NOWCAM

University of Washington

www.uvic.ca/psyc/nowcam

TENTH ANNUAL MEETING

June 26-28, Seattle, Washington

2008

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.

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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 studens 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 activities with an informed, sympathetic, and good-humored audience. In this 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 10th Annual Conference has benefited from the strong support and organizational efforts of the following people and organizations. Thanks for making it possible!

> The University of Washington Department of Psychology Staff
> > Chair: Steve Buck
> > Assistant to the Chair: Beth Rutherford
> > Budget Administrator: Michele Jacobs
> University of Washington Housing & Food Services: Emily Hackman
> Allen Edwards Endowed Lectureship in Psychology:
> > Betty Johanna, Colloquium Coordinator
> The University of Washington Club: Jenelle Ebisu
> The NOWCAM "Grand Poobah": Steve Lindsay

Special thanks to the University of Washington graduate student NOWCAM Organizers & Volunteers: Kristie Fisher, Jenna Lee, Alec Scharff, Mara Sedlins, Leona Dondi, Ben Drury, Emily Jones, Nicole Savage, & Sally Moore

Locations
(see Campus Map)

Registration: Registration tables will be located in Johnson Hall 1st floor lobby

Paper Presentations & Keynote Addresses: All talks will take place in Johnson Hall, room 102

Poster Presentations: All poster presentations will take place in the Haggett Hall Cascade Room

On-Campus Housing: Students staying on-campus will be housed in McMahon Hall

Housing Office: The housing office is located at McMahon Hall (same place attendees will be staying) for check-in, check-out, & information

Banquet: The traditional Friday evening banquet will be held at the University of Washington Club, on the northwest end of campus

Presenter and Attendee Information

Poster Set-Up: Posters should be brought to Haggett Hall between 11:00 and 11:30 to be set up before the poster session on the day that you present.

Talks: Paper presentations should be downloaded to the designated computers before the beginning of each paper session

Housing Check-In/Out: Check-in is after 2:00pm in the McMahon housing office. You must check out by 11:00am the morning you are leaving.

Dining: Lunch is provided both days at the poster session. Breakfast is included in on-campus housing, and there will be a banquet on Friday night. A coffee break with refreshments will be provided on Friday afternoon. There is also a list of on and off-campus dining options listed in the back of the program. Also, a coffee/snack bar is located in Mary Gates Hall, a building adjacent to Johnson Hall, where the paper sessions will be held.

Campus Map

Program Outline

Thursday, June 26th, 2008

→ Residence hall Check-in after 2:00pm
→ 6:00-10:00 No-host reception at the College Inn Pub
   <u>Directions from McMahon Hall (see campus map)</u>: Walk southwest along the quad, cut through Red Square (area above ground from "Central Plaza Parking Garage" on map), walk across 15th Ave on the pedestrian bridge adjacent to the Henry Art Gallery, turn left on University Way and you'll see the sign less than a block down the street.

Friday, June 27th, 2008

- 8:45-9:30 Conference registration & Sign-in in Johnson Hall Lobby
- 9:30-10:15 Opening Keynote—Tony Greenwald
- 10:15-11:30 Paper Session I—Memory I, Chaired by D. Stephen Lindsay
- 12:00-1:15 Poster Session I & Lunch
- 1:45-3:00 Paper Session II—Perception & Attention, Chaired by John Palmer
- 3:00-3:30 Coffee Break in Lobby
- 3:30-4:45 Paper Session III—Perception, Cognitive Development & Language, Chaired by Deb Connolly
- 4:45-5:00 Break
- 5:00-6:00 Edwards Lecturer Dedre Gentner
- 7:00-9:30 Banquet at the UW Faculty Club on Lake Washington

Saturday, June 28th, 2008

- 9:15-9:30 Conference Registration & Sign-in
- 9:30-10:30 Paper Session IV—Memory II, Chaired by Jason Leboe
- 10:30-10:45 Break
- 10:45-11:30 Paper Session V—Reasoning & Learning I, Chaired by Susan Joslyn
- 12:00-1:15 Poster Session II & Lunch
- 1:45-2:45 Paper Session VI—Reasoning & Learning II, Chaired by Mark Blair
- 2:45-3:00 Closing Remarks

Detailed Program

Friday, June 27th
   (All Paper Sessions will take place in Johnson Hall 102)

8:45-9:30 Conference registration & Sign-in (Johnson Hall Lobby)

9:30-10:15 Opening Keynote—Tony Greenwald

10:15-11:30 Paper Session I—Memory & Cognition I, Chaired by D. Stephen Lindsay

   10:15 – 10:30 Michael Wood, Lihan Chen, & Mark Blair – *Space aliens and eye-trackers: A study of selective attention and memory for category exemplars*

   10:30 – 10:45 Alison J. Fernandez, Christina L. Rappin, & Cristina Sampaio – *Are spatial memories distorted by categorical information?*

   10:45 – 11:00 Lori Doan & Jason P. Leboe – *Holistic vs. feature-based processing and memory for foils*

   11:00 – 11:15 Jeffrey A. Sun, Justin Kantner, & D. Stephen Lindsay – *Being right (more or less): Feedback effects on accuracy and specificity in estimation*

   11:15 – 11:30 Cody Tousignant, Glen E. Bodner, & Rehman Mulji – *Test-list context affects remembering, not bias*

12:00-1:15 Poster Session I & Lunch

   1. Joseph Borrell, Sarah North, & K.J. Jantzen – *Differences in neural coupling between two tasks as a function of rate*

   2. Leona W. Dondi & Anthony G. Greenwald – *Assessing the Reliability and Construct Validity of the Brief Implicit Association Test*

   3. Verena Willenbockel, Daniel Fiset, & James Tanaka – *The role of luminance and facial features in race categorization*

   4. Benjamin Drury, Sapna Cheryan, & Cheryl Kaiser – *College Students Fail to Demonstrate Traditional Social Class Differences in Goal Orientation*

   5. Bonnie Cham & Mark Calogero – *Dessert as a comfort food: Cultural affiliation within a holistic community determines preference as measured by a dessert-offering script*

6. Laura E. Rientjes, Rebecca R. Fishman, Alex M. Gislason, Alexander J. Schiller, & Ira E. Hyman, Jr. – *Long-term recency in memory for cell phone calls*

7. Tamara L. Meixner, Justin Kantner, Natasha Wawrykow, Thomas D. Shrieves, & James W. Tanaka – *The atypicality bias: Effects of category learning on perception of objects*

8. Brittany A. Cardwell, Kristy S. Diepenheim, Rebecca A. Roy, & Ria E. Hyman, Jr. – *Collaborative facilitation in memory for categorical word lists*

9. Daniel Beatty, Katie Schultz, Bessie Chan, Shi Tao Xu, & Peter Graf – *Research ethics: Consent and debriefing practices*

10. Katherine Cella, Kevin Askew, Emily Jerome, Amanda Hahn, & McNeel Jantzen – *The effect of phonemic mergers on perception of within language phonological contrasts*

11. Hayley Heinekey & Olav E. Krigolson – *The impact of feedback complexity on error processing*

12. Paul Metzak, Todd Woodward, Beat Meier, & Peter Graf – *Unexpected stiuli do not elicit the bivalency effect in task switching*

13. Nuwan Rajapakse, Jennifer Whitman, & Todd Woodward – *Voluntary attention to semantic categories*

14. Amanda Hahn, Lawrence A, Symons, Kelly J. Jantzen, Katherine McCulloch, & Rachel Shirreff – *The effects of Thatcherization on the N170 response for animal and human faces*

15. Amandeep Bassi & Daniel Bernstein – *Could an antiseptic wipe save Lady Macbeth? Factors that influence volunteering behavior and moral emotions*

16. Jodi R. Davidson, Emily J. Blumenthal, & Jessica A. Sommerville – *The development of infants' understanding of the causal status of an event*

17. Matt Yanko, Paola Poiese, Thomas M. Spalek, & Vincent Di Lollo – *Separating exogenous from endogenous factors in attentional capture*

18. George-Alan Wallace & Richard D. Wright – *The spatial distribution of visual attentions*

19. Nicole Savage, Steven Demorest, Lee Osterhout, & Ramesh Gangolli – *Neural processing of expectancy violations in music acquisition: An ERP study*

1:45-3:00 Paper Session II—Perception & Attention, Chaired by John Palmer

> 1:45 – 2:00 Marcus Watson & Mark Blair – *Eye tracking studies of attentional allocation during feedback*

> 2:00 – 2:15 Alec Scharff & John Palmer – *Distinguishing serial and parallel models using variations of the simultaneous-sequential paradigm*

> 2:15 – 2:30 Christopher M. Warren – *Testing the hypothesized relationship between the locus coeruleus norepinephrine system, the P300, and the attentional blink*

> 2:30 – 2:45 Calen Walshe, Mark Blair, Luvdeep Malhi, & Mike Wood – *Eye tracking reveals error free optimizationof attentiont that violates the assumptions of many theories of category learning*

> 2:45 – 3:00 Danielle Labossiere & Jason P. Leboe – *Specific and Non-Specific Match Effects in Negative Priming*

3:00-3:30 Coffee Break in Lobby

3:30-4:45 Paper Session III—Perception, Cognition, & Development, Chaired by Deb Connolly

> 3:30 – 3:45 Magali Segers, Lara Pierce, Alisha Coolin, Jesse Rabinovitch, Laura Dixon, Natalie Huxtable, Natasha Wawrykow, Sean Butler, Tommy Shrives, Rebecca Phillips, & James Tanaka – *The training of other-face recognition: Neural correlates of perceptual expertise*

> 3:45 – 4:00 Sean Butler, James Tanaka, Martha Kaiser, & Richard Le Grand – *Mixed emotions: Holistic and analytic perception of facial expressions*

> 4:00 – 4:15 Christina Rappin & Todd Haskell – *Language affects attention and memory for visual scenes*

> 4:15 – 4:30 Natalie Huxtable, Kim Maynard, James Tanaka, & Ulrich Mueller – *Developmental trends in face processing: Configural and featural strategies*

> 4:30 – 4:45 Emily J. Blumenthal & Jessica A. Sommerville – *Understanding agency in the first year of life*

4:45-5:00 Break

5:00-6:00 Edwards Lecturer Dedre Gentner

7:00-9:30 Banquet at the UW Club overlooking Lake Washington

Saturday, June 28th, 2008
(All Paper Sessions will take place in Johnson Hall 102)

9:00-9:30 Conference Registration & Sign-in (Johnson Hall Lobby)

9:30-10:30 Paper Session IV—Memory & Cognition II, Chaired by Jason Leboe

    9:30 – 9:45 Melissa C. Hendry, Karen Z.H. Li, Sarah A. Fraser, Richard G. DeMont, Virginia B. Penhune, & Gabriela A.C. Abbud – *The role of age, walking speed, and balance in the prediction of concurrent cognitive and motor performance*

    9:45 – 10:00 Tanjeem Azad, Gen E. Bodner, & Elisabeth Musch – *On the potency of memory conformity effects: Is not seeing believing?*

    10:00 – 10:15 Tonia Relkov, Theresa Jubenville, Carrie Cuttler, Ryan McLaughlin, & Peter Graf – *The influence of regular marijuana use on prospective memory task performance*

    10:15 – 10:30 Andreas Breuer, Michael E. J. Masson, Anna-Lisa Cohen, & D. Stephen Lindsay – *Long-term repetition priming of briefly identified objects.*

10:30-10:45 Break

10:45-11:30 Paper Session V—Reasoning & Learning I, Chaired by Mark Blair

    10:45 – 11:00 Heather Lynne Tiede, Karen O'Brien, & Jason P. Leboe – *When illusions of competence are just an illusion*

    11:00 – 11:15 Jady Wong, Danielle Labossiere, Hasinah Abdul-Halim & Jason Leboe – *Mental effort and the perception of agency*

    11:15 – 11:30 Tamara L. Ansons, & Jason Leboe – *Looking at the past through rose-coloured glass: Demonstrations of a bias to perceive the distant past as more positive than the present*

12:00-1:15 Poster Session II & Lunch

20. Tanjeem Azad, D. Stephen Lindsay, & C. A. E. Brimacombe – *Do mock-jurors place more credence on testimony delivered by a victim-witness versus a bystander-witness?*

21. Andreas Breuer & Michael E. J. Mason – *Examining the intervener effect in masked repetition priming*

22. Louise Meilleur – *All in the paper: The judgment of employability*

23. Samuel Shin, Emily J. Blumenthal, Kaitlin Venema, & Jessica A. Sommerville – *Active versus passive preference in understanding infancy*

24. Allison Harmon, Victoria Skinner, Kara Braun, Kaitlin Venema, & Jessica A. Sommerville – *Learning and application of tool use in ten-month-old infants*

25. Karen Robson, Geoff Palmer, & Bruce Whittlesea – *Discrepancy or integrality? Evaluation of false memories in the Deese/Roediger-McDermott Paradigm*

26. Kyle Stroomer, Clay B. Holroyd, & Olav E. Krigolson – *The role of cognitive learning systems in motor control*

27. Courtney Kent, Clay B Holroyd, & Olav E. Krigolson – *Electroencephalographic correlates of implicit learning*

28. Jennifer Schneider & Daniel J. Weeks – *Unimanual and Bimanual reaction time in musicians and non-musicians*

29. Ashley Ruggles, Agnieszka E. Konopka. & Cristina Sampaio – *Can nonnative speakers outperform native speakers in memory for language?*

30. Genevive Roberts, Daniel N. Bub, & Michael EJ Masson – *Embodied representation of manipulable object words: The evocation of hand gestures during auditory language comprehension*

31. Andre Asfalg & Lutz Cuepper – *The robustness of implicit learning against a cognitive illusion*

32. Rebecca R. Fishman, Laura E. Rientjes, Alex M. Gislason, Alexander J. Schiller, & Ira E. Hyman, Jr. – *High Fear Individuals Show Better Memory for Fear Provoking Stimuli*

33. Sara Cowan & D. Stephen Lindsay – *But what about jurors? How well can laypersons predict eyewitness accuracy and confidence?*

34. Rachel Link, Michael E. J. Mason & Daniel N. Bub – *Having tea with the ERP: Exploring the neural correlates of the hand alignment effect*

35. Jesse Elterman, Carroll Boydell & Deborah A. Connolly – *A confirmatory factor analysis of the two-factor model of child witness credibility*

36. Queena Chen, Susan Joslyn, Limor Nadav-Greenberg, & Sonia Savelli – *Presenting only the worst-case scenario in probabilistic weather forecasts: Anchoring effects*

37. Rubina Mudhar, Ivy Siu-Ling Ng, Neha Deol, Aman Bassi, Suad Mohamed, Linda Ching & Daniel Bernstein – *Unscrambling and translating childhood memories*

38. Sarah L. Mordell & Tomothy Crowell – *Education effects for the RBANS in a geriatric clinical population*

1:45-2:45 Paper Session VI—Reasoning & Learning II, Chaired by John Miyamoto

 1:45 – 2:00 Chaya Chopra – *The cognitive task analysis of computer engineering*

 2:00 – 2:15 Carroll A. Boydell, J. Don Read, Deborah A. Connolly, & Jesse Elterman – *Relationships between corroborative evidence, psychotherapy, and continuity of memory in a sample of Canadian historic child sexual abuse cases*

 2:15– 2:30 Jennifer Whitman & Todd S. Woodward – *Systematic biases in evidence evaluation and hypothesis judgment*

 2:30 – 2:45 Sonia Savelli & John Miyamoto – *Are probabilistic reasoning errors caused by a similarity heuristic?*

2:45-3:00 Closing Remarks—Dr. D. Stephen Lindsay & UW Hosts

Program Abstracts

Friday, June 27th

9:30-10:15 Opening Keynote, Tony Greenwald—Social Cognition in the Context of Civil
Rights Litigation

In the past few years, plaintiffs' and defendants' attorneys in class-action discrimination lawsuits have been applying pressure on social scientists to advance diametrically opposed positions concerning the effects of automatic associations on social behavior. This talk describes challenges of balancing the roles of cautious scientist and expert witness, as well as some of the empirical findings that will likely play important roles in court cases.

10:15-11:30 Paper Session I—Memory & Cognition I, Chaired by D. Stephen Lindsay

10:15 – 10:30 Michael Wood, Lihan Chen, & Mark Blair – *Space aliens and eye-trackers: A study of selective attention and memory for category exemplars*

The connection between selective attention and memory was investigated using an eye-tracker. Participants first performed a categorization task involving one relevant and one irrelevant feature, and were later asked to make old/new judgments on stimulus pairs. Although there was a significant accuracy advantage for stimulus pairs that differed on the relevant feature, the effect was surprisingly small. Other factors contributing to old/new judgment accuracy, including eye-tracking data, are examined.

10:30 – 10:45 Alison J. Fernandez, Christina L. Rappin, & Cristina Sampaio – *Are spatial memories distorted by categorical information?*

We investigated the nature of the spatial memory underlying the category effect. Participants saw a target within a circle and reproduced its location after a 500ms delay or 3000ms delay. At retrieval, a new category membership was introduced for each target. We found that the longer the delay, the larger the influence of the new category relative to that the originally encoded category, suggesting that memories may not be distorted.

10:45 – 11:00 Lori Doan & Jason P. Leboe – *Holistic vs. feature-based processing and memory for foils*

Jacoby, Shimizu, Velanova, and Rhodes (2005) found that encoding items more deeply in a study phase enhances the quality of participants' encoding of recognition foils. We examined this influence of earlier processing on later processing of foils without manipulating depth of encoding. Instead, we investigated this process by manipulating the holistic vs. feature-based processing of nonsense shapes.

11:00 – 11:15 Jeffrey A. Sun, Justin Kantner, & D. Stephen Lindsay – *Being right (more or less): Feedback effects on accuracy and specificity in estimation*

Human judgment is reliably inaccurate, accompanied by inappropriate levels of confidence (e.g., Yaniv & Foster, 1997). The current investigations extended trial-by-trial outcome feedback interventions (FBIs) to a general-knowledge quantity estimation task eliciting range estimates. Two FBIs were used: a simple-right/wrong FBI and a scoring rule (SR) FBI. Both showed a similar accuracy advantage for FB recipients over controls, but only SRFB led accuracy and interval width toward marginal increases across blocks.

11:15 – 11:30   Cody Tousignant, Glen E. Bodner, & Rehman Mulji – *Test-list context affects remembering, not bias*

Mixing items of different memorability in a test list (a context manipulation) influences remember/know recognition judgments. An expectancy-heuristic account predicts that context influences response bias (changing both hits and false alarms), whereas a functional account suggests context can also affect discrimination (changing only hits). In our investigation, different words were studied in shallow, medium, and deep level-of-processing tasks. One week later, medium words were tested in the context of either shallow or deep words. Medium words received more remember judgments in the shallow context. Signal-detection analysis revealed that the test-list context affected discrimination rather than bias, supporting the functional account.

12:00-1:15 Poster Session I & Lunch

1.   Joseph Borrell, Sarah North, & K.J. Jantzen – *Differences in neural coupling between two tasks as a function of rate*

Premotor and motor cortex play complementary roles in motor planning and execution respectively. It is recognized that transient coupling between these areas may underlie aspects of rhythmic coordination. Using EEG, this study (N=10) examines the hypothesis that the strength of coupling between M1 and PMC is mediated by the variability of coordination patterns. Results of cortical coherence analysis will be discussed in the context of current theories of motor coordination.

2. Leona W. Dondi & Anthony G. Greenwald – *Assessing the Reliability and Construct Validity of the Brief Implicit Association Test*

The present study investigated whether the Brief Implicit Association Test (BIAT) produces a measure of implicit associations with improved test-retest reliability, internal consistency and implicit-explicit correspondence, over the standard IAT. The BIAT is shorter and simpler than the standard IAT. Results

show that a gender/self-concept and political attitude BIAT had comparable reliability to the standard IAT and the gender/self-concept BIAT had better construct validity than the political attitude BIAT.

3. Verena Willenbockel, Daniel Fiset, & James Tanaka – *The role of luminance and facial features in race categorization*

    The relative importance of luminance and featural information was examined in a 2-alternative race categorization task. 25 grayscale photographs of Caucasian and African-American faces were shown in 25 conditions (5 morphing levels x 5 luminance levels). 18 participants performed the task with upright and the other 18 with inverted faces. For upright faces, reliance on featural information was largest; however, the influence of luminance information increased with face inversion.

4. Benjamin Drury, Sapna Cheryan, & Cheryl Kaiser – *College Students Fail to Demonstrate Traditional Social Class Differences in Goal Orientation*

    Using parental education as a proxy for social class, participants reported that their mothers held similar goals for them regardless of their socioeconomic background. In study 2, we avoided self-report bias by priming participants' relationships with their mothers and measuring performance on a word generation task. Priming failed to differentially predict task performance further suggesting that college students may not demonstrate traditional goal differences as a result of class background.

5. Bonnie Cham & Mark Calogero – *Dessert as a comfort food: Cultural affiliation within a holistic community determines preference as measured by a dessert-offering script*

    Making a conscious choice for a comfort food is a cognitive behavior. We examined the relationship between eating behaviors and cultural immersion within a naturopathic community. Nine subjects of varying affiliation were offered no-cost dessert choices and questioned about their dessert-habits. Food choices were influenced by nutritional indicators, physiological stimuli (e.g. sweet taste), and cognitive factors. Higher cultural affiliation, influencing knowledge of nutritional indicators, dominated conscious choices about healthful diet.

6. Laura E. Rientjes, Rebecca R. Fishman, Alex M. Gislason, Alexander J. Schiller, & Ira E. Hyman, Jr. – *Long-term recency in memory for cell phone calls*

    The ratio rule predicts long-term recency effects only when the interval between studied items is larger than the delay interval. Participants recalled their most recent sent and received cell phone calls. We observed a long

term recency effect for cell phone calls.   Contrary to the ratio rule, we found a recency effect regardless of temporal spacing. We offer a cue overload explanation of long-term recency.

7. Tamara L. Meixner, Justin Kantner, Natasha Wawrykow, Thomas D. Shrieves, & James W. Tanaka – *The atypicality bias: Effects of category learning on perception of objects*

The "atypicality bias" is the finding that when a morph is created with equal contributions from a typical and an atypical parent stimulus, it is perceived as more similar to the atypical parent. Past research has demonstrated this phenomenon using natural categories including cars, birds, and faces. We report two experiments using artificial "blob" stimuli to test the effects of learning on the emergence of the atypicality bias in object perception.

8. Brittany A. Cardwell, Kristy S. Diepenheim, Rebecca A. Roy, & Ria E. Hyman, Jr. – *Collaborative facilitation in memory for categorical word lists*

Collaborative inhibition—nominal dyads outperforming collaborative dyads in memory tasks—may reflect the interruption of retrieval strategies when two people work together. In this experiment, participants recalled a word list consisting of 15 categories with four exemplars each. We did not find collaborative inhibition reflecting collaborative dyads' use of common retrieval strategies. Instead, we found collaborative facilitation wherein collaborative dyads made fewer intrusions than nominal dyads.

9. Daniel Beatty, Katie Schultz, Bessie Chan, Shi Tao Xu, & Peter Graf – *Research ethics: Consent and debriefing practices*

Participants are required to give consent at the start of a study and they may be debriefed at the end of the study. To explore the day-to-day practice of consent and debriefing processes, between 2 to 4 trained volunteers participated in a series of ongoing studies, and completed a brief questionnaire immediately after each study. The results showed that consent and debriefing practices are in reasonable compliance with applicable guidelines.

10. Katherine Cella, Kevin Askew, Emily Jerome, Amanda Hahn, & McNeel Jantzen – *The effect of phonemic mergers on perception of within language phonological contrasts*

This study examined the perception of the low back vowel contrast and the high/low front vowel contrast by American English native speakers from the Pacific Northwest and portions of the Midwest and Northeast. We employed a long lag repetition priming paradigm consisting of both contrasts and a

lexical decision task that required subjects to discriminate between words and nonwords. Response times were measured from the onset of each word.

11. Hayley Heinekey & Olav E. Krigolson – *The impact of feedback complexity on error processing*

In the present experiment, we investigated the impact of feedback stimulus complexity on the amplitude and latency of the error related negativity (ERN), a component of the event-related brain potential associated with the processing of performance feedback. Our results indicate that as feedback stimuli complexity increased, ERN amplitude decreased. Importantly, these data suggest that for learning to occur, feedback needs to be simple and easy to understand.

12. Paul Metzak, Todd Woodward, Beat Meier, & Peter Graf – *Unexpected stiuli do not elicit the bivalency effect in task switching*

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 a further investigation of this phenomenon, it was found that mere surprise cannot account for the bivalency effect as unexpected stimuli did not lead to an increase in reaction time unless they also shared features with more than one of the tasks.

13. Nuwan Rajapakse, Jennifer Whitman, & Todd Woodward – *Voluntary attention to semantic categories*

Previous research has shown support for a center-surround activation-inhibition mechanism within the semantic network during controlled attention when using an instructed attentional shift paradigm. In the current study we aim to replicate these findings using a category naming paradigm. In accordance with our past results, we hypothesized speeded vocal response times to words directly related to the named category, and slowed vocal response times to words indirectly related to the named category.

14. Amanda Hahn, Lawrence A, Symons, Kelly J. Jantzen, Katherine McCulloch, & Rachel Shirreff – *The effects of Thatcherization on the N170 response for animal and human faces*

Thatcherization of a face results in a disruption of the configural information. As such, the N170 response is larger, reflecting an increased processing. The effects of Thatcherization on human faces have been well documented. However, there is no research to date on the effects of Thatcherization of animal faces. In the present study, EEG recordings were taken while subjects viewed both Thatcherized and unthatcherized animal and human

faces. According to Farah and colleagues (1999), human faces require much more configural processing than do animal faces. We, therefore, expect to see a large increase in the N170 response for human faces. For the animal faces, we expect to see an N170 response similar to that seen with the unthatcherized animal faces. Results to be discussed.

15. Amandeep Bassi & Daniel Bernstein – *Could an antiseptic wipe save Lady Macbeth? Factors that influence volunteering behavior and moral emotions*

Previous research found that subjects who thought of an unethical deed from their past, and cleansed their hands with an antiseptic wipe, had lower moral emotions and volunteering behaviour (Zhong & Liljenquist, 2006). The present study extended Zhong and Liljenquist's study with the addition of lemon scent and rub conditions to see if it purely was cleansing that led to reduction in moral emotions and volunteering behaviour. The results showed no significant difference in moral emotions and volunteering behaviour between groups with and without handwipes, rub and lemon scent.

16. Jodi R. Davidson, Emily J. Blumenthal, & Jessica A. Sommerville – *The development of infants' understanding of the causal status of an event*

Adults assign causal roles to a variety of different events. We showed 10- and 12-month-old infants sequences in which one car hit another car and then gave them the opportunity to choose one of the cars. We predicted that infants would prefer to approach the agent car than the recipient, due to its causal status. Results will be discussed with respect to infants' assignment of stable causal roles.

17. Matt Yanko, Paola Poiese, Thomas M. Spalek, & Vincent Di Lollo – *Separating exogenous from endogenous factors in attentional capture*

We show that both exogenous (stimulus-bound) and endogenous (goal-oriented) sources of attentional capture can act concurrently. RSVP streams of differently-coloured letters contained a target-letter of a specific colour. Irrelevant singletons surrounded either one RSVP item or all items. Experiment 1 revealed both exogenous and endogenous sources of capture. Experiment 2 removed exogenous sources by eliminating the suddenness of distractor-onset.   Experiments 3-5 ruled out masking as a major factor.

18. George-Alan Wallace & Richard D. Wright – *The spatial distribution of visual attentions*

A study was conducted to examine the effect of a unique feature on the distribution of visual spatial attention. Participants responded to the onsets of targets while performing a visual search task in which discrete regions were indicated by the feature. Participants were instructed to ignore items in

regions denoted by one type of unique feature while focusing their attention on regions denoted by another type of feature.

19. Nicole Savage, Steven Demorest, Lee Osterhout, & Ramesh Gangolli – *Neural processing of expectancy violations in music acquisition: An ERP study*

Event related potentials (ERPs) of Western and Indian listeners were recorded while actively listening to short melodies from familiar and foreign musical schemata. We expect to find that a P600 response will be elicited by expectancy violations within the melodies from the familiar musical schema, but not in the foreign music. This will help refine our understanding of the neural processes that underlie music cognition, and the processing of complex, hierarchally structured sound sequences.

1:45-3:00 Paper Session II—Perception & Attention, Chaired by John Palmer

1:45 – 2:00 Marcus Watson & Mark Blair – *Eye tracking studies of attentional allocation during feedback*

Eye movements were tracked during feedback on a categorization task. Results corroborate several findings from previous research that used indirect methodologies, and suggest several new conclusions. Perhaps most interestingly, we find that attentional allocation to stimuli re-presented during feedback on incorrect trials is predictive of subjects' success in learning, even in as few as ten trials. Eyetracking studies of feedback are a promising way of investigating learning processes.

2:00 – 2:15 Alec Scharff & John Palmer – *Distinguishing serial and parallel models using variations of the simultaneous-sequential paradigm*

Alternative models of divided attention can be distinguished by the simultaneous-sequential paradigm. This paradigm compares accuracy performance between simultaneous and sequential presentations of otherwise equivalent stimuli. When processing capacity is limited, accuracy performance is better in the sequential-presentation condition. But when processing capacity is unlimited, performance in the two conditions is equivalent. Thus, the method can identify cases of unlimited-capacity, parallel processes. Our goal is to develop variations of this method to distinguish between other alternatives, including various limited-capacity parallel models and serial models. We describe one variant that can distinguish a fixed-capacity process and are in the process of developing a test for a serial process. These methods are applied to two test cases: simple feature detection and semantic word categorization. The results provide evidence that contrast increment detection is an unlimited-capacity process, while semantic word categorization is a serial process.

2:15 – 2:30 Christopher M. Warren – *Testing the hypothesized relationship between the locus coeruleus norepinephrine system, the P300, and the attentional blink*

Evidence relating a neuromodulatory nucleus called locus coeruleus – norephinephrine system with a cognitive phenomenon know as the attentional blink and with an event related potential component called the P300 will be presented.

2:30 – 2:45 Calen Walshe, Mark Blair, Luvdeep Malhi, & Mike Wood – *Eye tracking reveals error free optimizationof attentiont that violates the assumptions of many theories of category learning*

Numerous models of attentional allocation assume that optimization of attention occurs only when a subject produces errors on the task. Contrary to this assumption, we use gaze fixations on a categorization task to demonstrate that participants optimize their attention in the absence of both external feedback and error. These results indicate that humans possess highly flexible attentional abilities as well as suggesting modifications to current models of categorization and attention.

2:45 – 3:00 Danielle Labossiere & Jason P. Leboe – *Specific and Non-Specific Match Effects in Negative Priming*

Negative priming occurs when responses are impaired to a recently ignored stimulus. From an episodic retrieval perspective, negative priming involves retrieval of inappropriate stimulus processing as a function of the match between a prior event and current processing. The present experiments demonstrate how these match effects can be both specific and non-specific, with specific identity-based sources of match dominating under some conditions and general identity-free sources of match dominating under others.

3:30-4:45 Paper Session III—Perception, Cognition, & Development, Chaired by Deb Connolly

3:30 – 3:45 Magali Segers, Lara Pierce, Alisha Coolin, Jesse Rabinovitch, Laura Dixon, Natalie Huxtable, Natasha Wawrykow, Sean Butler, Tommy Shrives, Rebecca Phillips, & James Tanaka – *The training of other-face recognition: Neural correlates of perceptual expertise*

The current study examined the behavioural and the electrophysiological implications of the other-race effect, the phenomenon that individuals are better at recognizing faces from their own race than faces from other races. Participants underwent behavioural training at the subordinate level of the individual or the basic level of race for African American and Chinese faces. Event-related

potentials were recorded and assessed prior to and immediately following behavioural training.

3:45 – 4:00 Sean Butler, James Tanaka, Martha Kaiser, & Richard Le Grand – *Mixed emotions: Holistic and analytic perception of facial expressions*

Mixed emotions: Holistic and analytic perception of facial expressions
Co-authors: Sean Butler, James Tanaka, Martha Kaiser, Richard Le Grand
Abstract: Ps (N = 48) engaged in a labeling task where composite faces were presented, followed by visual noise. The top and bottom regions of composite faces displayed congruent (e.g., happy top/happy bottom) and incongruent (e.g., angry top/happy bottom) expressions. When labeling cued halves of incongruent expressions, conflicting information in the irrelevant face half interfered with identification of attended half expressions but had little effect on the perception of congruent expressions.

4:00 – 4:15 Christina Rappin & Todd Haskell – *Language affects attention and memory for visual scenes*

The present study investigated the effects of a language task on attention and memory for visual scenes. Subjects described a scene using one of two sentence structures, followed by a memory task. Eye movements were recorded using an eyetracker. Sentence structure systematically affected how participants scanned the scene. Furthermore, the sentence structure used had a pronounced effect on participants' memory, even when the information conveyed by the sentences was equivalent.

4:15 – 4:30 Natalie Huxtable, Kim Maynard, James Tanaka, & Ulrich Mueller – *Developmental trends in face processing: Configural and featural strategies*

Behavioral studies suggest that expert-level face processing, especially the ability to utilize a configural strategy, is slow to develop in children. A same/different face dimension task, varying along strategic (configural or featural) and regional (eyes or mouth) dimensions, was conducted on children (ages 7 through 12) and adults. The results indicated that configural processing developed more slowly in the mouth region, while featural and configural judgments were equally accurate in the eye region.

4:30 – 4:45 Emily J. Blumenthal & Jessica A. Sommerville – *Understanding agency in the first year of life*

Agents are characterized by stability and change. Agents' actions can be motivated by stable preferences. Agents also can affect change in the world. In one study, we investigated 8- and 10-month-old infants' ability to transfer an agent's goals across contexts. In another study, we examined the ways in which

agency can change 10- and 12-month-olds' causal perception. Our findings suggest that infants appreciate both of these elements of agents.

5:00-6:00 Edwards Lecturer Dedre Gentner, Northwestern University—*Analogy in Learning and Reasoning*

Analogy is a powerful learning process by which abstract knowledge can arise from experience. I'll begin by laying out a framework for analogical comparison as a process of *structure-mapping*, and show four ways in which it fosters learning.   Although analogy is powerful, it has an important limitation: Even when learners know a relevant prior analog, they often fail to retrieve it from LTM when they encounter a new analogous situation. This is often called the *inert knowledge* problem. I will discuss two ways to overcome the inert knowledge problem: *relational language* and *analogical encoding*. Studies illustrating these phenomena in both adults and children will be described.

Saturday, June 28th

9:30-10:30 Paper Session IV—Memory & Cognition II, Chaired by Jason Leboe

> 9:30 – 9:45 Melissa C. Hendry, Karen Z.H. Li, Sarah A. Fraser, Richard G. DeMont, Virginia B. Penhune, & Gabriela A.C. Abbud – *The role of age, walking speed, and balance in the prediction of concurrent cognitive and motor performance*
>
> Cognitive and motor performance under divided attention were examined. Younger and older adults performed a semantic judgment task while walking downhill on a treadmill. Balance and muscle activation (using electromyography) were recorded. Age, balance, and speed were not predictive of cognitive dual-task performance. However, these variables significantly predicted dual-task motor performance in six of eight muscle groups and, in three cases, age significantly predicted performance beyond walking speed and balance.
>
> 9:45 – 10:00 Tanjeem Azad, Gen E. Bodner, & Elisabeth Musch – *On the potency of memory conformity effects: Is not seeing believing?*
>
> Memory conformity effects occur when witnesses report having witnessed details they learned about from a co-witness. We compared the reporting of details provided by co-witnesses versus other second-hand sources. In Experiment 1, co-witness collaboration did not produce especially high rates of misinformation relative to reading another witness's report. In Experiment 2, opposition instructions attenuated the misinformation effect and co-witnesses were again not found to be a potent source of misinformation.

10:00 – 10:15 Tonia Relkov, Theresa Jubenville, Carrie Cuttler, Ryan McLaughlin, & Peter Graf – *The influence of regular marijuana use on prospective memory task performance*

Does regular marijuana use influence prospective memory task performance? As part of a larger battery of neuropsychological tests, 48 individuals who had never tried marijuana, 45 individuals who had experimented with marijuana and 42 regular marijuana users completed three prospective memory tasks as well as a survey designed to assess marijuana use and problems with prospective memory. The results show that regular marijuana users have more problems with prospective memory.

10:15 – 10:30 Andreas Breuer, Michael E. J. Masson, Anna-Lisa Cohen, & D. Stephen Lindsay – *Long-term repetition priming of briefly identified objects.*

We provide evidence that memory encoding can occur for briefly viewed objects in a rapid serial visual presentation list, contrary to claims that such encoding requires a form of consolidation driven by uninterrupted processing of objects on the order of hundreds of milliseconds. Additional experiments revealed that the memory episodes formed for these objects included perceptual and conceptual components.

10:30-10:45 Break

10:45-11:30 Paper Session V—Reasoning & Learning I, Chaired by Mark Blair

10:45 – 11:00 Heather Lynne Tiede, Karen O'Brien, & Jason P. Leboe – *When illusions of competence are just an illusion*

We investigated whether the proportion of identical and related word pairs within a study list contributes to over- and underconfidence in predictions of future recall. An illusion of competence emerged for identical word pairs in the 70%-related condition, but not in the 25%-related condition. Commission errors were consistent with the pattern of accurate recall performance, suggesting that factors that influence recall performance, rather than JOLs, may also contribute to over/underconfidence.

11:00 – 11:15 Jady Wong, Danielle Labossiere, Hasinah Abdul-Halim & Jason Leboe – *Mental effort and the perception of agency*

We suspect an association between mental effort and the perception of agency over completion of a task. To test this idea, participants studied a series of words and later completed word-fragments. We manipulated difficulty in solving word fragments by presenting fragments with either one or three letters missing. After completing each word-fragment, participants judged whether they generated the answer on their own, or due to having studied the item earlier.

11:15 – 11:30 Tamara L. Ansons, & Jason Leboe – *Looking at the past through rose-coloured glass: Demonstrations of a bias to perceive the distant past as more positive than the present*

We sought empirical evidence for our impression that people perceive the distant past in a more positive light than the more recent past. Participants read positive/neutral or negative articles obtained from Time magazine issues printed during the 1920s, 1950s, 1980s and 2000s. We found a consistent bias for participants to estimate positive/neutral articles as deriving from the relatively distant past and negative articles as deriving from the more recent past.

12:00-1:15 Poster Session II & Lunch

20. Tanjeem Azad, D. Stephen Lindsay, & C. A. E. Brimacombe – *Do mock-jurors place more credence on testimony delivered by a victim-witness versus a bystander-witness?*

   We investigated whether the status of an eyewitness – crime victim versus bystander – affects witness credibility. Subjects heard a fictitious case in which the victim and bystander identified the defendant in a lineup. We orthogonally manipulated the order in which the two witnesses' evidence was presented and the presence/ absence of a gun in the crime. Jurors' beliefs about victims and bystanders influence their confidence in verdict decisions and testimony credibility.

21. Andreas Breuer & Michael E. J. Mason – *Examining the intervener effect in masked repetition priming*

   In a masked priming paradigm, repetition priming occurs when subjects are faster to respond to a target when it is preceded by a briefly presented repetition of the target. We investigated the impact of inserting a word between the prime and target, which appears to selectively block an orthographic or semantic component of repetition priming depending on whether this intervening word is visible or not.

22. Louise Meilleur – *All in the paper: The judgment of employability*

   This study investigated the effect that paper quality of a resume has on the evaluation of employability of a job applicant. There were 66 participants and three conditions; plain copier, high-grade white, and high-grade coloured paper. Participants recommended significantly higher start-up salary when the resume was printed on a high-grade white compare to resume printed on a plain copier paper or a high-grade color paper. The implications of the results are discussed within the theory of perception and cognitive bias.

23. Samuel Shin, Emily J. Blumenthal, Kaitlin Venema, & Jessica A. Sommerville
– *Active versus passive preference in understanding infancy*

Understanding preferences is an important part of social cognition. Eight- and 10-month-old infants selected a toy for an actor and/or selected their own toy, after observing an actor's toy preference. We predicted that infants' own preferences would be biased by the actor's preference, but infants may have difficulty using an actor's preference to give her a toy. Findings will be discussed with respect to active versus passive preference understanding.

24. Allison Harmon, Victoria Skinner, Kara Braun, Kaitlin Venema, & Jessica A. Sommerville – *Learning and application of tool use in ten-month-old infants*

Tool usage is a hallmark of advanced intelligence; adults use tools as a means to attain particular goals. We investigated ten-month-old infants' understanding of tools as goal-directed implements using a looking-time paradigm, and related it to infants' own ability to use tools. Findings are discussed with respect to the development of tool use, observational learning, and links between action and perception.

25. Karen Robson, Geoff Palmer, & Bruce Whittlesea – *Discrepancy or integrality? Evaluation of false memories in the Deese/Roediger-McDermott Paradigm*

The present studies investigated whether false memory in the Deese/Roediger and McDermott (DRM) paradigm is associated with the perception of discrepancy (a feeling of strangeness) or integrality (a feeling of belongingness). Experiment 1 replicated the DRM effect; Experiment 2 demonstrated that inserting a pause between list presentation and recognition decisions of prototypes did not affect false alarms, indicating that DRM false memories may be due to the perception of integrality.

26. Kyle Stroomer, Clay B. Holroyd, & Olav E. Krigolson – *The role of cognitive learning systems in motor control*

In the present experiment we utilized event-related brain potentials to investigate the role of medial-frontal cortex in motor learning. Our results indicate that an error related negativity (ERN) was elicited when participants made mistakes during performance of a motor task. Importantly, our findings suggest that a reinforcement learning system within medial-frontal cortex is generic, and responsible for the acquisition of cognitive, perceptual, and motor skills.

27. Courtney Kent, Clay B Holroyd, & Olav E. Krigolson –
Electroencephalographic correlates of implicit learning

In the present experiment we recorded event-related brain potentials (ERP) as participants learned to classify stimuli as being either infrequent or frequent without the benefit of performance feedback. Our results demonstrate that trial to trial changes in the amplitude of P300 ERP component reflected learning of the stimulus probabilities. In sum, our data suggest that parietal cortex plays a key role in implicit learning.

28. Jennifer Schneider & Daniel J. Weeks – *Unimanual and Bimanual reaction time in musicians and non-musicians*

To examine the cognitive benefits of musical training ,drummers and non-musicians will perform unimanual and bimanual movements in a simple reaction time paradigm. It is predicted that drummers will exhibit superior temporal coupling in the bimanual conditions. Results will be discussed in terms of the impact of experience-dependent changes in the development of interhemispheric communication.

29. Ashley Ruggles, Agnieszka E. Konopka. & Cristina Sampaio – *Can nonnative speakers outperform native speakers in memory for language?*

Memory for surface form of native language is inferior to that of gist. We investigated whether the same pattern is found with nonnative language. Native and nonnative speakers were tested on their memory for sentences. There was no difference in accuracy for gist-based recall. However, nonnative outperformed native speakers in retention of surface form, suggesting more extensive processing of lexical information for nonnative speakers of a language.

30. Genevive Roberts, Daniel N. Bub, Michael E. J. Masson – *Embodied representation of manipulable object words: The evocation of hand gestures during auditory language comprehension*

The evocation of hand gestures as mental representations of manipulable object words was examined in two experiments in order to investigate their role in auditory language comprehension. Subjects were trained to make a hand gesture cued by a photograph of the gesture while listening to 1) single object words or 2) full sentences containing object words. The object words in both experiments were either related or unrelated to the cued action, and the action cued represented either a functional gesture (associated with the object's purpose) or volumetric gesture (associated with the object's form). For the experiment involving full sentences, two distinct verb types were used: attention verbs ("looked at) and interaction verbs (non-manual physical interactions such as "kicked). When object words alone were listened to, only functional gestures were primed. For full sentences, functional gestures were primed for both verb conditions. Volumetric gestures, however, were only primed for the interaction verb type. These results suggest that different

sentence contexts can affect the nature of mental representations, and that they do not appear to be literal re-creations of the interactions being described. Mental representations of language seem to be an integral component of comprehension.

31. Andre Asfalg & Lutz Cuepper – *The robustness of implicit learning against a cognitive illusion*

Reber (1993) claimed that implicit learning is more robust than explicit learning. In this study the robustness of implicit learning against a cognitive illusion was tested experimentally. The cognitive illusion appeared in the explicit measure but not the implicit measure, supporting Reber's claim. Dissociations such as this lend further support that there is more than one mechanism responsible for knowledge acquisition.

32. Rebecca R. Fishman, Laura E. Rientjes, Alex M. Gislason, Alexander J. Schiller, & Ira E. Hyman, Jr. – *High Fear Individuals Show Better Memory for Fear Provoking Stimuli*

We investigated the attention narrowing hypothesis. Participants recalled a 15-item animal slideshow with a picture of a spider or a control animal in the eighth position. Participants recalled the spider more frequently than the control picture. Individuals scoring higher on a Spider Phobia Questionnaire more frequently recalled the spider. Contrary to the attention narrowing hypothesis, high fear individuals did not show worse memory for items surrounding the spider picture.

33. Sara Cowan & D. Stephen Lindsay – *But what about jurors? How well can laypersons predict eyewitness accuracy and confidence?*

To investigate how well laypersons evaluate eyewitness accuracy, participants were given descriptions of conditions from an eyewitness study and asked to predict the results. Half were shown the lineups. For participants in the lineup group, quality of view and target presence/absence in the lineup interacted; target presence/absence was salient only in the better view. This interaction was not found for participants in the no lineup group; view and target presence/absence had additive effects.

34. Rachel Link, Michael E. J. Mason & Daniel N. Bub – *Having tea with the ERP: Exploring the neural correlates of the hand alignment effect*

Subjects responded with left-handed and right-handed grasps to the colours green and blue respectively. Shorter lift-off times were observed when the response hand indicated by teapot colour was aligned with the handle of the teapot versus response hand-not-aligned-with-handle condition. No LRP differences were observed between conditions. Indicating that the hand

alignment effect may arise from differences in later stages of processing or execution instead of motor planning differences.

35. Jesse Elterman, Carroll Boydell & Deborah A. Connolly – *A confirmatory factor analysis of the two-factor model of child witness credibility*

Children are increasingly being asked to provide testimony in court (Bala, 1999) and are often the only individuals available to provide evidence about a crime. Therefore, the believability of the allegation rests on the perceived credibility of the child. Ross et al. (2003) have argued that a child's perceived credibility is composed of two factors: honesty and cognitive competence. This study attempts to replicate this model using confirmatory factor analysis.

36. Queena Chen, Susan Joslyn, Limor Nadav-Greenberg, & Sonia Savelli – *Presenting only the worst-case scenario in probabilistic weather forecasts: Anchoring effects*

Can people understand probabilistic weather forecasts? Some users want just the worst-case scenario. We tested this suggestion using decision-making tasks involving wind speed forecasts. Participants given a single boundary of the 80% predictive interval (worst-case scenario) showed biased understanding of the forecast compared to those given full uncertainty (both bounds) or the deterministic forecast alone, consistent with anchoring. Results suggest full uncertainty information should be provided to avoid biased understanding.

37. Rubina Mudhar, Ivy Siu-Ling Ng, Neha Deol, Aman Bassi, Suad Mohamed, Linda Ching & Daniel Bernstein – *Unscrambling and translating childhood memories*

How do people decide if a particular event occurred in the past? One important factor is how people process the event they are trying to remember. Unscrambling a word (anagram) just prior to making a recognition decision on that word or an unrelated word increases the belief that the target word was seen before – "the revelation effect" (Watkins & Peynirciouglu, 1990; Westerman & Greene, 1998). Mostly observed with verbal stimuli, the revelation effect has been extended to childhood autobiographical memory: Subjects are more confident that events happened in their childhood if they unscramble a word embedded within descriptions of those events (e.g., broke a nwidwo playing ball), or translate life events from Russian into English prior to rating their confidence (Bernstein, Whittlesea, & Loftus, 2002; Nourkova & Bernstein, 2007). The aim of the current study is to answer the following: 1.Does unscrambling entire life events (e.g., window I broke ball while playing) also increase recognition claims? 2.Does translating life events from Punjabi into English increase recognition claims? 3.Does the delay between unscrambling, translating and recognition ratings matter?

38. Sarah L. Mordell & Tomothy Crowell – Education effects for the RBANS in a geriatric clinical population

The RBANS, used to identify deficits in neurological functioning, does not include educational norms. Research has found educational differences on RBANS indexes in a community sample; no research has looked at a clinical sample. Archival data from 33 adult patients with various diagnoses indicated that RBANS total and years of education are correlated. Implications of not having educational norms for the RBANS are discussed.

1:45-2:45 Paper Session VI—Reasoning & Learning II, Chaired by John Miyamoto

1:45 – 2:00 Chaya Chopra – *The cognitive task analysis of computer engineering*

You're the manager of a large-scale website. Suddenly your site is under attack, receiving millions of visits per second. The computers that run the website are about to melt down from all the pressure. What do you do? And more importantly, why do you do it? The cognitive tasks involved in such a job are assessed through an analysis with Artur Bergman, director of engineering for Wikia.com, Wikipedia's for-profit sister.

2:00 – 2:15 Carroll A. Boydell, J. Don Read, Deborah A. Connolly, & Jesse Elterman – *Relationships between corroborative evidence, psychotherapy, and continuity of memory in a sample of Canadian historic child sexual abuse cases*

Relationships between corroborative evidence, continuity of memory (continuous vs. noncontinuous or "repressed") and psychotherapy were explored in matching samples of repressed and continuous memory complainants from a database of Canadian historic child sexual abuse cases. Overall, there was significantly less corroborative evidence for Therapy than Non-Therapy and, in some evidence categories, less for Repressed than Continuous memory complainants. Differences between these and Geraerts and Schooler's (2007) results will be discussed.

2:15 – 2:30 Jennifer Whitman & Todd S. Woodward – *Systematic biases in evidence evaluation and hypothesis judgment*

In a study examining how individuals evaluate evidence when assessing hypotheses we observed the following cognitive biases: (1) the extent to which one type of evidence was seen to support the focal hypothesis was biased by the extent to which another independent type of evidence supported that hypothesis, and (2) strong evidence supporting the focal hypothesis and intermediate evidence regarding the alternate hypothesis were perceived as being more congruent with the focal hypothesis than they actually were.

2:30 – 2:45 Sonia Savelli & John Miyamoto – *Are probabilistic reasoning errors caused by a similarity heuristic?*

We report a line of experiments that test the hypothesis that conjunction errors are caused by a similarity heuristic against the alternatives that they are due to pragmatic mistinterpretation or unfamiliarity with the language of probability (as opposed to frequency language). We will provide evidence against both of these alternative explanations. Furthermore, we will introduce a new type of reasoning error that we call a conditionalization error.

Pre-registered Attendees and Participants

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Recommended Near-Campus Dining

NOTE: Most near-campus restaurants and bars are located on University Way NE, a block to the west of UW campus. Directions from McMahon Hall: Walk southwest along the quad, cut through Red Square (area above ground from "Central Plaza Parking Garage" on map), walk across 15th Ave on the pedestrian bridge adjacent to the Henry Art Gallery. University Way is the street one block west of 15th.

Ivar's Salmon House: Famous lakeside seafood restaurant. 401 NE Northlake Way

Ruby: Rice bowls, sandwiches, various entrees, full bar. 4241 University Way NE

Thai 65: Great Thai food. 4214 University Way NE

Café Allegro: Soups, sandwiches, salads, espresso. Located at the corner of 40th and University Way NE

Solstice: Sandwiches, soup and baked goods. Also has free wi-fi. 4116 University Way NEs

There is also an abundance of restaurants & shops at University Village, located just north and east of campus
        Directions from McMahon Hall: Walk down the trail out of the back of the building and across the pedestrian bridge over Montlake Blvd. Walk north on Montlake a couple of blocks and you'll see the University Village complex.

Bars, Nightclubs, Events & Attractions

Pubs closest to campus:
- *College Inn Pub*: A favorite Friday happy hour hang out for UW's graduate students. Has pool, darts, and typical bar food. Located at the corner of 40th and University Way NE. Entrance is behind Café Allegro.
- *Big Time Brewery*: Large selection of beers brewed in-house and in the Seattle area. Has darts & shuffleboard. Located at 4133 University Way NE

Capitol Hill:
- *Century Ballroom*: Famous for salsa dancing on the weekends. 915 E Pine St. Seattle, WA, 98122
- *Barca*: Swanky spot for cocktails. 1510 11th Ave, Seattle, WA 98122
- *Neighbours*: Large dance club that caters to the GLBT community, but all are welcome. 1509 Broadway, Seattle, WA, 98122

Fremont:
- *Nectar*: Cool hang out with patio and live hip-hop most Fridays. 412 N 36th Street, Seattle, WA, 98103
- *Ballroom*: Large bar that has DJ, pool & patio area. 456 N 36th Street, Seattle, WA, 98103
- *Browers*: Pub with a *huge* selection of exotic beers on tap. 400 N 35th Street, Seattle, WA, 98103

Downtown:
- *Triple Door*: Large, creative space that includes bar, restaurant and two music/performance venue216 Union Street, Seattle, WA, 98101
- *Pioneer Square*: Area between 2nd Avenue, S. King Street, and Yesler Way home to many different bars and night clubs

Friday night events in the Seattle area: COMING SOON!

Taxi's:
    Yellow Cab: 206-622-6500
    Far West Taxi: 206-433-1788

Popular Seattle Tourist Attractions:
More information at http://www.ci.seattle.wa.us/html/visitor/
    Pike's Place Market
    Seattle Art Museum
    Space Needle
    Lake Union
    Seattle's Parks & Beaches