

Word Association RT First Look

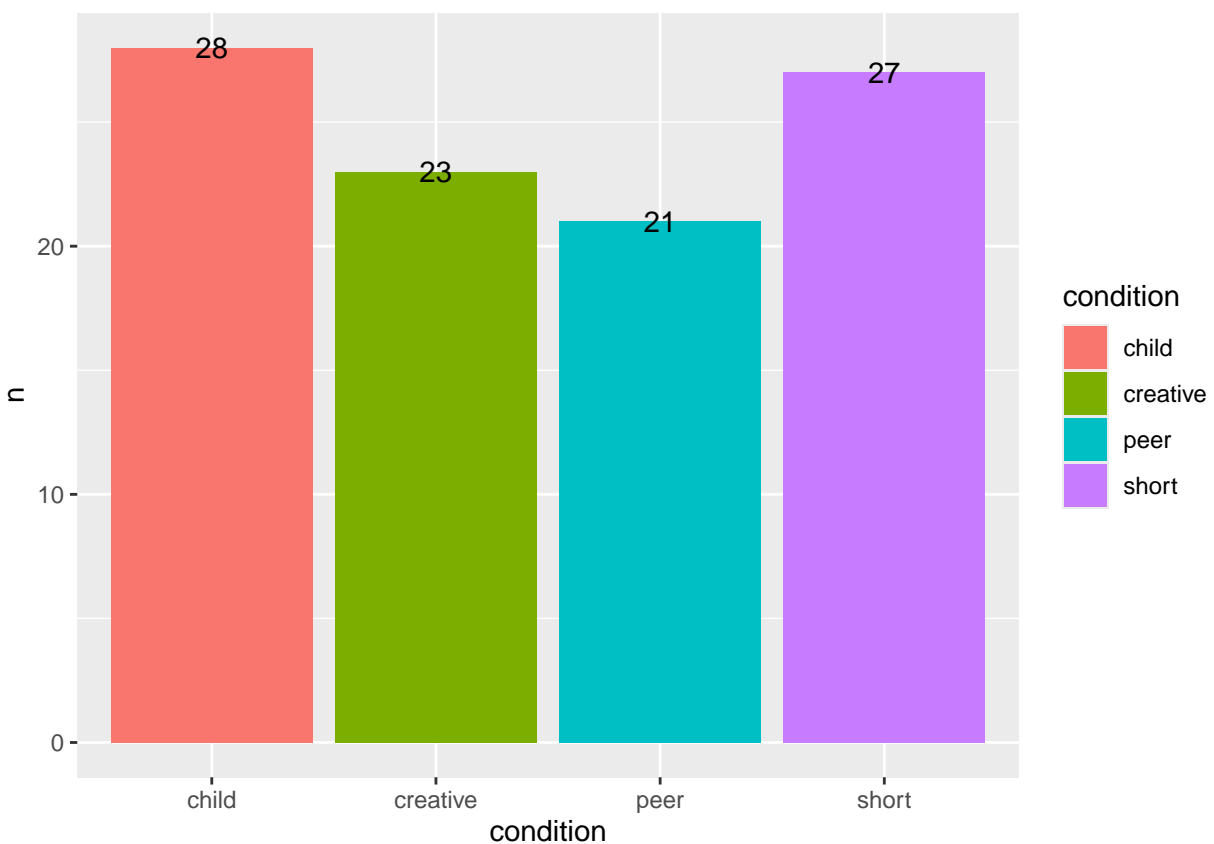
Stan West

2025-02-28

Ideas in the lab have been circulating around an idea of “semantic warping”, or the context-driven shifting of semantic weights that make concepts related to the context more available. Below, we describe a study investigating how response times to association generation may differ between conditions where you are given a coherent context to guide associative behavior versus explicit rules as to what kinds of responses are appropriate.

Condition completion

Target sample size is 30 per condition

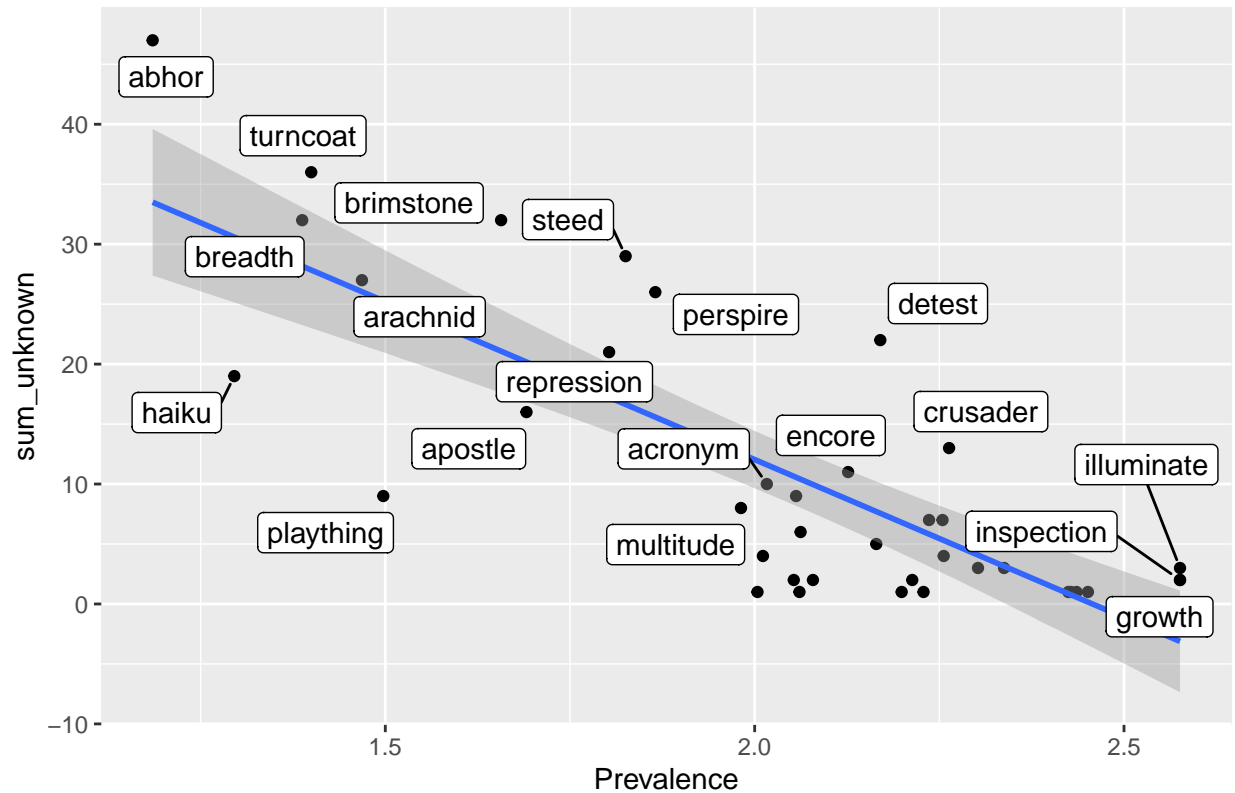


Participant-wise behavior over cues

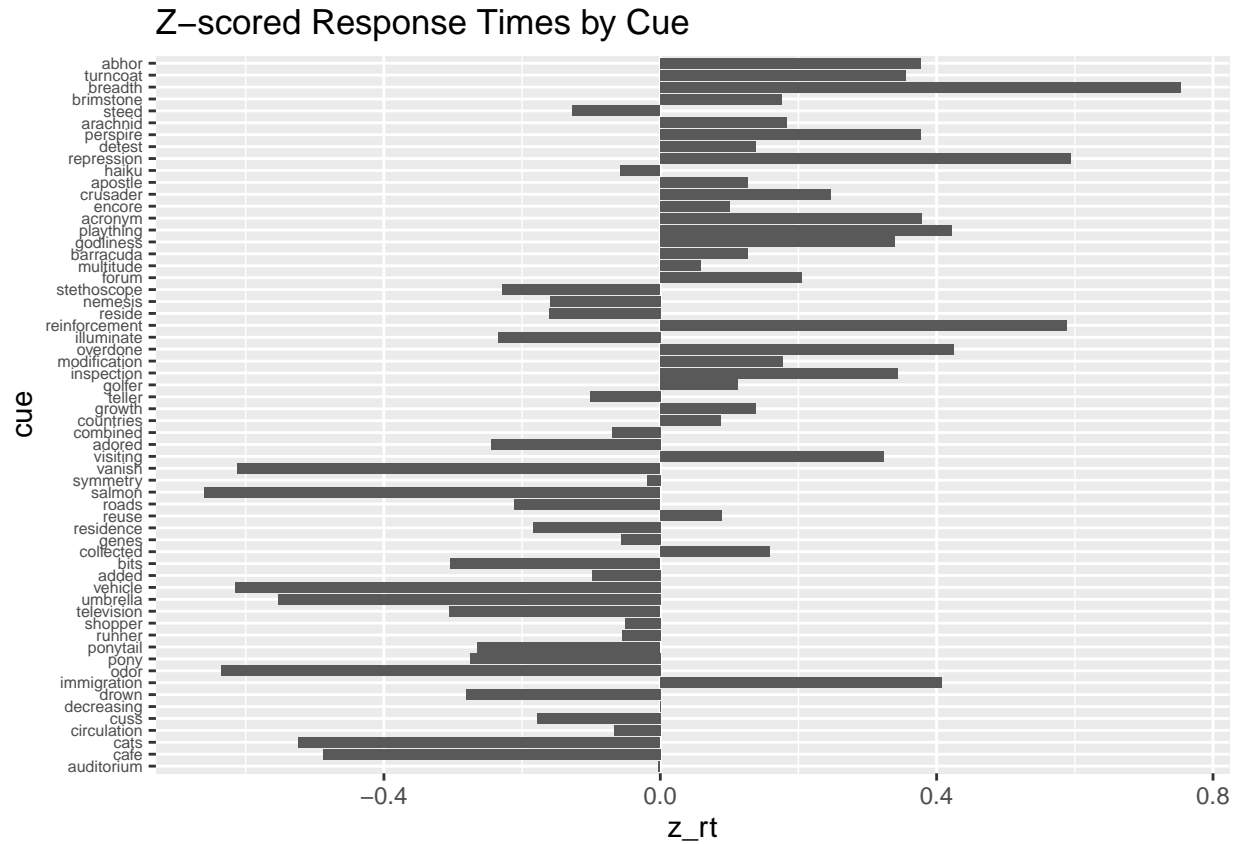
Regressing blank response cues with Prevalence. Removing responses faster than 150 ms and anything further than 3SDs from the participant-wise mean

This was accomplished by filtering out response latencies less than 150ms, grouping by participant and computing z-scores, and filtering out responses that are more than three standard deviations away from the participant means. I then plot the cues in terms of their Prevalence in the MOESM database and their missingness in our response set.

Blank Responses by Prevalence



Participant Z-scored response time by cue. In descending order of number of missing responses. Same procedure as above, but did not filter on standard deviations from the participant means.



cue	sum_unknown
abhor	47
turncoat	36
breadth	32
brimstone	32
steed	29
arachnid	27
perspire	26
detest	22
repression	21
haiku	19
apostle	16
crusader	13
encore	11
acronym	10
plaything	9
barracuda	9
multitude	8
godliness	7
forum	7
stethoscope	6
nemesis	5

cue	sum_unknown
reinforcement	4
reside	4
illuminate	3
overdone	3
modification	3
teller	2
growth	2
inspection	2
countries	2
golfer	2
combined	2
visiting	1
collected	1
roads	1
salmon	1
added	1
adored	1
bits	1
symmetry	1
vanish	1
genes	1
residence	1
reuse	1