

www.uvic.ca/psyc/nowcam

Simon Fraser University

NINTH ANNUAL MEETING
May 24-26, Burnaby, BC

2007



Cogito ergo incola aquilo occasus

NorthWest Cognition And Memory

NOWCAM is an annual venue for students and researchers from the Pacific Northwest working in the general area of memory and cognition to meet and share their current research with an informed, sympathetic, and good-humoured audience.



Table of Contents

Mission statement.....	3
Acknowledgments	3
Locations for registration, poster and paper sessions, etc.	3
Poster set-up information	3
Program outline	4
Detailed program.....	5
Program abstracts	9
Pre-registered attendees' names and e-mail addresses	22
On-Campus Dining.....	25
Off-Campus Dining.....	26
Selected Local Events	27

Hosted By:
Don Read and John McDonald

With financial support from the Departments of Psychology at the University of Victoria, University of B.C., Western Washington University, University of Washington, and Simon Fraser University.

Web Mastery:
Joshua Goldberg and Chris Lalonde

NOWCAM Mission Statement

The Pacific Northwest is home to numerous wide-flung Psychology departments with strengths in cognition and memory. In recent years, there has been no annual regional conference to provide a forum for such faculty and students to get together and discuss their latest research. Interactions with other researchers can spark innovations and cross-fertilizations that move the research forward in new and exciting ways. In any case, it's good fun to get together with friends and colleagues who share similar interests, chew the cognitive rag a bit, and quaff a beer or two over a good meal.

The aim of NOWCAM is to support Northwest faculty and student researchers working in the general area of memory and cognition by creating a venue in which they can share their current research activities with an informed, sympathetic, and good-humoured audience. In this first annual get-together, we have emphasized student presentations, partly so that students get a chance to practice their presentation skills and mostly so that faculty can kick back and relax a bit.

Acknowledgments

The 9th Annual Conference has benefitted from the strong support and organizational efforts of the following people and organizations. We are greatly indebted to them.

The SFU Psychology Department and Departmental Assistant, Bev Davino
 Office of the Vice-President Academic, John Waterhouse, VPA
 Simon Fraser University Bookstore and Mikhail Dzuba
 Simon Fraser Residence and Housing and Accommodation (Meghan)
 Simon Fraser Facilities Management (Angie) and Room Bookings (Gladys and Alexandra)
 Diamond Alumni Centre and Vivien Tan
 Renaissance Coffee and Parminder
 Simon Fraser Security and Parking
 The NOWCAM mother hen at UVic , Steve Lindsay, and assistant Joshua Goldberg

Financial support from the Departments of Psychology at the University of Victoria, University of B.C., Western Washington University, University of Washington, and Simon Fraser University.

The SFU Organizing Committee of Mario Liotti, Tom Spalek, Mark Blair, Deb Connolly, Vince Di Lollo, Carroll Boydell, Jennifer Whitman, Carol Wong, Heidi Gordon, Caroline Greaves, Sarah Desmarais, Matt Yanko, and Reema Jayakar

Locations for Keynote Addresses, Papers, and Poster Sessions

The keynote address, poster sessions, and most paper sessions will be held in the West Mall Complex (WMC 3520 and the nearby student study area). Paper sessions on Friday morning will be held in Images Theatre. The Registration desk will be set up at Images Theatre on Friday morning and in the West Mall Centre student study area on Saturday.

Poster Set-Up Information

Posters should be set up no later than the end of the morning break on the day of presentation.

Program Outline

Thursday Evening, May 24

06:00-10:00 Welcome (Highland Pub)

Friday, May 25

08:00-09:00 Registration (Images Theatre)

09:00-10:15 Paper Session I: Attention and Performance, chaired by John McDonald (Images Theatre)

10:15-10:30 Break

10:30-12:00 Paper Session II: Judgment and eyewitness testimony, chaired by Steve Lindsay (Images Theatre)

12:00-02:00 Lunch (See On-campus dining on page 26)

02:00-03:30 Poster Session I (WMC Student Study Area)

03:30-04:30 Paper Session III: Memory and Cognition I, chaired by Tom Spalek (WMC 3520)

04:30-05:00 Break

05:00-06:00 Opening Keynote, Vincent Di Lollo: *Memory and prediction - That's what the brain is in business for*. Introduced by John McDonald (WMC 3520)

06:30- Gala Dinner @ Diamond Alumni Club

Saturday, May 26

09:00-09:30 Refreshments

09:30-10:45 Paper Session IV: Executive functioning, chaired by Mario Liotti (WMC 3520)

10:45-11:00 Break

11:00-12:30 Paper Session V: Memory, chaired by Ira Hyman (WMC 3520)

12:30-02:00 Poster Session II with Pizza (WMC Student Study Area)

02:00-03:00 Paper Session VI: Memory and Cognition II, chaired by Dan Bernstein (WMC 3520)

Detailed Program

Thursday Evening, May 24

06:00-10:00 Welcome (Highland Pub)

Friday, May 25

08:00-09:00 Registration (Images Theatre)

09:00-10:15 Paper Session I: Attention and Performance, chaired by John McDonald (Images Theatre)

09:00-09:15 Alexa B. Roggeveen & Lawrence M. Ward - *Anisotropy of covert, endogenous orienting across the visual field: effect of attention distribution.*

09:15-09:30 Hiroe Li & Peter Graf - *Personal Digital Assistant Usability: Navigating the system requires more attention than entering data.*

09:30-09:45 Calen Walshe, Fil Maj, Jordan Shimell, Marcus Watson, Steve Smith, & Mark Blair - *Eyetracking reveals patterns of selective attention that violate assumptions of many theories of category learning.*

09:45-10:00 Kyle E. Mathewson & Jim W. Tanaka - *The detrimental effects of working memory load on a sustained attention task: The elimination of a cueing effect with distraction.*

10:00-10:15 Jennifer Barrie, Brian Luus, Anthony Herdman, James Tanaka, & Mario Liotti - *Influence of spatial frequency on the M170 neuromagnetic response to face and non-face stimuli.*

10:15-10:30 Break

10:30-12:00 Paper Session II: Judgment and Eyewitness Testimony, chaired by Steve Lindsay (Images Theatre)

10:30-10:45 Leora C. Dahl, C. A. Elizabeth Brimacombe, & D. Stephen Lindsay - *Who to believe: How investigators compare alibi evidence to eyewitness evidence.*

10:45-11:00 Jesse Elterman & Deb Connolly - *The role of race in adults' perceptions of child credibility.*

11:00-11:15 Melissa Boyce, D. Stephen Lindsay, & C. A. Elizabeth Brimacombe - *Are student-investigators sensitive to race when evaluating eyewitness decisions?*

11:15-11:30 Ruby Banipal & Deborah A. Connolly - *Children's report consistency and perceived credibility of a single-event and an instance of a repeated-event.*

11:30-11:45 Melissa Northcott & Deborah A. Connolly - *Stereotype use in child sexual abuse trials.*

11:45-12:00 Carla L. MacLean, C. A. Elizabeth Brimacombe, & Veronica Stinson - *The deceptive interviewee: An industrial investigator's perspective.*

12:00-02:00 Lunch

02:00-03:30 Poster Session I (WMC Student Study Area)

1. Carol K. Wong & J. Don Read - *Context reinstatement and its effect on eyewitness identification and confidence judgment.*

2. Carmelina Barone & J. Don Read - *The effects of delay on eyewitness confidence and*

accuracy.

3. Jessica Anderson, Kilioe Fern, & Leslie McDonald-Miszczak - *Beliefs about memory predict younger and older adults' adherence to an everyday memory task over 2-weeks.*
4. Nelson Eddingfield, Lee Lau, Jason Martens, & Peter Graf - *Ongoing task response demands do not affect prospective memory.*
5. Jason Martens, Winnie Chung, Lee Lau, Nelson Eddingfield, & Peter Graf - *Modality matters in prospective memory.*
6. Glen E. Bodner & Jeremy C. S. Johnson - *The repetition proportion effect is in full effect in accuracy-based tasks.*
7. Gemma Gillespie, Djuna Field, Jie Gao, Peter Graf - *Producing a discrepancy reaction.*
8. Leila Mohazab, Vesta Ghanavati, Ada Cheng, Celine Chung, Bianca Lam, & Peter Graf - *Spatial cognition demands affect prospective memory.*
9. Ron Boaz, David Coleman, David Pettitt, Cedric Villamin, Elina Birmingham, Scott Sinnett, & Alan Kingstone - *UBC undergraduates present: Unbelievably meaningful data!*
10. Patricia E. Brosseau-Liard, Ramin Joubin, & Susan A. J. Birch - *What makes reasoning about what others know so hard? Variations in the 'curse of knowledge' by domain of knowledge and recency of learning.*
11. Victoria Jeffries & Steven D. Hart - *Which heuristic is it?*
12. Amanda Hahn, Brian Roberts, & Lawrence A. Symons - *The face inversion effect for human and animal faces.*
13. Cody Tousignant, Bruce W. A. Whittlesea, Thomas Spalek - *Further evidence regarding the role of fluency in the subjective experience accompanying aesthetic processing.*
14. Jeffrey A. Sun & Daniel N. Bub - *Dissociating alignment and grasp compatibility effects.*
15. Paul Metzack & Todd S. Woodward - *Anterior cingulate may signal a change in response style when switching tasks.*
16. Lisa Buchy, Todd S. Woodward, Peter Liddle, & Ivan Torres - *Symptomatic determinants of insight in schizophrenia.*
17. Ashley Ruggles & Leslie McDonald-Miszczak - *Applied metamemory: Do memory beliefs predict younger and older adults' medication adherence?*
18. Kilioe Fern, Jessica Anderson, Ashley Ruggles, Liz Rankin, Kate Murphy, & Leslie McDonald-Miszczak - *Everyday memory for medication instructions: Age differences in expectations and recall.*
19. Megan Myers, Lara Pierce, Oliver Ayling, Mehul Gandhi, Parminder Kaur, Kim Maynard, Rebecca Phillips, Zena Rittenhouse, Kathleen Unfreed, Nicole von Kleist, James Tanaka - *Electrophysiology of other-race face recognition.*

03:30-04:30 Paper Session III: Memory and Cognition I, chaired by Tom Spalek (WMC 3520)

03:30-03:45 William J. Peria, Rebecca M. Nicholas, & Geoffrey R. Loftus - *On the use of large- and small-scale visual information in the formation of memory for naturalistic scenes.*

03:45-04:00 Justin Kantner & D. Stephen Lindsay - *Constraining retrieval in recognition memory.*

04:00-04:15 Christopher M. Warren, Michael E. J. Masson, & Daniel N. Bub - *Effects of sentence context on the priming of motor representations.*

04:15-04:30 Andreas Breuer & Michael E. J. Masson - *Does object rotation affect how gestural knowledge is evoked?*

- 04:30-05:00 Break
- 05:00-06:00 Opening Keynote, Vincent Di Lollo: *Memory and prediction - That's what the brain is in business for*. Introduced by John McDonald (WMC 3520)
- 06:30- Gala Dinner @ Diamond Alumni Club

Saturday, May 26

- 09:00-09:30 Refreshments (WMC 3520)
- 09:30-10:45 Paper Session IV: Executive functioning, chaired by Mario Liotti (WMC 3520)
- 09:30-09:45 Olav Krigolson, Lara Pierce, Jim Tanaka, & Clay Holroyd - *Internal error evaluation and the acquisition of perceptual expertise*.
- 09:45-10:00 Kyle E. Mathewson, Olav E. Krigolson, & Clay B. Holroyd - *The error-related negativity as a reinforcement learning signal in motor sequence acquisition*.
- 10:00-10:15 Kevin Lee, Olav E. Krigolson, & Clay B. Holroyd - *Investigating the role of expectancy and predictive stimuli on the feedback error-related negativity*.
- 10:15-10:30 Brian Luus & Mario Liotti - *Beyond averaging epochs: Investigating the electrophysiological dynamics of response-inhibition using parametric sorting and blind signal separation*.
- 10:30-10:45 Fern Jaspers-Fayer, I. Taake, L. Buchy, & M. Liotti - *A high-density ERP study of a seasonal emotional Stroop task in healthy adults*.
- 10:45-11:00 Break
- 11:00-12:30 Paper Session V: Memory, chaired by Ira Hyman (WMC 3520)
- 11:00-11:15 Tanjeem Azad, Raymond W. Gunter, & Glen E. Bodner - *How distinctive encoding reduces the DRM illusion: Evidence from source judgments*.
- 11:15-11:30 Celine Chung, Bianca Lam, Ada Cheng, Vesta Ghanavati, Leila Mohazab, & Peter Graf - *Prospective memory is not affected by addition task difficulty*.
- 11:30-11:45 Lee Lau, Winnie Chung, Jason Martens, Nelson Eddingfield, Peter Graf - *Prospective memory task performance is reduced by a concurrent reasoning*.
- 11:45-12:00 Jie Gao, Gemma Gillespie, Djuna Field, & Peter Graf - *Cued prospective memory task retrieval*.
- 12:00-12:15 Raymond W. Gunter & Glen E. Bodner - *How eye movements affect unpleasant memories: Support for a working memory account*.
- 12:15-12:30 Katie Haverstock, Jennifer L. Baxter, Laura C. Rakestraw, Christina M. Walker, & Ira E. Hyman - *Differences in central and peripheral details recalled from spider encounters among people with various levels of spider fear*.
- 12:30-02:00 Poster Session II with Pizza (WMC Student Study Area)
1. Sophia Grewal & Deborah A. Connolly - *Admissibility of evidence given by children with developmental delays*.
 2. Carroll A. Boydell & J. Don Read - *Confidence and accuracy in eyewitness memory for events: A pilot study*.

3. Reid A. Nelson, Christopher L. Sharp, & Ira E. Hyman, Jr. - *Possible distinctions between true and false memories: A signal detection approach.*
4. Linda Ching, Rubina Mudhar, Suad Mohamed, Aman Bassi, Neha Deol, Daniel Bernstein, Seema Clifasefi, & Elizabeth Loftus - *Alcohol false memories.*
5. Karen Robson, Geoff Palmer, & Bruce Whittlesea - *The effect of context on false memory in the Deese/Roediger-McDermott paradigm.*
6. Reh Mulji & Glen E. Bodner - *Concentrating on directed forgetting.*
7. L. James Climenhage & Michael Schmitt - *Get off my planet: Social distance comparisons of identified least liked groups between Asians, South Asians and Caucasians.*
8. H. Robert Outten, Shannon Pinegar, & Michael T. Schmitt - *History shaping present beliefs? Perceptions of U.S. history and social dominance orientation as predictors of hierarchy-legitimizing beliefs.*
9. Drew A. Baillie, Daniel M. Bernstein, & Anthony G. Greenwald - *The Food IAT: Examining food preference within the context of implicit association.*
10. Rebecca M. Nichols, Susan Joslyn & Limor Nadav-Greenberg - *The effects of wording on the understanding of weather forecast uncertainty information.*
11. Patricia Wallis, Karen Robson, Michele Hooey, & Rachel T. Fouladi - *The impact of questionnaire presentation format on information processing of item content and item responses.*
12. Patricia Wallis, Heather Neilson, Melissa Friesen, & Rachel T. Fouladi - *A study of response shifts across repeated assessments of previous week's mood in a short timeframe.*
13. Brian Luus, Lindsay Nagamatsu, Simone Biljoen, Janice Crowe, Veronica Boswell, Merrill McSpadden, & Jonathan Schooler - *As the over glaze eyes: Failures to detect periodic gibberish in text is associated with reduced gamma-band EEG.*
14. Fumito Kawakami & Yuji Itoh - *Representations in change blindness.*
15. Shahab Ghorashi & Vincent Di Lollo - *A spatial cue affects both the level of performance and the slope in a search task.*
16. Lisa N. Jefferies, Dan Smilek, Eric Eich, & James T. Enns - *Does mood influence the attentional blink?*
17. Valery Sramko & Mario Liotti - *Comprehension of affective prosody elicits activity in speech motor regions.*
18. Isabel Taake, Fern Jaspers-Fayer, Lisa Buchy, & Mario Liotti - *A high-density ERP investigation in high and low anxiety sensitive participants.*
19. Victoria Harms, & John J. McDonald - *Re-examining evidence for distractor suppression in visual search: An ERP study.*

02:00-03:00 Paper Session VI: Memory and Cognition II, chaired by Dan Berstein (WMC 3520)

02:00-02:15 Kamyar Keramatian, Seyed Hossein Faramarzi, William Speechley, & Elton T. C. Ngan - *Double-dissociation between brain areas involved in intuitive and deliberative decision making processes.*

02:15-02:30 Kristie J. Fisher & Miriam Bassok - *Measuring Modeling in Algebraic Tasks.*

02:30-02:45 Michael H. Yeomans, Jason K. Chin, & Jonathan W. Schooler -

Mind-altering figures: Insight and transfer-inappropriate processing shifts.

02:45-03:00 Amy Guthormsen, Miriam Bassok, & Lee Osterhout - *Conceptual integration of mathematical and semantic knowledge.*

Program Abstracts

Friday, May 25

09:00-10:15 Paper Session I: Attention and Performance, chaired by John McDonald (Images Theatre)

09:00-09:15 Alexa B. Roggeveen & Lawrence M. Ward - *Anisotropy of covert, endogenous orienting across the visual field: effect of attention distribution.*

Visual attention has been conceptualized as a mechanism for selecting a location or object, and as a resource that can be distributed across the visual field. How does efficacy of location selection across the visual field vary with attention distribution? To answer this question, we manipulated cue validity between experiments. Results demonstrate anisotropy of attention allocation across the visual field, with subtle but significant differences resulting from attention distribution.

09:15-09:30 Hiroe Li & Peter Graf - *Personal Digital Assistant Usability: Navigating the system requires more attention than entering data.*

Personal Digital Assistants (PDAs) are powerful, mobile devices that are frequently used in attention-demanding environments (eg. while driving, while listening to a presentation). The present study examined the amount of attention required to perform two different types of PDA tasks: Text entry and system navigation. Thirty undergraduate students performed each of these types of PDA tasks while concurrently engaged in an attention-demanding secondary task. The results revealed that navigation tasks require more attention than data/text entry tasks.

09:30-09:45 Calen Walshe, Fil Maj, Jordan Shimell, Marcus Watson, Steve Smith, & Mark Blair - *Eyetracking reveals patterns of selective attention that violate assumptions of many theories of category learning.*

Most theories of categorization assume that attention is allocated consistently across all stimuli presented in any specific classification task. To test this assumption, participants were asked to learn 4 categories of fictitious microorganisms that differed in the number of features necessary for their correct classification. Results show that different categories elicited different eye fixation patterns, a violation of the assumptions of task-level attention.

09:45-10:00 Kyle E. Mathewson & Jim W. Tanaka - *The detrimental effects of working memory load on a sustained attention task: The elimination of a cueing effect with distraction.*

The effect of working memory load on a spatial cueing task was examined. Participants were cued to one side of visual space and indicated as quickly as possible the side on which targets appeared with and without a dual-task of mental math. The mental math task led to an overall slowing of responses and the elimination of the cueing effect observed in the no-task condition. Thus, reaction time advantages afforded by orienting attention are negated by working memory load.

10:00-10:15 Jennifer Barrie, Brian Luus, Anthony Herdman, James Tanaka, & Mario Liotti - *Influence of spatial frequency on the M170 neuromagnetic response to face and non-face stimuli.*

The goal of the project was to examine the effect of spatial frequency (SF) on the face-specific M170 neuromagnetic response. It was hypothesized that low SF faces would elicit an earlier peak response than high SF faces. Faces and

objects were presented in HighSF and LowSF and participants made face-object discriminations while sitting under the magnetoencephalography helmet. Results confirmed the hypothesis and support previous findings that faces are processed holistically.

10:30-12:00 Paper Session II: Judgment and Eyewitness Testimony, chaired by Steve Lindsay (Images Theatre)

10:30-10:45 Leora C. Dahl, C. A. Elizabeth Brimacombe, & D. Stephen Lindsay - *Who to believe: How investigators compare alibi evidence to eyewitness evidence.*

This research examined how participant-investigators evaluated alibi and eyewitness testimony when they had already identified a suspect in the case. Investigators evaluated alibi evidence that was either strong or weak (in regards to exonerating the suspect) and eyewitness evidence involving a witness who either identified the investigator's suspect or rejected the suspect (by not making an identification). Overall, investigators rated the eyewitness as more credible than the alibi provider.

10:45-11:00 Jesse Elterman & Deb Connolly - *The role of race in adults' perceptions of child credibility.*

With the increased number of children providing testimony in court and the growing prevalence of visible minorities in BC, it is important to understand the role of race in perceptions of child credibility. Children from three racial backgrounds participated in a play session and were interviewed about it on videotape. Adults watched a videotaped interview and rated the credibility of the child. Results and implications will be discussed.

11:00-11:15 Melissa Boyce, D. Stephen Lindsay, & C. A. Elizabeth Brimacombe - *Are student-investigators sensitive to race when evaluating eyewitness decisions?*

Subject-investigators interviewed witnesses about a crime committed by either an Asian or Caucasian criminal, then chose a suspect, and rated their belief in his guilt prior to and after administering a lineup to the witness. Although cross-race identifications are generally less reliable (Meissner & Brigham, 2002) and people tend to be aware of this phenomenon (Read & Desmarais, 2006), does this knowledge affect the weight student-investigators give eyewitness identification decisions?

11:15-11:30 Ruby Banipal & Deborah A. Connolly - *Children's report consistency and perceived credibility of a single-event and an instance of a repeated-event.*

Two studies were conducted to examine children's report consistency and perceived credibility. In Study 1, children were interviewed twice about their memory of a single- or a repeated-event. In Study 2, participants judged the credibility of children's reports. Single-event children were more consistent than repeat-event children; and despite equal levels of actual accuracy, they were also judged to be more accurate. The forensic implications of children's testimony are discussed.

11:30-11:45 Melissa Northcott & Deborah A. Connolly - *Stereotype use in child sexual abuse trials.*

We investigated the effects of child sexual abuse stereotypes on perceptions of complainant and defendant credibility in two studies. Participants read trial vignettes in which assorted stereotypes varied. In study 1, the stereotypical and non-stereotypical groups differed from the control group on a number of factors.

In study 2, stereotypical complainants were perceived as more credible than non-stereotypical and control group complainants. Non-stereotypical defendants were perceived as more intelligent than stereotypical defendants. Implications are discussed.

11:45-12:00 Carla L. MacLean, C. A. Elizabeth Brimacombe, & Veronica Stinson - *The deceptive interviewee: An industrial investigator's perspective.*

We conducted a survey of 185 occupational accident investigators and measured how these professionals deal with interviewee deception in accident investigations. The results indicate that investigators perceive that deceptive interviewees demonstrate unique: personal characteristics, testimony, and body language. A large percentage of investigators' reported that their questioning technique changes with deceptive interviewees as they ask more detail focused questions and revisited information in an attempt to flesh out accurate responses.

02:00-03:30 Poster Session I (WMC Student Study Area)

1. Carol K. Wong & J. Don Read - *Context reinstatement and its effect on eyewitness identification and confidence judgment.*

The impact of context reinstatement on eyewitness identification was examined. Participants watched a video about a theft and returned to either the same or a different room at test one week later. Results suggested that context reinstatement enhanced the perceived familiarity of the target/foil and their willingness to identify someone in the lineup. Although context reinstatement improved facial identification when the target was present, it also artificially boosted participants' confidence.

2. Carmelina Barone & J. Don Read - *The effects of delay on eyewitness confidence and accuracy.*

This study examined the relationship between eyewitness accuracy and confidence. Delay to the identification test (10 minutes, 1 week, 3 weeks) and attention (full or divided) were manipulated. Participants viewed a videotaped scenario depicting a theft and then attempted to identify the actors from lineups and rated the likelihood that they had made a correct decision. Attention and delay conditions did not affect accuracy. Longer delays resulted in decreased confidence.

3. Jessica Anderson, Kilioe Fern, & Leslie McDonald-Miszczak - *Beliefs about memory predict younger and older adults' adherence to an everyday memory task over 2-weeks.*

The analyses explore predictors of adherence to prescription medication and to a standardized memory task in young (N =56; M =21.2, SD=3.80) and older adults (N=62; M = 74.3, SD=7.27). Regression analyses indicate perceived memory for medications predicts adherence for older adults, but not young. Memory task adherence differed by age, but scores on a perceived memory scale predicted accuracy for both. Findings indicate that perceived memory for medications is useful in understanding everyday memory.

4. Nelson Eddingfield, Lee Lau, Jason Martens, & Peter Graf - *Ongoing task response demands do not affect prospective memory.*

Participants viewed displays, each showing a photo of a common object plus either a word or a pseudoword, and made a key-press response to each word. To manipulate the response demands, either 80% or only 20% of all displays included a word. The prospective task required pressing a designated key in response to a photo of a fruit. There was no difference in prospective task performance between the high- and low-frequency word conditions.

5. Jason Martens, Winnie Chung, Lee Lau, Nelson Eddingfield, & Peter Graf - *Modality*

matters in prospective memory.

Is prospective memory task performance better for cues that occur in the sensory modality which dominates a concurrently ongoing activity? Students studied a series of common objects either by touching (without seeing) or hearing the name of each, and the prospective memory cues were defined either by shape (a spherical object) or sound (an object whose name rhymes with "fall"). The results showed higher prospective memory performance when the cues were defined by shape.

6. Glen E. Bodner & Jeremy C. S. Johnson - *The repetition proportion effect is in full effect in accuracy-based tasks.*

Masked repetition priming is typically greater when a high proportion of trials have repetition primes. Although prior studies have not obtained this RP effect in an accuracy-based task (thus implicating a response deadline mechanism), we obtained it in two such tasks. Surprisingly, the effect of RP on priming occurred in the RT measure in both masked word identification and fragment completion tasks, whereas it affected accuracy only in fragment completion.

7. Gemma Gillespie, Djuna Field, Jie Gao, Peter Graf - *Producing a discrepancy reaction.*

Discrepancy-attribution theory suggests that unexpectedly fluent processing produces a discrepancy reaction which provides a basis for various cognitive judgments. The current study explored whether discrepancy reactions can be produced by those factors not directly link to processing fluency, such as, foreground-background contrast manipulation and target display location manipulation. The results showed that both manipulations affected subjects' liking ratings and old-new decisions about words.

8. Leila Mohazab, Vesta Ghanavati, Ada Cheng, Celine Chung, Bianca Lam, & Peter Graf - *Spatial cognition demands affect prospective memory.*

To explore whether the spatial demands on an ongoing activity influence event-based prospective memory task performance, students were shown pairs of puzzle pieces that were rotated away from each other to a low or high degree. The ongoing task required deciding whether the paired pieces had a matching edge, and the prospective task required a response to displays with a yellow background. Prospective task performance was higher in the low-rotation puzzles condition.

9. Ron Boaz, David Coleman, David Pettitt, Cedric Villamin, Elina Birmingham, Scott Sinnett, & Alan Kingstone - *UBC undergraduates present: Unbelievably meaningful data!*

The present study explores the perception of events as either meaningful or unbelievable. Participants viewed episodes of "Alfred Hitchcock Presents" and were required to hold a key whenever they felt that something was either meaningful or unbelievable. Response convergence between participants and questions were analyzed. Our findings have implications for dynamic measurements of attention, meta-awareness, and may in turn be useful for the film industry.

10. Patricia E. Brosseau-Liard, Ramin Joubin, & Susan A. J. Birch - *What makes reasoning about what others know so hard? Variations in the 'curse of knowledge' by domain of knowledge and recency of learning.*

The present study examined how the magnitude of the curse of knowledge (the tendency to be biased by one's own knowledge when reasoning about a more naive perspective) varies by domain and recency of learning. Results indicate that this "curse" is more pronounced when estimating others' knowledge of words than facts, and that, for both domains, a delay between learning and estimating others' knowledge increases the magnitude of the bias.

11. Victoria Jeffries & Steven D. Hart - *Which heuristic is it?*

The availability heuristic is commonly used to explain the link between risk judgments and ease of imaginability. Recent research on a new concept, the affect heuristic, suggests that information is processed differently when it is associated with weak or strong affect. A between-subjects design with 4 conditions will be employed to determine if the presence of affect causes participants to discount availability as a cause of their risk judgments.

12. Amanda Hahn, Brian Roberts, & Lawrence A. Symons - *The face inversion effect for human and animal faces.*

The present study examined the impact of the inversion of face stimuli on recognition of human and cat faces. Images of a human face and a cat face were manipulated to create an array of slightly different new faces. Inverting the face stimuli disrupted recognition, but to a greater extent for human faces than cat faces.

13. Cody Tousignant, Bruce W. A. Whittlesea, Thomas Spalek - *Further evidence regarding the role of fluency in the subjective experience accompanying aesthetic processing.*

The processing mechanisms underlying aesthetic perception were investigated using abstract contrast patterns. The issues of complexity and fluency were examined. It was found that subjects respond preferentially to more complex patterns and that fluency judgments did not correspond to preference judgments. The results are considered in terms of Reber, Schwarz & Winkielman's (2004) fluency-attribution hypothesis. Implications for a dissociation between pallid and vivid aesthetic experience are also discussed.

14. Jeffrey A. Sun & Daniel N. Bub - *Dissociating alignment and grasp compatibility effects.*

Some evidence indicates that handled objects may automatically orient observers to the handled side of the object. However, such alignment effects can prove elusive. Using a modified Stroop paradigm involving a reach and grasp motion, experiment 1 was unable to detect alignment effects. However, experiment 2 showed that objects appear to be associated with specific forms of grasping, activated as part of one's intent to respond to object colour.

15. Paul Metzack & Todd S. Woodward - *Anterior cingulate may signal a change in response style when switching tasks.*

The bivalency effect is the generalized increase in reaction time in task switching experiments caused by presenting stimuli that have features relevant to multiple tasks. In an fMRI investigation, anterior cingulate cortex (ACC) activation was associated with the bivalency effect. Additional behavioral results suggest that the bivalency effect, and the ACC activation, is attributable to a requirement to change response style, not mere surprise or increased task difficulty.

16. Lisa Buchy, Todd S. Woodward, Peter Liddle, & Ivan Torres - *Symptomatic determinants of insight in schizophrenia.*

To evaluate which symptoms of schizophrenia predict awareness of illness (i.e., insight), we regressed a measure of insight on 19 symptoms measured on 156 schizophrenia patients. The results showed that patients with psychomotor excitation (i.e., mania) and delusions (e.g., paranoia) were less aware of their own mental illness, confirming a separation from reality. In contrast, patients with depression/anxiety were more aware of their mental illness.

17. Ashley Ruggles & Leslie McDonald-Miszczak - *Applied metamemory: Do memory beliefs predict younger and older adults' medication adherence?*

The current set of analyses seek to examine whether metamemory beliefs mediate the effects of depression, number of medications, and prospective memory on younger (N=53, M=21.20, SD=3.87) and older (N=43, M=74.09, SD=7.39) adults'

adherence to both actual medication and a standardized adherence task. Regression analyses indicated that perceived memory for medications was a predictor variable for only the older adults' adherence. The results suggest that metamemory beliefs are important in understanding the relationship between cognition and adherence performance in older adults.

18. Kilioe Fern, Jessica Anderson, Ashley Ruggles, Liz Rankin, Kate Murphy, & Leslie McDonald-Miszczak - *Everyday memory for medication instructions: Age differences in expectations and recall.*

The present analyses examined 54 older adults' (M=74.5 yrs., SD=7.43) and 53 younger adults' (M=21.21 yrs., SD=3.90) expectations for remembering medication instructions and their actual ability to do so after a delay of 2-weeks. Analyses revealed that although both age groups had high expectations for remembering the instructions, younger adults actually recalled the instructions better than older adults. The results also indicate that recall performance is indicative of important adherence behaviors and beliefs in older adults.

19. Megan Myers, Lara Pierce, Oliver Ayling, Mehul Gandhi, Parminder Kaur, Kim Maynard, Rebecca Phillips, Zena Rittenhouse, Kathleen Unfreed, Nicole von Kleist, James Tanaka - *Electrophysiology of other-race face recognition.*

Although it is established that people are better at recognizing own- versus other-race faces, the neural mechanisms mediating this advantage are not well understood. In this study, Caucasian participants were trained to differentiate African (or Hispanic) faces at the subordinate individual level and classify Hispanic (or African) faces at the basic level of race. The main finding was that when trained at the subordinate level, novel African faces elicited a greater posterior N250 potential than novel Hispanic faces. These differences were mirrored in an old/new recognition task suggesting that the N250 component is a reliable marker of other-race face recognition.

03:30-04:30 Paper Session III: Memory and Cognition I, chaired by Tom Spalek (WMC 3520)

03:30-03:45 William J. Peria, Rebecca M. Nicholas, & Geoffrey R. Loftus - *On the use of large- and small-scale visual information in the formation of memory for naturalistic scenes.*

We measured recognition performance for pictures shown at varying durations. These were either spatially-filtered (providing only high or only low frequency information) or left unfiltered. A power law related recognition performance to duration, and there was a synergy between high and low frequency information-viewing unfiltered images produced better recognition performance than would be predicted by independently combining the performances measured with the two types of filtered images.

03:45-04:00 Justin Kantner & D. Stephen Lindsay - *Constraining retrieval in recognition memory.*

Many prominent theories of recognition memory hold that recognition judgments are based on the degree of match between test probes and previously encountered exemplars. Jacoby, by contrast, has recently argued that such judgments may be supported by a process of "constrained retrieval" whereby the field of exemplars is deliberately searched for items of a particular contextual source. We evaluate Jacoby's evidence and report experiments designed to elicit constrained retrieval in a recognition task.

04:00-04:15 Christopher M. Warren, Michael E. J. Masson, & Daniel N. Bub - *Effects of sentence context on the priming of motor representations.*

The role of action representations in language comprehension was examined. Subjects listened to sentences and were cued to make a gesture related or unrelated to a manipulable object mentioned in the sentence. Gesture production was faster when the gesture was related to the object. Variations in sentence context showed dissociable priming effects between functional gestures (associated with an object's use) and volumetric gestures (associated with an object's shape).

04:15-04:30 Andreas Breuer & Michael E. J. Masson - *Does object rotation affect how gestural knowledge is evoked?*

Research into object recognition and sentence comprehension has suggested that gestural knowledge contributes to these processes. For example, viewing a picture of a manipulable object (e.g., a stapler) may activate motor representations of hand gestures involved in picking up or using the object. Pictures of rotated objects allow us to determine how gestural knowledge is activated when identifying an object that is conceptually familiar but presented in an unfamiliar orientation.

05:00-06:00 Keynote, Vincent Di Lollo: *Memory and prediction - That's what the brain is in business for*. Introduced by John McDonald (WMC 3520)

In agreement with neuroanatomical evidence, but contrary to conventional feed-forward notions, my colleagues and I hold to a scheme in which perceptions emerge from iterative exchanges between brain regions linked by reentrant pathways. In this scheme, the brain is seen as a repository of memories in the form of neural networks (cell assemblies and phase sequences) established through Hebbian learning. Those networks are used in cortical reentrant loops to set up moment-to-moment action plans for perceiving objects and for predicting behaviour sequences. Long-standing problems, including the development of perceptual categories and the "binding" problem, are resolved naturally within this conceptual framework. I will illustrate this viewpoint with evidence from behavioural manifestations such as visual masking, and electrophysiological evidence from MEG and event-related potentials that provide converging evidence for a reentrant theory of perception and cognition.

Saturday, May 26

09:30-10:45 Paper Session IV: Executive functioning, chaired by Mario Liotti (WMC 3520)

09:30-09:45 Olav Krigolson, Lara Pierce, Jim Tanaka, & Clay Holroyd - *Internal error evaluation and the acquisition of perceptual expertise*.

During our lifetime we learn to discriminate between an incredible amount of visual information. In the present experiment we generated a random series of objects and recorded event-related brain potentials as participants learned to correctly identify them. Our results demonstrate that as participants shifted to an internal mode of error evaluation there was a parallel increase in their ability to recognise and discriminate between the newly learned objects.

09:45-10:00 Kyle E. Mathewson, Olav E. Krigolson, & Clay B. Holroyd - *The error-related negativity as a reinforcement learning signal in motor sequence acquisition*.

As a window into dopaminergic reinforcement learning signals, the error-related negativity (ERN) was examined during a sequence learning task. With learning, the ERN elicited by feedback (fERN) was expected to diminish while the ERN following erroneous responses (rERN) was expected to increase. This predicted shift in ERN timing was obtained, mirroring the shift of dopamine signals to the earliest indicator of event outcomes, and revealing the shift from external to internal behavioural evaluation.

10:00-10:15 Kevin Lee, Olav E. Krigolson, & Clay B. Holroyd - *Investigating the role of expectancy and predictive stimuli on the feedback error-related negativity.*

The feedback error-related negativity (fERN) is an electrophysiological response that is elicited by negative feedback. According to reinforcement learning theory of the ERN (RL-ERN), the fERN is proportional to the degree of expectancy violation, and can occur in response to a stimulus predictive of negative feedback. In the current study, participants saw a sequence of two stimuli in which the first stimulus predicted the feedback stimulus. The study results were found to be consistent with RL-ERN.

10:15-10:30 Brian Luus & Mario Liotti - *Beyond averaging epochs: Investigating the electrophysiological dynamics of response-inhibition using parametric sorting and blind signal separation.*

The Stop Signal Task (SST) requires both response-inhibition and time-estimation abilities. Liotti et al. (2005) demonstrate attenuation of the success-related P3a difference (320ms) for ADHD compared to controls, building on previous knowledge that N2 amplitude (200ms) correlates with SST performance. We examine covariance between experimental latencies and evoked component peaks to better understand components' cognitive significance. Furthermore, component decomposition allows characterization of temporal dynamics and time-frequency properties of topographical patterns.

10:30-10:45 Fern Jaspers-Fayer, I. Taake, L. Buchy, & M. Liotti - *A high-density ERP study of a seasonal emotional Stroop task in healthy adults.*

Reaction time effects have been found in a number of emotional Stroop tasks, but these effects have rarely been explored with event-related potentials (ERPs). This study recorded ERPs from healthy volunteers, with high and low seasonality, while they performed a seasonal version of the emotional Stroop task. The two groups show significant differences, with the high group exhibiting an early effect at frontal electrode sites.

11:00-12:30 Paper Session V: Memory, chaired by Ira Hyman (WMC 3520)

11:00-11:15 Tanjeem Azad, Raymond W. Gunter, & Glen E. Bodner - *How distinctive encoding reduces the DRM illusion: Evidence from source judgments.*

Encouraging item-specific encoding induces a mirror effect in the DRM paradigm. We conducted an experiment to test whether this mirror effect reflects use of a distinctiveness heuristic, or results from a general increase in memory strength for studied words. All participants read some words, generated some from anagrams, and formed self-referential images of others. Source memory for both studied words and critical lures provided support for the distinctiveness heuristic.

11:15-11:30 Celine Chung, Bianca Lam, Ada Cheng, Vesta Ghanavati, Leila Mohazab, & Peter Graf - *Prospective memory is not affected by addition task difficulty.*

To explore whether the size of addition problems affects prospective memory performance, we showed displays with up to 4 or 6 animals, and required participants to add the total number of legs of the animals. The prospective task required responding if a horse was displayed. Addition-responses were faster and more accurate on displays with up to 4 than 6 animals, but the size of the addition problems had no effect on prospective memory.

11:30-11:45 Lee Lau, Winnie Chung, Jason Martens, Nelson Eddingfield, Peter Graf - *Prospective memory task performance is reduced by a concurrent*

reasoning.

To test the assumption that event-based prospective memory task performance reflects the demands of concurrently ongoing activities, we presented displays: each with 4 cards which either fit or did not fit a rule (eg. color of cards alternates). The ongoing activity required students to make "card-fits-the-rule" decisions, under self- or experimenter-paced conditions, and the prospective task was to press a designated key if cards were displayed against a yellow background. Ongoing and prospective memory task performance were better under self- compared to experimenter-paced conditions.

11:45-12:00 Jie Gao, Gemma Gillespie, Djuna Field, & Peter Graf - *Cued prospective memory task retrieval.*

The objective of the present study was to investigate the role of a discrepancy-attribution mechanism in prospective memory (ProM) task retrieval. To produce discrepancy reactions, we manipulated the position ProM-cues displayed and the contrast between the ProM-cues and the background on which the cues were presented. Our results showed that the manipulations on physical factors (i.e., display location and color contrast) produced a discrepancy reaction, which facilitates ProM task performance.

12:00-12:15 Raymond W. Gunter & Glen E. Bodner - *How eye movements affect unpleasant memories: Support for a working memory account.*

Making saccadic eye movements has been found to reduce the unpleasantness of people's negative autobiographical memories. We obtained this benefit with both horizontal and vertical eye movements, but only if the memories were held in mind during the eye movements. Moreover, consistent with a working memory account, other tasks that taxed working memory also produced a benefit, and a working memory measure was predictive of the magnitude of the benefit.

12:15-12:30 Katie Haverstock, Jennifer L. Baxter, Laura C. Rakestraw, Christina M. Walker, & Ira E. Hyman - *Differences in central and peripheral details recalled from spider encounters among people with various levels of spider fear.*

We investigated differences in memories for traumatic and non-traumatic events by using memories for encountering a spider. Based on an individual's response to spiders, such an encounter elicits different levels of arousal. Participants listed details about the event and rated each detail as central or peripheral. Participants also completed a memory characteristics questionnaire and a spider phobia questionnaire. Participants with higher spider fears had a higher percentage of central details.

12:30-02:00 Poster Session II with Pizza (WMC Student Study Area)

1. Sophia Grewal & Deborah A. Connolly - *Admissibility of evidence given by children with developmental delays.*

We examined whether a child with a developmental delay would be perceived as less competent to testify in court than a typically-developing child. Participants read a mock police investigation of either a typically-developing 5-year-old, or an 8-year-old with Down Syndrome (who had the mental age of 5) alleging sexual abuse. Participants were more likely to require the child with Down Syndrome to take a competency examination. Implications for the legal system are discussed.
2. Carroll A. Boydell & J. Don Read - *Confidence and accuracy in earwitness memory for events: A pilot study.*

Although research on confidence and accuracy in witnesses has focused on eyewitnesses, little has focused on earwitnesses that overhear criminal conversations. This pilot study explores confidence in and accuracy of memory for details of events revealed in criminal accounts. Participants watched a video of a male describing his alleged criminal activity. Results and future directions will be discussed in relation to credibility of memory for verbal accounts of crime.
3. Reid A. Nelson, Christopher L. Sharp, & Ira E. Hyman, Jr. - *Possible distinctions between true and false memories: A signal detection approach.*

We presented participants DRM word lists in six colors, each containing items related and unrelated to a critical lure. On a recognition test, participants labeled targets old or new, rated their confidence, and claimed a color. Contrary to Signal Detection Theory, confidence did not affect percentages of words for which a color was claimed. Instead claims of source information were based on the ability to construct source information, lending some support for Source Monitoring theory.
4. Linda Ching, Rubina Mudhar, Suad Mohamed, Aman Bassi, Neha Deol, Daniel Bernstein, Seema Clifasefi, & Elizabeth Loftus - *Alcohol false memories.*

We suggested to experimental subjects that they had become ill after drinking rum or vodka before the age of sixteen. Control subjects received no such suggestion. Experimental subjects increased their confidence that the false memory event occurred. However, the false suggestibility did not change subjects' present alcohol preference. These findings demonstrate that adults can be led to believe that they become ill after drinking certain alcohol in their youth.
5. Karen Robson, Geoff Palmer, & Bruce Whittlesea - *The effect of context on false memory in the Deese/Roediger-McDermott paradigm.*

Deese/Roediger-McDermott (DRM) false recognition will be assessed following encoding context manipulation. Participants will study 8-item lists in which the first or last 3 items (bias items) will shift the emphasis of the DRM items to a biased prototype. False memory of biased and DRM prototypes will be investigated as a function of bias type of list; results will be interpreted using the Selective Construction and Preservation of Experiences memory framework.

6. Reh Mulji & Glen E. Bodner - *Concentrating on directed forgetting*.
In two-list directed forgetting, an instruction to forget after list 1 and to concentrate on list 2 impairs list 1 recall (costs) but improves list 2 recall (benefits). However, we observed benefits-but no costs-with only the forget instruction. We suggest that that instruction induces improved list 2 encoding (benefits), whereas the concentrate instruction produces list 1 forgetting (costs) by inducing a between list mental context change.
7. L. James Climenhage & Michael Schmitt - *Get off my planet: Social distance comparisons of identified least liked groups between Asians, South Asians and Caucasians*.
Social norms and political changes suggest that racism is an unappealing quality to have. In this study we asked people to think about a group they liked the least to explore their willingness to write down ethnic groups. We then asked people to indicate the 'best' distance from that group. Caucasians were least likely to list an ethnic group. Those who listed an ethnic group were least likely to list an extreme social distance.
8. H. Robert Outten, Shannon Pinegar, & Michael T. Schmitt - *History shaping present beliefs? Perceptions of U.S. history and social dominance orientation as predictors of hierarchy-legitimizing beliefs*.
This study investigated whether social dominance orientation (SDO) and perceptions of U.S. history would predict the endorsement of prejudicial attitudes amongst a sample of European-Americans (N = 98). Findings suggest that positive views towards hierarchy-legitimizing events in U.S. history may be a stronger predictor of prejudicial attitudes towards the impoverished, homosexuals and women than SDO. We interpret the findings as indicating the effects of social identity on cognition.
9. Drew A. Baillie, Daniel M. Bernstein, & Anthony G. Greenwald - *The Food IAT: Examining food preference within the context of implicit association*.
Using the Implicit Association Test (IAT) as an independent variable, we sought to alter people's unconscious associations between food items and valence words. Next, a series of self report measures assessed the extent to which the IAT task affected people's attitudes about target food items. Results indicate that the IAT cannot be used to create temporary associations in a person's mind which are reflected in their explicit attitudes.
10. Rebecca M. Nichols, Susan Joslyn & Limor Nadav-Greenberg - *The effects of wording on the understanding of weather forecast uncertainty information*.
What is the best way to convey probabilistic weather information to a non-expert audience? This study investigated the effects of reference class and uncertainty format in a threshold forecasting decision. While varying the reference class had little impact, probability formats facilitated understanding most when described as part of a whole (X% out of 100%) compared with simple probability (X%) and frequency (X times in 10) formats.
11. Patricia Wallis, Karen Robson, Michele Hooley, & Rachel T. Fouladi - *The*

impact of questionnaire presentation format on information processing of item content and item responses.

Do individuals process and respond to questionnaire items differentially as a function of presentation format? Participants completed a questionnaire in three computerized formats: in one form, items were presented individually; in two, surrounding items and responses were differentially visible. Analytic (when one item is available) or non-analytic (when multiple items can be evaluated as a group) processing styles are considered using respondents written descriptions of their processing and item analyses.

12. Patricia Wallis, Heather Neilson, Melissa Friesen, & Rachel T. Fouladi - *A study of response shifts across repeated assessments of previous week's mood in a short timeframe.*

Research has demonstrated that, on average, questionnaire respondents report increased functioning over time on certain measures of negative mood even when no mood elevation is expected. This study evaluates whether similar means are obtained when respondents recall and report their levels of depressive symptomology for the preceding week three times in a single 1-hour session, and further examines individual response patterns to determine whether patterns are uniform or subgroups of respondents can be meaningfully distinguished.

13. Brian Luus, Lindsay Nagamatsu, Simone Biljoen, Janice Crowe, Veronica Boswell, Merrill McSpadden, & Jonathan Schooler - *As the over glaze eyes: Failures to detect periodic gibberish in text is associated with reduced gamma-band EEG.*

Gamma-band synchrony has been proposed as the electrophysiological correlate of cognitive representation. Performing a word-at-a-time reading task, participants were instructed to report immediately after noticing interruption of the narrative by a string of grammatically acceptable yet meaningless "gibberish". We examine the negative correlation between the number of gibberish words missed before a self-report and gamma-band EEG (power and phase-coherence) over frontal and temporal regions.

14. Fumito Kawakami & Yuji Itoh - *Representations in change blindness.*

In a trial, participants were presented two similar images with a blank image in between. Afterwards, they could distinguish the second image from non-presented distracters even when they couldn't detect changes, whereas they couldn't distinguish the first image from distracters. Although participants remember the second images, change blindness occurs. These results indicate that representations of the second images overwrite representations of the first images.

15. Shahab Ghorashi & Vincent Di Lollo - *A spatial cue affects both the level of performance and the slope in a search task.*

When two targets (T1, T2) are presented in rapid sequence, processing of T2 is impaired (attentional blink; AB). We show that an exogenous spatial cue can be perceived even during the period of the AB, so as to trigger attentional orienting to a target in a search task. Three

experiments revealed that spatial cueing influences both the overall level of performance and the slope of the search function.

16. Lisa N. Jefferies, Dan Smilek, Eric Eich, & James T. Enns - *Does mood influence the attentional blink?*
 Mood consists of two dimensions: affective valence [positive-valence (PV), negative-valence (NV)] and arousal [Low-arousal (LA), High-arousal (HA)]. We examined the influence of these dimensions on a standard attentional blink task. We induced four emotional states: calm (LA-PV), happy (HA-PV), sad (LA-NV), and anxious (HA-NV). The attentional blink was largest for anxious participants and smallest for sad participants. Participants in a positive mood had an intermediate blink, independent of arousal.
17. Valery Sramko & Mario Liotti - *Comprehension of affective prosody elicits activity in speech motor regions.*
 Somatomotor representations not only play a central role in one's own emotional experience and expression, but also in the perception of others' emotional behaviour. Speech premotor/motor areas were hypothesized to be activated during the recognition of emotion in speech. High density brain activity was recorded while participants listened to sentences that conveyed various emotions through affective prosody. Preliminary analyses show differences in event-related activity over anterior-frontal scalp regions between emotional and neutral stimuli.
18. Isabel Taake, Fern Jaspers-Fayer, Lisa Buchy, & Mario Liotti - *A high-density ERP investigation in high and low anxiety sensitive participants.*
 This study investigated attentional biases in high and low anxiety sensitive (AS) volunteers using an Emotional Stroop task, while recording event-related potentials (ERPs). The two groups showed significant differences. A slowing of reaction time to physical threat words was present in the high AS group only. Additionally, this group exhibited early onset activity at frontal electrode sites, which was not present in the low AS individuals.
19. Victoria Harms, & John J. McDonald - *Re-examining evidence for distractor suppression in visual search: An ERP study.*
 The N2pc, an event-related potential correlate of attentional selection can explain how visual target selection occurs. One view suggests that this component reflects the suppression of distractor stimuli around an attended stimulus. However, recent research suggests that the N2pc reflects selective processing of an attended stimulus. This research demonstrates that an N2pc can be elicited when the suppression of distractors would impede target selection, providing support for the theory that the N2pc reflects selective target processing.

02:00-03:00 Paper Session VI: Memory and Cognition II, chaired by Dan Berstein (WMC 3520)

02:00-02:15 Kamyar Keramatian, Seyed Hossein Faramarzi, William Speechley, & Elton T. C. Ngan - *Double-dissociation between brain areas involved in intuitive and deliberative decision making processes.*

Two distinct cognitive processes (intuitive and deliberative) have been recognized in human decision making. We hypothesized a double-dissociation in neural networks involved in these two processes. fMRI was used to measure cortical activity in a deliberative and an intuitive decision making task. Activations in dorsolateral prefrontal and posterior parietal cortices were associated with the deliberative whereas activation in inferior temporal cortex was associated with the intuitive task.

02:15-02:30 Kristie J. Fisher & Miriam Bassok - *Measuring Modeling in Algebraic Tasks.*

When people reason about arithmetic, they tend to add categorically related objects (cookies-brownies) and divide functionally related objects (cookies-jars), but not vice versa. However, prior work failed to find such semantic alignments in an algebraic task. We replicated this prior work using a more sensitive dependent measure (reading latencies) and found semantic alignments in both arithmetic and algebra. In both mathematical tasks, semantic alignments accompanied correct performance.

02:30-02:45 Michael H. Yeomans, Jason K. Chin, & Jonathan W. Schooler - *Mind-altering figures: Insight and transfer-inappropriate processing shifts.*

Effects of transfer-inappropriate processing shifts (TIPS) are seen in many cognitive functions, including face recognition, taste discrimination, implicit learning, and, recently, insight problem solving. Study 1 examines the effect of holistic and featural priming using Navon figures on insight problem solving performance. Study 2 replicates those findings and demonstrates a relationship between the effects of TIPS on left-right visual field bias, suggesting an hemispheric activation hypothesis of TIPS.

02:45-03:00 Amy Guthormsen, Miriam Bassok, & Lee Osterhout - *Conceptual integration of mathematical and semantic knowledge.*

Mathematics is typically viewed as an isolated domain of knowledge. However, harnessing the power of mathematics as a problem solving tool requires people to connect their mathematical and semantic knowledge. I report the results of a study that uses N400 amplitude to show that the integration between mathematical and semantic knowledge can occur through a process as fast and stable as the integration of semantic knowledge during sentence comprehension.

NOWCAM 2007 Participants and Attendees

Thanks for your support!

First Name	Last Name	Affiliation	Email Address
John	Alderete	SFU	john.alderete@gmail.com
Jessica	Anderson	WWU	ander333@cc.wwu.edu
Tanjeem	Azad	U Calgary	tazad@ucalgary.ca
Drew	Baillie	U Washington	drewb@u.washington.edu
Ruby	Banipal	SFU	rbanipal@sfu.ca
Carmelina	Barone	SFU	cctbarone@sfu.ca
Jennifer	Barrie	SFU	jbarrie@sfu.ca
Amanda	Bassi	Kwantlen U-C	aman.bassi@yahoo.com
Jennifer	Baxter	WWU	baxterj3@cc.wwu.edu
Daniel	Bernstein	Kwantlen U-C	daniel.bernstein@kwantlen.ca
Mark	Blair	SFU	mblair@sfu.ca
Glen	Bodner	U Calgary	bodner@ucalgary.ca
Veronica	Boswell	UBC	vonkaboo@telus.net
Melissa	Boyce	UVic	mboyce@uvic.ca
Carroll	Boydell	SFU	carrollb@sfu.ca
Andreas	Breuer	UVic	abreuer@uvic.ca
Patricia E.	Brosseau-Liard	UBC	patricia@psych.ubc.ca
Lisa	Buchy	SFU	lisabuchy@gmail.com
Ada	Cheng	UBC	ada18@interchange.ubc.ca
Linda	Ching	Kwantlen U-C	lindaching@hotmail.com
Winnie	Chung	UBC	winnie.chung@hotmail.com
Celine	Chung	UBC	weijean16chung@yahoo.ca
James	Climenhage	SFU	jclimenh@sfu.ca
Anna-Lisa	Cohen	Yeshiva U	alc312@nyu.edu
Deb	Connolly	SFU	debc@sfu.ca
Leora C.	Dahl	UVic	ldahl@uvic.ca
Neha	Deol	Kwantlen U-C	chick_604_01@hotmail.com
Vince	Di Lollo	SFU	enzo@sfu.ca
Jesse	Elterman	SFU	jelterma@sfu.ca
Angelina M.	Fabbro	SFU	amf3@sfu.ca
Kilioe	Fern	WWU	fernk@cc.wwu.edu
Kristie J.	Fisher	UW	kjfisher@u.washington.edu
Mehul	Gandhi	UVic	mehgan@uvic.ca
Jie	Gao	UBC	jje@psych.ubc.ca
Vesta	Ghanavati	UBC	vivi_gh@yahoo.com
Shahab	Ghorashi	UBC	ghorashi@psych.ubc.ca
Gemma Diane	Gillespie	UBC	llama_1111@hotmail.com
Heidi	Gordon	SFU	hmgordon@sfu.ca
Peter	Graf	UBC	pgraf@psych.ubc.ca
Caroline	Greaves	SFU	clg@sfu.ca
Jessica	Green	SFU	jgreenb@sfu.ca
Sophia	Grewal	SFU	sophiag@sfu.ca

Raymond	Gunter	U Calgary	rwgunter@ucalgary.ca
Amy	Guthormsen	U Washington	aguthorm@u.washington.edu
Amanda	Hahn	WWU	hahna@cc.wwu.edu
Victoria	Harms	SFU	vharms@sfu.ca
Katie	Haverstock	WWU	haversk@cc.wwu.edu
Sarah	Hutchison	UVic	sarah_hutchison13@hotmail.com
Jill	Huynh	UW	dhuynh27@u.washington.edu
Ira	Hyman	WWU	hyman@cc.wwu.edu
Mark	Jaholkowski	UCFV	mark.jaholkowski@ucfv.ca
Fern	Jaspers-Fayer	SFU	fjaspers@sfu.ca
Lisa N.	Jefferies	UBC	ljefferi@gmail.com
Victoria	Jeffries	SFU	forepsyc@gmail.com
Jeremy C. S.	Johnson	U Calgary	jcsjohns@ucalgary.ca
Justin	Kantner	UVic	jkantner@uvic.ca
Fumito	Kawakami	Tokyo Institute of Technology	fumito0118@aol.com
Kamyar	Keramatian	UBC	kamyar@psych.ubc.ca
Olav	Krigolson	UVic	olav@uvic.ca
Bianca	Lam	UBC	biancalam@shaw.ca
Lee	Lau	UBC	leel@interchange.ubc.ca
Hiroe	Li	UBC	hiroeli@psych.ubc.ca
Steve	Lindsay	UVic	slindsay@uvic.ca
Mario	Liotti	SFU	mliotti@sfu.ca
Brian	Luus	SFU	brian.luus@gmail.com
Johnson	Ma	SUCCESS Family & Youth Services	johnsonmae20@hotmail.com
Carla L.	MacLean	UVic	carlamac@uvic.ca
Fil	Maj	SFU	fmaj@sfu.ca
Casey R.	Mann	WWU	manncc@cc.wwu.edu
A. A. J. (Tony)	Marley	UVic	ajmarley@uvic.ca
Michael	Masson	UVic	mmasson@uvic.ca
Kyle	Mathewson	UVic	kylemath@uvic.ca
Kim	Maynard	UVic	kmaynard@uvic.ca
Leslie	McDonald-Miszczak	WWU	leslie.mcdonald-miszczak@wwu.edu
John	McDonald	SFU	jmcd@sfu.ca
Kim	Meier	SFU	kmm1@sfu.ca
Paul	Metzak	Riverview Hospital/UBC	pmetzak@gmail.com
Erin	Miller	SFU	emiller@sfu.ca
Leila	Mohazzab	UBC	flmohazzab@hotmail.com
Rubina	Mudhar	UBC	rubina_m85@hotmail.com
Reh	Mulji	U Calgary	reh@ucalgary.ca
Heather	Neilson	SFU	heatherneilson@gmail.com
Reid	Nelson	WWU	elguapo84@hotmail.com
Elton	Ngan	UBC	eltonngan@gmail.com
Becky	Nichols	U Washington	rnichols@u.washington.edu

Melissa	Northcott	SFU	mjn@sfu.ca
Levente	Orban	Kwantlen U-C	levente.orban@kwantlen.net
Robert	Outten	SFU	routten@sfu.ca
Bill	Peria	UW	wjp@u.washington.edu
Rebecca	Phillips	UVic	rebeccap@uvic.ca
Colleen	Pillar	SFU	cjp5@sfu.ca
Laura	Rakestraw	WWU	rakestl@cc.wwu.edu
Don	Read	SFU	jdonread@sfu.ca
Zena	Rittenhouse	UVic	zena.ritten@gmail.com
Alexa B.	Roggeveen	UBC	alexar@interchange.ubc.ca
Rebecca	Roy	WWU	royr2@cc.wwu.edu
Ashley	Ruggles	WWU	ashley@ruggles.com
Cristina	Sampaio	WWU	cristina.sampaio@wwu.edu
Chris	Sharp	WWU	sharpc@cc.wwu.edu
Jordan	Shimell	SFU	jshimell@sfu.ca
Thomas	Spalek	SFU	tspalek@sfu.ca
Valery	Sramko	SFU	vsramko@sfu.ca
Diane	Strub	SFU	dstrub@sfu.ca
Jeffrey	Sun	UVic	jasun@telus.net
Jim	Tanaka	UVic	jtanaka@uvic.ca
Cody	Tousignant	SFU	catousig@sfu.ca
Kathleen	Unfreed	UVic	kmu@uvic.ca
Jodi	Viljoen	SFU	jviljoen@sfu.ca
Cedric	Villamin	U	villamin@interchange.ubc.ca
Chris	Walker	WWU	cmwalker84@yahoo.com
Patricia	Wallis	SFU	pwallis@sfu.ca
Christopher	Warren	UVic	cwarren@uvic.ca
Marcus	Watson	SFU	marcusw@sfu.ca
Jennifer	Whitman	SFU	jcwhitma@sfu.ca
Carol K.	Wong	SFU	ckw2@sfu.ca
Todd	Woodward	not listed	toddswoodward@gmail.com
Mike	Yeomans	UBC	mike.yeomans@utoronto.ca

On-Campus Dining

Where	Name (Food Type)	Hours
Academic Quad (3 rd Floor)	<i>MacKenzie Café</i>	Mon-Fri 0800-1500
	<i>Sandwich Central</i>	Mon-Fri 1100-1400
	<i>Big Pita</i>	Mon-Thur 1100-1400
Academic Quad (2nd Floor)	<i>White Spot Triple O's</i> (fast food)	Mon-Fri 0900-1400
	<i>Simon C's Convenience Store</i> (packed sandwiches and salads)	Mon-Thur 0800-1800 Fri 0800-1600 Sat 1100-1500
West Mall Complex	<i>Raven's Café</i> (coffee and snacks)	Mon-Fri 0900-1400
	<i>Raven's Bistro</i> (Starbucks coffee, soups, pastas, salads, and desserts)	Mon-Fri 0800-1500
Diamond Alumni Centre	(lunch only)	Tue-Fri 1100-1400
Maggie Benston Centre	<i>The Highland Pub</i>	Mon-Fri 1100-2200
	<i>Higher Grounds Coffee Bar</i>	Mon-Fri 0700-1900
	<i>Mr. Sub</i>	Mon-Fri 1100-2200 Sat 1100-1600
	<i>Koya Japan</i>	Mon-Fri 1000-1800
Cornerstone Building	<i>Donair Town</i> (donairs and kebabs)	Mon-Thur 1000-2000
	<i>Himalayan Peak Restaurant</i> (Indian food with lunch buffet < \$10)	Mon-Fri 1100-2100 Sat 1200-2100
	<i>Ichibankan Express</i> (Japanese food)	Mon-Fri 1100-2100 Sat 1200-1900
	<i>Nature's Garden Organic Deli</i> (organic salads, soups, and sandwiches)	Mon-Thur 0700-1900 Fri 0700-1800 Sat 0900-1700
	<i>Pizza Point</i>	Mon-Fri 0900-1800
	<i>Renaissance Coffee</i> (coffee, soups, salads, paninis, desserts)	Mon-Fri 0630-2100 Sat & Sun 0800-2100

	<i>Viewpoint Marketplace and Florist</i> (convenience store; salad bar)	Mon-Fri Sat	0800-2100 0900-2000
--	--	----------------	------------------------

Off-Campus Dining

Name and Contact Information	Directions from SFU
Mountain Shadow Pub 7174 Barnet Road Burnaby, BC 604-291-9322	Turn right onto University Drive (heading West towards Hastings Street) Turn right onto Duthie St. Take 1 st left towards Mountain Shadow Pub
Anducci's 9604 Cameron St Burnaby, BC 604-444-4788 (pastas served in huge portions at reasonable prices)	Go down Gaglardi Way towards Highway 1 Turn left onto Broadway Ave. Turn right onto North Rd. Turn right onto Cameron St. End at Anducci's (on your right)
Denny's 500 Austin Avenue Coquitlam, BC 604-939-6545 (open 24/7)	Go down Gaglardi Way towards Highway 1 Turn left onto Broadway Ave. Turn right onto North Rd. Turn left onto Austin Ave Denny's is at the corner of North and Austin
Fuji Sushi 526B Clarke Road, Coquitlam, BC 604-936-0304	Go down Gaglardi Way towards Highway 1 Turn left onto Broadway Ave. Turn left onto Smith Ave. Turn slight left onto Clarke Rd Fuji Sushi is on your right
Paros Taverna and Souvlaki House 526A Clarke Road, Coquitlam BC 604-936-5500	<i>See directions for Fuji Sushi</i>
Mavericks 6669 Kingsway Burnaby, BC 604-430-9594	Go down Gaglardi Way towards Highway 1 Go west on Highway 1 Take Willingdon Ave. exit South Turn left onto Kingsway Ave. End at Mavericks
Delaney's Pub 170-5665 Kingsway Burnaby, BC 604-433-8942	<i>See directions for Mavericks</i>
Foggy Dew Irish Pub 405 North Road Coquitlam, BC 604-937-5808	Go down Gaglardi Way towards Lougheed Highway Turn left onto Lougheed Highway Turn left onto North Road Take 1 st right into parking lot towards The Executive Hotel Foggy Dew Irish Pub is located directly beside the Hotel
Shark Club Bar & Grill 4399 Lougheed Highway Burnaby, BC 604-628-5500	Go down Gaglardi Way towards Lougheed Highway Turn left onto Lougheed Highway End at 4399 Lougheed Highway (parking lot underground)

Selected Events in Vancouver (May 26, 2007)

<p>Believe in Cargo with Satoshi Tomiie @ Red Room 398 Richards St Vancouver, BC 604-687-5007</p>	<p>Ticket: \$25 Time: 10:30pm-3am *** The Masters Series Part. 9 Release Tour *** <i>Features tracks, remixes and edits from Planet Funk, Radioslave, Shlomi Aber, Guy Gerber, Marc Romboy vs. Robert Owens, DJ Yellow & King Britt, Jimster, Opus Ink (Satoshi Tomiie & Audiofly) plus many more...</i></p>
<p>AuBAR 7 Year Anniversary 674 Seymour Street Vancouver, BC Lounge/Bar – Nightclub 604-648-2227</p>	<p>Friday: Hip-hop, R&B, Reggae Saturday: House, Top 40, R&B, Party Jams, and Hip Hop</p>
<p>Fiction Plane @ Plaza Club 881 Granville Street, Vancouver, BC 604-646-0064</p>	<p>Ticket: \$10 Time: 7pm-?? Presented by the House of Blues and Plaza Club <i>The Plaza Club's regular Saturday night will begin immediately following the show</i> http://www.hob.ca</p>
<p>JEM Productions Presents Stolen Bicycles Gang w/ Bad Beers @ The Princeton Pub 1901 Powell St, Vancouver, BC 604-253-6645</p>	<p>**free show** Time: 9pm-12:30pm http://www.princetonpub.com</p>

Nightclubs – New Westminister/Downtown Vancouver

<p>The Standard 140 6th Street New Westminister Lounge/Bar 604-519-0333</p>	<p>Friday: Top 40 Saturday: Top 40, Funky House, 80s</p>
<p>Granville Street Clubs (Davie St – Smithe St)</p>	<p>Caprice Crush Champagne Lounge Ginger 62 Roxy The Republic Tonic</p> <p><i>*most nightclubs require at least 2 pieces of ID (19+)</i></p> <p>Visit www.clubvibes.com for more information</p>

Yellow Cab:
 604-681-1111; Toll Free: 1-800-898-TAXI (8294)