

Friday, May 12 Cascade Room

4:30 pm Welcome and opening remarks by Scott Allen (University of Lethbridge)

Please register with Peter Dixon if you have not already done so (\$70 for faculty, \$25 for students and postdoctoral fellows).

4:45 pm Douglas J. K. Mewhort (Queen's University)



A new model for retrieval from memory: Iterative resonance applied to recognition memory and serial reaction-time tasks

I will sketch a new theory of retrieval based on a resonance metaphor and show that it captures data from recognition memory and from serial reaction-time tasks. According to the model, when a retrieval probe is presented, it resonates with items stored in memory in proportion to their similarity to the probe, and an echo of the resonant information is formed. If the echo does not provide clear evidence, further comparisons are calculated. In the subsequent comparisons, information taken from memory is sharpened, and the process cycles until clear evidence is obtained. RT is a function of the number of iterations required to provide the necessary evidence. Using the model, I will show, by simulation, that complex rule-like behaviour can be produced from a structured record of events without applying formal rules.

6:00 pm Dinner Break

8:00-11:00 pm Reception & Poster Session I Cascade Room

Sponsored by the *Canadian Journal of Experimental Psychology* and the Canadian Psychological Association.

Saturday, May 14 Cascade Room

8:30 am Coffee, tea, juice, and pastries

Please register with Peter Dixon if you have not already done so.



9:00 am Bruce Milliken (McMaster University)

Attending, ignoring, and the immediate priming method

Studies of selective attention focus on processes that allow us to attend to some stimuli and ignore others. The processing fate of ignored stimuli is regarded as a particularly important issue in this field. The immediate priming method is one of many that have been used to address this issue. The general research strategy that accompanies use of this method is that the processing consequences of attending or ignoring a prime ought to be revealed in performance for an identical (or related) target stimulus. As simple as this research strategy sounds, it has a complicating feature that is often overlooked: inferences about attention in such studies hinge entirely on our understanding about how present and past are integrated in human performance. My talk will focus on research aimed at these integration issues, with an emphasis on how attention in the present shapes the integration of previous and current experience.

10:30 am

Coffee, tea, & juice



11:00 am Pierre Jolicoeur (Université de Montréal)

Electrophysiological indices of visual spatial attention and visual short-term memory

Visual event-related potentials (ERPs) provide powerful tools to study the mechanisms mediating the deployment of visual spatial attention, visual short-term memory, and interactions between spatial attention and central attention. In this talk I will summarize several sets of experiments focusing on the N2pc ERP component as a moment-to-moment index of the deployment of visual spatial attention. These studies explore how central attentional loads created in the context of paradigms used to study the attentional blink (AB) and the psychological refractory period (PRP) systematically modulate the N2pc, and presumably the ability to control visual spatial attention. Spatial attention is important for the selection of visual stimuli that are to be processed by later capacity-limited mechanisms. Visual short-term memory provides a temporary store for objects selected for further processing that has very limited storage capacity (about 3 or 4 objects). I will also discuss recent work involving a later component, which we call the SPCN (sustained posterior contralateral negativity), that appears to be a specific index of neural activity mediating the maintaince of information in visual short-term memory, and describe serveral experiments in which this activity is sharply affected by concurrent central processing demands.

12:30 pm Lunch break

2:00 pm Steve Joordens (University of Toronto at Scarborough)



Playing with the characters and characteristics of negative priming: Task variants, scientific deviants, and what they tell us about attention

I am not an expert on attention. Rather, I am someone with the good fortune to conduct investigations and share discussions with others who are experts in this area. The empirical context for many of these interactions has involved alterations of procedures typically used to demonstrate negative priming effects; alterations designed to examine the link between negative priming and selective attention. My talk will trace these social and empirical interactions, presenting bits of work driven largely by scientific colleagues including Bruce Milliken (Milliken & Joordens, 1996; Milliken, Joordens, Merikle & Seiffert, 1998), Penny MacDonald (MacDonald, Joordens & Seergobin, 1999; MacDonald & Joordens, 2000), and Tomas Spalek (Joordens, Batencourt & Spalek, in press; Spalek & Joordens, in preparation). The talk will highlight the advantages and disadvantages of altering traditional procedures, and will conclude with my current opinion with respect to how negative priming effects are related to selective attention, selective responding, and the general notion of selection for action.

3:30 pm Coffee, tea, juice, cake, & the traditional picture

4:00 pm Tom Spalek (Simon Fraser University)

Attention, what it is and what it isn't: My suggestion as to what it is



What are the rules that govern the redeployment of attention to targets presented sequentially across space? In providing an initial answer to this question, I will draw from the conceptual and practical work that has been done in the field of *inhibition of return* (IOR). IOR is the finding that response times are slower to a target presented at a previously cued location.

In the predominant view, IOR has been attributed to some form of inhibitory mechanism acting on the previously cued location. This inhibition must be overcome before redeploying attention to that location. I will present evidence consistent with the view that IOR is not a unitary phenomenon based on inhibition. Rather, the magnitude of IOR is influenced by expectations that the observer has developed from everyday interactions with the physical world. These expectations include directional momentum and directional reading biases.

Attentional redeployment also governs accuracy of target identification in another perceptual phenomenon known as *object-substitution masking*. I will illustrate how the deployment of spatial attention plays a critical role in this type of masking. Furthermore, I will illustrate how the perceptual processes that mediate object-substitution masking are also affected by expectations based on learned regularities with the physical world.

5:30 pm Closing remarks by John Vokey (University of Lethbridge)

6:00-8:00 pm Reception & Poster Session II Cascade Room

Sponsored by the *Canadian Journal of Experimental Psychology* and the Canadian Psychological Association.

Poster Session I Friday 8:00 - 11:00 pm

Sponsored by the Canadian Journal of Experimental Psychology and the Canadian Psychological Association.

1. Addend familiarity and strategy choice Arron Metcalfe & Jamie I. D. Campbell University of Saskatchewan

2. Putting the other-race effect in context

Michelle Corcoran & John R. Vokey University of Lethbridge

3. What's the difference between a chicken: An attributional account of memory for nonsense movement

Rehman Mulji, Geoffrey Palmer, Cody Tousignant, & Bruce Whittlesea Simon Fraser University

4. Effects of eye movements on unpleasant autobiographical memories

Raymond W. Gunter & Glen E. Bodner University of Calgary

5. Assessing the accuracy of eyewitness identification

Jennifer L. Short & J. Thomas Dalby University of Calgary

6. False memories or false responses: A variant of the DRM effect

Jolene Kinley & John R. Vokey University of Lethbridge

7. "If I formed an image of myself, I would've remembered it:" Self-referential imagery attenuates the DRM illusion

Tanjeem Azad, Raymond W. Gunter, & Glen E. Bodner
University of Calgary

8. The effects of JOLs and self-paced training on the mirror effect

Geoffrey J. Palmer, Yifat Faran, & Bruce A. Whittlesea
Simon Fraser University

9. Training strategies and the mirror effect: Breaking the mirror is not seven years of bad luck

Yifat Faran, Geoffrey J. Palmer, & Bruce A. Whittlesea
Simon Fraser University

10. Mnemonics for prospective memory

Daniel Siu & Peter Graf University of British Columbia

11. Is retrieval-induced forgetting in arithmetic cue-dependent?

Natasha Pandila & Thomas Phenix University of Regina

12. Reality source monitoring in children with and without autism

Carly McMorris & Suzanne Hala University of Calgary

13. Attentional demands of navigation versus data entry tasks in handheld devices

Hiroe Li & Peter Graf University of British Columbia

14. Models of accuracy

Peter Dixon
University of Alberta

Poster Session II Saturday 6:00 - 8:00 pm

Sponsored by the Canadian Journal of Experimental Psychology and the Canadian Psychological Association.

15. Bimanual interference is task specific and occurs at multiple levels of processing Sukhvinder Obhi & Melvyn A. Goodale Wilfrid Laurier University

16. Mapping the dynamic nature of the "controlled" and "automatic" processing in the brain

Jonathan Fugelsang & Kevin Dunbar University of Waterloo

17. Representing semantics: Neural correlates of concreteness and ambiguity

I. C. Hargreaves, L. C. Henry, P. M. Pexman, J. D. Edwards, & B. Goodyear University of Calgary

18. Is semantic processing obligatory in word naming?: A structural equation model using fMRI data

Amabilis Harrison, Gordon Sarty, & Ron Borowsky University of Saskatchewan

19. "That was a great play!": Children's processing of verbal irony

Emma Climie & Penny Pexman University of Calgary

20.7-to-11-year-olds' production of ironic criticisms

Juanita Whalen & Penny M. Pexman University of Calgary

21. The influence of task demands and homophone type on homophone effects

Linda R. Kerswell, Paul D. Siakaluk, Penny M. Pexman, Christopher R. Sears, & William J. Owen

University of Northern British Columbia

22. Distinguishing between accounts of masked response priming using a parity task Andreas Breuer & Glen E. Bodner

Andreas Breuer & Glen E. Bodner University of Calgary

23. Embodied word recognition: The effects of ease of body-object interaction

Laura Aguilera, Paul D. Siakaluk, Penny M. Pexman, William J. Owen, & Christopher R. Sears
University of Northern British Columbia

24. Insular sensitivity in basic reading processes Jacqueline Cummine, R. Borowsky, & G. Sarty University of Saskatchewan

25. The influence of specificity on causal reasoning

Andrea Nicole Burnett, Jonathan A. Fugelsang, William J. Owen, & Paul D. Siakaluk University of Northern British Columbia

26. Improving the confidence-accuracy relationship in deductive reasoning

Jamie Prowse & Valerie A. Thompson University of Saskatchewan

27. Influence of stimulus repetition on the SNARC effect

Shawn Tan Chin Yang & Peter Dixon University of Alberta

28. The relationship between semantic and response effects in the Stroop task

Lisa McCormick, Stacey McHenry, & Jim Cheesman
University of Saskatchewan

BASICS 2006 Registrants

Laura Aguilera, University of Northern British Columbia

Scott Allen, University of Lethbridge

Tanjeem Azad, University of Calgary

Glen Bodner, University of Calgary

Andreas Breuer, University of Calgary

Lee Brooks, McMaster University

Alisha Brown, University of Calgary

Andrea Nicole Burnett, University of Northern British

Columbia

Jamie Campbell, University of Saskatchewan

Emma Climie, University of Calgary

Michelle A. Corcoran, University of Lethbridge

Jacqueline Cummine, University of Saskatchewan

Peter Dixon, University of Alberta

Brian Duffels, University of Alberta

Yifat Faran, Simon Fraser University

Jonathan Fugelsang, University of Waterloo

Melanie Glenwright, University of Calgary

Raymond W. Gunter, University of Calgary

Ian Hargreaves, University of Calgary

Amabilis Harrison, University of Saskatchewan

Luke Henry, University of Calgary

Ashley Jespersen, University of Lethbridge

Pierre Jolicoeur, University of Montreal

Steve Joordens, University of Toronto

Linda R. Kerswell, University of Northern British

Columbia

Jolene Kinley, University of Lethbridge

Anna Kjellqvist, University of Sköude

Gregory P. Krätzig, Campion College at the University of

Regina

Hiroe Li, University of British Columbia

Cheryl Macelli, University of Calgary

Tess Macelli

Lila McCormick, University of Saskatchewan

Carly McMorris, University of Calgary

Arron Metcalfe, University of Saskatchewan

Douglas J. K. Mewhort, Queen's University

Bruce Milliken, McMaster University

Gail Moroschan, University of Alberta

Rehman Mulji, Simon Fraser University

Sukhvinder S. Obhi, Wilfrid Laurier University

William J. Owen, University of Northern British Columbia

Geoffrey J. Palmer, Simon Fraser University

Natasha Pandila, University of Regina

Penny Pexman, University of Calgary

Thomas Phenix, University of Regina

Jamie Prowse, University of Saskatchewan

Lenore Read, University of Alberta

Valerie San Juan, University of Calgary

Chris Sears, University of Calgary

Jennifer L. Short, University of Calgary

Paul Siakaluk, University of Northern British Columbia

Daniel Siu, University of British Columbia

Tom Spalek, Simon Fraser University

Valerie Thompson, University of Saskatchewan

Megan Torry, University of Lethbridge

Cody Tousignant, Simon Fraser University

John Vokey, University of Lethbridge

Juanita Whalen, University of Calgary

Bruce W. A. Whittlesea, Simon Fraser University

Shawn Tan Chin Yang, University of Alberta

Acknowledgments

The organizers gratefully acknowledge the support of psychology departments at the University of Alberta, the University of British Columbia, the University of Calgary, the University of Lethbridge, the University of Manitoba, the University of Northern British Columbia, the University of Saskatchewan, and the University of Victoria, and as well as the Canadian Society for Brain, Behaviour, and Cognitive Science, and the *Canadian Journal of Experimental Psychology*.