Where was the moose? The time course of dynamic road scene perception

APPLY LAB

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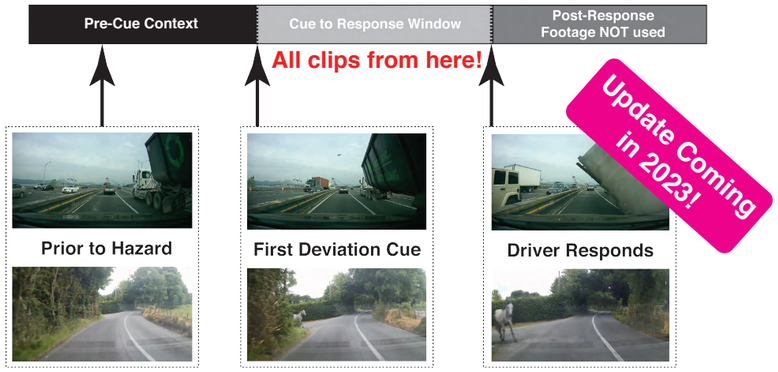
Detecting hazards is a key visual task in driving (Wolfe et al., 2019, JEP:General)**, but *when* do we know *where* hazards are? Studying this in the lab (or online) is safer, but does spatial scale impact our results?**

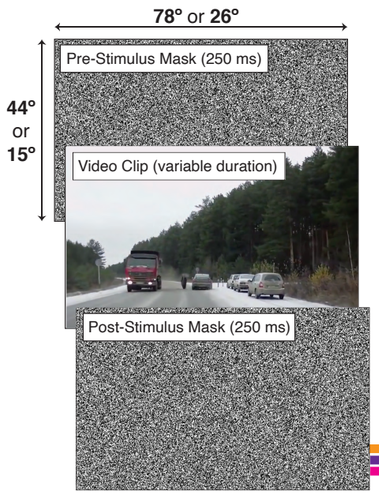
Road Hazard Stimuli (Wolfe 2019)

503 dashcam videos (253 hazardous events, 250 matched controls)

Available on OSF: https://osf.io/uq6pc/

Temporal Annotation: When did things happen?





Large: 78° x 44°; Small: 26° x 15°

Three tasks, two spatial scales

Tasks and Scale Conditions are Blocked and Randomized

n= 24

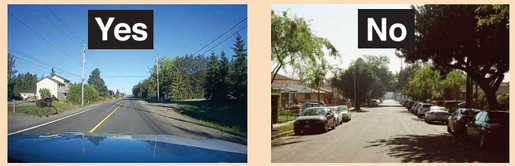
Detection Task
Variable Duration
Staircased (33-1000 ms)

Evasion Task
Variable Duration
Staircased (33-1000 ms)

Localization Task
Fixed Duration
(33, 66, 100, 166, 233, 333, 466, 600 ms)

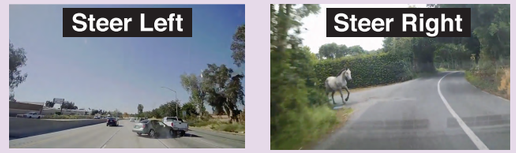
Detection Task

Was there a hazard present that you would have needed to respond to?



Evasion Task

Would you steer left or right to evade the hazard that was present?

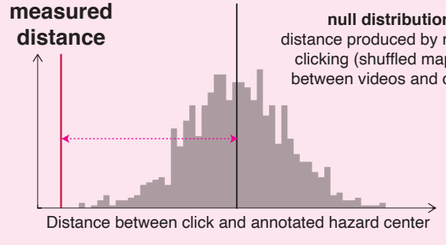


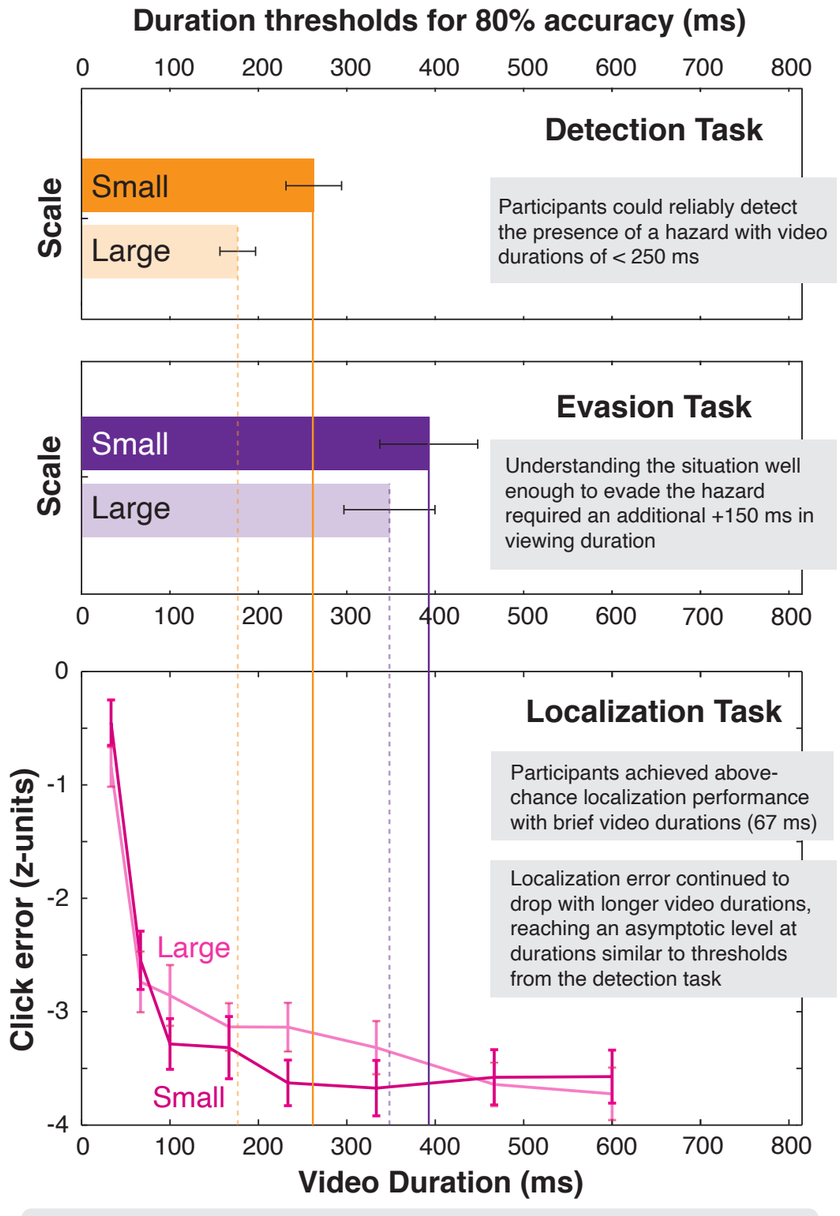
Localization Task

Where did you perceive the hazard?

Where was the hazard when the video ended?

Report the hazard location (mouse click response)





Duration thresholds are comparable across different spatial scales and localization builds on the same timescale as scene understanding

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