UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

The hemisphere-specific processing that links visual perception to cognition

Permalink <u>https://escholarship.org/uc/item/559330gp</u>

Author

Holcombe, Alex

Publication Date 2023

Peer reviewed

The hemisphere-specific processing that links visual perception to cognition

Alex Holcombe

University of Sydney, Sydney, Australia

Abstract

How does cognition engage with the visual world? I make the case that multiple object tracking tasks can isolate an important object selection process that also applies to unmoving objects. Among other characteristics, the hemisphere specificity of object selection sets it apart from cognitive processing. Tracking is blind in that cognition generally does not know which tracked object is which. Contrary to a recent suggestion, this means that trackers cannot be used as the pointers for different roles necessary to comprehend language or compute certain spatial relations. Instead, in the effects it has, tracking has more in common with stimulus-driven attention, saliency, and featural attention.

In M. Goldwater, F. K. Anggoro, B. K. Hayes, & D. C. Ong (Eds.), *Proceedings of the 45th Annual Conference of the Cognitive Science Society.* ©2023 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY).