

Department of Psychology

Distinguished Lecturer Series



DR. MARCIA SPETCH, University of Alberta

TALK: Navigating with mixed messages: How creatures great and small deal with spatial conflict

ABSTRACT

Accurate and efficient navigation can be critical to survival. Not surprisingly, many animals make use of multiple, often redundant, sources of spatial information for navigation to important places such as home or sources of food. Using multiple cues can provide more accurate information than a single cue and can safeguard against the possibility of one information source becoming unavailable. Relying on multiple cues can, however, lead to situations of conflict in which different cues provide discrepant information. There are several possible ways to respond to such conflict, including following only one source (winner take all), using different cues for different components of navigation, or averaging the information from the discrepant sources to strike a compromise. My research over several decades has explored how organisms deal with spatial conflict, and the role of experience in their behavior. I will present results from laboratory and field studies on navigation in animals ranging from desert ants to humans.

BIOGRAPHY

Marcia Spetch is a Professor Emeritus in the Department of Psychology at the University of Alberta. She obtained her PhD from the UBC in 1982, followed by a postdoctoral fellowship at UC San Diego and was an Assistant Professor at Dalhousie prior to joining the University of Alberta in 1987. Her area of expertise is Comparative Cognition with a focus on spatial cognition and risky decision processes. She has received uninterrupted grant support throughout her career from NSERC and her research on risky decision making is also funded by the Alberta Gambling Research Institute. She has published well over 100 research articles and several book chapters. She is a past president of the Comparative Cognition Society, a fellow of the Association for Psychological Science, and co-editor of *Comparative Cognition & Behavior Reviews*. She has supervised numerous undergraduate students, graduate students, and postdoctoral fellows, including some who have continued on to faculty positions. She has collaborated with numerous researchers from Canada, USA, UK and Australia. She is the recipient of the 2018 Comparative Cognition Society Research Award, and in 2017 was inducted as a Fellow in the Royal Society of Canada.

Friday, March 2, 2018 - 2:30 P.M.
Dupuis 215