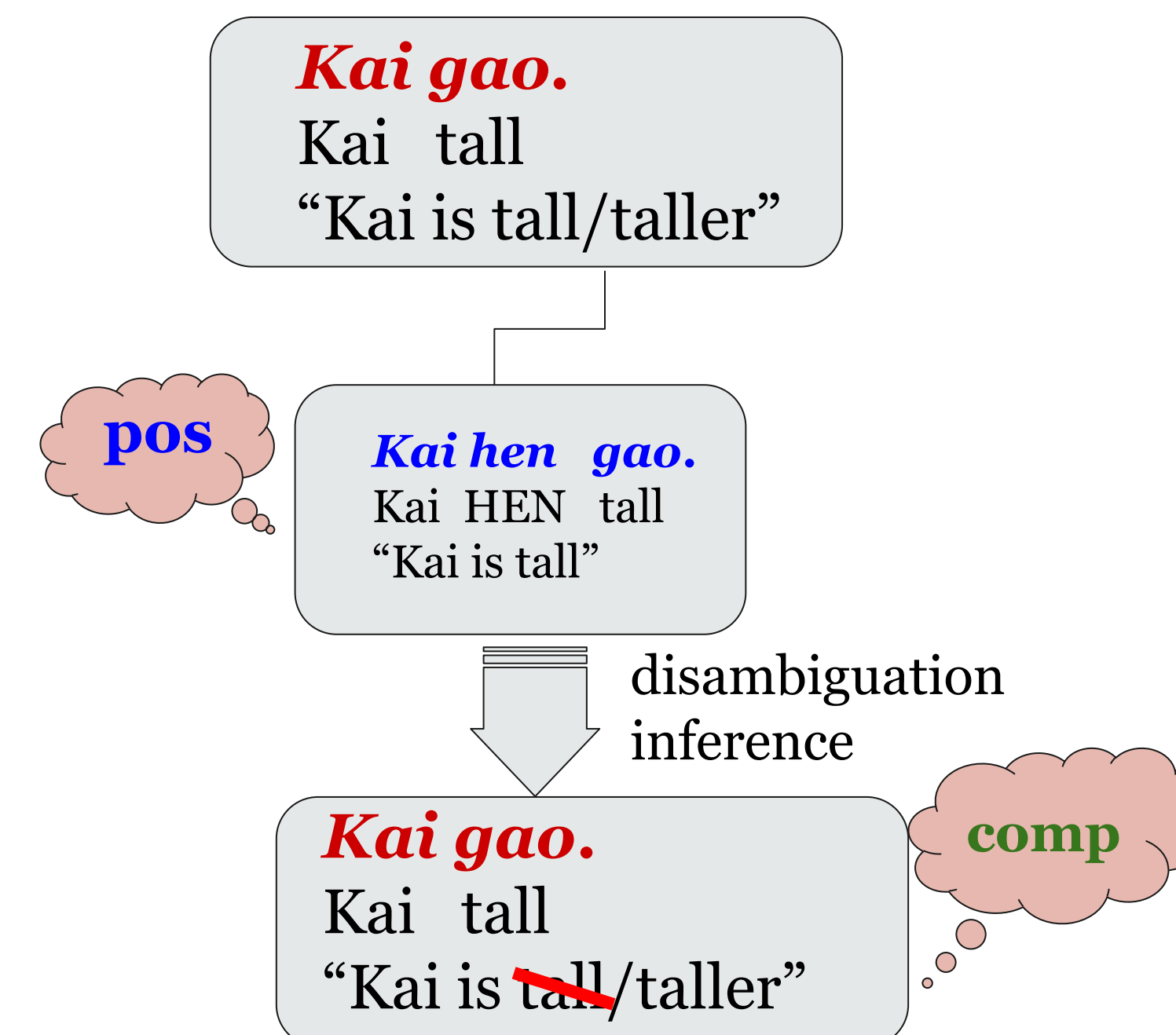
(3) *Kai hen gao.* [**pos** alternative]

Kai HEN tall “Kai is tall.”

[[Kai gao]] → ambiguous → **comp**

[[Kai hen gao]] → **pos**

## Basic Proposal (cont)



## The symmetry problem

- Why (3) (not (4) or (5)) leads to the desired implicature
- IF activating both (3) and (4,5), we will get a **symmetry**

(4) *Kai bi suoyou.ren gao.* [**comp** alternative<sub>1</sub>]

Kai than everyone tall “K is taller than everyone.”

(5) *Kai bi.jiao gao.* [**comp** alternative<sub>2</sub>]

Kai more tall “Kai is taller.”

## Refined proposal

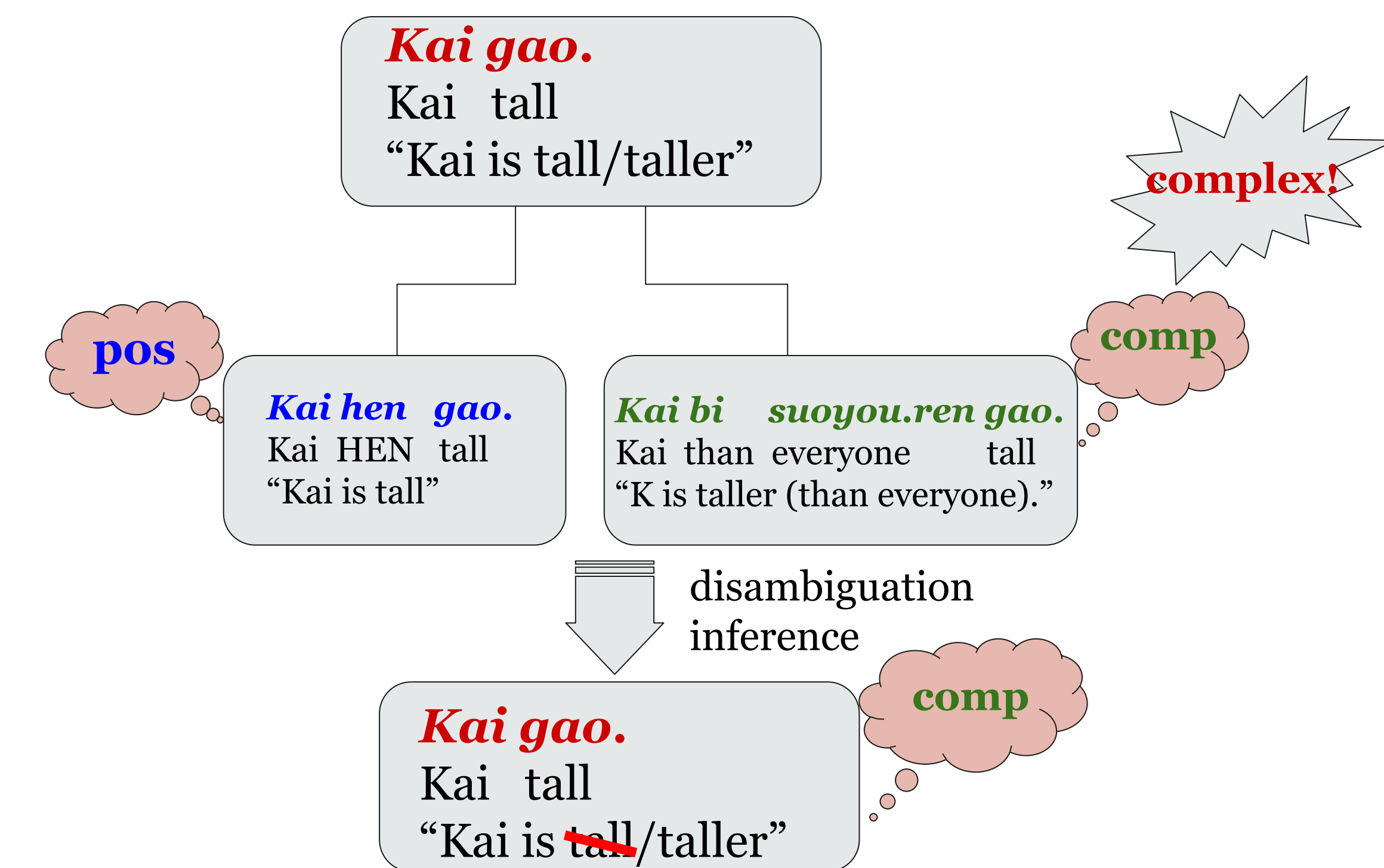
Following Buccola et al (2021):

- complexity is both gradient **and** determined by conceptual preferences/primitiveness;
- **pos**/(3) is (all else being equal) simpler/more primitive than **comp**/(4,5);
- this is a **hypothesis** that can and should be tested somehow, e.g. experimentally.

Using Bayesian update:

1. scenario (a) intends **comp** “taller”, (4,5) > (1), and cost(4,5)>cost(1).
2. scenario (b) intends **pos** “tall”, (3) > (1), and cost(3)>cost(1), but **the difference is small**
3.  $P_s((1)|\text{“taller”}) > P_s((1)|\text{“tall”})$  (effects amplified)

## Refined Proposal (cont)



**cost**(refer to the heights of other individuals in the context/**comp**) > **cost**(refer to the standard/**pos**)

## Implications

- **Replicate** the same problems and solutions in the domain of NSI as in the domain of SI
- **Cost**-based competition → disambiguation inference: the more costly alternative's interpretation should attain
- **Next step**: test hypothesis experimentally, cross-linguistically

## Works Cited

Buccola, B. et al. (2021) Conceptual alternatives: Competition in language and beyond; Katzir, R.(2007). Structurally-defined alternatives; Zhang & Ling. (2020). The semantics of comparatives: A difference-based approach.

*This is joint work with Dr. Brian Buccola. Thanks for having me! This is fun. Hope everyone have a bright future as a linguist!*