FRIDAY MAY 2

4:30 PM Welcome and opening remarks

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

4:45 PM **Peter Carruthers** (Philosophy, University of Maryland)

Massively modular models of mind

The notion of 'modularity' has been given many interpretations in cognitive science, in Fodor (1983) and elsewhere. Which of those notions should be employed, in order that a massively modular account of human cognitive architecture can be defensible? The way to answer this question is to consider the main arguments that have been offered in support of massively modular accounts of the mind, extracting from them a matching account of modularity. These are the arguments from biological design generally, the argument from the organization of learning / animal minds, and the argument from computational tractability. The account of modularity that emerges is weaker than Fodor's (in particular, modules needn't be encapsulated), but nevertheless substantive enough to be interesting. Viz.: the mind consists of a great many distinct and dissociable processing systems, all of which are computationally frugal in their operations, and with internal processing that is inaccessible elsewhere.

6:00 PM Dinner break

8:00-11:00 PM Reception and poster session

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

SATURDAY MAY 3

8:30 AM Coffee, tea, juice, pastries

9:00 AM **Dennis Krebs** (Psychology, Simon Fraser University)

The evolution of morality

Evolutionary theory offers a framework for organizing, expanding, and refining psychological theories of moral development. Prosocial behavioral dispositions evolved in early humans (and other animals) because they helped them reap the adaptive benefits of social living. The emotional reactions that accompanied these dispositions endowed early humans with a primitive sense of morality, which was refined and elaborated when they acquired the capacity to make moral judgments. Moral norms evolved as products of strategic social interactions among members of groups who experienced confluences and conflicts of interest. Moral beliefs and moral standards are products of automatic and controlled information-processing and decision-making mechanisms. To understand morality, we must attend to the adaptive problems it evolved to solve. Moral reasoning is a tool that may be used to achieve moral and immoral goals.

10:30 AM Coffee, tea, juice

11:00 AM **Mel Rutherford** (Psychology, McMaster University)

Evidence of function specialization

The human mind is exquisitely coordination with the environment in which it evolved. Evidence of Functional Specialization of the human mind is inexplicable from a domain-general or associationistic perspective. Here I will provide evidence of functional coordination with both the physical and the social environment in which the human species evolved. The gravitational field in which humans evolved has affected the design of the visual system such that gravity is taken into account in the perception of speed and the perception of animacy. The psychological organization of emotion categories does not follow a symmetrical organization that would be the default expectation, but shows evidence of functional organization. Even the Theory of Mind mechanism, specialized for calculating the relationship between actions and mental states, is elegantly designed for our hierarchical social world such that it is more sensitive when a person is lower in status. Three empirical projects from different areas illustrate the point that the mind shows exquisite functional specialization, so well-coordinated with the environment that it would be difficult to explain without appeal to evolution by natural selection.

12:30 PM Lunch break

2:00 PM **Greg Bryant** (Communication Studies, UCLA)

Form and function in the sound of speech

The sound of speech, independent of the words, is a rich channel of information. Because different communicative interactions pose different kinds of problems for those involved, the form that communication takes often depends on the specific communicative problem that must be solved. I will present two examples from my own research of how the acoustic form of speech facilitates the communicative goals of interlocutors: communicating intentions to preverbal infants in the case of infant-directed speech, and how vocal cues of ovulation and attractiveness manifest themselves in women's voices. I will conclude with thoughts about how form-function analyses can illuminate a host of phenomena in the study of communication and cognition.

3:30 PM Coffee, tea, juice, cake

4:00 PM **Peter Todd** (Psychology, Indiana University)

Evolved search mechanisms in the mind's adaptive toolbox

Traditional views of rational decision making assume that individuals use a few powerful mechanisms to solve most of the problems they face. But given that human and animal minds have evolved to be quick and just "good enough" in environments where information is often costly and difficult to obtain, we should instead expect individuals to draw on an "adaptive toolbox" of simple, fast and frugal heuristics that make good decisions with limited information processing. These heuristics typically ignore most of the available information and rely on only a few important cues. Yet they make choices that are accurate in their appropriate application domains, achieving ecological rationality through their fit to particular information structures. Individuals not only have to decide when to stop searching for information for making choices, but also when to stop searching for choice options themselves that appear sequentially over an extended period of time. In one form of such sequential search tasks, aspiration-level or satisficing heuristics can determine when to stop search--such as when a suitable mate has been found. Another class of heuristics in the adaptive toolbox can be used in foraging search tasks, where the problem is to decide when to give up on the current depleted location and move on to a fresh resource patch. New experiments in our lab are exploring the heuristic mechanisms that people use in these types of settings, and the ways that search in one domain may influence search in another.

5:30 PM Closing remarks

6:00-8:00 PM Reception and poster session

Posters Friday 8:00-11:00

1. Tanjeem Azad, D Stephen Lindsay, C. A. E. Brimacombe (University of Victoria), *Do mock-jurors place more credence on testimony delivered by a victim-witness versus a bystander-witness?*
2. Andreas Breuer, Michael E. J. Masson, Daniel N. Bub (University of Victoria), *Knowledge of object identity and orientation influence reach and grasp actions*
3. Alisha Brown, Suzanne Hala, Valerie San Jaun (University of Calgary), *Toddler's memory for sources of action*
4. Meagan De Jong (University of Lethbridge), *Undergraduates' perceptions of schizophrenia*
5. Florin Dolcos, Sara Tomlinson, James Kragel, Jared Stokes, Gregory McCarthy, Roberto Cabeza (University of Alberta), *Role of individual differences in the response to emotional distraction: An event-related fMRI investigation*
6. Brian Duffels, Peter Dixon (University of Alberta), *Stages of processing for the encoding of environmental features*
7. Lindsay Friesen, Suzanne Hala, Valerie San Juan (University of Calgary), *The effects of elaboration and rehearsal on source memory in early school aged children*
8. John Granzow, Shelley Gross, John R. Vokey (University of Lethbridge), *Expertise and the F0 illusion*
9. Jodie Jacob, Michael Munro, Josh Rash, Paul Siakaluk (University of Northern British Columbia), *Insults and embodiment: A preliminary study*
10. Randy Jamieson, Matthew Crump, Samuel Hannah (University of Manitoba), *Exemplar memory and classical conditioning*
11. Glen E. Bodner, Jeremy Johnson (University of Calgary), *Masked nonword priming in an all nonword task*
12. Minjung Kim, Ronald A. Rensink (University of British Columbia), *Image transitions: The invariance of mental representations to visual transformations*
13. Gregory Krätzig, Jamie I. D. Campbell (University of Saskatchewan), *Feedback effects on strategy choice adaptivity in normal aging*
14. Glen E. Bodner, Raymond W. Gunter, Tanjeem Azad, Geoff Matthews (University of Calgary), *A distinctiveness heuristic, not global memory strength, dampens the DRM illusion*
15. Sandeep Mishra, Martin L. Lumière (University of Lethbridge), *You can't always get what you want: The motivational effect of need on risky decision making*
16. Annik Mossière, Tom Dalby (University of Calgary), *The influence of age on mock-juror decision making*
17. Blaine Mullins, Peter Dixon (University of Alberta), *Repetition effects in speech with switch costs*
18. Jamie A. Prowse Turner, Valerie A. Thompson (University of Saskatchewan), *The effects of normal aging on reasoning ability*
19. Glen E. Bodner, Cody Tousignant, Rehman Mulji (University of Calgary), *An effect of test-list context on remember judgment accuracy*
20. Rehman Mulji, Glen E. Bodner (University of Calgary), *Wiping out memories in the directed forgetting paradigm*

Posters Saturday 6:00-8:00

1. Nicole Alberts, Jamie I. D. Campbell (University of Saskatchewan), *The effect of numerical surface form in elementary subtraction*
2. Erin L. Beatty, Valerie A. Thompson (University of Saskatchewan), *The effects of individual differences and perspective taking on scientific reasoning*
3. Rehman Mulji, Glen Bodner (University of Calgary), *The prime-proportion made me do it: Masked priming of fixed and free choices*
4. Nicole Burnett, Paul Siakaluk, Jonathan Fugelsang, William Owen (University of Northern British Columbia), *Can the belief-bias effect be attenuated through the manipulation of content?*
5. Emma Climie, Suzanne Hala, Annik Mossière (University of Calgary), *Comprenez-vous? Influence of bilingualism on preschool children's processing of speed*
6. Nicola Forshaw, Colleen M. Schaffner, Tessa E. Smith (University of Lethbridge), *Behavioural and endocrine responses of captive callitrichid monkeys to relocation*
7. Shelley Gross, Jogn E. Granzow, John R. Vokey (University of Lethbridge), *Expertise and the F0 illusion*
8. Ian Scott Hargreaves, Jeremy Johnson, Penny Pexman (University of Calgary), *Number of features effects in free recall: The more you know?*
9. Theresa Jubenville, Tonia Relkov, Carrie Cuttler, Ryan McLaughlin, Peter Graf (University of British Columbia), *Marijuana use and prospective memory*
10. Robert B. Latimer, Norman R. Brown (University of Alberta), *Use of imperfectly predictive categories in serial position estimation*
11. Jessica LeHuquet, Charmaine Thomas, Jeremy Johnson, Christopher R. Sears (University of Calgary), *Selective attention in depression: Eye fixations to depression-related, anxiety-related, and positive images*
12. Devon McConnachie, Penny Pexman, Lenka Zdraziloca (University of Calgary), *"Clap, whack, wink": Children's production of ironic or non-literal gestures in family interactions*
13. Arron W. S. Metcalfe, Jamie I. D. Campbell (University of Saskatchewan), *Operand recognition time and strategy choice for basic arithmetic*
14. Tugba Uzer, Peter J. Lee, Norman R. Brown (University of Alberta), *Retrieval processes in autobiographical memory: Evidence of the prevalence of direct retrieval*
15. Annie-Maire Selzler, Michelle Wellsby, Josh Rash, Keri Locheed, William Owen, Paul Siakaluk (University of Northern British Columbia), *Body-object interaction effects: Examining response modality*
16. Cyrus Shaoul, Chris Westbury (University of Alberta), *Performance of HAL-like word space models on semantic categorization tasks*
17. Doug P. VanderLaan, Paul L. Vasey (University of Lethbridge), *An adaptive cognitive dissociation between willingness to help kin and non-kin in Samoan*
18. Juanita M. Whalen, Penny M. Pexman, Jill J. Green (University of Calgary), *The impact of ironic language: Contrast or evaluative fit?*
19. Michael R. Woloszyn (Thompson Rivers University), *The effect of study-test modality on false recognition for familiar melodies*

Registrants

Nicole Alberts
University of Saskatchewan
nma312@mail.usask.ca

Scott Allen
University of Lethbridge
allens@uleth.ca

Tanjeem Azad
University of Victoria
tazad@uvic.ca

Erin L. Beatty
University of Saskatchewan
Erin.Beatty@usask.ca

Laurie Bernes
University of Northern British Columbia
bernes@unbc.ca

Glen E. Bodner
University of Calgary
bodner@ucalgary.ca

Andreas Breuer
University of Victoria
abreuery@yahoo.ca

Alisha Brown
University of Calgary
browam@ucalgary.ca

Aaron A. Brown
University of Regina
brown18a@uregina.ca

Greg Bryant
UCLA
gabryant@ucla.edu

Nicole Burnett
University of Northern British Columbia
pratta@unbc.ca

Jamie Campbell
University of Saskatchewan
jamie.campbell@usask.ca

Peter Carruthers
University of Maryland
pcarruth@umd.edu

Anthony Chaston
Mount Royal College
achaston@mtroyal.ca

Emma Climie
University of Calgary
eaclimie@ucalgary.ca

Meagan De Jong
University of Lethbridge
meagan.dejong@uleth.ca

Peter Dixon
University of Alberta
peter.dixon@ualberta.ca

Florin Dolcos
University of Alberta
fdolcos@ualberta.ca

Brian Duffels
University of Alberta
bduffels@ualberta.ca

Nicola Forshaw
University of Lethbridge
nicola.forshaw@uleth.ca

Lindsay Friesen
University of Calgary
lindsay.friesen@shaw.ca

John Granzow
University of Lethbridge
granje@uleth.ca

Shelley Gross
University of Lethbridge
shelley.gross@uleth.ca

Ian Scott Hargreaves
University of Calgary
ishargre@ucalgary.ca

Jodie Jacob
University of Northern British Columbia
jodjacob@hotmail.com

Randy Jamieson
University of Manitoba
randy_jamieson@umanitoba.ca

Jeremy Johnson
University of Calgary
jcsjohnson@yahoo.com

Theresa Jubenville
University of British Columbia

Minjung Kim
University of British Columbia
minjung@ubcviscog.com

Gregory Krätzig
University of Saskatchewan
gregory.kratzig@usask.ca

Dennis Krebs
Simon Fraser University
krebs@sfu.ca

Robert B. Latimer
University of Alberta
rlatimer@ualberta.ca

Jessica LeHuquet
University of Calgary
jlehuque@ucalgary.ca

Keri Locheed
University of Northern British Columbia
locheed@unbc.ca

Geoff Matthews
University of Calgary
geoff22@shaw.ca

Devon McConnachie
University of Calgary
devon_mcconnachie@hotmail.com

Arron W. S. Metcalfe
University of Saskatchewan
arron.metcalfe@usask.ca

Doug Mewhort
Queens University
mewhortd@post.queensu.ca

Sandeep Mishra
University of Lethbridge
sandeep.mishra@uleth.ca

Annik Mossière
University of Calgary
amossier@ucalgary.ca

Weimin Mou
University of Alberta
wmou@ualberta.ca

Rehman Mulji
University of Calgary
reh@ucalgary.ca

Blaine Mullins
University of Alberta
bmullins@ualberta.ca

Michael Munro
University of Northern British Columbia
munrom@unbc.ca

William J. Owen
University of Northern British Columbia
owenw@unbc.ca

Gordon Pennycook
University of Saskatchewan
grp992@mail.usask.ca

Penny Pexman
University of Calgary
pexman@ucalgary.ca

Jamie A. Prowse Turner
University of Saskatchewan
Jamie.Turner@usask.ca

Josh Rash
University of Northern British Columbia
rash@unbc.ca

Victoria Richards
University of Alberta
vlr@ualberta.ca

Jennifer Robinson
University of Manitoba
jenrobinson1@gmail.com

Mel Rutherford
McMaster University
rutherm@mcmaster.ca

Chris Sears
University of Calgary
sears@ucalgary.ca

Annie-Maire Selzler
University of Northern British Columbia
annieselzler@hotmail.com

Cyrus Shaoul
University of Alberta
cyrus.shaoul@ualberta.ca

Paul Siakaluk
University of Northern British Columbia
siakaluk@unbc.ca

Anthony Singhal
University of Alberta
asinghal@ualberta.ca

Shawn Tan Chin Yang
University of Alberta
shawnt@ualberta.ca

James Taylor
Mount Royal College
jctaylor@mtroyal.ca

Charmaine Thomas
University of Calgary
charmaine.thomas@shaw.ca

Valerie Thompson
University of Saskatchewan
valerie.thompson@usask.ca

Peter Todd
Indiana University
pmtodd@indiana.edu

Cody Tousignant
University of Calgary
catousig@ucalgary.ca

Tugba Uzer
University of Alberta
uzer@ualberta.ca

Doug P. VanderLaan
University of Lethbridge
doug.vanderlaan@uleth.ca

John Vokey
University of Lethbridge
vokey@uleth.ca

Juanita M. Whalen
University of Calgary
jwhalen@ucalgary.ca

Shannon Winters
University of Manitoba
shan_1_4@hotmail.com

Michael R. Woloszyn
Thompson Rivers University
mwoloszyn@tru.ca

Acknowledgment

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

NOTES