UC Merced

Proceedings of the Annual Meeting of the Cognitive Science Society

Title

Context-dependency in marmoset gaze-following

Permalink

https://escholarship.org/uc/item/0wp8f4m0

Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 47(0)

Authors

Mohan, Oviya
Mitchell, Jude
Biro, Dora

Publication Date

2025

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

Context-dependency in marmoset gaze-following

Oviya Mohan
University of Rochester, Rochester, New York, United States

Jude Mitchell
University of Rochester, Rochester, New York, United States

Dora Biro
University of Rochester, Rochester, New York, United States

Abstract

Gaze-following, the ability to direct one's attention to the target of another individual's gaze, plays a key role in social interactions. Gaze-following has been considered reflexive, implying it might operate invariant to context. We tracked the eye position of head-fixed marmosets as they viewed naturalistic video stimuli featuring a marmoset gazing toward (i.e., cueing) one of two transparent boxes. Three trial types were presented interleaved: in the first, a second marmoset entered the cued box; in the second, no marmoset entered either box; and in the third, both boxes were occluded, creating a non-informative context. In all three conditions, a significantly larger number of initial saccades landed in the cued region than in the un-cued region ($p < 0.001$) confirming gaze-following effects. However, preliminary analysis of other eye movements revealed different gazing patterns across conditions, indicating the potential context-dependent nature of gaze-following influenced by the availability of relevant information.

In D. Barner, N.R. Bramley, A. Ruggeri and C.M. Walker (Eds.), *Proceedings of the 47th Annual Conference of the Cognitive Science Society* ©2025 the author(s). This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY).