

36TH ANNUAL COGNITIVE SCIENCE CONFERENCE
QUEBEC CITY, CANADA

JUL 23 - JUL 26

CO-LOCATED WITH AAAI

SYMPOSIA

The Future of Human-Agent Interaction
Moral Cognition and Computation
Foundations of Social Cognition

SPEAKERS

Minoru Asada
Dedre Gentner
Stevan Harnad

cognitive science meets artificial intelligence: human and artificial agents in interactive contexts

COGNITIVE SCIENCE 2014



Program Chairs: Paul Bello, Marcello Guarini, Marjorie McShane, and Brian Scassellati

Program of the 36th Annual Meeting of the Cognitive Science Society

Québec City, Canada, 23-26 July 2014

Chaired by

Paul Bello

Naval Research Laboratory

Marcello Guarini

University of Windsor

Marjorie McShane

Rensselaer Polytechnic Inst.

Brian Scassellati

Yale University



Dear Cognitive Scientists:

It is a great pleasure to welcome you to Quebec City for the 36th Annual Conference of the Cognitive Science Society! In addition to bringing together some of the most innovative and exciting research in the cognitive sciences, CogSci 2014 highlights the unique influence that computational cognitive systems have had on our community. CogSci 2014 is co-located with the 28th AAI Conference on Artificial Intelligence and our program encourages interaction through shared demonstrations and interactive panels. We are also very pleased to have three outstanding plenary speakers, Dedre Gentner, Stevan Harnad, and Minoru Asada, and three invited symposia that cover some of the most rapidly developing and active areas of research.

Overall, the quality of the submissions this year was extremely high. CogSci 2014 received 973 submissions, including 714 full papers, 214 member abstracts, 11 publication-based presentations, 20 symposium proposals, and 16 workshop and tutorial proposals. After a rigorous review process, we selected 297 papers for oral presentation (42%), 218 papers for poster presentation (31%), 241 member abstracts for poster presentation (96% of submitted abstracts plus reformulations of submitted papers as member abstracts), 7 publication-based papers for oral presentations (64%), 14 symposia (70%), and 13 tutorials or workshops (81%).

Quebec City offers our conference a unique and colorful backdrop. A UNESCO World Heritage site, the city's breathtaking views and old world charm bring a European flavor to North America. We hope that your visit will include time to wander the cobblestone streets, enjoy the views of the St. Lawrence River from the Cap Diamant cliffs, and explore the fortifications of the only walled city north of Mexico.

We hope that you enjoy the wide array of intellectual, cultural, and social activities that CogSci 2014 and Quebec City have to offer!

Quebec City, Summer 2014

Paul Bello, Marcello Guarini, Marjorie McShane, and Brian Scassellati

Acknowledgements

We are deeply indebted to the many people who contributed to the intellectual atmosphere of the conference. The members of the Organizing Committee, the Program Committee members, and a remarkable list of reviewers were the foundation for building the deep and innovative program that we are proud to present.

We are particularly indebted to the following individuals:

- Jessica Wong for unceasing efforts to keep the logistics of this event from overwhelming us
- Ken Forbus for acting as our liaison to the Governing Board and providing rapid and expert advice throughout the planning process
- Chen Yu and the members of the prize selection committee for handling a much larger volume of excellent papers than expected
- James Stewart from Precision Conference Solutions for keeping our submission system running smoothly
- Dongkyu Choi for maintaining the CogSci conference website
- The Scarritt Group, Inc. for the logistics management
- George Konidakis, Gregory Dudek, and Keri Harvey for helping to manage the interactions with AAAI 2014 and making the cognitive systems exhibition possible
- Our sponsors for their continued support in making this conference possible

We also are also thankful to have had the support and creativity of the entire Cognitive Science community. We hope the suggestions and contributions of everyone result in a productive and enjoyable event for all.

Paul Bello, Marcello Guarini, Marjorie McShane, and Brian Scassellati

Cognitive Science 2014 co-chairs

CogSci2014 Organizing Committee

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Web Chair:	Dongkyu Choi, University of Kansas
Conference Officer:	Jessica Wong, University of Chicago

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Robert Youmans
Chen Yu
Ron Zacharski

Registration and Information Desk

Pre-registered attendees can pick up their badges near the main entrance on Level 4. On-site registration is located in the same area.

	On-Site Registration:	Badge Pick Up:
Wednesday, 23 July	08:00 – 12:30, 14:00 – 16:30	07:30 – 17:30
Thursday, 24 July	08:00 – 12:30, 14:00 – 16:30	07:30 – 18:00
Friday, 25 July	08:00 – 12:30, 14:00 – 16:30	08:00 – 18:00
Saturday, 26 July	08:30 – 10:00	08:30 – 12:30

In Case of Emergency

Police: 911

Emergency calls and Fire department: 911

Proceedings

The proceedings can be accessed or downloaded through the following address:

<http://cognitivesciencesociety.org/conference2014>

After the conference, a short description of CogSci2014 and links to the proceedings will be available on:

http://cognitivesciencesociety.org/conference_past.html

Internet

Basic wireless internet access is complimentary at the Quebec City Convention Center for CogSci 2014 attendees. To log on:

1. Activate the wireless network card on the computer (or other device)
2. Connect to: **Videotron_Centre_des_congres**
3. Open a web browser and try to connect to a website. You will be redirected to the internet provider's portal. Once on the homepage, choose: **Videotron Free Wireless Internet**.
4. Read and accept and terms and conditions.

Presentation instructions

Oral presentations: Each talk is allotted 20 minutes which includes time for questions and changing speakers. We recommend that you plan on **speaking for 15 minutes leaving 5 minutes for questions and change of speaker**. Each room has a video projector with standard VGA input, a screen, microphone and sound system. The computer is not provided.

Some participants have agreed to serve as session chairs. If a session has no chair the last speaker has been assigned the role of session chair. The duty of the session chair is to announce each speaker and to keep track of time. We will provide signs that indicate how much time a speaker has left.

Poster presentations: The size of the poster boards is 1.2 meter (3.9 ft) width and 1.5 meter (4.9 ft) height. Although the height is somewhat flexible (the poster can stick out) the width is not. Push pins to attach the poster to the poster boards will be provided. Posters can be put up from 8:00-12:00 and must be removed at the end of the poster session.

Coffee Breaks (Foyer 4, Level 4)

The beverages are offered to all attendees for purchase during the morning and afternoon breaks. Please make sure that you are back in the lecture halls in time so that **you do not disturb the first talk**.

Cognitive Science Society Business Meeting

The Cognitive Science Society Business Meeting takes place on Thursday, 24 July at 19:00 in room 200 C.

How to Cite Your Paper

APA formatted citation for a 6-page paper:

Author A. & Author B. (2014). This is the title of the paper. In M. Bello P., Guarini M., McShane M. & Scassellati B. (Eds.) *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. NUMBERS). Austin TX: Cognitive Science Society.

APA formatted citation for a published abstract:

Author A. & Author B. (2014). This is the title of the abstract [Abstract]. In Bello P., Guarini M., McShane M. & Scassellati B. (Eds.) *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (p. NUMBER). Austin TX: Cognitive Science Society.

APA formatted citation for a talk (or poster) presentation:

Author A. & Author B. (2014 August). This is the title of the talk or poster. Paper (or Poster) presented at the 36th Annual Conference of the Cognitive Science Society. Québec City, Canada.

CogSci 2014 Sponsors

We thank the sponsors of the 36th Annual Meeting of the Cognitive Science Society for their support of the conference awards and the tutorials and for supporting student participation through student travel grants.

The Robert J. Glushko and Pamela Samuelson Foundation

Wiley-Blackwell -- Publisher of the Society's journals, *Cognitive Science* and *Topics in Cognitive Science*

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The MIT Press publishes extensively in cognition, brain, and behavior. Please come by our booth to browse new and classic titles and receive a 30% discount.

Wiley-Blackwell

Wiley-Blackwell is proud to partner with the Cognitive Science Society to publish its two journals, *Cognitive Science* and *Topics in Cognitive Science*.

Robert J. Glushko Dissertation Prizes

The **Cognitive Science Society** and the **Glushko-Samuelson Foundation** will award up to five outstanding dissertation prizes in cognitive science each year. The goals of these prizes are to increase the prominence of cognitive science and encourage students to engage in interdisciplinary efforts to understand minds and intelligent systems. The hope is that the prizes will recognize and honor young researchers conducting ground-breaking research in cognitive science. The eventual goal is to aid in efforts to bridge between the areas of cognitive science and create theories of general interest to the multiple fields concerned with scientifically understanding the nature of minds and intelligent systems. Promoting a unified cognitive science is consistent with the belief that understanding how minds work will require the synthesis of many different empirical methods formal tools and analytic theories. 2011 was the inaugural year of this prize and a new competition is held annually.

The 2014 recipients of the Robert J. Glushko Prizes for Outstanding Doctoral Dissertations / theses in Cognitive Science are:

Dr. Samuel Gershman - 2013 PhD thesis "Memory Modification in the Brain: Computational and Experimental Investigations" from Princeton University

Dr. Celeste Kidd - 2013 PhD thesis "Rational Approaches to Learning and Development" from University of Rochester

Dr. Victoria Leong - 2013 PhD thesis "Speech Rhythm Cognition: A Multi-Disciplinary Account" from University of Cambridge

Dr. Ian Lyons - 2013 PhD thesis "A Sense of Order: Ordinality and the meaning of symbolic numbers" from University of Chicago

Dr. Takao Sasaki - 2013 PhD thesis "Psychology of A Superorganism" from Arizona State University

A special **Glushko Dissertation Prize Symposium** showcases the award winning PhD research projects (Friday, 25 July from 16:30 - 17:50). See also:

http://www.cognitivesciencesociety.org/about_awards_glushko_recipients.html

CogSci2014 Awards

Marr Prize

The Marr Prize named in honor of the late David Marr is awarded to the best student paper at the conference. All student first authors were eligible for the Marr Prize for the best student paper. The Marr Prize includes an honorarium of \$1000 and is sponsored by The Cognitive Science Society. The winner of the 2013 Marr Prize for the Best Student Paper is:

Anna Coenen, Bob Rehder, and Todd Gureckis: *Decisions to intervene on causal systems are adaptively selected*, Saturday, 26 July.

Computational Modeling Prizes

Four prizes worth \$1000 each are awarded for the best full paper submissions to CogSci 2013 that involve computational cognitive modeling. The four prizes represent the best modeling work in the areas of perception/action language higher-level cognition and applied cognition. These prizes are all sponsored by The Cognitive Science Society. The winners of the 2013 Computational Modeling Prizes are:

Perception/Action: **Ben Cipollini and Garrison W. Cottrell:** *A Developmental model of Hemispheric Asymmetry of Spatial Frequencies*, Friday, 25 July.

Language: **Leon Bergen and Noah D. Goodman:** *The strategic use of noise in pragmatic reasoning*, Thursday, 24 July.

Higher-Level Cognition: **Maarten Speekenbrink and Emmanouil Konstantinidis:** *Uncertainty and exploration in a restless bandit task*, Saturday, 26 July.

Applied Cognition: **Yunfeng Zhang, Jaehyon Paik and Peter Pirolli:** *Reinforcement learning and counterfactual reasoning explain adaptive behavior in a changing environment*, Saturday, 26 July.

Student Travel Awards

Travel awards have been provided to students whose submissions were accepted as full papers, received high rankings, and who indicated a need for travel funding. The awardees are listed below.

Robert J. Glushko and Pamela Samuelson Foundation

The Robert J. Glushko and Pamela Samuelson Foundation generously sponsored \$10,000 for student travel awards. The 2014 Travel Awards went to:

Ed Baggs (University of Edinburgh, UK)
Barend Beekhuizen (Leiden University, The Netherlands)
Ben Cipollini (University of California San Diego, USA)
Jacob W. Dink (Northwestern University, USA)
Yan Gu (MIT, USA)
Maurice Lamb (University of Cincinnati, USA)
Tyler Marghetis (University of California San Diego, USA)
Aida Nematzadeh (University of Toronto, Canada)
Kimele Persaud (Rutgers University, USA)
Alexander S. Rich (New York University, USA)
Scott Seyfarth (University of California San Diego, USA)
Daniel R. Schlegel (State University of New York at Buffalo, USA)
Kimberly M. Scott (MIT, USA)
Michael H. Tessler (Stanford University, USA)
Kevin Patrick Tobia (Oxford University, UK)
Midori Tokita (Ochanomizu University, Japan)
Maegen Walker (University of Hawaii at Manoa, USA)
Eliane Stampfer Wiese (Carnegie Mellon University, USA)
Yang Wu (MIT, USA)

Awards Committee

Chen Yu (chair), Indiana University at Bloomington

Thomas Hills, University of Warwick

Celeste Kidd, University of Rochester

Hanako Yoshida, University of Houston

Invited Plenary Presentations

Rumelhart Prize Lecture

In Defense of Theory

Ray Jackendoff, Tufts University

Friday, 25 July, 18:00

Keynote Talks

Analogy: The Key To Higher-Order Cognition

Dedre Gentner, Northwestern University

Thursday, 24 July, 09:00

Cognitive versus Affective? How can artificial empathy follow the developmental pathway of natural empathy

Minoru Asada, Osaka University

Friday, 25 July, 09:00

From Grounded Symbols to Open Science

Stevan Harnad, Université du Québec à Montréal & University of Southampton

Saturday, 26 July, 09:00

Invited Symposia

Foundations of Social Cognition

Thursday, 24 July 10:30 – 12:10

Moral Cognition and Computation

Friday, 25 July, 14:30 – 15:50

The Future of Human-Robot Interaction

Saturday, 26 July, 10:30 – 12:10

WEDNESDAY - 23 July 2014 (Tutorials and Workshops)										
	302 A	205 B	301 A	303 A	303 B	304 A	301 B	302 B	205 A	304 B
9:00 – 12:30	Full-Day Workshop - ACT-R Workshop	Half-Day Tutorial - Practical Advice on How to Run Human Behavioral Studies	Full-Day Workshop - Deep Learning and the Brain	Full-Day Tutorial - Growth Curve Analysis: A Hands-On Tutorial on Using Multilevel Regression to Analyze Time Course Data	Full-Day Tutorial - Probability, programs, and the mind: Building structured Bayesian models of cognition	Half-Day Tutorial -Types and states: Mixture and hidden Markov Models for cognitive science	Half-Day Tutorial -Online Experiments using jsPsych, psITurk, and Amazon Mechanical Turk	Full-Day Workshop - Sequential Sampling Models for Cognitive and Perceptual Decision Making	Full-Day Workshop - Cognitive Science and the Arts	Full-Day Tutorial - Quantum Models of Cognition and Decision
		Half-Day Workshop - Computational Modeling of Cognition-Emotion Interactions: Relevance to Mechanisms of Affective Disorders and Therapeutic Action					Half-Day Workshop -Can Cognitive Scientists Help Computers Recognize Irony?			
14:00 – 17:30										

SATURDAY - 26 JULY 2014

8:45 - 9:00	Organizational Remarks										
9:00 - 10:00	Plenary – Stevan Harnad										
10:00 - 10:30	Coffee Break										
	A 200 C	B 301 A	C 303 A	D 303 B	E 200 A	F 200 B	G 205	H 302	I 304	J 301 B	K 201 C
Symposia and Talks: 10:30 - 12:10	Invited Symposium: The Future of Human-Robot Interaction	Symposium: Moot Point Process Models	Symposium: Tetrads as a Research Paradigm	Symposium: The Role of Comparison in Social Cognition	Symposium: Understanding Affective Cognition	Symposium: Creative Cognition	Computational Modeling - Symbolic	Learning 1	Preferences in Decision-Making	Decision-Making 2	Symposium: Computational Cognition Ideation Challenge
12:10 - 14:30	Poster Session 3 – light lunch provided, room 400 A										
	A 200 C	B 301 A	C 303 A	D 303 B	E 200 A	F 200 B	G 205	H 302	I 304	J 301B	K 201C
Talks: 14:30 - 15:50		Causal Cognition and Action	Computational Modeling - Architecture	Action and Gesture - Understanding	Multimodal Cognition	Decision-Making 3	Modeling Decision-Making	Problem Solving and Search 1	Learning 2	Social Cognition - Modeling	Spatial Cognition – Cross-Modal Perception
16:00 - 16:30	Coffee Break										
Talks: 16:30 - 17:50		Cognitive Modeling and Creativity	Computational Modeling - Interaction and Agents	Computational Modeling - Tools	Social Cognition - Perception	Decision-Making 4	Models of Memory	Problem Solving and Search 2	Word Learning	Learning 3	Analogical Cognition

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WILEY

Detailed Program: Wednesday 23 July 2014

Wednesday 23 July 2014

Tutorials

TU 01 **Online Experiments Using jsPsych, psiTurk, and Amazon Mechanical Turk**
[Room 301 B]

Time: Half-day (9:00 - 12:30)
Organizers: Josh de Leeuw, Anna Coenen, Doug Markant, Jay B. Jay B. Martin, John McDonnell, Alexander Rich, Todd Gureckis

TU 02 **Types and States: Mixture and Hidden Markov Models for Cognitive Science**
[Room 304 A]

Time: Half-day (9:00 - 12:30)
Organizers: Ingmar Visser, Maarten Speekenbrink

TU 03 **Practical Advice on How to Run Human Behavioral Studies**
[Room 205 B]

Time: Half-day (9:00 - 12:30)
Organizers: Frank Ritter, Jong Kim

TU 04 **Growth Curve Analysis: A Hands-On Tutorial on Using Multilevel Regression to Analyze Time Course Data**
[Room 303 A]

Time: Full-day (9:00 - 17:30)
Organizer: Daniel Mirman

TU 05 **Quantum Models of Cognition and Decision**
[Room 304 B]

Time: Full-day (9:00 - 17:30)
Organizers: Zheng Wang, Jerome Busemeyer, Jennifer Trueblood

TU 06 **Probability, Programs, and the Mind: Building Structured Bayesian Models of Cognition**
[Room 303 B]

Time: Full-day (9:00 - 17:30)
Organizers: Noah Goodman, Josh Tenenbaum

Detailed Program: Wednesday 23 July 2014

Wednesday 23 July 2014

Workshops

WS 01 **Cognitive Science and the Arts**
[Room 205 A]
Time: Full-day (9:00 - 17:30)
Organizers: Barbara Tversky, Patrick Healey, David Kirsh

WS 02 **ACT-R Workshop**
[Room 302 A]
Time: Full-day (9:00 - 17:30)
Organizers: Dario D. Salvucci, Michael D. Byrne, Christian Lebiere, Niels A. Taatgen, J. Gregory Trafton

WS 03 **Deep Learning and the Brain**
[Room 301 A]
Time: Full-day (9:00 - 17:30)
Organizer: Andrew Saxe

WS 04 **Sequential Sampling Models for Cognitive and Perceptual Decision Making**
[Room 302 B]
Time: Full-day (9:00 - 17:30)
Organizers: Richard Shiffrin, Jerome Busemeyer, Antonio Rangel, Roger Ratcliff, Chris Donkin, Tom Palmeri

WS 05 **Can Cognitive Scientists Help Computers Recognize Irony?**
[Room 304 A]
Time: Half-day (14:00 - 17:30)
Organizers: Byron Wallace, Laura Kertz

WS 06 **Computational Modeling of Cognition – Emotion Interactions: Relevance to Mechanisms of Affective Disorders and Therapeutic Action**
[Room 205 B]
Time: Half-day (14:00 - 17:30)
Organizer: Eva Hudlicka

WS 07 **Applying for National Science Foundation Funding in Cognitive Science: Cognition, Computation, Development, Education and Neuroscience**
[Room 301 B]
Time: Half-day (14:00 - 17:30)
Organizers: Anne Cleary, James Donlon, Evan Heit, Chris Hoadley, Laura Namy, Akaysha Tang, Betty Tuller

Detailed Program: Thursday 24 July 2014

Thursday 24 July 2014

Symposia: 10:30 - 12:10

Foundations of Social Cognition

Invited Symposium

[Room 200 C]

Bertram Malle, Noah Goodman,
Andrew Meltzoff

The Implications of Embodiment for Mathematics and Computing Education

Symposium

[Room 301 A]

David Landy, Dragan Trninic, Firat Soylu, Joselle Kehoe, Paul Fishwick

The Role of Culture and Language for Numerical Cognition

Symposium

[Room 303 A]

Andrea Bender, Sieghard Beller, Karenleigh A. Overmann, Caleb Everett, Deanna Gagne, Marie Coppola, Stephen Chrisomalis

Triangulating Surprise: Expectations, Uncertainty and Making-Sense

Symposium

[Room 303 B]

Meadhbh Foster, Mark Keane, Jeffrey Loewenstein, Phil Maguire, Rebecca Maguire, Ross May, Martin Smith-Rodden, Ivan Ash, Edward Munnich, Michael Ranney

The Cognition of Comics: What Comics Can Tell Us About the Mind

[Room 201 C]

Neil Cohn, David Wagner, Tom Foulsham, John Drury

Thursday 24 July 2014

Talks: 10:30 - 12:10

Causal Cognition 1

[Room 200 A]

Discovering hidden causes using statistical evidence

Christopher Lucas, Kenneth Holstein, Charles Kemp

From Causal Models to Sound Heuristic Inference

Ana Sofia Morais, Lael Schooler, Henrik Olsson, Bjorn Medler

Inferred Evidence in Latent-Scope Explanations

Samuel Johnson, Greeshma Rajeev-Kumar, Frank Keil

The Order of Things: Inferring Causal Structure from Temporal Patterns

Neil Bramley, Tobias Gerstenberg, David Langendo

A Quantum Probability Approach to Human Causal Reasoning

Jennifer Trueblood, Emmanuel Pothos

Detailed Program: Thursday 24 July 2014

Concepts and Categories

[Room 200 B]

Exemplar Dynamics Models of the Stability of Phonological Categories

Paul Tupper

Neurophysiological Correlates of Thematic and Functional Knowledge Activation during Object Conceptual Processing

Yannick Wamain, Ewa Pluciennicka, Solene Kalenine

Similarity-Based Ordering of Instances for Efficient Concept-Learning

Erik Weitnauer, Paulo Carvalho, Robert Goldstone, Helge Ritter

Testing the Psychological Validity of Cluster Construction Biases

Joseph Austerweil

Empirical Approaches to Linguistics 1

[Room 205]

An Empirically Grounded Approach to Extend the Linguistic Coverage and Lexical Diversity of Verbal Probabilities

Christine Engelmann, Udo Hahn

Frequency Effects in the Processing of Unbounded Dependencies

Martin van Schijndel, William Schuler, Peter Culicover

Examining Strains and Symptoms of the "Literacy Virus:" The Effects of Orthographic Transparency on Phonological Processing in a Connectionist Model of Reading

Alastair Smith, Padraic Monaghan, Falk Heutlig

Statistical Unpredictability of F0 Trajectories as a Cue to Sentence Stress

Sofoklis Kakouros, Okko Johannes Rasanen

Interaction Dynamics

[Room 302]

Are You Hiding Something from Me? Uncertainty and Judgments about the Intentions of Others

Chris Street, Daniel Richardson

Early Language Experience has a Long-Lasting Impact on the Neural Basis of Theory-of-Mind

Jorie Koster-Hale, Naomi Berlove, Rachel Magid, Rachel Benedict, Jennie Pyers, Rebecca Saxe

Eliminating Unpredictable Linguistic Variation through Interaction

Kenny Smith, Olga Feher, Nikolaus Ritt

Facilitation in Dishonesty is Subject to Task Constraints

Maryam Tabatabaieian, Rick Dale, Nicholas Duran

Spatial Cognition in Context

[Room 304]

Grounding the Ungrounded: Estimating Locations of Unknown Place Names from Linguistic Associations and Grounded Representations

Gabriel Recchia, Max Louwerse

Spatial Reasoning in Bilingual Mexico: Delimiting the Influence of Language

Tyler Marghetis, Melanie McComsey, Kensy Cooperrider

The Cultural Transmission of Spatial Cognition: Evidence from a Large-Scale Study

Juergen Bohnmeyer, Katharine Donelson, Randi Tucker, Elena Benedicto, Alejandra Capistran Garza, Alyson Eggleston, Nestor Hernandez Green, Maria de Jesus Selene Hernandez Gomez, Samuel Herrera Castro, Carolyn O'Meara

Detailed Program: Thursday 24 July 2014

What is the Ground? Continuous Maps for Symbol Grounding

Ian Perera, James Allen

Experimental Pragmatics

[Room 301 B]

Familiarity Modulates the Dynamics of Collaborative Inhibition in a Trivia Game

Janelle Szary, Rick Dale

Lost your Marbles? The Puzzle of Dependent Measures in Experimental Pragmatics

Judith Degen, Noah Goodman

On the Automaticity of Reduction in Dialogue: Cognitive Load and Repeated Multimodal References

Ingrid Masson, Martijn Goudbeek, Emiel Krahmer

On the Role of Object Knowledge in Reference Production: Effects of Color Typicality on Content Determination

Hans Westerbeek, Ruud Koolen, Alfons Maes

Thursday 24 July 2014

Talks: 14:30 - 15:50

Attention 1

[Room 301 A]

A Non-Verbal Pre-Training Based on Eye-Movements to Foster Comprehension of Static and Dynamic Learning Environments

Irene T. Skuballa, Alexander Renkl

Eye Can't Ignore What You're Saying: Varying the Reliability of Gaze and Language

Ross Macdonald, Benjamin Tatler

Eye-Tracking Investigation of Visual Search Strategies When Mediated by Language

Eric Chiu, Lillian Rigoli, Michael Spivey

Keeping the Eyes on a Fixation Point Modulates How a Symbolic Cue Orients Covert Attention

Michele Burigo, Pia Knoeferle

Categories and Learning

[Room 303 A]

Shaping Relational Category-Learning with Visuospatial Priming

Katherine Livins, Michael Spivey, Leonidas Doumas

The Interaction of Category Structure and Supervision in Category Learning: A Comparative Approach

Hyungwook Yim, Leyre Castro, Edward Wasserman, Vladimir Sloutsky

The Relevance of Labels in Semi-Supervised Learning Depends on Category-Structure

Wai Keen Vong, Amy Perfors, Daniel Navarro

The Role of Difference-Detection in Learning Contrastive Categories

Linsey Smith, Dedre Gentner

Education – Understanding Processes

[Room 303 B]

Investigating Scaffolds for Sense-Making in Fraction Addition and Comparison

Elaine Wiese, Kenneth Koedinger

Modeling the Dynamics of Classroom Education Using Teaching Games

Michael Frank

Detailed Program: Thursday 24 July 2014

Relating a Task-Based, Behavioral Measure of Achievement Goals to Self-Reported Goals and Performance in the Classroom

J. Elizabeth Richey, Matthew L. Bernacki, Daniel M. Belenky, Timothy J. Nokes-Malach

Representing Time in Scientific Diagrams

William Bechtel, Daniel Burnston, Benjamin Sheredos, Adele Abrahamsen

Memory

[Room 200 A]

Empirical Evidence for Markov-Chain Monte Carlo in Memory Search

David Bourgin, Joshua Abbott, Tom Griffiths, Kevin Smith, Ed Vul

Semantic Networks and Order Recall in Verbal Short-Term Memory

Marie Poirer, Jean Saint-Aubin, Ali Mair, Gerry Tehan, Anne Tolan

The Influence of Knowledge and Expectations for Color on Episodic Memory

Kimele Persaud, Pernille Hemmer

The Role of Modality Congruence in the Presentation and Recognition of Task-Irrelevant Stimuli in Dual Task Paradigms

Maegen Walker, Andrew Dewald, Scott Sinnett

Cognitive Development – Social Interaction

[Room 200 B]

Children Consider Prior Knowledge and the Cost of Information Both in Learning From and Teaching Others
Hyowon Gweon, Patrick Shafto, Laura Schulz

Controlling the Message: Preschoolers' Use of Evidence to Teach and Deceive Others

Elizabeth Baraff Bonawitz, Patrick Shafto, Annie Chen

I'd Do Anything For a Cookie (But I Won't Do That): Childrens' Understanding of the Costs and Rewards Underlying Rational Action

Julian Jara-Ettinger, Hyowon Gweon, Josh Tenenbaum, Laura Schulz

Preschoolers' Expect Others to Learn Rationally From Evidence

Phyllis Yan, Rachel Magid, Laura Schulz

To Give a Fish or to Teach How to Fish? Children Weigh Costs and Benefits in Considering What Information to Transmit

Hyowon Gweon, Veronica Chu, Laura Schulz

Cross-Linguistic Analysis

[Room 205]

Incremental and Predictive Discourse Processing Based on Causal and Consessive Discourse Markers: ERP Studies on German and English

Heiner Drenhaus, Vera Demberg, Judith Koehne, Francesca Delogu

Modeling Reading Times in Bilingual Sentence Comprehension

Stefan Frank

Order of Nominal Conjuncts in Visual Scene Description Depends on Language

Lindsay Kay Butler, Timothy J. Tilbe, T. Florian Jaeger, Juergen Bohnemeyer

The Use of Colour in Reference Production: A Comparison Between Dutch and Greek

Mirjana Sekicki, Jette Viethen, Martijn Goudbeek, Emiel Krahmer

Detailed Program: Thursday 24 July 2014

Concepts: Social and Scientific Context

[Room 302]

Cognitive Biology: Surprising Model Organisms for Cognitive Science

William Bechtel

Degenerative Techno-Cognitive Niches: Unforeseen Dangers of the Hyper-Technological Paradigm

Tommaso Bertolotti, Lorenzo Magnani

Do Social Norms Influence Causal Inference?

Jana Samland, Michael R. Waldmann

Reintroducing the Cyborg Concept to Explain Internet-Related Safety Issues

Tommaso Bertolotti, Lorenzo Magnani

Spatial Cognition - Skills

[Room 304]

Construction and Revision of Spatial Mental Models under High Task Demand

Jelica Nejasmic, Leandra Bucher, Paul D. Thorn, Markus Knauff

Interaction Design and the Role of Spatial Ability in Moderating Virtual Molecule Manipulation Performance

Trevor Barrett, Mary Hegarty

Supra-Individual Consistencies in Navigator-Driven Landmark Placement for Spatial Learning

Rul von Stulpnagel, Saskia Kuliga, Simon J. Buechner, Christoph Holscher

What to Simulate? Inferring the Right Direction for Mental Rotation

Jessica Hamrick, Tom Griffiths

Semantics and Lexicon

[Room 301 B]

Cross-Linguistic Evidence for Cognitive Foundations of Polysemy

Huichun Zhu, Barbara Malt

The Divergent Lexicon: Lexical Overlap Decreases With Age in a Large Corpus of Conversational Speech

Stephan Meylan, Susanne Gahl

The Semantics of Climate Change and Global Warming

Timothy Gann, Teenie Matlock

The Structure of the Lexicon Reflects Principles of Communication

Molly Lewis, Elise Sugarman, Mike Frank

Action and Gesture - Impact

[Room 201 C]

Beat Gestures Facilitate Speech Production

Che Lucero, Holly Zaharchuk, Daniel Casasanto

Observed Motor Actions Affect Valence Judgments

Juanma de la Fuente, Daniel Casasanto, Julio Santiago

The Protean Pointing Gesture: Variation in a Building Block of Human Communication

Kensy Cooperrider, Rafael Nunez, James Slotta

The QUERTY Effect: How Typing Shapes Word Meanings and Baby Names

Daniel Casasanto, Kyle Jasmin, Geoffrey Brookshire, Tom Gijssels

Detailed Program: Thursday 24 July 2014

Thursday 24 July 2014

Talks: 16:30 - 17:50

Attention 2

[Room 301 A]

Comparing Accounts of Psychomotor Vigilance Impairment Due to Sleep Loss

Matthew Walsh, Glenn Gunzelmann, Hans Van Dongen

Hearing "Moon" and Looking Up: Word-Related Spatial Associations Facilitate Saccades to Congruent Locations

Ben Dunn, Yuki Kamide, Christoph Scheepers

Requirements for Predicting the Impact of Fatigue on Human Behavior

Glenn Gunzelmann

Categorization: Experimental Issues

[Room 303 A]

Categorical Perception of Facial Expressions is Not a Homogeneous Effect

Olga Korolkova

Learned Visual Categorical Perception Effects Depend on Method of Assessment and Stimulus Discriminability

Joshua de Leeuw, Janet Astington, Ken Livingston

The Effect of Pre-Exposure on Family resemblance Categorization for Stimuli of Varying Levels of Perceptual Difficulty

Fraser Milton, Edward Copestake, David Satherley, Tobias Stevens, Andy Wills

Violations of Local Independence Assumption in Categorization

Jesse Zee, Gert Storms, Steven Verheyen

Improving Instruction

[Room 303 B]

Achievement Goals, Observed Behaviors, and Performance: Testing a Mediation Model in a College Classroom

J. Elizabeth Richey, Timothy J. Nokes-Malach, Aleza Wallace

Creating Visual Explanations Improves Learning

Eliza Bobek, Barbara Tversky

Does Maths Anxiety Make People Bad Decision-Makers? The Link Between Mathematical Anxiety and Cognitive Reflection

Kinga Morsanyi, Chiara Busdraghi, Caterina Primi

Improving Programming Instruction with Subgoal Labeled Instructional Text

Lauren Margulieux, Richard Catrambone

Memory: Interference and Illusion

[Room 200 A]

A Continuous Source Reinstatement Model of True and Illusory Recollection

Brendan Johns, Michael Jones, Douglas Mewhort

Looking Forwards and Backwards: Similarities and Differences in Prediction and Retrodiction

Kevin Smith, Ed Vul

Memory is Deceiving: A Typical Size Induces the Judgment Bias in the Ebbinghaus Illusion

Amandine Eve Rey, Benoit Riou, Remy Versace

The Cost of Learning: Interference Effects on Early Learning and Memory

Kevin Darby, Vladimir Sloutsky

Detailed Program: Thursday 24 July 2014

Decision-Making 1

[Room 200 B]

Effects of Problem Schema on Successful Maximizing in Repeated Choices

Jie Gao, James Corter

How Awareness and Valuation of the Future Jointly Shape Intertemporal Financial Decisions

Daniel Bartels, Oleg Urminsky, Shane Frederick

Misestimating Probability Distributions of Repeated Events

Oleg Urminsky

A Mathematical Formalization of Fuzzy Trace Theory

David Broniatowski, Valerie Reyna

Discourse and Pragmatics

[Room 205]

Addressee Backchannels Influence Overhearers' Comprehension of Dialogue

Jackson Tolins, Jean E. Fox Tree

An Exploratory Investigation of Word Aversion

Paul Thibodeau, Christopher Bromberg, Robby Hernandez, Zachary Wilson

Quantifying Categorical and Conceptual Convergence in Child-Adult Dialogue

Raquel Fernandez, Robert Grimm

Philosophical Issues 1

[Room 302]

How Does Bayesian Reverse-Engineering Work?

Carlos Zednik, Frank Jakel

Is There a Monadic as Well as a Dyadic Bayesian Logic? Two Logics Explaining Conjunction "Fallacies"

Momme von Sydow

Toward Boundedly Rational Analysis

Thomas Icard

Number Cognition 1

[Room 304]

Cutting In Line: Discontinuities in the Use of Large Numbers by Adults

David Landy, Arthur Charlesworth, Erin Ottmar

Subitizing and Finger Gnosis Predict Calculation Fluency in Adults

Marcie Penner-Wilger, Rylan J. Waring, Adam T. Newton

Numerical Estimation Under Supervision

John Opfer, Clarissa Thompson

Semantics and Pragmatics

[Room 301 B]

Theory Comparison for Generalized Quantifiers

Marco Ragni, Henrik Singmann, Eva-Marie Steinlein

Formalizing the Pragmatics of Metaphor Understanding

Justine Kao, Leon Bergen, Noah Goodman

Meaning and Use of Gradable Adjectives: Formal Modeling Meets Empirical Data

Ciyang Qing, Michael Franke

Metaphoric Iconicity in Signed and Spoken Languages

Defu Yap, Laura Staum Casasanto, Daniel Casasanto

The Metaphors We Speak With Affect How We Think About Time and Space

Martin Lleras, Florencia Reali, Camila Avliar, Maria Paula Bermudez

Detailed Program: Thursday 24 July 2014

Cognitive Development - Impact of Language

[Room 201 C]

Gesture and Speech Input are Interlocking Pieces: The Development of Childrens Jigsaw Puzzle Assembly Ability

Christopher Young, Erica Cartmill, Susan Levine, Susan Goldin-Meadow

Partial Color Word Comprehension Precedes Production

Katie Wagner, Jill Jergens, David Barner

Preschoolers Infer Contrast from Adjectives if They Can Access Lexical Alternatives

Alexandra Horowitz, Michael Frank

Reappraising Lexical Specificity in Childrens Early Syntactic Contributions

Stewart M. McCauley, Morten H. Christiansen

Detailed Program: Friday 25 July 2014

Friday 25 July 2014

Symposia: 10:30 - 12:10

Rumelhart Symposium

Invited Symposium
[Room 200 C]

Chair: Peter Culicover
Barbara Landau, Frederick Newmeyer,
Adele Goldberg

Multimodal Symbolic Representations of Number: Everything You Ever Wanted to Know About Mental Abacus But Were Afraid to Ask

Symposium
[Room 301 A]

David Barner, George Alvarez, Mahesh Srinivasan, Neon Brooks, Susan Goldin-Meadow, Jessica Sullivan, Katie Wagner, Michael Frank

Origins of Time: New Insights Into the Psychological Foundations of Time

Symposium
[Room 303 A]

Katharine Tillman, Esther Walker, Tyler Marghetis, Andrea Bender, Sieghard Beller, Mahesh Srinivasan, David Barner, Julian Santiago, Benjamin Bergen, Rafael Nunez, Daniel Casasanto, Lera Boroditsky

The Role of Alternatives in Pragmatic Inference

Symposium
[Room 303 B]

Judith Degen, Noah Goodman, Roni Katzir, David Barner, Albert Gatt

Crisis in Cognitive Science? Rise of the Undead Theories

Symposium

[Room 201 C]

Moritz Heene, James Coyne, Greg Francis, Phil Maguire, Rebecca Maguire

Friday 25 July 2014

Talks: 10:30 - 12:10

Causal Cognition 2

[Room 200 A]

Causal Supersession

Jonathan Kominsky, Jonathan Phillips, Tobias Gerstenberg, David Lagnado, Joshua Knobe

Contextual Abnormality for Teleological Explanation

Alexandra Varga

Learning Causal Direction from Transitions with Continuous and Noisy Variables

Kevin Soo, Benjamin Rottman

From Counterfactual Simulation to Causal Judgment

Tobias Gerstenberg, Noah Goodman, David Lagnado, Joshua Tenenbaum

Simplicity and Goodness-of-Fit in Explanation: The Case of Intuitive Curve-Fitting

Samuel Johnson, Andy Jin, Frank Keil

Vision and Reading

[Room 200 B]

Comparing Global and Limited Sampling Strategies in Size-Averaging a Set of Terms

Midori Tokita, Akira Ishiguchi

Machine Learning of Visual Object Categorization: An Application of the SUSTAIN Model

Giovanni Sirio Carmantini, Andy Wills

Does the Emotional Modulation of Visual

Detailed Program: Friday 25 July 2014

Experience Entail the Cognitive Penetrability or Emotional Penetrability of Early Vision?

Athanassios Raftopoulos

Parallel vs. Serial Issues in Reading Aloud: Evidence for Parallel Processing from a Computational Model of Japanese Kanji & Kana Non-word Reading

Taiji Ueno, Kenji Ikeda, Yuichi Ito, Shinji Kitagami, Jun Kawaguchi

Empirical Approaches to Linguistics 2

[Room 205]

Self-Organized Artificial Grammar Learning in Spiking Neural Networks

Renato Duarte, Peggy Series, Abigail Morrison

Interactions Between Statistical Aggregation and Hypothesis Testing Mechanisms During Word Learning

Alexa Romberg, Chen Yu

The Strategic Use of Noise in Pragmatic Reasoning

Leon Bergen, Noah Goodman

Valence Weakly Constrains the Information Density of Messages

David Vinson, Rick Dale

Sentence Processing in Spiking Neurons: A Biologically Plausible Left-Corner Parser

Terrence Stewart, Feng-Xuan Choo, Chris Eliasmith

Spatial Cognition

[Room 302]

Childrens Inferences Based on Figure and Ground Thematic Roles

Eleanor Chestnut, Ellen Markman

The Relation of Space and Musical Pitch in the Brain

Sarah Dolscheid, Roel M. Willems, Peter Hagoort, Daniel Casasanto

Modeling Spatial Abstraction During Mental Rotation

Andrew Lovett, Holger Schultheis

Number Cognition 2

[Room 304]

A Neural Network Model of Learning Mathematical Equivalence

Kevin W. Mickey, James L. McClelland

Individuation vs. Aggregation Strategies for Processing Number Sets

Patrick Cravalho, Bradley Morris, Christopher Was, Amy Masnick

Two Plus Three is Five: Discovering Efficient Addition Strategies Without Metacognition

Steven Stenberg Hansen, Cameron Ross Lloyd McKenzie, James L. McClelland

Friday 25 July 2014

Symposium: 14:30 – 15:50

Moral Cognition and Computation

Invited Symposium

[Room 200 C]

Fiery Cushman, Joshua Knobe, Paul Bello, Joshua Tenenbaum

Friday 25 July 2014

Talks: 14:30 – 15:50

Language Acquisition 1

[Room 301 A]

Contribution of Sublexical Information to Word Meaning: An Objective Approach Using Latent Semantic Analysis on Predicates

Keisuke Inohara, Taiji Ueno

Effects of Text Exposure on Spoken Sentence Production

Jessica Montag, Maryellen MacDonald

Detailed Program: Friday 25 July 2014

Self-Consistency as an Inductive Bias in Early Language Acquisition

Abdellah Fourtassi, Ewan Dunbar, Emmanuel Dupoux

Studying Frequency Effects in Learning Center-embedded Recursion

Jun Lai, Emiel Krahmer, Jan Sprenger

Methodology - Applications

[Room 303 A]

Brainprint: Identifying Unique Features of Neural Activity with Machine Learning

Maria Ruiz-Blondet, Negin Khalifian, Blair Armstrong, Zhanpeng Jin, Sarah Lazlo

Development of a Design Database and Experimental Discussion of Brain Activations for Creativity Assessment

Hitoshi Terai, Kazuhisa Miwa, Syunsuke Mizuno

Discriminative Dimensionality Reduction for Analyzing EEG Data

Eunho Noh, Virginia de Sa

It's a Catastrophe! Testing Dynamics Between Competing Cognitive States Using Mixture and Hidden Markov Models

Ingmar Visser, Maarten Speekenbrink

Teaching and Learning

[Room 303 B]

Benefits of Variation Increase with Preparation

David Braithwaite, Robert Goldstone

Improving Childrens Spelling Ability with a Morphology-Based Intervention

Kendall Kolne, Laura Gonnerman

Biases for Learning From Teaching

Nicholas Searcy, Patrick Shafto

Order Effects in Learning Relational Structures

Baxter Eaves, Patrick Shafto

Memory: Multimodal Investigations

[Room 200 A]

Effective EEG Connectivity Analysis of Episodic Memory Retrieval

Chung-Yeon Lee, Byoung-Tak Zhang

Experience Matters: Modeling the Relationship Between Face and Object Recognition

Panqu Wang, Isabel Gauthier, Garrison Cottrell

Neural Efficiency in Working Memory Tasks: The Impact of Task Demand and Training

Daniela Nussbaumer, Roland H. Grabner, Elsbeth Stern

Nonverbal Cues of Meta-Memory Awareness in Older Adults

Mandy Visser, Marie Postma, Emiel Krahmer, Marc Swerts

Reasoning - Mechanisms

[Room 200 B]

A Tentative Role for FOXP2 in the Evolution of Dual-Processing Modes and Generative Abilities

Courtney Chrusch, Liane Gabora

Amortized Inference in Probabilistic Reasoning

Samuel Gershman, Noah Goodman

Does Coffee Make You Reason Smarter? The Effect of Caffeine on Executive Functioning and Dual-Process Reasoning

Katrijn Pijpijn, Stievy Visterin, Leen Janssens, Walter Schaeken

The 'Ah-Ha!' Moment: When Possible, Answering the Currently Unanswerable Using Focused Reasoning

Daniel Schlegel, Stuart Shapiro

Detailed Program: Friday 25 July 2014

Word Use and Learning

[Room 205]

Failure to (Mis)communicate:

Linguistic Convergence, Lexical Choice, and Communicative

Success in Dyadic Problem Solving

Alexandra Paxton, Jennifer M. Roche,
Alyssa Ibarra, Michael K. Tanenhaus

Moral Rhetoric in Twitter: A Case Study of the U.S. Federal Shutdown of 2013

Eyal Sagi, Morteza Dehghani

Typical Use of Quantifiers: A Probabilistic Speaker Model

Michael Franke

Learning Meaning Without Primitives: Typology Predicts Developmental Patterns

Barend Beekhuizen, Afsaneh Fazly,
Suzanne Stevenson

Philosophical Issues 2

[Room 302]

Is Holism a Problem for Inductive Inference? A Computational Analysis

Maxwell A. Bertolero, Tom Griffiths

Is Episodic Memory a Natural Kind? A Defense of the Sequence Analysis

Markus Werning, Sen Cheng

The Nativist Input Problem: Why Evolutionary Psychology Still Can't Explain Human Intelligence

Linus (Ta-Lun) Huang

The Task-Oriented Approach to Psychology: A Solution to Fodor's Problem

Ed Baggs

Number Cognition 3

[Room 304]

Are Fractions Natural Numbers Too?

Percival Matthews, Dana Chesney, Nicole McNeil

Experimental Origins of the Mental Number Line

Benjamin Pitt, Daniel Casasanto

Numerical Systems Across Languages Support Efficient Communication: From Approximate Numerosity to Recursion

Yang Xu, Terry Regier

Syntax

[Room 301 B]

Dependencies and Hierarchical Structure in Sentence Processing

Peter Baumann

Measuring Gradience in Speakers' Grammaticality Judgments

Jey Han Lau, Alexander Clark, Shalom Lappin

Predictability and Syntactic Production: Evidence From Subject Omission in Russian

Ekaterina Kravtchenko

The Distinction Between Unaccusative and Unergative Verbs in Turkish: An Offline and an Eye-Tracking Study of Split Intransitivity

Deniz Zeyrek, Cengiz Acarturk

Cognitive Development - Reasoning

[Room 201 C]

A Developmental Model of Hemispheric Asymmetry of Spatial Frequencies

Ben Cipollini, Garrison Cottrell

Interhemispheric Integration of Visual Concepts in Infancy

Kimberly Scott, Laura Schulz

Detailed Program: Friday 25 July 2014

**The Impact of Statistical Training on
Childrens Inductive Reasoning**
Susan Stanley, Chris Lawson

**The Unintended Consequence of
Checklists**
Elise A. Stave, Paul J. Muentener,
Laura Schulz

Friday 25 July 2014

Symposia: 16:30 – 17:50

Glushko Dissertation Award Winners
Invited Symposium
[Room 200 C]

Dr. Samuel Gershman - 2013 PhD thesis
"Memory Modification in the Brain:
Computational and Experimental
Investigations " from Princeton University

Dr. Celeste Kidd - 2013 PhD thesis "Rational
Approaches to Learning and
Development" from University of
Rochester

Dr. Victoria Leong - 2013 PhD thesis "Speech
Rhythm Cognition : A Multi-Disciplinary
Account" from University of Cambridge

Dr. Ian Lyons - 2013 PhD thesis "A Sense of
Order: Ordinality and the meaning of
symbolic numbers" from University of
Chicago

Dr. Takao Sasaki - 2013 PhD thesis
"Psychology of A Superorganism" from
Arizona State University

Friday 25 July 2014

Talks: 16:30 - 17:50

Language Acquisition 2

[Room 301 A]

Isolating Second Language Learning Factors in a Computational Study of Bilingual Construction Acquisition

Yevgen Matuskevych, Afra Alishahi, Ad
Backus

Language Acquisition of Bilingual Children: A Network Analysis

Samuel Bilson, Hanako Yoshida,
Thomas Hills

Learning to Express Left-Right & Front- Behind in a Sign versus Spoken Language

Beyza Sumer, Pamela Perniss, Inge
Zwitserslood, Asli Özyürek

Type of Iconicity Matters: Bias for Action-based Signs in Sign Language Acquisition

Gerardo Ortega, Beyza Sümer, Asli
Özyürek

Methodology - Foundations

[Room 303 A]

A Hierarchical Approach to the Optimal Design of Experiments

Woojae Kim, Mark Pitt, Zhong-Lin Lu,
Mark Styvers, Jairong Gu, Jay Myung

Bidimensional Regression: Issues with Interpolation

Tyler Thrash, Ioannis Giannopolous,
Victor Schinazi

One Semiring to Rule Them All

Gianluca Giorgolo Ash Asudeh

Percentile Analysis for Goodness-of-Fit Comparisons of Models to Data

Sangeet Khemlani, Greg Trafton

Detailed Program: Friday 25 July 2014

Concept of Belief

[Room 303 B]

Purpose-Based Thinking Affects Belief in the Existence of Everyday Objects

Jacob Dink, Lance Rips

Because the Brain Agrees: The Impact of Neuroscientific Explanations for Belief

Dillon Plunkett, Tania Lombrozo, Lara Buchak

Beliefs About Experiencing and Destroying Art

Jessecae Marsh, Darren Hick

Memory and Language

[Room 200 A]

Effect of Naming on Haptic Memory in Children and Adults

Trevor Cessna, Shealan McAlister, Heidi Kloos, Robert Frank

Emergence of Semantic Memory Through Sequential Event Prediction and its Role in Episodic Future Thinking

Yuichi Ito, Taiji Ueno, Shinji Kitagami, Jun Kawaguchi

Generating Structure from Experience: The Role of Memory in Language

Brendan Johns, Michael Jones

The Role of Procedural Memory in Adult Second-Language Acquisition

Katherine Brill-Schuetz, Kara Morgan-Short

Reasoning - Foundations

[Room 200 B]

Can Formal Non-Monotonic Systems Properly Describe Human Reasoning?

Gregory Kuhnmuensch, Marco Ragni

On Fallacies and Normative Reasoning: When Peoples Judgments Follow Probability Theory

Fintan Costello, Travis Mathison

Some Arguments are Probably Valid: Syllogistic Reasoning as Communication

Michael Tessler, Noah Goodman

Symbolic Reasoning with Bounded Cognitive Resources

Claes Strannegard, Abdul Rahim Nizamani, Fredrik Engstrom, Olle Haggstrom

Language

[Room 205]

Modeling Sentence Processing Difficulty With a Conditional Probability Calculator

Zhong Chen, Tim Hunter, Jiwon Yun, John Hale

Competitor Activation and Semantic Interference: Evidence from Combined Phonological and Semantic Similarity

Alexandra Frazer, Padraig O'Seaghdha, Hector Munoz-Avila, Nicholas Roessler

Electrophysiology of Pragmatic Processing: Exploring the Processing Cost of the Scalar Implicature in the Truth-Value Judgment Task

Maria Spyckalska, Jarmo Kontinen, Markus Werning

Global Cocktail Parties and an Arms-Race in Language Evolution

Thomas Hills, James Adelman

The Effects of Semantic Priming on Novel Verb Inflection

Molly McCarthy, Trina Kershaw

Detailed Program: Friday 25 July 2014

Philosophical Issues 3

[Room 302]

On the Nature of Moral Judgment

Nalini Ramlakhan

A Social-Conceptual Map of Moral Criticism

John Voiklis, Corey Cusimano, Bertram Malle

Running to Do Evil: Costs Incurred by Perpetrators Affect Moral Judgment

Julia Jara-Ettinger, Nathaniel Kim, Paul Muentener, Laura Schulz

Number Cognition 4

[Room 304]

Applying Math onto Mechanism: Investigating the Relationship Between Mechanistic and Mathematical Understanding

Allison Liu, Christian Schunn

Copying Equations to Assess Mathematical Competence: An Evaluation of Pause Measures Using Graphical Protocol Analysis

Peter Cheng

Equations are Effects: Using Causal Constrasts to Support Algebra Learning

Jessica M. Walker, Patricia W. Cheng, James W. Stigler

The Influence of Feedback on the Flexibility of Strategy Choices in Algebraic Problem Solving

Daniela Nussbaumer, Michael Schneider, Elsbeth Stern

Speech and Prosody

[Room 301 B]

Holistic Processing in Speech Perception: Experts and Novices Processing of Isolated Cantonese Syllables

Tianyin Liu, Janet Hui-wen Hsiao

Prosodic encoding of Informativity: Word Frequency and Contextual Probability Interact with Information Structure

Iris Chuoying Ouyang, Elsi Kaiser

Rapid Adaptation in Online Pragmatic Interpretation of Contrastive Prosody

Chigusa Kurumada, Meredith Brown, Sarah Bibyk, Daniel Pontillo, Michael Tanenhaus

They Know the Words But Not the Music: Deficits in Perceiving Prosodic Cues to Emotion by Individuals With Psychopathic Characteristics

Angel Mackenzie, John Logan

Attention 3

[Room 201 C]

A Comprehensive Model of Spoken Word Recognition Must Be Multimodal: Evidence from Studies of Language Mediated Visual Attention

Alistair Smith, Padraic Monaghan, Falk Huettig

Detecting Hands in Childrens Egocentric Views of Understand Embodied Attention During Social Interaction

Sven Bambach, John Franchak, David Crandall, Chen Yu

Endogenously But Not Exogeneously-Driven Selective Sustained Attention is Related to Learning in a Classroom-Like Setting in Kindergarten Children

Lucy Erickson, Erik thiessen, Karrie Godwin, John Dickerson, Anna Fisher

Detailed Program: Friday 25 July 2014

**Selective Sustained Attention, the
Visual Environment, and Learning in
Kindergarten-Age Children:
Preliminary Results of an Individual
Difference Study**

Karrie Godwin, Anna Fisher

Detailed Program: Saturday 26 July 2014

Saturday 26 July 2014

Symposia: 10:30 - 12:10

The Future of Human-Robot Interaction

Invited Symposium
[Room 200 C]

Matthias Scheutz, Brian Scassellati,
Minoru Asada

Moot Point Process Models

Symposium
[Room 301 A]

Brad Love, Jana Jarecki, Jerome
Busemeyer, Neils Taatgen, Tom
Griffiths, Jenny Mirjam

Tetris as a Research Paradigm: An Approach to Studying Complex Cognitive Skills

Symposium
[Room 303 A]

Wayne Gray, Ray Perez, John
Lindstedt, Anna Skinner, Robin
Johnson, Richard Mayer, Deanne
Adams, Kurt VanLehn

The Role of Comparison in Social Cognition

Symposium
[Room 303 B]

Christian Hoyos, Dedre Gentner,
Theodore Bach, Andrew Meltzoff,
Stella Christie, Valerie San Juan,
Patricia Ganea, William Horton

Understanding Affective Cognition: Frontiers in Modeling Reasoning About Others' Emotions

Symposium
[Room 200 A]

Desmond Ong, Jamil Zeki, Noah
Goodman

Creative Cognition Symposium

[Room 200 B]

Will Bridewell, Liane Gabora, David Kirsh,
Paul Thagard

Computational Cognition Ideation Challenge

Symposium

[Room 201 C]

Kevin Gluck, Vladislav Veksler, Norbou
Buchler, Troy Kelley, Paul Bello, James
Donlon, Alonso Vera, Bob Lee

Saturday 26 July 2014

Talks: 10:30 - 12:10

Computational Modeling - Symbolic

[Room 205]

Deconstructing Episodic Memory and Learning in Sigma

Paul Rosenbloom

Learning Physical Theories from Dynamical Scenes

Tomer Ullman, Andreas Stuhlmüller, Noah
Goodman, Joshua Tenenbaum

Structural Differences in Semantic Networks of Simulated Word Learners

Aida Nematzadeh, Afsaneh Fazly, Susanne
Stevenson

Detailed Program: Saturday 26 July 2014

The Systematicity of the Sign: Modeling Activation of Semantic Attributes from Nonwords

ToPadraic Monaghan, Gary Lupyan, Morten Christiansen

Learning 1

[Room 302]

Acquiring Inductive Constraints from Self-Generated Evidence

Zi Sim, Fei Xu

Block Boxes: Hypothesis Testing via Indirect Perceptual Evidence

Max Slegel, Rachel Magid, Joshua Tenenbaum, Laura Schulz

Classical Conditioning via Inference Over Observable Situation Contexts

Nisheeth Srivastava, Paul Schrater

Discriminative Learning Predicts Human Recognition of English Blend Sources

Scott Seyfarth, Mark Myslin

Developmental Changes in the Semantic Organization of Living Kinds

Layla Unger, Anna V. Fisher, Christopher MacLellan

Preferences in Decision-Making

[Room 304]

Following the Scent: Applying the Ecological Valence Theory to Odor Preferences

Karen B. Schloss, Carolyn S. Goldberger, Stephen E. Palmer, Carmel A. Levitan

Frugal Preference Formation

Nisheeth Srivastava, Paul Schrater

How Robust is the Recent Event Preference?

Dato Abashidze, Maria Nella Carminati, Pia Knoeferle

Subjective Hazard Rates Rationalize "Irrational" Temporal Preferences

Christian Luhmann, Michael Bixter

Decision-Making 2

[Room 301 B]

A Bounded Rationality Account of Wishful Thinking

Rebecca Neumann, Anna Rafferty, Thomas Griffiths

Previously Encountered Options Affect Risky Decisions in Choices Between Pension Funds

Sarah Smith, Adam Harris

Context Effects and Risk Amplification: Why More is Risky

Takao Noguchi, Thomas Hills

Sequential Effects: A Bayesian Analysis of Prior Bias on Reaction Time and Behavioral Choice

Shunan Zhang, He Huang, Angela J. Yu

Saturday 26 July 2014

Talks: 14:30 - 15:50

Causal Cognition and Action

[Room 301 A]

Causation, Force and the Sense of Touch

Phillip Wolff, Samuel Ritter, Kevin Holmes

Decisions to Intervene on Causal Systems are Adaptively Selected

Anna Coenen, Bob Rehder, Todd Gureckis

The Influence of Causal Knowledge on the Comprehension and Retention of Medical Information Among Younger and Older Adults

Karen Michelle Zhang, Leora Swartzmann, John Paul Minda

Working Memory and Causal Reasoning Under Ambiguity

Yiyun Shou, Michael Smithson

Detailed Program: Saturday 26 July 2014

Computational Modeling - Architecture

[Room 303 A]

A Neural Model of Hierarchical Reinforcement Learning

Daniel Rasmussen, Chris Eliasmith

ACT-R Models of a Delayed Match-to- Sample Task

Sarah Cebulski, Sterling Somers

Endowing a Cognitive Architecture with World Knowledge

Dario Salvucci

Extending the Influence of Contextual Information in ACT-R Using Buffer Decay

Robert Thomson, Stefano Bennati,
Christian Lebiere

Action and Gesture - Understanding

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Jun Ichikawa, Kazuhisa Miwa, Hitoshi
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Harvesting Motion Patterns in Still Images from the Internet

Jiajun Wu, Yining Wang, Zhulin Li,
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Information Selection in Noisy Environments with Large Action Spaces

Pedro Tsividis, Samuel Gershman,
Joshua Tenenbaum, Laura Schulz

Learning a Motor Grammar of Iconic Gestures

Amir Sadeghipour, Stefan Kopp

Skillex, An Action Labeling Efficiency Score: The Case for French and Mandarin

Yann Desalle, Bruno Gaume, Karine
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Multimodal Cognition

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An Electrophysiological Study of Intra- and Inter-modal Duration

Discrimination: Effects of Performance Level

Emi Hasuo, Emilie Gontier, Takako
Mitsudeo, Yoshitaka Nakajima, Shozo
Tobimatsu, Simon Grondin

Evaluation of Cognitive Processing in Redundant Audio-Visual Signals

Elizabeth Fox, Joseph Glavan, Joseph
Haupt

Making Sense Out of Food

Brent Kievit-Kylar, Peter Todd, Yong-
Yeol Ahn

What Color is that Smell? Cross- Cultural Color-Odor Associations

Carmel Levitan, Jiana Ren, Andy
Woods, Sanne Boesveldt, Jason Chan,
Kirsten McKenzie, Michael Dodson, Jai
Levin, Xiang Ru Leong, Jasper van den
Bosch

Decision-Making 3

[Room 200 B]

Information Versus Reward in a Changing World

Daniel Navarro, Ben Newell

Sampling of Social Information: Decision From Experience in Bargaining

Nadine Fleischhut, Florian Artinger,
Sebastian Olschewski, Kirsten Volz,
Ralph Hertwig

The Value of Approaching Bad Things

Alexander Rich, Todd Gureckis

Trajectory Effects in a Novel Serial Reaction Time Task

George Kachergis, Floris Berends, Roy
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Modeling Decision-Making

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Bayesian Updating: A Framework for Understanding Medical Decision Making

Talia Robins, Pernille Hemmer, Yubei Tang

Modeling Probability Knowledge and Choice in Decisions From Experience

Guy Hawkins, Adrian Camilleri, Andrew Heathcote, Ben Newell, Scott Brown

Modeling Moral Choice as a Diffusion Process Dependent on Visual Fixations

Philip Parnamets, Daniel Richardson, Christian Balkenius

Threshold Models of Human Decision Making on Optimal Stopping Problems in Different Environments

Maime Guan, Michael Lee, Andy Silva

Problem Solving and Search 1

[Room 302]

A Preference for the Unpredictable Over the Informative During Self-Directed Learning

Doug Markant, Todd Gureckis

Foraging for Alternatives: Ecological Rationality in Keeping Options Viable

Hansjoerg Neth, Neele Englemann, Ralf Mayrhofer

Gestalt Effects in Planning: Rush-Hour as an Example

Stefano Bennati, Sven Brussow, Marco Ragni, Lars Konieczny

Learning By Asking: How Children Ask Questions to Achieve Efficient Search

Azzurra Ruggeri, Tania Lombrozo

Learning 2

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On-Line Measures of Prediction in a Self-Paced Statistical Learning Task

Elisabeth A. Karuza, Thomas A. Farmer, Alex B. Fine, Francis X. Smith, T. Florian Jaeger

Does Incidental Training Increase the Prevalence of Overall Similarity Classification? A Re-examination of Kemler Nelson (1984)

Angus Inkster, Fraser Milton, Andy Wills

One-Shot Learning of Generative Speech Concepts

Brenden Lake, Chia-ying Lee, James Glass, Joshua Tenenbaum

Transferring Primitive Elements of Skill Within and Between Tasks

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Does Language Shape the Production and Perception of Gestures? A Study on Late Chinese-English Bilinguals' Conceptions About Time

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Social Cognition - Modeling

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A Socially Aware Bayesian Model for Competitive Foraging

Sheeraz Ahmad, Angela Yu

Analyzing the Effect of Team Structure on Team Performance: An Experimental and Computational Approach

Ut Na Sio, Kenneth Kotovsky, Jonathan Cagan

Modeling Perspective-Taking by Correlating Visual and Proprioceptive Dynamics

Fabian Schrodtt, Georg Layer, Heiko Neumann, Martin Butz

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Visualizing Theory-of-Mind with Multiple Intrinsic Frames of Reference

Chen Liang, Yanlong Sun, Hongbin Wang

Spatial Cognition – Cross-Modal Perception

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Comprehending Action in Depicted Paths: Evidence From the Cognition of Motion Lines in Visual Narratives

Neil Cohn, Stephen Maher

Pierced by the Number Line: Integers are Associated with Back-to-Front Sagittal Space

Tyler Marghetis, Kendall Youngstrom

Pitch Effects Estimates of Space but Not Vice Versa

Alexander Kranjec, Matthew Lehet, Anjan Chatterjee

The Influence of Structural Salience and Verbalisation on Finding the Return Path

Thomas Hinterecker, Marianne Strickrodt, Florian Roser, Kai Hamburger

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Cognitive Modeling and Creativity

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Computationally Modeling Creativity: Implementation and Response to a Computer Being Creative on its Own

Stephen DiPaola

Multi-Model Comparison Using the Cross-Fitting Method

Holger Schultheis, Praneeth Naidu

Overreliance on Conceptually Far Sources Decreases the Creativity of Ideas

Joel Chan, Christian Schunn, Steven Dow

Computational Modeling – Interaction and Agents

[Room 303 A]

An Embodied Real-Time Model of Language- Guided Incremental Visual Search

Matthias Scheutz, Evan Krause, Sepideh Sadeghi

An Exploration of Social Grouping in Robots: Effects of Behavioral Mimicry, Appearance and Eye Gaze

Ahsan Nawroj, Mariya Toneva, Henny Admoni, Brian Scassellati

Computational and Algorithmic Models of Strategies in Turn-Based Games

Gerben Bergwerff, Ben Meijering, Jakub Szymanik, Rineke Verbrugge, Stefan Wierda

Speech and Gaze Conflicts in Collaborative Human-Robot Interactions

Henny Admoni, Christopher Datsikas, Brian Scassellati

Simulating Cognitive Complexity in Work Systems

William Clancey

Computational Modeling - Tools

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Coherence in the Visual Imagination: Local Hill Search Outperforms Thagard's Connectionist Model

Michael Vertolli, Jim Davies

GAMIT-Net: Retrospective and Prospective Interval Timing in a Single Neural Network

Caspar Addyman, Denis Mareschal

Learning and Variability in Spiking Neural Networks

Jeffrey Rodny, Chris Kello

Structure and Application of Dynamical Models in Cognitive Science

Maurice Lamb, Anthony Chemero

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Social Cognition - Perception

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Joint Inference of Belief and Desire from Facial Expressions

Yang Wu, Chris Baker, Joshua Tenenbaum, Laura Schulz

Predicting the Good Guy and the Bad Guy: Attitudes are Encoded in Language Statistics

Gabriel Recchia, Alexandra Slater, Max Louwerse

Reasoning About Social Choices and Social Relationships

Alan Jern, Charles Kemp

The Interplay Between Joint Attention, Physical Proximity and Pointing Gestures in Demonstrative Choice

David Peeters, Zeynep Azar, Asli Ozyurek

Decision-Making 4

[Room 200 B]

Choice Deferral in Models of Preference Accumulation

Sudeep Bhatia

Evolving Useful Delusions: Subjectively Rational Selfishness Leads to Objectively Irrational Cooperation

Artem Kaznatcheev, Marcel Montrey, Thomas Shultz

Predicting Behavior From the World: Naïve Behaviorism in Lay Decision Theory

Samuel Johnson, Lance Rips

The Availability Heuristic in a Symbolic-Connectionist Architecture

Aaron Hamer, Leonidas Doumas

Models of Memory

[Room 205]

Caching Algorithms and Rational Models of Memory

Avi Press, Michael Pacer, Thomas Griffiths, Brian Christian

Linking Memory Models and Decision

Models: Insights on Frequency and Speed/Accuracy Tradeoff

Gregory Cox, Richard Shiffrin

Multitasking in Working Memory

Ami Eidels, Joseph Hout, James Coleman, Jason Watson, David Strayer

Organizing the Space and Behavior of Semantic Models

Timothy Rubin, Brent Kievit-Kylar, Jon Willits, Michael Jones

Problem Solving and Search 2

[Room 302]

Adaptive Information Source Selection During Hypothesis Testing

Andrew Hendrickson, Amy Perfors, Daniel Navarro

Information Search in an Autocorrelated Causal Learning Environment

Benjamin Rottman

Problem Solving: What are the Important Questions?

Joachim Funke

Uncertainty and Exploration in a Restless Bandit Task

Maarten Speekenbrink, Emmanouil Konstantinidis

Word Learning

[Room 304]

Beyond Naïve Cue Combination: Salience and Social Cues in Early Word Learning

Daniel Yurovsky, Michael Frank

Real Words, Possible Words, and New Words

Janet Pierrehumbert

The Influence of Contextual Variability on Word Learning

Brendan Johns, Melody Dye, Michael Jones

Wordlikeness and Novel Word Learning

James Bartolotti, Viorica Marian

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Learning 3

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Reinforcement Learning and Counterfactual Reasoning Explain Adaptive Behavior in a Changing Environment

Yunfeng Zhang, Jaehyon Paik, Peter Pirolli

The Psychophysics of Algebra Expertise: Mathematics Perceptual Learning Interventions Produce Durable Encoding Changes

Carolyn Bufford, Everett Mettler, Emma Geller, Philip Kellman

Toward Understanding Expert Coding of Student Disengagement in Online Learning

Luc Paquette, Adriana de Carvalho, Ryan Baker

Using Dual Eye-Tracking to Evaluate Students' Collaboration with an Intelligent Tutoring System for Elementary-Level Fractions

Daniel Belenky, Michael Ringenberg, Jennifer Olsen, Vincent Aleven, Nikol Rummel

Learning With a Purpose: The Influence of Goals

Sarah Wellen, David Danks

Effects of Comparison and Explanation on Analogical Transfer

Brian Edwards, Joseph Williams, Dedre Gentner, Tania Lombrozo

Using a Hybrid Cognitive Architecture to Model Childrens' Errors in an Analogy Task

John Licato, Ron Sun, Selmer Bringsjord

Analogical Cognition

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Adults' Eye Tracking Search Profiles and Analogical Difficulty

Yannick Glady, Bob French, Jean-Pierre Thibaut

Automatic Analogical Reasoning Underlies Structural Priming in Comprehension of Ambiguous Sentences

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125	Wins above replacement: Responsibility attributions as counterfactual replacements	Tobias Gerstenberg, Tomer Ullman, Max Kleiman-Weiner, David Lagnado, Josh Tenenbaum
126	Comparing reinforcement learning in humans and artificial intelligence through Tetris	Logan Gittelsohn, John Lindstedt, Catherine Sibert, Wayne Gray
127	Evidence for parallel processing in the identification of shape and color during visual search	Joseph Glavan, Joseph Hout
128	A logical analysis of typicality	Valentina Gliozzi
129	A culture-by-context analysis of endowment effects	Matthias S. Gobel, Tiffanie Ong, Adam J. L. Harris
130	Inductive generalization in early childhood: The contribution of perceptual and representational similarity	Karrie Godwin, Anna Fisher
131	The role of alternative causes in moderating belief-based data weighting	Kelly Goedert, Michelle Ellefson
132	The nature of verbal short-term memory codes in Chinese	Lidia Suarez, Winston Goh, Eileen Soh

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133	Supervised neural network models for high-order motion detection	James Golden
134	Learning to cooperate in the prisoner's dilemma: Robustness of predictions of an instance-based learning model	Cleotilde Gonzalez, Noam Ben-Asher
135	Target categorization with primes that vary in both congruency and modality	Kathryn Weatherford, Michael Mills, Paula Goolkasian
136	Font can change how we think about what we think	Chelsea Gordon, Sarah Anderson, Michael Spivey
137	Real-time perspective taking: When your decision is influenced through visual competition	Michelle Greenwood, Michael Spivey
138	Do we recommend lower electricity consumption after priming with pro-social and intrinsic values?	Mona Guath, Peter Juslin
139	Assessing the time course of the influence of featural, distributional and spatial representations during reading	Ernesto Guerra, Falk Huettig, Pia Knoeferle
140	Spatial distance modulates reading times for sentences about social relations: Evidence from eye tracking	Ernesto Guerra, Pia Knoeferle
141	Effects of temporal and causal schemas on probability problem solving	S. Sonia Gugga, James E. Corter
142	Language evolution in the lab tends toward informative communication	Shubha Guha, Alexandra Carstensen, Terry Regier
143	Solving valid syllogistic problems using a bidirectional heteroassociative memory	Marie-France Hébert, Sylvain Chartier, Christophe Tremblay
144	Anthropogenesis and cultural development: Works of M. Tomasello from the cultural-historical perspective	Vladimir Glebkin
145	Back to basics: A critique of the false dichotomy surrounding the iowa gambling task	Courtney Humeny
146	A mathematical approach to investigate the relationship between association memory and latent semantic analysis for word meanings in English and Chinese	Ming-Liang Wei, Chung-Ching Wang, Yen-Cheng Chen, Yu-Lin Chang, Hsueh-Chih Chen, Jon-Fan Hu

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148	Assessing collaborative problem solving	Julia Hilse, Daniel Holt, Andreas Fischer, Joachim Funke
149	Symbolic representation in AI: A perspective from C. S. Peirce's semiotics	Angelo Loula, João Queiroz
150	The ordinary concept of personal identity	Kevin Patrick Tobia
151	Sentimental and monetary value in moral dilemmas	Charles Millar, Jonathan Fugelsang, Ori Friedman
152	L3 learning: Lexical effects from L1 and L2	Lucy Tse, Michael Yip
153	Animal abduction and the emergence of deception	Lorenzo Magnani, Tommaso Bertolotti
154	Fallacies as distributed "military" intelligence. The manifest cognitive value of fallacies	Lorenzo Magnani

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1	Reciprocal and multiplicative relational reasoning with rational numbers	Melissa DeWolf, Keith Holyoak
2	Measurement of engineering design creativity in undergraduate students	Trina Kershaw, Molly McCarthy, Sankha Bhowmick, Adam Young, Carolyn Seepersad, Paul Williams, Katja Hölttä-Otto
3	Mining Twitter for new words	Lance Hahn, William Walters, Taylor Blaetz
4	Automated scoring of originality using semantic representations	J. Isaiah Harbison, Henk Haarmann
5	Listening to the architecture: ACT-R, associative learning, and the fan-effect	Anthony Harrison
6	False memory for words with negative or positive valence	Hajimu Hayashi
7	Asking for help from a gendered robot	Emma Alexander, Caroline Bank, Jie Jessica Yang, Bradley Hayes, Brian Scassellati
8	Betting on transitivity in an economic setting	Dennis Hebbelmann, Momme von Sydow
9	In dialogue with an avatar, syntax production is identical compared to dialogue with a human partner	Evelien Heyselaar, Peter Hagoort, Katrien Segaert
10	Modeling the development of theory of mind	Laura Hiatt, Greg Trafton
11	Early understanding of intensive properties of matter: Developmental and cultural differences	Julia Hill, Anne Schlottmann, Michelle Ellefson, Keith Taber, Venus Tse, Tiffany Yung
12	SQUARELAND 2.0: a flexible and realistic virtual environment for investigating cognitive processes in human wayfinding	Thomas Hinterecker, Florian Röser, Marianne Strickrodt, Kai Hamburger
13	On what happens in speech and gesture when communication is unsuccessful	Marieke Hoetjes, Emiel Krahmer, Marc Swerts
14	A final refutation of a single-system model of category learning?	Måns Holgersson

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15	Categorical perception reflects non-basic color categories	Kevin Holmes, Terry Regier
16	Models of deferred decision making	Jared Hotaling, Jörg Rieskamp, Sebastian Gluth
17	Moral judgments and emotions: Exploring the role of 'inevitability of death' and 'instrumentality of harm'	Evgeniya Hristova, Veselina Kadreva, Maurice Grinberg
18	The role of theory of mind in teenagers' humor comprehension	Yong-Ru Hsiao, Yueh Lin Tsai, Yu-Chi Huang, Shih-Ching Lu, Chia-Jou Chuang, Ya-Lun Liang, Yu-Chen Chan, Hsueh-Chih Chen, Jon-Fan Hu
19	Reliability and validity of the empathy quotient: the Chinese version	Yong-Ru Hsiao, Yueh Lin Tsai, Yu-Chi Huang, Jon-Fan Hu
20	Young children's demonstration of adult-like syntactic competence—evidence from Mandarin Chinese	Dong-Bo Hsu
21	Inverse optimal control model of driving behavior in depressed individuals	He Huang, Katia Harle, Martin Paulus, Javier Movellan
22	Binocular interactions in center-surround modulation: Measurement and modeling	Pi-Chun Huang
23	Investigating time horizon of taiwanese speakers: A circle test	Shuping Huang
24	The effects of phonological complexity on word learning in deaf children with cochlear implants	Yu-Chen Hung, Jon-Fan Hu, Li-Chiun Tsai, Ya-Jung Lee, Pei-Ling Wang
25	Avoiding the language-as-a-fixed-effect fallacy: How to estimate outcomes of linear mixed models	Sterling Hutchinson, Lei Wei, Max Louwerse
26	Quick linguistic representations and precise perceptual representations: Language statistics and perceptual simulations under time constraints	Sterling Hutchinson, Richard Tillman, Max Louwerse

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27	Depth expression and semantic clarity of pictograms	Kentaro Inomata
28	Parsing strategies in film trailers	Catalina Iricinschi, Donald Hu
29	Attention to detail predicts better verbal analogy performance	Jessica L. Irwin, Lara L. Jones, Matthew J. Kmieciak, Nash Unsworth, Robert G. Morrison
30	The use of a foreign language can improve decision making under information overload	Gen Ito, Takeshi Shibata, Yohtaro Takano
31	Parallel belief updating in sequential diagnostic reasoning	Georg Jahn, Rebekka Stahnke, Felix G. Rebitschek
32	Making sense of the abstract uses of the prepositions in and on	Anja Jamrozik, Dedre Gentner
33	Relational labels: A simple way to improve the likelihood of relational retrieval	Anja Jamrozik, Dedre Gentner
34	'But' how do children judge it on a scale?	Leen Janssens, Annelies Van den Broeck, Walter Schaeken
35	Spatial reasoning: The effect of training for adults and children	Walter Schaeken, Veerle Breugelmans, Leen Janssens
36	Conditions for backtracking with counterfactual conditionals	Jung-Ho Han, William Jimenez-Leal, Steve Sloman
37	Coherence and argument structure: An empirical comparison between plausible reasoning and the Bayesian approach to argumentation	Christian Gaviria, William Jimenez-Leal
38	The unbearable burden of executive load on cognitive reflection: A validation of dual process theory	Eric D Johnson, Elisabet Tubau, Wim De Neys
39	Explanatory scope informs causal strength inferences	Samuel Johnson, Angie Johnston, Amy Toig, Frank Keil

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40	Classifying movements using efficient kinematic codes	Leif Johnson, Dana Ballard
41	The Bouba effect: Sound-shape iconicity in iterated and implicit learning	John Matthew Jones, David Vinson, Nourane Clostre, Alex Lau Zhu, Julio Santiago, Gabriella Vigliocco
42	Working memory and interference control in verbal analogy	Lara L. Jones, Jessica L. Irwin, Matthew J. Kmieciak, Nash Unsworth, Robert G. Morrison
43	Stimulus identity differentially influences the perception of space and time	Devin Gill, J. Scott Jordan
44	Developing semantic knowledge through cross-situational word learning	George Kachergis, Chen Yu, Richard Shiffrin
45	Tracking object location: Evidence from eye movements during event comprehension	Yuki Kamide, Anuenue Kukona
46	Modeling learning via progressive alignment using interim generalizations	Subu Kandaswamy, Ken Forbus, Dedre Gentner
47	The cognitive science research group at educational testing service (ETS)	Irvin R. Katz, Malcolm Bauer, Gabrielle Cayton-Hodges, Gary Feng, G. Tanner Jackson, Madeleine Keehner, Juan Diego Zapata-Rivera
48	The fast and the not-so-frugal: Human heuristics for optimization problem solving	Genovefa Kefalidou, Tom Ormerod
49	The memory tesseract: Distributed MINERVA and the unification of memory	Matthew Kelly, Douglas Mewhort, Robert West
50	The emotional ties that bind us to concerns of harm and fairness	Deirdre Kelly
51	A mental model theory of set membership	Sangeet Khemlani, Max Lotstein, Phil Johnson-Laird
52	Effects of moral concerns on negotiations	Eunkyoung Kim, Morteza Dehghani, Yoo Kyoung Kim, Peter Carnevale, Jonathan Gratch

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53	Mathematical proficiency: Number acuity vs. numeracy	Dan Kim, John Opfer
54	A portal designed to learn about educational robotics	ChanMin Kim, Prashant Doshi, Chi Thai, Dongho Kim, Jiangmei Yuan
55	Grammatical influences in a Bayesian speech production framework	Christo Kirov
56	How should examples be learned in a production task? An experimental investigation in mathematical problem posing	Kazuaki Kojima, Kazuhisa Miwa, Tatsunori Matsui
57	Associations between colors and affective words related to tourist attractions	Takatsugu Kojima, Tetsuaki Nakamura
58	You know it when you hear it: A review of computational models of jazz improvisation	Cody Kommers, Mark Tramo
59	Evidence of innate inclination for predilection of Western harmony	Cody Kommers, Mark Tramo
60	Effects of uncovering gaze target mismatch in human-robot joint visual attention on evaluation of understanding and impressions of robot	Takeshi Konno, Shoji Nagataki, Masayoshi Shibata, Takashi Hashimoto, Hideki Ohira
61	How perceived distractor distance influences reference production: Effects of perceptual grouping in 2D and 3D scenes	Ruud Koolen, Eugene Houben, Jan Huntjens, Emiel Krahmer
62	Not so bad after all? The role of explanation features in blame mitigation	Joanna Korman, Corey J. Cusimano, Jessica E. Smith, Andrew E. Monroe, Bertram F. Malle
63	The role of familiarity in segmentation of human action	Jessica Kosie, Dare Baldwin
64	Effects of speaker gaze versus depicted actions on visual attention during sentence comprehension	Helene Kreysa, Pia Knoeferle, Eva M. Nunnemann
65	Embodied cognition and emotion: A new explorative tool	Victor Kuperman, Amy Beth Warriner

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66	Does spatiotemporal integration occur with single empty time intervals instead of two neighboring intervals in the visual modality?	Tsuyoshi Kuroda, Simon Grondin, Shozo Tobimatsu
67	Optimizing the category construction task to promote learning and transfer of knowledge in classroom instruction	Kenneth J. Kurtz, Andy Cavagnetto, Garrett Honke, Nolan Conaway, John D. Patterson, James C. Marr, Yan Tao
68	Engaging the comparison engine: Implications for relational category learning and transfer	John D. Patterson, Kenneth J. Kurtz
69	The strength and weight of evidence in choice and confidence	Peter Kvam, Timothy Pleskac
70	Leaving Andy Clark's 'safe shores': Scaling predictive processing to higher cognition	Johan Kwisthout, Maria Otworowska, Harold Bekkering, Iris van Rooij
71	The influence of grammatical number on a congruency-effect between numbers (high,low) and nouns with implicit directional cue (roof,root)	Martin Lachmair, Susana Ruiz Fernández, HC Nuerk, Barbara Kaup
72	Complement coercion as the processing of aspectual verbs: Evidence from self-paced reading and fMRI	Yao-Ying Lai, Cheryl Lacadie, Todd Constable, Ashwini Deo, Maria M. Piñango
73	Logical reasoning process for high school and college students	Meng-Lung Lai, Yi-Hua Cheng, Chia-You Liu
74	Computational creativity: Generating new objects with a hierarchical Bayesian model	Brenden Lake, Josh Tenenbaum
75	People are sensitive to hypothesis sparsity during category discrimination	Steven Langsford, Andrew Hendrickson, Amy Perfors, Daniel Navarro
76	The cognitive reflection task, numeracy and decision-making tasks: A study in Taiwan	Joseph Lavalley, Supin Hung
77	When diverse evidence is (and isn't) inductively privileged: The influence of evidence presentation on children's and adults' generalization	Chris Lawson
78	Interaction between physiological and personality markers in the execution of a cognitive task	Yanina Ledovaya, Alexandra Moreno

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79	Unsupervised clustering of morphologically related Chinese words	Chia-Ling Lee, Ya-Ning Chang, Chao-Lin Liu, Chia-Ying Lee, Jane Yung-jen Hsu
80	Interpreting dynamic relationship between dreaming cognition and acculturative anxiety	Sang Bok Lee, Esther Jihye Lee
81	Modeling perceptual learning with deep networks	Rachel Lee, Andrew Saxe
82	The processing of humor advertisement: Evidence from eye movement	Yen-Lin Lee, Yu-Chen Chan, Hsueh-Chih Chen
83	Understanding shopper's true intention from conversational dialogue between salesperson and shopper	Soo-Young Lee, Bokyeong Kim
84	Predicting the semantic neural representations in Korean-Chinese early bilinguals	MiaoMei Lei, Hiroyuki AKAMA, Brian Murphy
85	The effects of external representations on fraction understanding	Despina Lepenioti, Stella Vosniadou
86	The neurocognitive roots of fraction knowledge	Mark Lewis, Percival Matthews, Edward Hubbard
87	Error-driven stochastic search for theories and concepts	Owen Lewis, Santiago Perez, Josh Tenenbaum
88	Constructing hierarchical concepts via analogical generalization	Chen Liang, Ken Forbus
89	The eye movement analysis of 3D spatial problem solving by the different cues between experts and novices	Yi-Jun Liao, Yu-Chen Chan, Hsueh-Chih Chen
90	The high availability of extreme events serves resource-rational decision-making	Falk Lieder, Ming Hsu, Thomas L. Griffiths
91	Supramodal representations in melodic perception	Ahnate Lim, Leonidas Doumas, Scott Sinnett
92	Can approximate number system acuity improve with arithmetic training?	Marcus Lindskog, Anders Winman, Leo Poom

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93	The timecourse of phonotactic learning	Tal Linzen, Gillian Gallagher
94	Working memory deficits in Chinese developmental dyslexia of ethnic minority children in China	Fang Liu, Yun Tao
95	Evaluating personality trait attribution based on gestures by virtual agents	Kris Liu, Jackson Tolins, Jean Fox Tree, Marilyn Walker, Michael Neff
96	The effects of complexity on relational recognition	Katherine Livins, Leonidas Doulmas
97	Attentional and immediate memory capacity limitations in the acquisition of non-native linguistic contrasts	Jordan Schoenherr, John Logan
98	Symbol interpretation in neural networks: An investigation on representations in communication	Emerson Oliveira, Angelo Loula
99	Fractional dynamics and multi-slide model of human memory	Ihor Lubashevsky, Bohdan Datsko
100	Modelling implicit attitudes with large corpora: A comparison of linguistic co-occurrence models	Dermot Lynott, Kerry O'Brien, Louise Connell, Nick Shryane, Himanshu Kansal, Michael Walsh
101	How do static and dynamic emotional faces prime incremental semantic interpretation? Comparing older and younger adults	Katja Münster, Maria Nella Carminati, Pia Knoeferle
102	What contributes to the frequency-modulated syllable effect in reading in French dyslexic children?	Norbert Maïonchi-Pino, Jean Écalle, Annie Magnan
103	Modeling multi-agent chaos: Killing aliens and managing difficult people	Korey MacDougall, Robert West, Emmanuelle Hancock
104	Flexible theft and resolute punishment: Evolutionary dynamics of social behavior among reinforcement-learning agents	James MacGlashan, Michael Littman, Fiery Cushman
105	Experimental investigation of simultaneous use of automation and alert systems	Akihiro Maehigashi, Kazuhisa Miwa, Hitoshi Terai, Kazuaki Kojima, Junya Morita

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106	Simple recurrent networks and human spoken word recognition	James S. Magnuson
107	Is consciousness computable? Quantifying integrated information using algorithmic information theory	Phil Maguire, Philippe Moser, Rebecca Maguire, Virgil Griffith
108	Effect of regularity structure in samples on hypothesis generation and categorization	Yoshimasa Majima
109	The ghosts of number forms (2): Between-individual variation of mental number lines in non-synaesthetes	Shogo Makioka
110	Source discrimination for unrecognized items? On empirical arguments against the high-threshold model of source memory	Simone Malejka, Arndt Bröder
111	A paradox of good intentions: The impact of control on moral judgment	Justin Martin, Fiery Cushman
112	Structure mapping in visual comparison: Embodied correspondence lines?	Bryan Matlen, Dedre Gentner, Steve Franconeri
113	The effects of thermal comfort on mere exposure effect	Ken Matsuda, Shunsuke Nakamoto, Hiroki Morioka, Kyosuke Hiyama, Tomonobu Goto, Makoto Koganei, Takashi Kusumi
114	Dual process in large number estimation under uncertainty	Miki Matsumuro, Kazuhisa Miwa, Hitoshi Terai, Kento Yamada
115	Bridging the gap between spatial and social reasoning: A look at social distance and estimated caloric expenditure	Justin L. Matthews, Teenie Matlock
116	Task relevance moderates saccade velocities to spatially separated cues	Caitlyn McColeman, Mark Blair
117	Counting practice with pictures, but not objects, improves children's understanding of cardinality	Lori Petersen, Nicole McNeil, Alice Tollaksen, Alexander Boehm, Casey Hall, Cristina Carrazza, Brianna Devlin

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118	Linguistic features of lectures: Offsetting challenging words	Srdan Medimorec, Philip I. Pavlik Jr., Andrew Olney, Arthur C. Graesser, Evan F. Risko
119	A Bayesian sequential sampling model of choice reaction time incorporating stimulus onset/duration uncertainty	Jordan Meyer, Jun Zhang
120	Children's flexibility in using spatial language and its relation to spatial skills	Hilary E. Miller, Haley A. Vlach, Vanessa R. Simmering
121	Establishing a communication system: Miscommunication drives abstraction	Gregory Mills
122	The role of attention allocation during induction	Tracey Miser, Vladimir Sloutsky
123	What brings diversity to story comprehension in classroom?	Satoko Miwa
124	Effects of harmonization between word's meaning and voice quality on memory	Kozue Miyashiro, Etsuko Harada, T.
125	Speaker-gaze modulates the inter-personal repetition of hand gestures	Lisette Mol, Milou Althof
126	Novel word recognition: the role of production	Elizabeth Morin-Lessard, Tania S. Zamuner, Stephanie Strahm, Michael Page
127	Comprehension of code-switching by bilingual infants	Krista Byers-Heinlein, Elizabeth Morin-Lessard
128	Intuitive statistics: Identifying children's data comparison strategies using eye tracking	Bradley Morris, Patrick Cravalho, Angela Junglen, Christopher Was, Amy Masnick
129	Working memory and crystallized knowledge in visual analogy	Robert G. Morrison, Matthew Kmiecik, Jessica L. Irwin, Nash Unsworth, Lara L. Jones
130	Grammatical change begins within the word: Causal modeling of the co-evolution of Icelandic morphology and syntax	Fermin Moscoso del Prado

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131	Categorical perception of spatial relations across languages: The case of support	Kelsey Moty, Kevin Holmes, Terry Regier
132	Is perceived expressivity of game players a cue to game outcome prediction accuracy?	Phoebe Mui, Martijn Goudbeek, Marc Swerts
133	Can causal sense-making benefit foresight, rather than biasing hindsight?	Edward Munnich, Jennifer Milazzo, Jade Stannard, Katherine Rainford
134	Harming is more intentional than helping because it is more probable: A hidden influence of probability on the Knobe effect	Kuninori Nakamura
135	Implications of stimulus sampling on the attraction effect	Shaurabh Nandy
136	Can music affect decisions-to-drink? Towards a dual-process model of risky decision-making	Anastasia Nikoulina, Lindsay Arcurio, Thomas James
137	Effects of eye gaze direction on vocal imitation in individuals with autism spectrum disorder: Does joint attention matter?	Marie Postma-Nilsenova, Mariska van Kastel, Martijn Balsters
138	Robotic learning of the delayed saccade task using a neurally inspired adaptive working memory system	David Noelle, Justin Ray
139	A pragmatic account of the processing of negative sentences	Ann Nordmeyer, Mike Frank
140	What is the learning potential of children's picture books? A content analysis of one type of naturalistic input	Angela Nyhout, Pierina Cheung
141	Privileged access and perspective taking	Zoltan Jakab, Szabolcs Kiss
142	A preliminary meta-analysis on the influence of scaffolding characteristics and study and assessment quality on cognitive outcomes in STEM education	Brian R. Belland, Andrew E. Walker, Nam Ju Kim, Mason R. Lefler
143	A generalized process model of human action selection and error and its application to error prediction	Frank Tamborello, Gregory Trafton
144	How do songs enhance memory?	Kayoko Sugino, Sachiko Kiyokawa

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145	Cognitive limitations impose advantageous constraints on word segmentation	Katarzyna Hitczenko, Gaja Jarosz
146	A prediction theory of motor representation	Daniel Hsi-wen Liu
147	Group biases in the prisoner's dilemma game: Looking for Simpson's Paradox effects on cooperation	Maurice Grinberg, Hristo Hristov, Evgenia Hristova
148	An innovation in the integration of cognitive science and NLP: A multi-level, multi-path approach	Kristina Doing-Harris
149	The C957T DRD2 polymorphism predicts rule-based category learning performance	Kaileigh A. Byrne, Darrell A. Worthy
150	The effect of ceiling height on the symbolic distance effect	Masashi Sugimoto, Takashi Kusumi, Tokika Kurita, Atsuo Ishikawa, Takeshi Sakaguchi, Megumi Nabetani, Hiroki Takahashi, Megumi Nishida
151	Cognitive dynamics underlying rule induction in children and adults	Steve Croker, Corinne Zimmerman, Bradley Morris

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1	Phoneme restoration in interactive activation models: Yes they can!	James S. Magnuson
2	Learning Chinese characters approach based on the association between character components	Chung-Ching Wang, Yu-Lin Chang, Hsueh-Chih Chen, Ming-Liang Wei, Yi-Ling Chung, Jon-Fan Hu
3	Two is company, three is a crowd: Party labels and number of candidates as determinants of 'incorrect' vote choice.	Keith O' Brien, Adam Harris
4	The effect of convergent interaction using subjective opinions in the decision-making process	Yoshimasa Ohmoto, Misao Kataoka, Toyoaki Nishida
5	Choice and strategy use facilitate preschoolers' cognitive flexibility	Allison O'Leary, Vladimir Sloutsky
6	The effects of learning on learning: Plasticity within infant and adult statistical learning	Luca Onnis, Erik Thiessen, Matthew Lou-Magnuson
7	The effects of strategy instruction and role assignment on reducing "my-side bias" during writing	Ryosuke Onoda
8	Effects of a mood and an unrecognized hint on insight problem solving	Ryo Orita, Masasi Hattori
9	Cognitive control mode predicts behavioral expression of model-based reinforcement-learning	A. Ross Otto, Anya Skatova, Seth Madlon-Kay, Nathaniel Daw
10	Magical thinking: Outcome bias affects children's evaluation of testimony	Iris Oved, Gail Heyman, David Barner
11	Concepts as representations for essences: Evidence from use of generics	Iris Oved, Pierina Cheung, David Barner
12	A model-based analysis of impulsivity using a slot-machine gambling paradigm	Saeed Paliwal, Frederike Petzschner, Anna Katharina Schmitz, Marc Tittgemeyer, Klaas Enno Stephan
13	Effects of instructing the relevance and processing efforts on property induction	Kyung Soo Do, In Jeng Yeon, Juhwa Park

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14	Heuristics as a special case of Bayesian inference	Paula Parpart, Matt Jones, Brad Love
15	Understanding the benefits of providing feedback: Improving letter writing ability by providing specific feedback	Melissa Patchan, Cynthia Puranik, Christopher Talbot, Sadie Digon
16	Analogy causes distorted memory by blending memory episodes	Margarita Pavlova, Boicho Kokinov
17	Network analysis of multimodal, multiscale coordination in dyadic problem solving	Alexandra Paxton, Drew H. Abney, Christopher T. Kello, Rick Dale
18	Leveraging linguistic content and debater traits to predict debate outcomes	Alexandra Paxton, Rick Dale
19	A model of object location memory	David Peebles, Corinna Jones
20	Symbiotic symbols: Symbolic (but not nonsymbolic) number representation predicts calculation fluency in adults	Adam T. Newton, Rylan J. Waring, Marcie Penner-Wilger
21	Functional diversity of the intraparietal sulcus: Evidence against a number module	Marcie Penner-Wilger, Michael Anderson
22	People ignore token frequency when deciding how widely to generalize	Amy Perfors, Keith Ransom, Daniel Navarro
23	What's your source: Evaluating the effects of context in episodic memory for objects in natural scenes	Pernille Hemmer, Kimele Persaud, Rachel Venaglia, Joseph DeAngelis
24	Predicting how people feel: Ownership matters for preschoolers	Madison Pesowski, Ori Friedman
25	I actually can read your "poker face": The effect of emotion suppression on language production during dyadic interactions	Brett Peters, Jennifer Roche, Jeremy Jamieson
26	Analogy and cognitive architecture: Two kinds of systematicity, one kind of (universal) construction	Steven Phillips

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27	Bayesian inference as a viable cross-linguistic word segmentation strategy: It's all about what's useful	Lawrence Phillips, Lisa Pearl
28	Sustaining attention in the hands	Natalie Phillips, Evan Risko
29	Combining neural fields and the neural engineering framework	Dimitris Pinotsis, Chris Eliasmith
30	Recursive language is learned by using it, not by exposure to it.	Fenna Poletiek, Padraic Monaghan
31	The level of processing affects the magnitude of induced retrograde amnesia	Vencislav Popov, Georgi Petkov
32	Generic priors yield competition between independently-occurring preventive causes	Derek Powell, Alice Merrick, Hongjing Lu, Keith Holyoak
33	Non-obvious conceptual structure: Evidence from weak definites	Sandeep Prasada, Emma Briggs
34	Item response theory analysis of the cognitive reflection test: Testing the psychometric properties of the original scale and a newly developed 8-item version	Caterina Primi, Kinga Morsanyi, Maria Anna Donati, Francesca Chiesi
35	Models of complexity for dynamic decision making derived from cognitive informatics, complexity theory, and psychophysics	Sylvain Pronovost, Jean-François Gagnon, Daniel Lafond, Sebastien Tremblay
36	Discovering the signatures of joint attention in child-caregiver interaction	Guido Pusiol, Laura Soriano, Michael C. Frank, Li Fei-Fei
37	Basic cuts revisited: Temporal segmentation of speech into phone-like units with statistical learning at a pre-linguistic level	Okko Räsänen
38	Perceptual category learning: Similarity and differences between children and adults	Rahel Rabi, John Paul Minda
39	Tracking student understanding of chemical reactions in ChemVLab+	Anna Rafferty, Jodi Davenport, David Yaron

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40	Body schema projection in musicians and non-musicians: The role of coordination mechanisms in updating functional body representations	Veronica Ramenzoni, Guenther knoblich, Natalie Sebanz
41	Metaphorical framing influences how we think about emotions	Florencia Reali, Catalina Arciniegas
42	A causal diversity effect in diagnostic reasoning	Felix G. Rebitschek, Josef F. Krems, Georg Jahn
43	Mentally accounting for restricted funds: How gift cards change preferences	Nicholas Reinholtz, Daniel Bartels, Jeffrey Parker
44	Impatience, risk propensity and rationality in timing games	Moojan Ghafurian, David Reitter
45	Neurocomputational oscillation for cognitive modeling	Spyridon Revithis
46	Autonomous neural dynamics to test hypotheses in a model of spatial language	Mathis Richter, Jonas Lins, Sebastian Schneegans, Yulia Sandamirskaya, Gregor Schöner
47	Choice exploration and exploitation in purchase decisions: A longitudinal study of customers' exploration and exploitation of supermarket products	Peter S. Riefer, Bradley C. Love
48	Reading and writing direction causes spatial biases in mental model construction in language understanding	Antonio Román, Andrea Flumini, Marysol Escobar, Julio Santiago
49	God sides with us: Reconstructing domain boundaries of causal concepts in Tonga	Annelie Rothe-Wulf, Stefan Seitz, Andrea Bender
50	Love your neighbour as yourself: The influence of arm movements in prosocial behavior	Susana Ruiz Fernández, Juan Jose Rahona, Martin Lachmair, Peter Gerjets
51	The equiprobability bias in the Monty Hall dilemma: A comparison of primary school, secondary school, and university students	Lore Saenen, Mieke Heyvaert, Ilke Grosemans, Wim Van Dooren, Patrick Onghena
52	Differences between observation and intervention in causal learning	Motoyuki Saito, Tsuneo Shimazaki

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53	Sound symbolic relationship between onomatopoeia and emotional evaluations in taste	Tatsuki Kagitani, Mao Goto, Junji Watanabe, Maki Sakamoto
54	Facial attractiveness: The role of iris ratio	Negar Sammaknejad, Darren Peshek, Donald Hoffman
55	Developing emotionally intelligent virtual social agents	Alexei Samsonovich
56	The neural basis of argument structure composition through eye-tracking, focal brain-lesion and fMRI	Sara Sanchez-Alonso, Amy Ly, David Braze, Cheryl M. Lacadie, Todd Constable, Maria M. Pinango
57	Visual bias of diagram in logical reasoning	Yuri Sato, Yuichiro Wajima, Kazuhiro Ueda
58	Multitask model-free reinforcement learning	Andrew Saxe
59	Predict choice: A comparison of 21 mathematical models	Eric Schulz, Maarten Speekenbrink, David R. Shanks
60	Reconciling inconsistency in encoded morphological distinctions in an artificial language	R. Alexander Schumacher, Janet Pierrehumbert, Patrick Lashell
61	Are you lying to me? Exploring children's nonverbal cues to deception	Mariana Serras Pereira, Eric Postma, Suleman Shahid, Marc Swerts
62	Analogical transfer of intentions	Luiza Shahbazy, Georgi Petkov, Lilia Gurova
63	Spatial metaphors for affect influence emotional expression identification	Derek Shapiro, Paul Thibodeau, Stephen Flusberg
64	The interaction between frequency and stereotype in processing cross-dialectal variation	Sharese King, Meghan Sumner
65	Are we truly mirrors of emotion? Studies of embodied emotion perception of outgroups.	Steven Sherrin, Eliot Smith
66	Inverted-U and inverted-J effects in self-referenced decisions	Kenpei Shiina
67	The context-dependent nature of action knowledge	Nicholas Shipp, Frederic Vallee-Tourangeau, Susan Anthony
68	God can hear but does he have ears? Dissociations between psychological and physiological dimensions of anthropomorphism	Andrew Shtulman, Marjaana Lindeman
69	Cognitive reflection predicts science	Andrew Shtulman, Kate McCallum

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	understanding	
70	Computational modeling of parenting styles and academic performance	Mei Si, Nutchanon Yongsatianchot
71	Tetris: exploring human strategies via cross entropy reinforcement learning models	Catherine Sibert, John Lindstedt, Wayne Gray
72	Using LBA to model RTs collected in the GRT paradigm	Noah Silbert, Joseph Hout
73	Evidentiality in language and cognition: The view from construal level theory	Anastasia Smirnova, Rumen Iliev
74	Considering the null	Maarten Speekenbrink
75	How do we get negation without symbols?	Samuel Spevack, Michael Spivey, Stephanie Huette
76	The relation of color naming and the environment	Elise Stickles
77	Inducing political attitude change and shifted voting intentions during a general election	Thomas Strandberg, Lars Hall, Petter Johansson
78	It's in the hands: Developmental changes in the quality of naming events for two-year-olds	Sumarga Suanda, Danika Geisler, Linda Smith, Chen Yu
79	A dual process theory of optimistic cognition	Peter Sunehag, Marcus Hutter
80	Exploring the unconscious nature of insight using continuous flash suppression and a dual task	Hiroaki Suzuki, Haruaki Fukuda, Hiromitsu Miyata, Keishi Tsuchiya
81	Head gestures as congruent or incongruent signs of children's attitudes	Marc Swerts, Tarissa Boerrigter, Yan Gu
82	Probabilistic semantic automata in the verification of quantified statements	Jakub Dotlacil, Jakub Szymanik, Marcin Zajenkowski
83	Inferring the hypothesis spaces underlying inductive generalization	Sean Tauber, Daniel Navarro, Amy Perfors, Michael Lee
84	Detecting changes in math strategy use during learning	Caitlin Tenison, John Anderson
85	Accounting for the relational shift and context sensitivity in the development of generalization	Paul Thibodeau, Erin Tesny, Stephen Flusberg

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86	Enculturation effects of musical training on pitch discrimination	Greta Grannan-Rubenstein, William Grannan-Rubenstein, Paul Thibodeau
87	Metaphor and causal reasoning	Paul Thibodeau, Karlyn Gehring, Erin Tesny, Stephen Flusberg, Caitlin Fausey, Lera Boroditsky
88	Do eye movement measures show testing effects?	Renee Shu-hua Tsai, Yuh-shiow Lee
89	Probing the structure and typicality of chinese emotion words using neural networks	Yueh Lin Tsai, Ming Liang Wei, Yu-Chen Chang Chien, Yi-Ling Chung, Chao-Ming Cheng, Shu-Ling Cho, Hsueh-Chih Chen, Jon-Fan Hu
90	Can Japanese junior high students be spared fake math phobias?	Akitoshi Uchida, Kazuo Mori
91	Incorporating social psychological theories in the model training regime: How neural representations for social cognition emerge from interactions with others	Taiji Ueno, Saori Tsukamoto, Tokika Kurita, Minoru Karasawa
92	Smart human, smarter robot: How cheating affects perceptions of social agency	Daniel Ullman, Iolanda Leite, Jonathan Phillips, Julia Kim-Cohen, Brian Scassellati
93	Strong flying women and weak invisible men: How people make counterintuitive concepts coherent	M. Afzal Upal
94	Does narrative transportation facilitate memory for counterintuitive concepts?	M. Afzal Upal
95	Complex network analysis of distributional semantic models	Akira Utsumi
96	How precise is the visual representation of a labeled target?	Catarina Vales, Linda Smith
97	The hands that guide the thinking: Interactivity in mental arithmetic	Lisa Guthrie, Julia Mayer, Frederic Vallee-Tourangeau
98	Modeling word learning and its impact in reading comprehension	Juan Valle-Lisboa
99	Pantomime strategies: On regularities in how people translate mental representations into the gesture modality	Karin van Nispen, Mieke van de Sandt-Koenderman, Lisette Mol, Emiel Krahmer
100	Preschooler's erps of online/offline visualizations and embodiment theory	Amedeo D'Angiulli, Gordon Griffiths, Robert West, Patricia Van Roon

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101	Context effects in explanation evaluation	Nadya Vasilyeva, John Coley
102	Controlling state-space explosion in chunk learning	Vladislav Veksler, Kevin Gluck, Christopher Myers, Jack Harris, Thomas Mielke
103	Sensorimotor laws, mechanisms, and representations	Alfredo Vernazzani
104	Theoretical assessment of the soille model of the human imagination	Michael Vertolli, Vincent Breault, Sebastien Ouellet, Sterling Somers, Jonathan Gagne, Jim Davies
105	Implicit learning of a natural syntactic rule	Lydia Vinals-Castonguay, John Williams
106	Explaining developmental differences in category learning using COVIS	Ingmar Visser
107	The shape bias shapes more than just attention: relationships between categorical biases & object recognition memory	Haley Vlach
108	Learning to reason pragmatically with cognitive limitations	Adam Vogel, Andrés Gómez Emilsson, Michael C. Frank, Dan Jurafsky, Christopher Potts
109	Assessing changes in explanations of natural phenomena after exposure to science: The Phen-Ex task	Stella Vosniadou, Despina Lepenioti, Anna Chountala, Kalliopi Eikospentaki
110	Does beat perception rely on the covert use of the motor system?	Esther Walker, Benjamin Stillerman, John Iversen, Aniruddh Patel, Benjamin Bergen
111	Language acquisition and the onset of relational reasoning in infants	Caren M. Walker, Samantha Hubachek, Alison Gopnik
112	Change in achievement goals and their relation to exam grades	Aleza Wallace, Elizabeth Richey, Timothy Nokes-Malach
113	Using process measures to track strategy use in probabilistic inference	Matthew Walsh, Kevin Gluck
114	Advanced learning Chinese characters strategy based on the characteristics of component and character frequency	Chung-Ching Wang, Ming-Liang Wei, Yu-Lin Chang, Hsueh-Chih Chen, Yi-Ling Chung, Jon-Fan Hu
115	Assessing the computational adequacy of the general problem solver model	Zahra Sajedinia, Todd Wareham

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116	Assessing the “bias” in human randomness perception	Paul Warren, Umberto Gostoli, George Farmer, Mark Boyle, Wael El-Deredy, Andrew Howes, Ulrike Hahn
117	Knowledge monitoring calibration: Sensitivity and specificity as unique cognitive constructs	Francis Smith, Christopher Was
118	Mind wandering and online learning: How working memory, interest, and mind wandering impact learning from videos	Ben Hollis, Christopher Was
119	Three senses of 'explanation'	Jonathan Waskan, Ian Harmon, Andrew Higgins, Joseph Spino
120	Patterns of information search in experience-based choice	Pete Wegier, Julia Spaniol
121	A self-organizing map connectionist modeling for cross-situational word learning in early infants	Ming-Liang Wei, Chung-Ching Wang, Yu-Chen Chang-Chien, I-Chen Chen, Lee-Xieng Yang, Jon-Fan Hu
122	Cultural variability in young children’s folk intuitions of free will	Adrienne Wenthe, Sophie Bridgers, Alison Gopnik, Zhao Xin, Zhu Liqi, Elizabeth Seiver
123	Naming and remembering atypically colored objects: Support for the processing time account for a secondary distinctiveness effect	Hans Westerbeek, Marije van Amelsvoort, Alfons Maes, Marc Swerts
124	Cultural evolution with sparse testimony: When does the cultural ratchet slip?	Andrew Whalen, Luke Maurits, Michael Pacer, Tom Griffiths
125	Can tractable algorithmic-level explanations be evolved?	Arne Wijnia, Todd Wareham, Iris van Rooij
126	Representing spatial shifts in event processing	Glenn Williams, Anuenue Kukona, Yuki Kamide
127	What gaze data reveal about coordinating multiple mathematical representations	Theodore Wills, Thomas Shipley, Briana Chang, Jennifer Cromley, Julie Booth
128	Coping with bullying: A computational emotion-theoretic account	Nicholas Wilson, Ron Sun
129	Causal illusions and occult forces	Hadar Naftalovich, Jason Shepard, Phillip Wolff
130	Inflection from form versus meaning: Developmental task differences	Anna Woollams, Keeble Sarah, Grzegorz Krajewski, Joanna Moy, Anna Theakston

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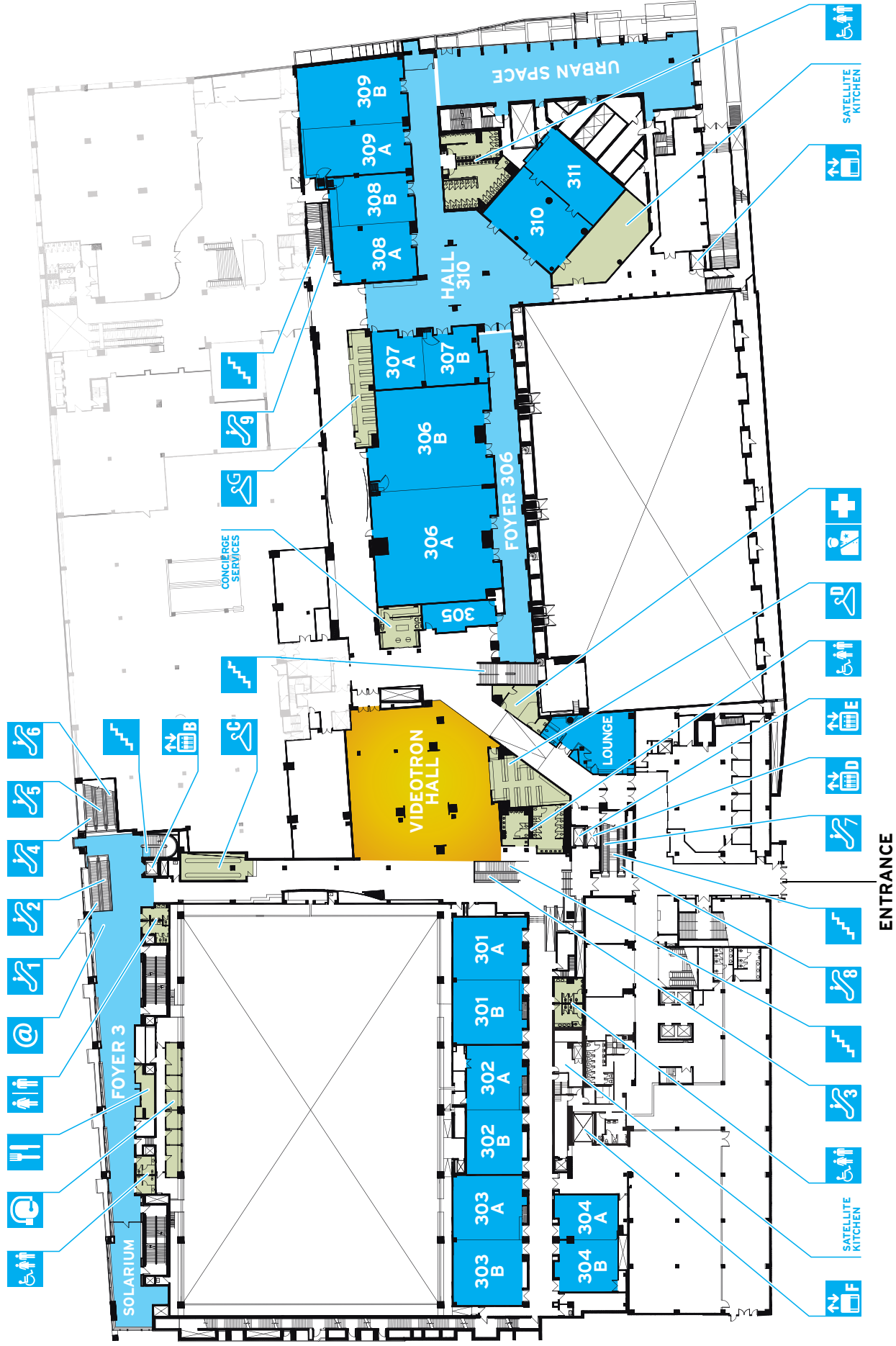
131	Order effect and time varying categories	Lee-Xieng Yang, Hao-Ting Wang
132	Prosodic synchrony: Dynamic social coordination in conversation	Li-chiung Yang
133	An ERP study of Japanese cleft constructions in context	Masataka Yano, Yuki Tateyama, Yoan Kim, Tsutomu Sakamoto
134	A hierarchical Bayesian model for improving wisdom of the crowd aggregation of quantities with large between-informant variability	Saiwing Yeung
135	Narrowing the explanatory gap with bridge metaphors	Jeffrey Yoshimi
136	Linear estimation and mental rotation predict children's early math abilities	Christopher Young, Susan Levine, Kelly Mix
137	Speakers are interconnected with comprehenders: The asymmetry of argument order by long-before-short preference in Korean	Yun-ju Nam, Upyong Hong, Hongoak Yun
138	The effect of role predictability and role filler predictability in Korean sentence processing	Hongoak Yun, Dongsu Lee, Yunju Nam, Hyein Jeong, Eunyong Chung, Upyong Hong
139	Memory representations as a window into the bilingual advantage	Daniel Yurovsky, Viridiana Benitez, Gregory Cox, Linda Smith
140	Type and thematic fit in logical metonymy	Alessandra Zarcone, Sebastian Pado, Alessandro Lenci
141	To react or not to react? A double-well potential model of event-driven human control	Arkady Zgonnikov, Ihor Lubashevsky, Shigeru Kanemoto
142	When another person's perspective interferes with one's own: Evidence for automatic spatial perspective taking	Xuan Zhao, Bertram Malle
143	Cognitive dynamics on the balance-scale task	Corinne Zimmerman, Steve Croker
144	The effect of short-term exposure to film violence on emotional facial processing	Robert T. Palumbo, Laura Stockdale, Matthew J. Kmiecik, Rebecca L. Siltan, Robert G. Morrison
145	Wikisilo: A self-organizing, crowd sourcing system for interdisciplinary science	David Pierre Leibovitz, Robert L. West, Mike Belanger

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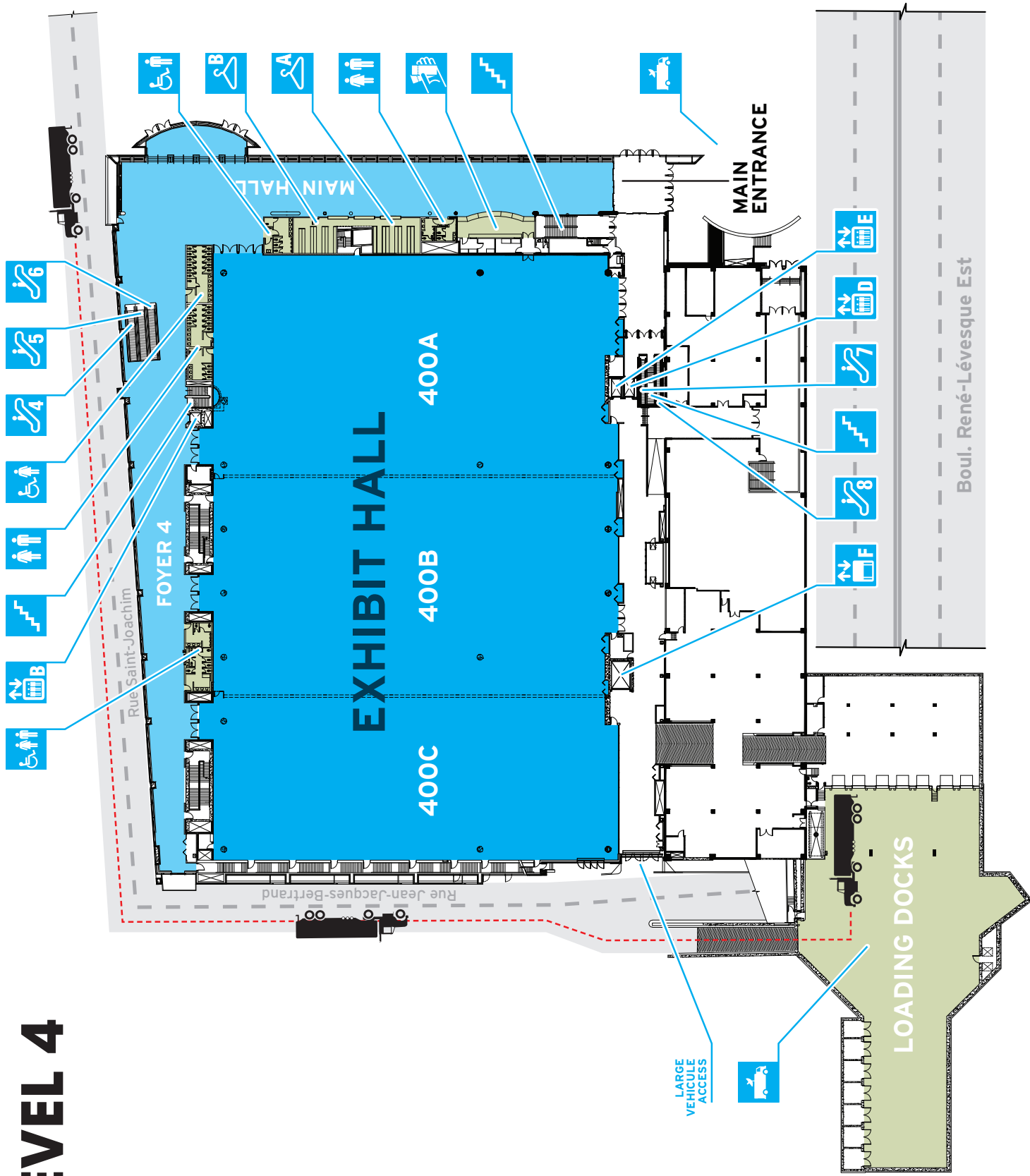
146	Processing various conceptual metaphors at the same time with a bad mood	Nicolas Spatola, Marc Ouellet, Julio Santiago, Brice Beffara, Martial Mermillod
147	Causal agency and the perception of force	Ralf Mayrhofer, Michael Waldmann
148	The impact of emerging knowledge of linguistic structure on word learning	Eva van den Bemd, Afra Alishahi, Maria Mos
149	The size of thought: Estimations of object size are relative to the body	Jeremy A. Luno, Stephanie Huetten
150	An embodied cognition approach to distinguishing pictorial versus symbolic properties of graphics for design	Peter Coppin
151	The telephone game: Exploring inductive biases in naturalistic language use	Stephan Meylan, Brett Goldstein, Anna Rafferty, Tom Griffiths
152	Lexical and pragmatic metonymy processing: Two domains vs. one mechanism	Emily Foster Hanson, Muye Zhang, Michiro Negishi, Maria M. Piñango
153	Cognitive states of potentiality in art-making	Nicole Carbert, Liane Gabora, Jasmine Schwartz
154	Paying for useless advice to resolve information overload	Qizhang Sun, Takao Noguchi, Thomas Hills, Michael Gibbert



LEVEL 3



LEVEL 4



General Information

Timezone

Quebec City is on Eastern Standard Time.

Money

The use of credit cards is generally available, but it is wise to always carry sufficient cash (Canadian dollars) to meet most needs. ATMs can be found throughout the city. You will normally be charged a fee for withdrawing cash but the exchange rate is usually good.

Postal Services

Post offices are open from 8 a.m. to 5:30 p.m., Monday to Friday. During their business hours, drugstores, convenience stores and the like also offer postal services including the purchase of stamps. The telephone number for postal information is 1-800-267-1177.

There is a post office and a philatelic counter in Old Québec at 5, rue du Fort, near the Château Frontenac.

Canadian postage stamps must be used to mail letters and postcards from Canada.

Climate

The average temperature in summer is around 19.1 degrees Celsius (66 degrees Fahrenheit). Rain is a possibility.

Airport Information

Jean Lesage International Airport is located southwest of Quebec City. Cab rides from the airport to the hotel area are a flat rate of \$34.25 and takes approximately 20 minutes. There are also shuttle buses that take approximately 1 hour and 20 minutes.

Public Transportation in Quebec City

There are several ways to travel in and around the area: Bus, Taxi, Taxi Boat, Ferry, or Bike.

Local **buses** are operated by RTC (<http://www.rtcquebec.ca/>), which runs throughout the city. The Ecolobus (also part of RTC) is an eco-friendly, quiet, electric bus that passes through Upper Town and the Old Port area, and connects to the ferry terminal for a minimal fee.

The closest bus stop to the Hilton Quebec is Rene-Levesque Est / Jean-Jacques Bertrand (bus 800 and 801), which is a 3 minute walk from the hotel. Another stop is Charest Est / Dorchester (bus 80), which is a 20 minute walk. Rides are \$2.75 and must be paid in exact change, as the driver does not have change.

Taxis are plentiful in Quebec City and can be identified by the sign on their roofs. To reserve a cab, please call 418-525-5191.

Taxi Boats (<http://excursionsmaritimesquebec.com/>) can be used to travel along the St. Lawrence River. You will need to make a reservation: 418-845-4564.

The **ferry** (<https://www.traversiers.com/>) links Quebec City and Levis (adjacent city across the river) 7 days a week.

Another transportation option is **bicycles**. The closest bike rental (and bike tour) to the hotel is Cyclo Services at 289 Rue Saint-Paul (http://www.cycloservices.net/rent_bikes.php?lang=en). Phone number is 418-692-4052.

In Case of Difficulties

Quebec City residents are friendly and tolerant so it's easy to find help in case you need directions or other assistance. The city itself is safe to walk at night, although always use your best judgment and travel in groups if possible. If you are in trouble, the Quebec City Police are located at 1130 route de l'Eglise, Ste-Foy and can be reached at 418-641-6411.

Restaurants

There are plenty of places to eat and drink around the conference venue. They rank from low-budget fast food to exquisite gourmet restaurants. The following list is just a few suggestions in the area within walking distance from the conference.

Versa Restaurant-Bar, http://versarestaurant.com/index_en.php

Korrigane Brasserie Artisanale, <http://www.korrigane.ca/resto.html>

Cafe Sirocco, <http://www.cafesirocco.com/>

Bistro l'Atelier, <http://www.bistrolatelier.com/>

Savini Resto-Bar, <http://www.savini.ca/>

Le Clocher Penchane, <http://www.clocherpenche.ca/>

Le Cochon Dingue, <http://www.cochondingue.com/>

Chez Ashton, <http://www.chezashton.ca/>

Vielle maison du Spaghetti, <http://vieillemaisonduspaghetti.com/>

Le Cosmos Cafe, <http://lecosmos.com/>

Le Cercle, <http://www.le-cercle.ca/2010/>

Rotisserie St-Hubert, <http://www.st-hubert.com/salle-manger/0238.en.html>

Starbucks, 684 Grande Allee Est, www.starbucks.com

Area Attractions

360° panoramic view of Quebec City from the 31st story:

<http://www.observatoire-capitale.com/en/home.html>

Fortifications of Quebec

Old Quebec (historical sites of the city)

Parliament Building

Petit-Champlain & Palace Royale

St. Lawrence River

Sante-Anne-de-Beaupre Shrine

Montmorency Falls Park

Museums and Monuments

Albert Gilles Copper Art & Museum

Atelier Pare – Economuseum of Woodcarving

Champlain Monument

Churchill and Roosevelt Monument

UNESCO Monument

Tourism

For general information on tourism in Quebec City, please visit the Quebec City

Tourism site: <http://www.quebecregion.com/en>.

Quebec City has an official tourism app ("Quebec") to help you plan your visit and navigate the city:

iPhone

<https://itunes.apple.com/ca/app/quebec/id507579943?mt=8>

Android

https://play.google.com/store/apps/details?id=Quebec.mobile&feature=search_result#?t=W251bGwsMSwyLDEsIlF1ZWJlYy5tb2JpbGUiXQ

Have a good time at CogSci2014 in Quebec City!

COGSCI 2015

MIND, TECHNOLOGY & SOCIETY

37th Annual Cognitive Science Society Meeting

Pasadena, California, USA

July 23-25, 2015

Invited symposia

Philosophy of Mind

Technological Innovation

Cognition in Society

Keynote speakers

Martha Farah, University of Pennsylvania

Christof Koch, Allen Institute for Brain Science

Rosalind Picard, MIT Media Laboratory

Program Organizers

Rick Dale, Carolyn Jennings, Paul Maglio, Teenie Matlock, David Noelle, Anne Warlaumont, Jeff Yoshimi
Cognitive and Information Sciences – University of California, Merced