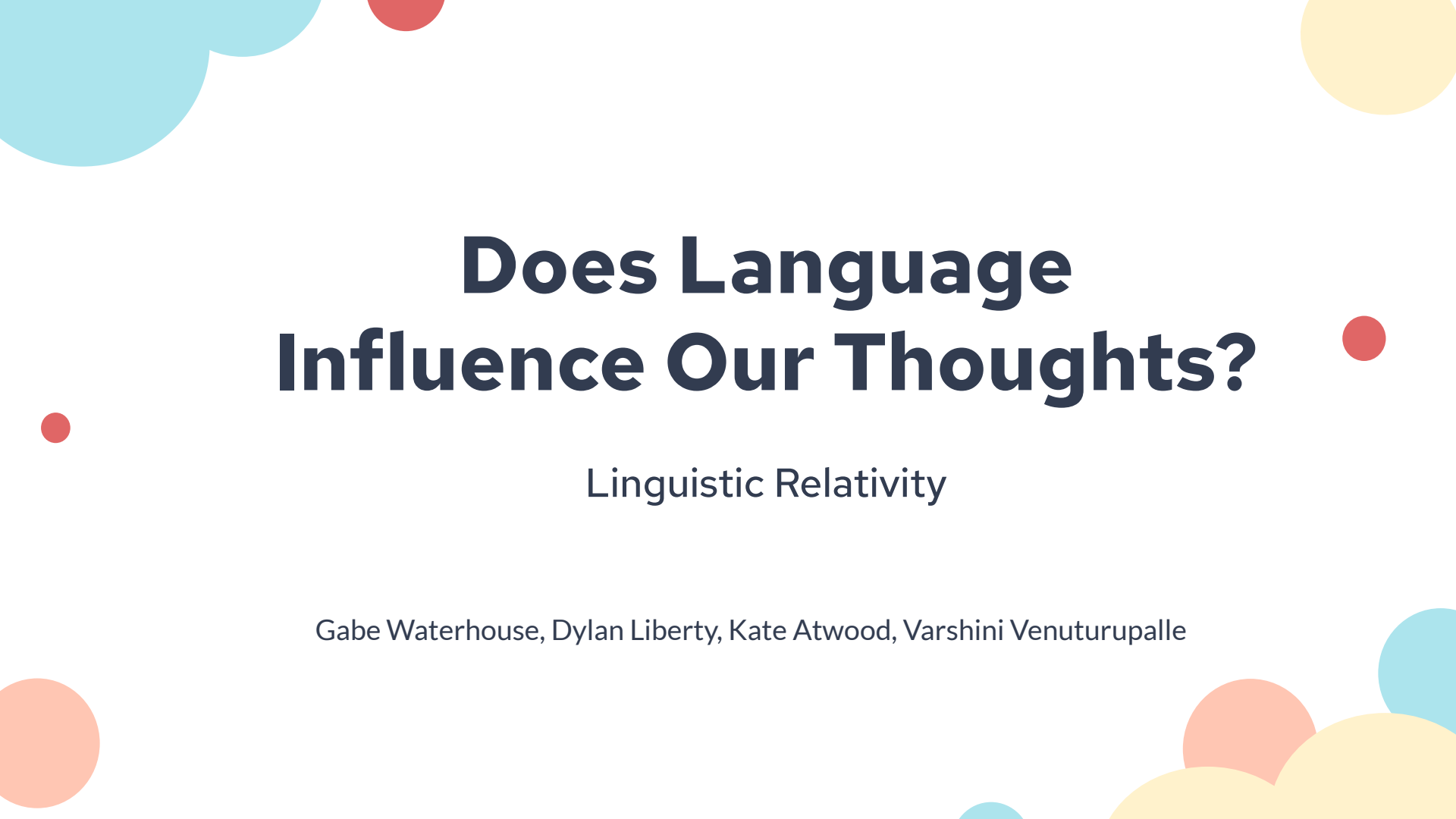




Does Language Influence Our Thoughts?

Linguistic Relativity

Gabe Waterhouse, Dylan Liberty, Kate Atwood, Varshini Venuturupalle

Describe the difference in taste between Pepsi and Coke

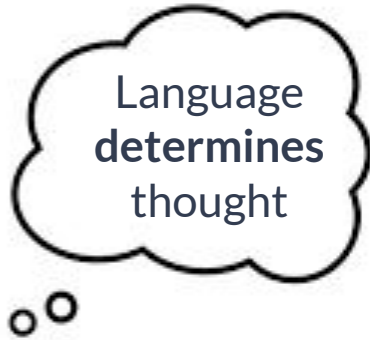


Linguistic Relativity: Our *language* affects
how we *think*



Linguistic Relativity: Our *language* affects how we *think*

Strong approach



Language
influences
thought

Weak approach





How do we study this?

Let's test it out...

On the next slide, we'll show one block of color for 5 seconds.

Then, we will take a 10 second break before we show you two more blocks of colors.

Your job is to determine which color in slide two is most similar to the singular color block you were first shown.



Let's test it out...



Let's test it out...



Let's test it out...



Study Methodology

A



Green v Blue (English)

Nol (Berimno)

B



Green (English)

Nol v Wor (Berimno)

Example A: *Across (Green/Blue): The matching colors were *across* English color rules (e.g., one green, one blue)

Example B: *Within (Green/Blue): The matching colors were *within* a single English color rule (e.g., both green)

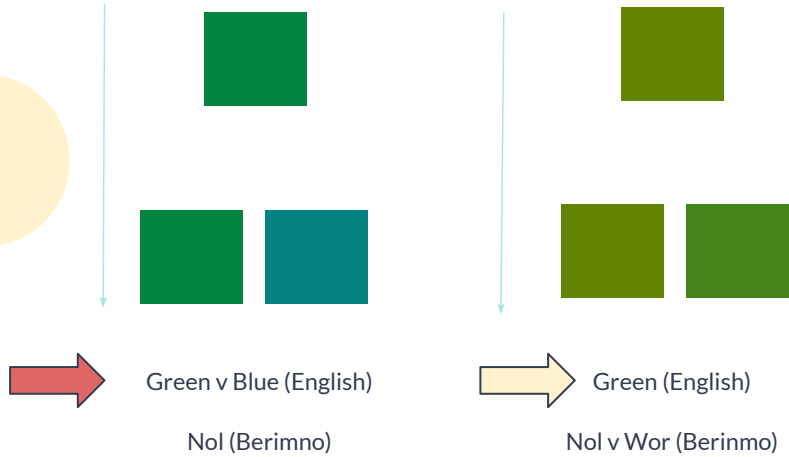
*They were both considered one color in Berimno

****Across (Nol/Wor):** The matching colors were *across* Berimmo color rules (e.g., one nol, one wor)

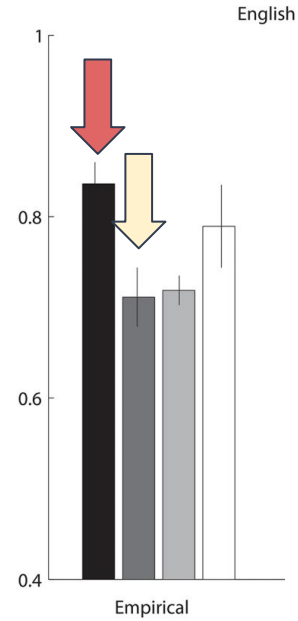
****Within (Nol/Wor):** The matching colors were *within* a single Berimmo color rule (e.g., both nol)

**They were both considered one color in English

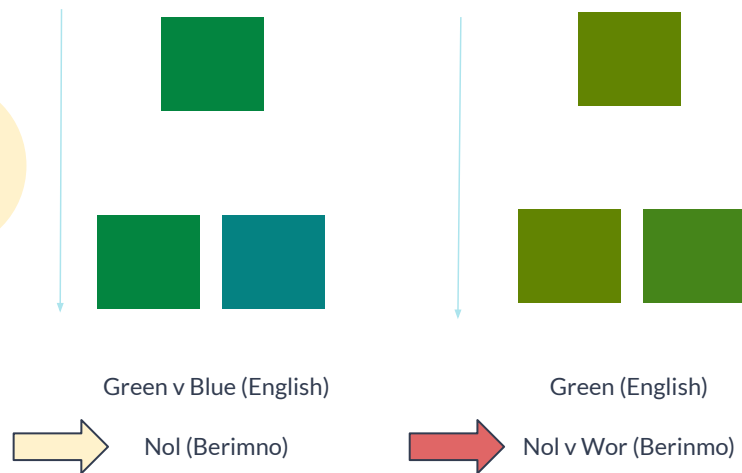
Results



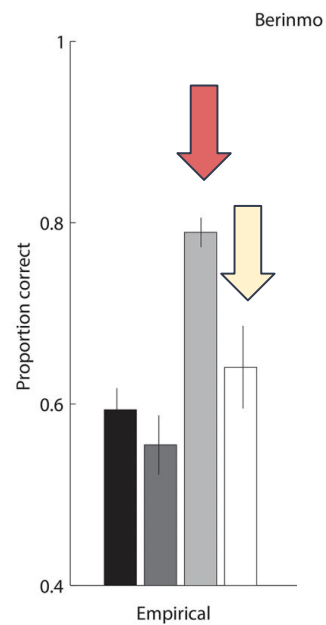
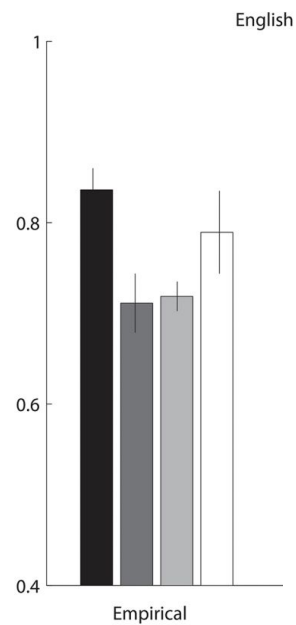
- Cross (Green–Blue)
- Within (Green–Blue)
- Cross (Nol–Wor)
- Within (Nol–Wor)



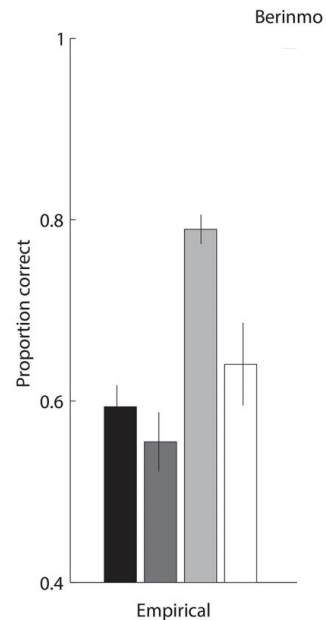
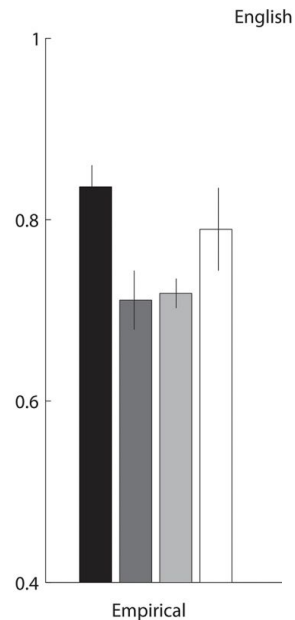
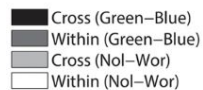
Results



■ Cross (Green–Blue)
■ Within (Green–Blue)
■ Cross (Nol–Wor)
■ Within (Nol–Wor)



Results

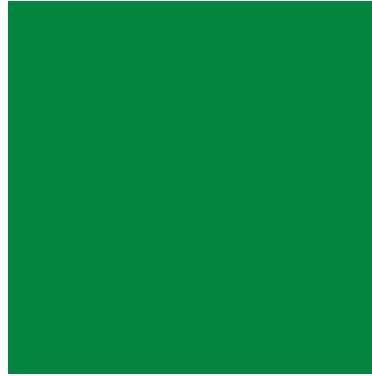


Notice: Participants performed better when the two colors they were shown have different words (green vs. blue or nol vs. wor)

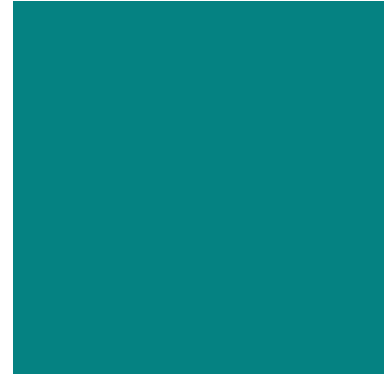
Why do we care?



VS

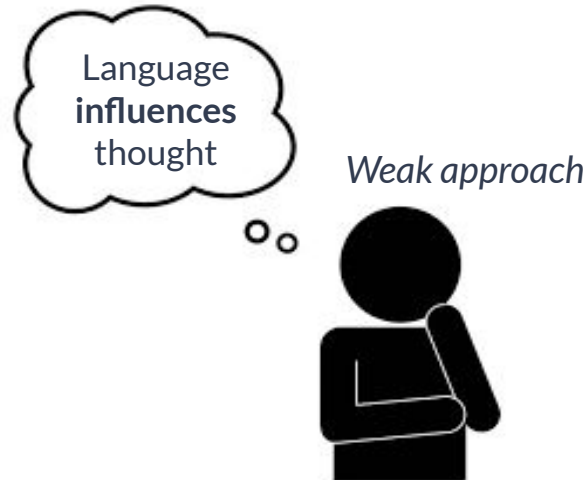


VS



Key Takeaways

- People notice and describe colors based on the words their language has for them.
- Language guides our thoughts but doesn't control them.
- Language shapes our perception, but human thinking is also universal across cultures.



References

Cibelli, Emily, Yang Xu, Joseph L. Austerweil, Thomas L. Griffiths, Terry Regier. (2016). The Sapir-Whorf hypothesis and probabilistic inference: Evidence from the domain of color. *PLOS ONE*, 11(8): e0161521. <https://doi.org/10.1371/journal.pone.0161521>.

Roberson, Debi, Ian Davies, Jules Davidoff. (2000). Color categories are not universal: Replications and new evidence from a stone-age culture. *Journal of Experimental Psychology: General*, 129(3), 369-398. <https://doi.org/10.1037/0096-3445.129.3.369>.