

Studying word meanings through the eyes

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How do words activate meaning?

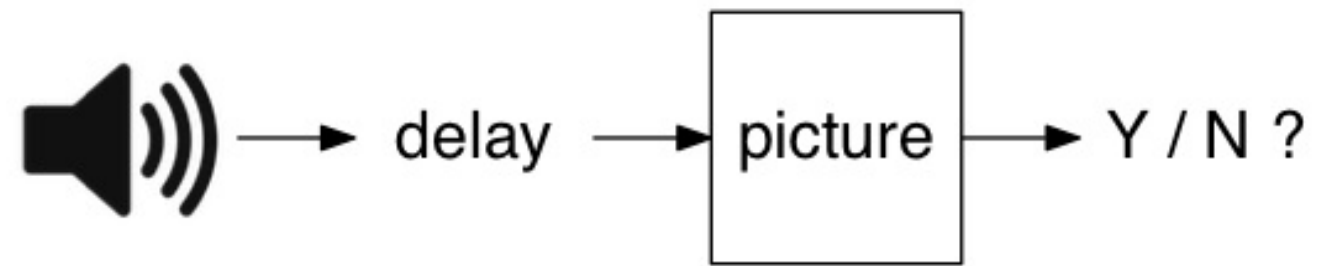


dog
bark

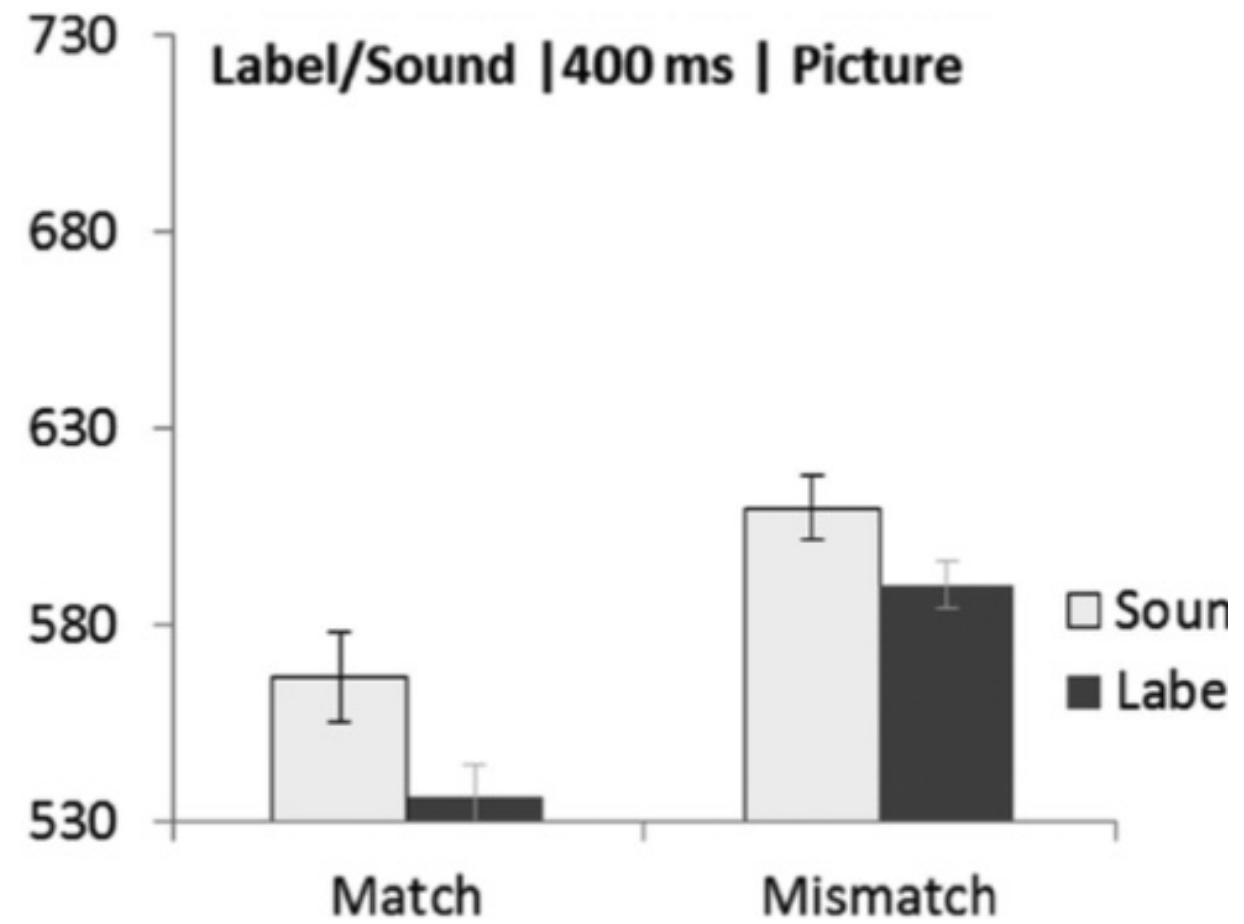
Different cues to the same concept

word	sound
"dog"	<bark>
"cat"	<meow>
"chainsaw"	<revving>
"bowling ball"	<crashing pins>
...	...

Picture verification task



Label advantage



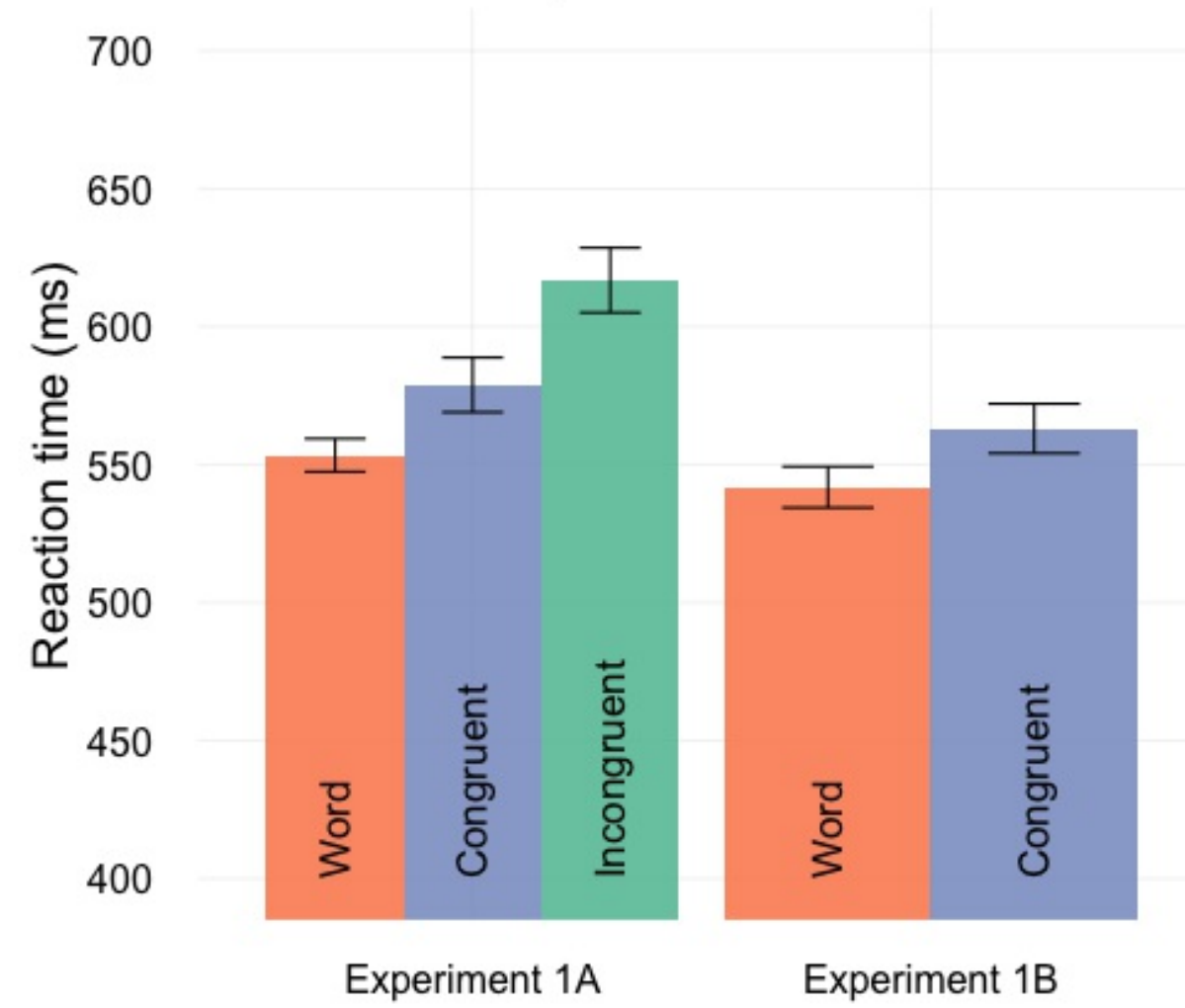
Lupyan & Thompson-Schill 2012 JEP:G

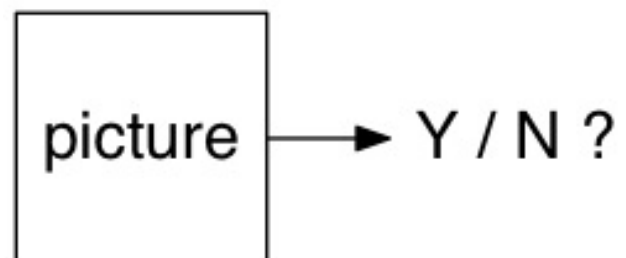
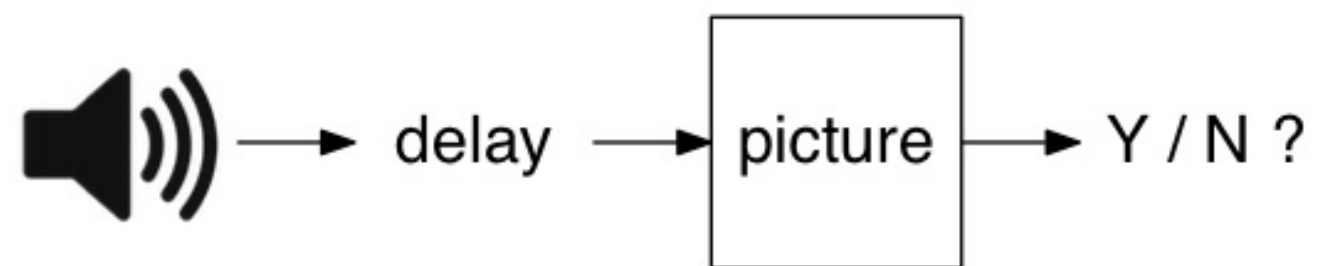
Words are unmotivated cues



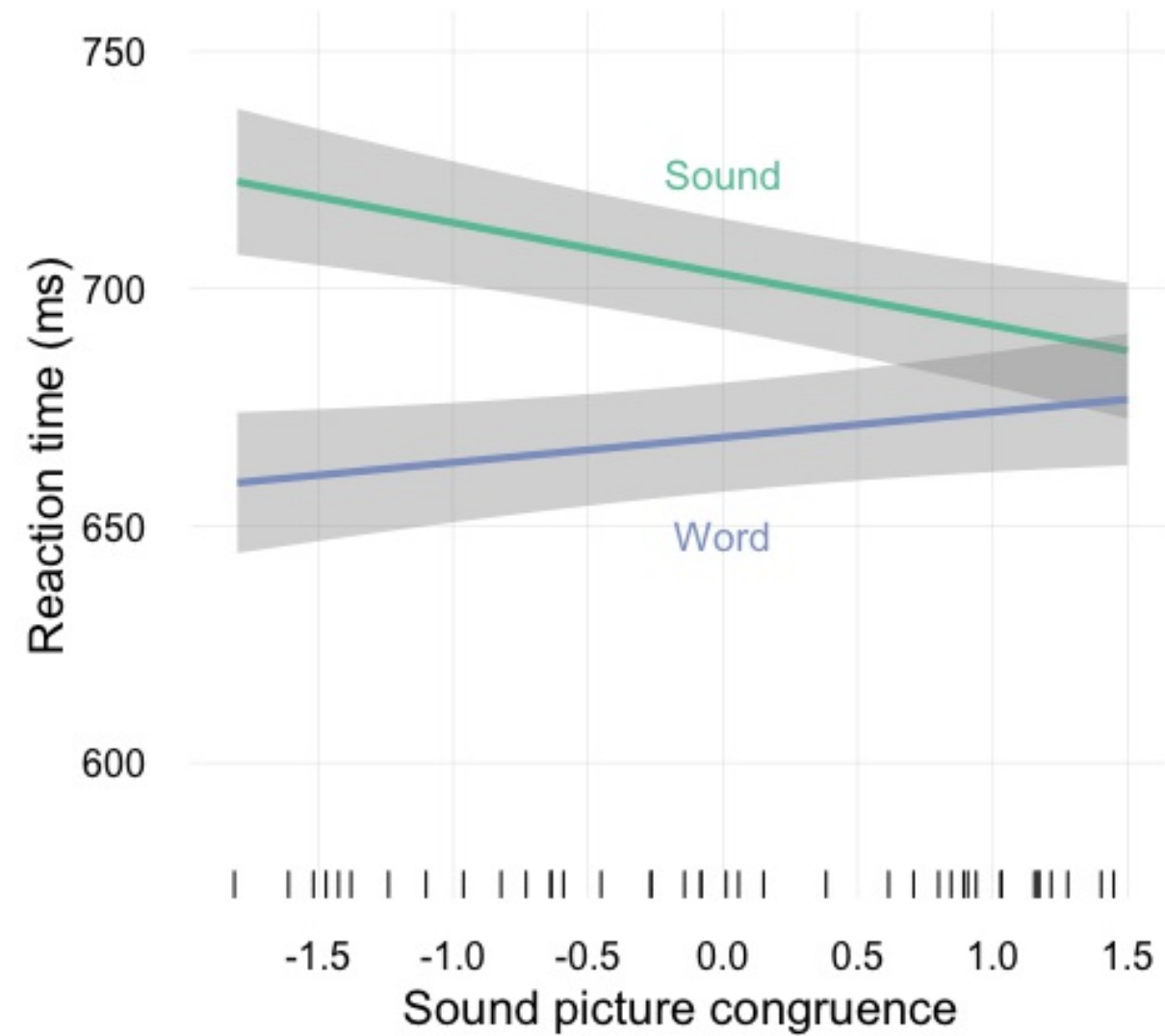
guitar 1
guitar 2

Unmotivated cues lead to
faster picture verification





Reducing the label advantage on simultaneous trials



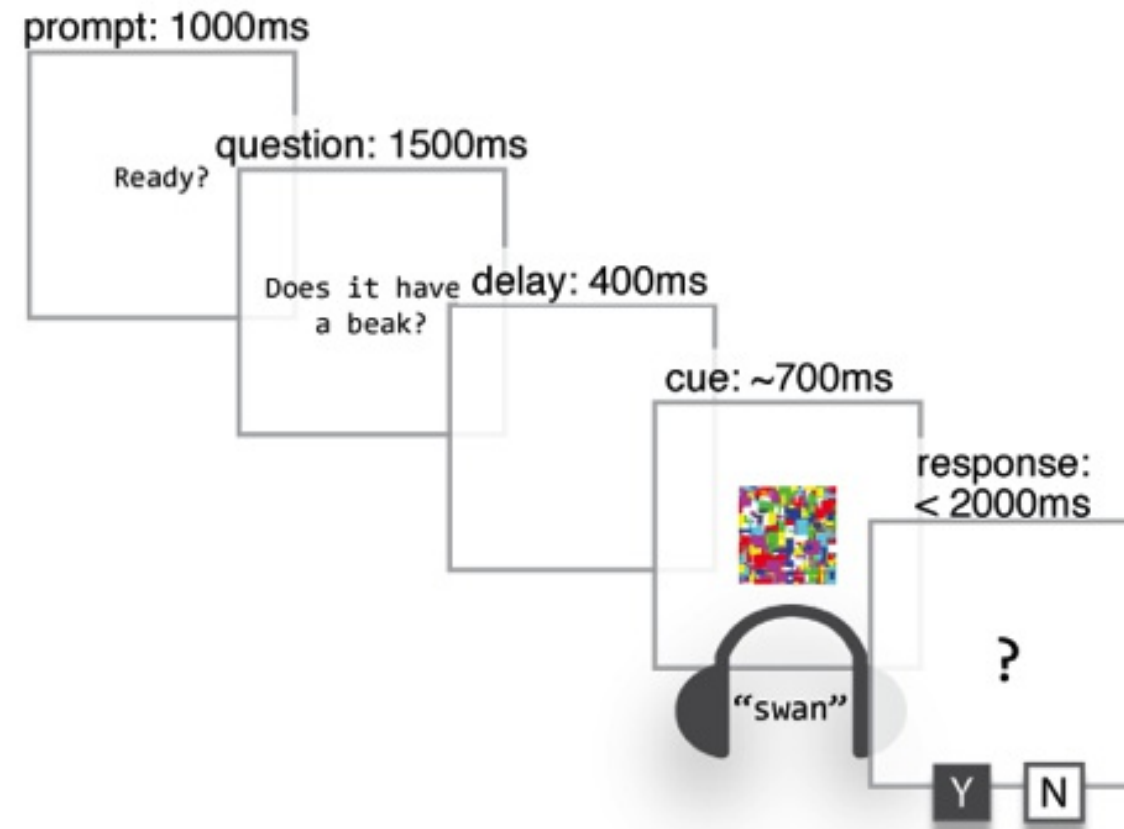
So, word meanings are abstract?

- Big whoop!
- *Only* unmotivated cues can do this.
- But how abstract?

Property verification task

question	cue	answer
Is it clothing?	jacket	yes
Does it have large ears?	tiger	no
Is it found at tables?	chair	yes
Does it lay eggs?	elephant	no
Is it furry?	donkey	yes
...

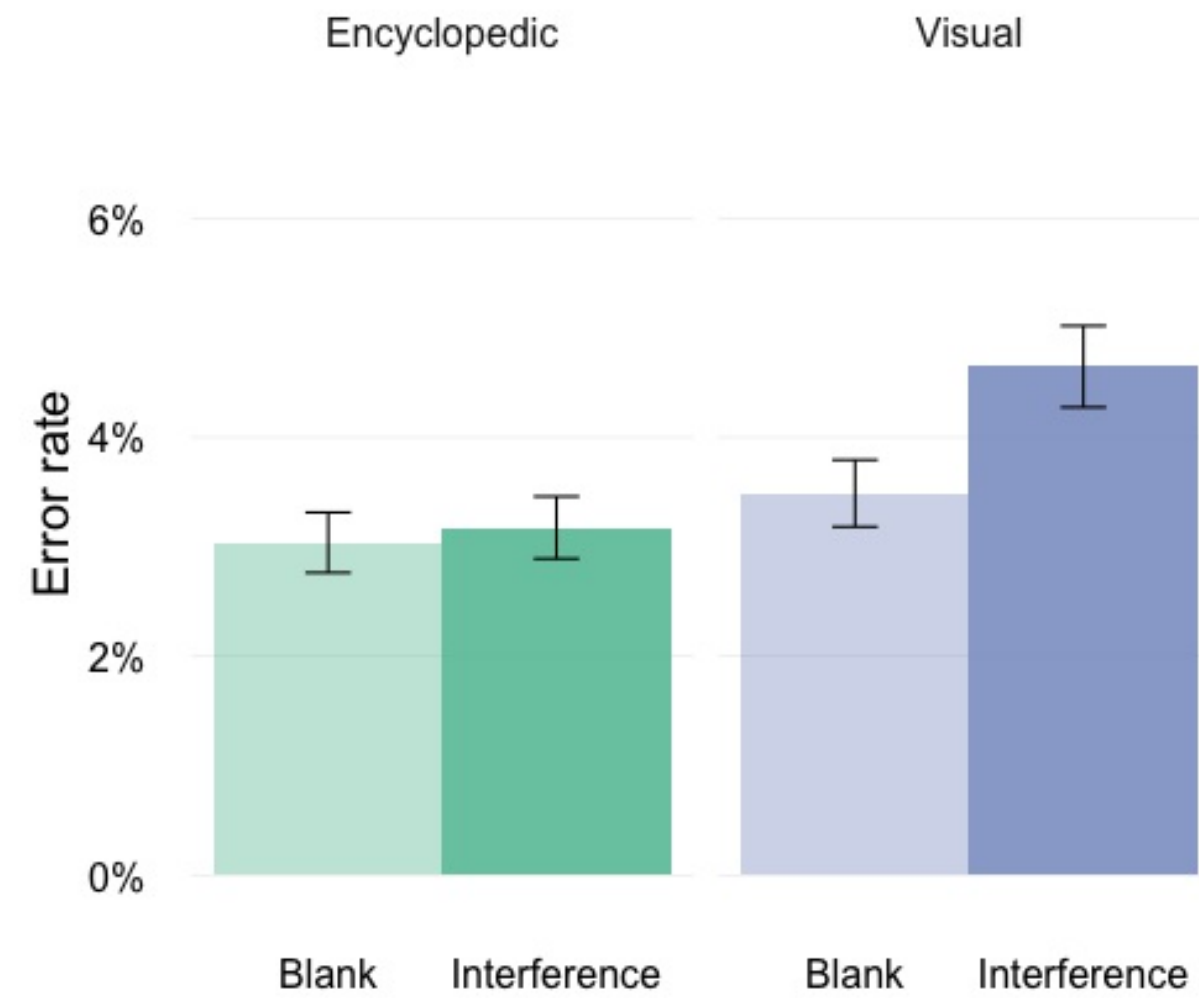
Property verification task



sample trial 1

sample trial 2

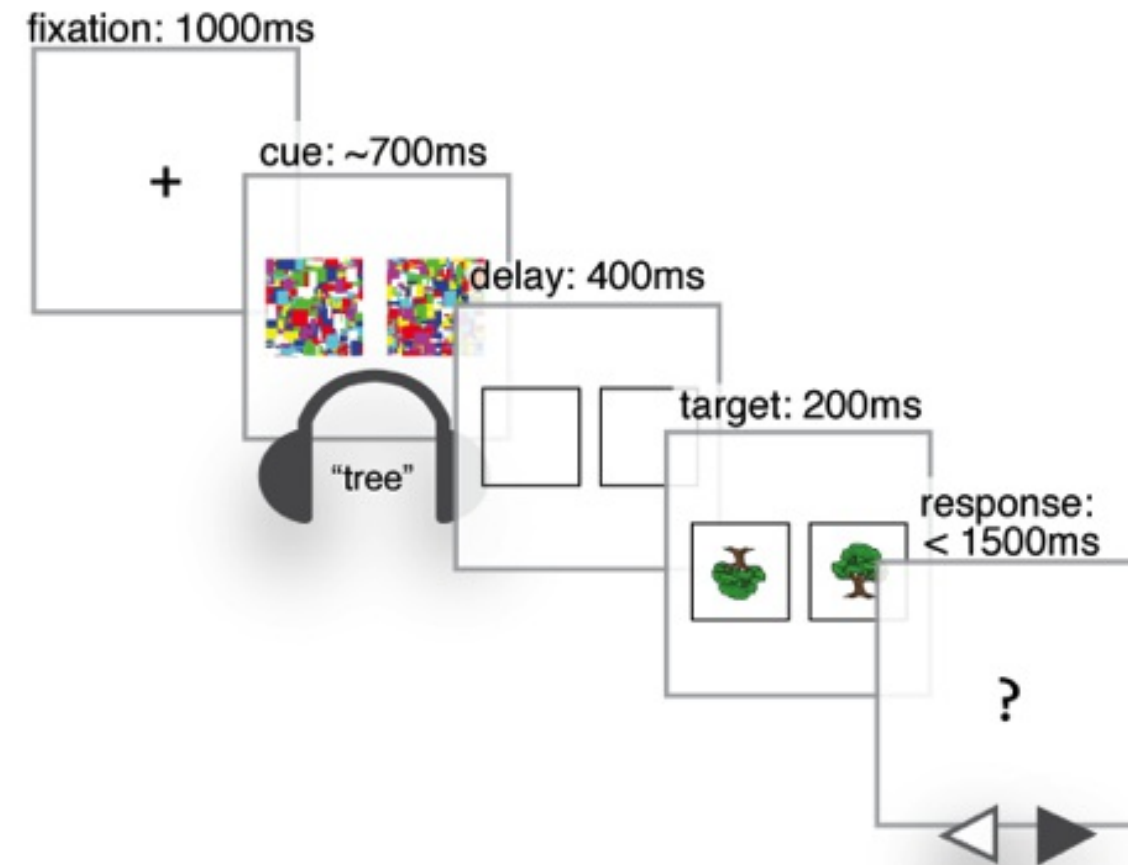
Visual interference disrupts visual knowledge



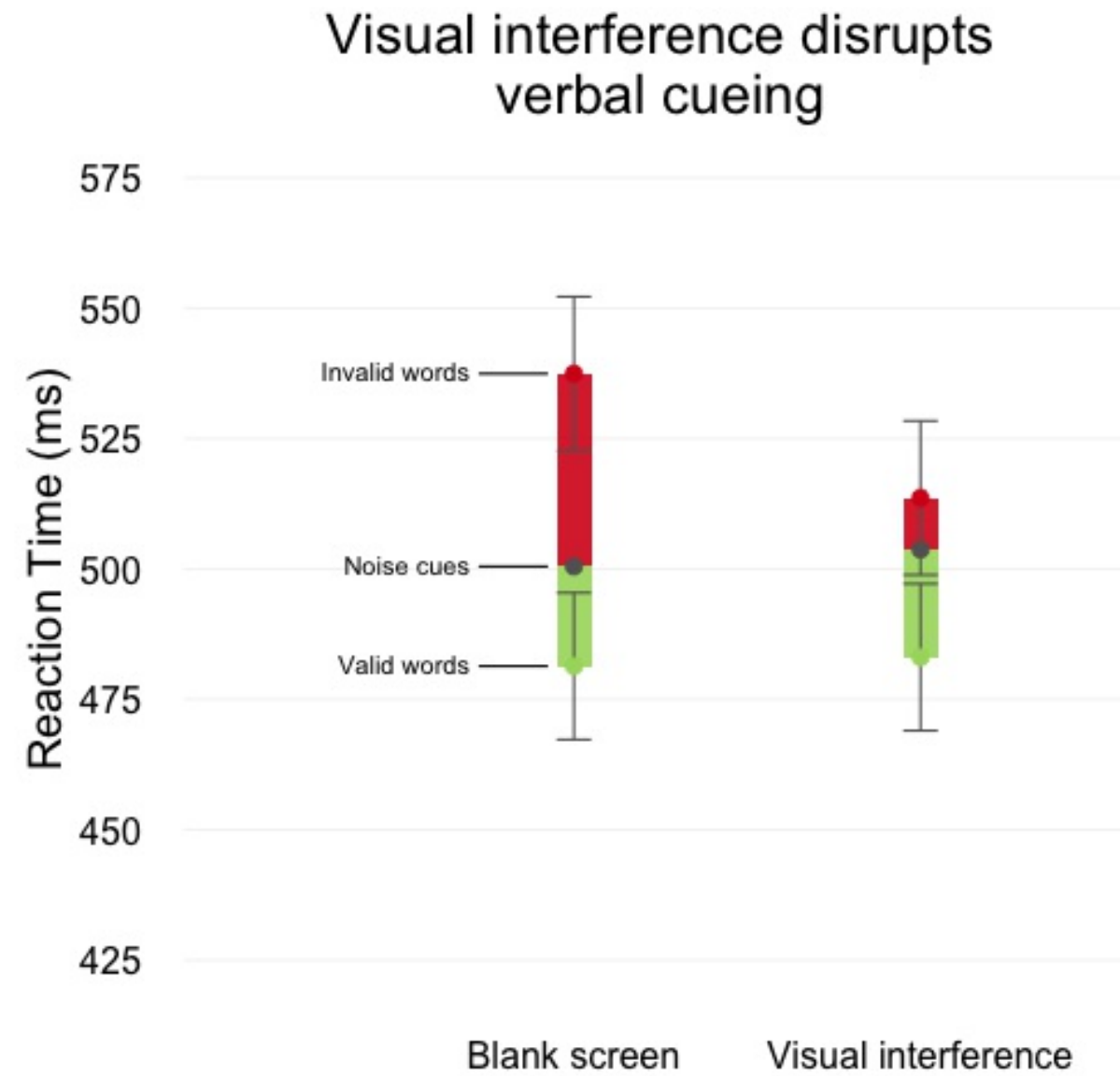
Orientation discrimination task



Orientation discrimination task



Orientation discrimination task



Conclusions

How do words activate meaning?

- Words are unmotivated cues.
- Visual knowledge is visual.

Thank you!

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github.com/pedmiston/studying-word-meanings

Edmiston & Lupyan (2015). What makes words special? Words as unmotivated cues. *Cognition*.

Edmiston & Lupyan (2016). Visual interference disrupts visual knowledge. *Journal of Memory and Language*.