Reviewing evidence for different representations in perception and action

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Physical Size (mm)

BACKGROUND





WEBER'S LAW

Weber's law is found in many sensory domains like manual estimation but reported violated in grasping.

 $JND \sim S \Rightarrow JND = k \times S$



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40

Physical Size (mm)



0.10 Grasping Manual Estimation ✓ 0.08 - Adjustmen 0.04 0.02 0.00 L15 H11 G08 Exp1

manual estimation in k.

Perception-Action Model

Visuomotor Actions (more modal)



The Garner effect likely depends Differences RT. overall between tasks regarding Garner interference might occur simply due to differing RTs in tasks.

VISUAL SIZE RESOLUTION

discrimination but MGAs reflected the real size differences between the stimuli. However, comparing a binary outcome (accuracy) with a continuous outcome (MGA) is problematic [9]. A recent study dichotomised MGAs using





 \Rightarrow Different representations in perception and action [1]

an upper-bound threshold but it resulted in grasping accuracies similar to perceptual report [10]. We plan to this analysis manual estimation apply to and improve/extend it using a median-split classifier [9].



CONCLUSION

In different experimental paradigms, our results suggest that there is no evidence for different representations in perception and action.

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