CogSci 2001 Programme

Wednesday 1 August

8:30–19:00	**Registration** *Foyer, David Hume Tower*
9:30–17:00	**Tutorials** *(see web page for details)*
17:00–19:00	**Welcome Drinks Reception** *Faculty Room North, David Hume Tower*

Thursday 2 August

8:30–18:00	**Registration** *Foyer, David Hume Tower*			
9:00–10:30	**PLENARY** ***Motivated Mental States*** *Jon Elster (Columbia, NY)* DHT Lecture Theatre A			
10:30–11:00	**Coffee** *David Hume Tower*			
11:00–12:45	Invited Symposium: **Emotion and Cognition** *DHT Lecture Theatre A* Chair: Keith Stenning **Presenters** Paul Seabright, Toulouse University Ziva Kunda, Waterloo University Drew Westen, Boston University	Paper Session: **Education** *DHT Lecture Theatre B* Session Chair: Peter Cheng ***Using Cognitive Models to Guide Instructional Design*** Bethany Rittle-Johnson, Kenneth Koedinger ***Efficacious Logic Instruction: People are not Irremediably Poor Deductive Reasoners*** Kelsey Rinella, Selmer Bringsjord, Yingrui Yang ***Toward a Model of Learning Data Representations*** Ryan Baker, Albert Corbett, Kenneth Koedinger ***Development of Physics Text Corpora for Latent Semantic Analysis*** Donald Franceschetti, Ashish Karnavat, Johanna Marineau, Genna McCallie, Brent Olde, Blair Terry	Paper Session: **Language, Perception, and Thought** *DHT Lecture Theatre C* Session Chair: Boicho Kokinov ***Motor Representations in Memory and Mental Models*** Daniel Richardson, Michael Spivey, Jamie Cheung ***The Roles of Body and Mind in Abstract Thought*** Lera Boroditsky, Michael Ramscar, Michael Frank ***Effects of Linguistic and Perceptual Information on Categorisation in Young Children*** Vladimr Sloutsky, Anna Fisher ***The Role of Thought and Experience in the Understanding of Spatio-temporal Metaphors*** Tracey Alloway, Michael Ramscar, Martin Corely	Paper Session: **Language and Context** *DHT Faculty Room South* Session Chair: Gary Cottrell ***An Integrative Approach to Stroop: Combining a Language Model and a Unified Cognitive Theory*** Erik Altmann, Douglas Davidson ***Activating Verbs from Typical Agents, Patients, Instruments and Locations via Event Schemas*** Ken McRae, Mary Hare, Jeff Elman, Todd Ferretti ***Rules for Syntax, Vectors for Semantics*** Peter Wiemer-Hastings, Iraide Zipitria ***Integrating Distributional, Prosodic and Phonological Information in a Connectionist Model of Language Aquisition*** Morten Christiansen, Rick Dale
12:45–14:30	**LUNCH (Not hosted)** **International Sub-Committee Meeting**, HCRC Seminar Room			

(continued)

Thursday 2 August *(continued)*

14:30–16:10	Symposium: **Computational Models of Historical Scientific Discoveries** *DHT Lecture Theatre A* Organisers: Pat Langley, Lorenzo Magnani **Presenters** Lorenzo Magnani, University of Pavia Peter Cheng, University of Nottingham Adrian Gordon, University of Northumbria Sakir Kocabas, Istanbul Technical University Derek Sleeman, University of Aberdeen	Paper Session: **Reasoning and Problem Solving I** *DHT Lecture Theatre B* Session Chair: Lance Rips *On the Evaluation of If p then q Conditionals* Constantinos Hadjichristidis, Rosemary Stevenson, David Over, Steven Sloman, Jonathan Evans, Aidan Feeney *Cognitive Uncertainty in Syllogistic Reasoning: An Alternative Mental Models Theory* Jeremy Qualye, Linden Ball *Structural Determinants of Counterfactual Reasoning* Daniel Yarlett, Michael Ramscar *A Computational Model of Counterfactual Thinking: The Temporal Order Effect* Clare Walsh, Ruth Byrne	Paper Session: **Associative Learning** *DHT Lecture Theatre C* Session Chair: TBA *Synfire Chains and Catastrophic Interference* Jacques Sougne, Robert French *The Mechanics of Associative Change* Mike Le Pelley, Lan McLaren *A Connectionist Investigation of Linguistic Arguments from the Poverty of the Stimulus: Learning the Unlearnable* John Lewis, Jeff Elman *Generalization in Simple Recurrent Networks* Marius Vilcu, Robert Hadley	Paper Session: **Perception and Recognition** *DHT Faculty Room South* Session Chair: Axel Cleermans *Spoken Language Comprehension Improves the Efficiency of Visual Search* Melinda Tyler, Michael Spivey *Visual Statistical Learning In Infants* Natasha Kirkham, Jonathan Slemmer, Scott Johnson *Visual Expertise is a General Skill* Maki Sugimoto, Garrison Cottrell *Modeling Tonality:Applications to Music Cognition* Elaine Chew
16:10–16:40	<td colspan="4" align="center">**TEA** *David Hume Tower*</td>
16:40–18:00	<td colspan="4" align="center">**THE 2001 RUMELHART PRIZEWINNER'S LECTURE:** **Geoff Hinton** ***Designing Generative Models to Make Perception Easy*** David Hume Tower Lecture Theatre A</td>
18:30–19:30	<td colspan="4" align="center">**THE 2001 RUMELHART PRIZEWINNER's RECEPTION** ***Sponsored by the Robert J. Glushko and Pamela Samuelson Foundation*** Playfair Library, Old College</td>
19:30–21:00	<td colspan="4" align="center">**Poster Session I** Playfair Library, Old College</td>

Friday 3 August

<table>
<tr><td>8:00–
9:00</td><td colspan="4">Conference Sub-Committee Meeting
HCRC Seminar Room</td></tr>
<tr><td>8:30–
18:00</td><td colspan="4">Registration
Foyer, David Hume Tower</td></tr>
<tr><td>9:00–
10:30</td><td colspan="4">PLENARY
<i>Some things a logician would like to know about human reasoning</i>
<i>Wilfred Hodges (London)</i>

DHT Lecture Theatre A</td></tr>
<tr><td>10:30–
11:00</td><td colspan="4">Coffee, David Hume Tower</td></tr>
<tr><td>11:00–
12:45</td><td colspan="4">HERB SIMON MEMORIAL SYMPOSIUM
Chair: John Andersen

Presenters:
Pat Langley - ISLE, Stanford
<i>TBC</i>

Fernand Gobet - University of Nottingham
<i>"Is Experts' Knowledge Modular?"</i>

Kevin Gluck - Air Force Research Laboratory
<i>"The Right Tool for the Job: Information Processing Analysis in Categorisation"</i>

David Hume Tower Lecture Theatre A</td></tr>
<tr><td>12:45–
14:05</td><td colspan="4">LUNCH (Not hosted)
Board of Governors Meeting, Call Centre, Buccleuch Place</td></tr>
<tr><td>14:30–
16:10</td>
<td>Symposium:
When Learning Shapes its own Environment
<i>DHT Lecture Theatre A</i>
Organiser: James Hurford

Presenters

Gerd Gigerenzer, Max Planck Institute

James Hurford, University of Edinburgh

Simon Kirby, University of Edinburgh

Peter Todd, Max Planck Institute</td>
<td>Paper Session:
Psycholinguistics

<i>DHT Lecture Theatre B</i>
Session Chair: Ellen Bard

<i>Extending the Past-Tense Debate: A Model of the German Plural</i>
Neils Taatgen

<i>The Influence of Semantics on Past-Tense Inflection</i>
Michael Ramscar

<i>Regularity and Irregularity in Inflectionally Complex Language: Evidence from Polish</i>
Agniesszka Reid, William Marslen-Wilson

<i>Activating Verb Semantics from the Regular and Irregular Past Tense</i>
Catherine Longworth, Billi Randall, Lorraine Tyler, William Marslen-Wilson</td>
<td>Paper Session:
Reasoning and Problem Solving II
<i>DHT Lecture Theatre C</i>
Session Chair: Richard Catrambone

<i>Addition as Interactive Problem Solving</i>
Hansjoerg Neth, Stephen J. Payne

<i>Adaptive Selection of Problem Solving Strategies</i>
Danilo Fum, Fabio Del Missir

<i>Training for Insight</i>
Trina Kershaw, Stellan Ohlsson

<i>Elementary School Children's Understanding of Experimental Error</i>
Amy Masnick, David Klahr</td>
<td>Paper Session:
Agents and Artificial Life

<i>DHT Faculty Room South</i>
Session Chair: Padraic Monaghan

<i>Simulating the Evolution of Modular Neural Systems</i>
John Bullinaria

<i>How Learning can Guide Evolution in Hierarchical Modular Tasks</i>
Janet Wiles, Bradley Tonkes, James Watson

<i>The Origins of Syllable Systems: An Operational Model</i>
Pierre-yves Oudeyer

<i>Modelling Cognition with Software Agents</i>
Stan Franklin, Art Graesser</td>
</tr>
</table>

<i>(continued)</i>

16:10–16:40	**TEA** *David Hume Tower*

16:40–17:55	Paper Session: **Theory Based Categori-sation** *DHT Lecture Theatre A* Session Chair: TBA ***Theory-based Reasoning in Clinical Psychologists*** Nancy Kim, Woo-kyoung Ahn ***Conceptual Combination as Theory Formation*** Dietmar Janetzko ***How is Abstract, Generative Knowledge Acquired?*** Timothy Nokes, Stellan Ohlsson	Paper Session: **Strategy** *DHT Lecture Theatre B* Session Chair: Greg Trafton ***The Strategic Use of Memory for Frequency and Recency in Search Control*** Andrew Howes, Stephen J. Payne ***Modelling an Opportunistic Strategy for Information Navigation*** Craig Miller, Roger Remington ***Context Affects Risky Choice*** Neil Stewart, Nick Chater, Henry Stott	Paper Session: **Philosophy** *DHT Lecture Theatre C* Session Chair: Michiel van Lambalgen ***Representation: Where Philosophy Goes when it Dies*** Peter Slezak ***How Primitive is Self Conciousness? Autonomous Non-Conceptual Content and Immunity to Error through Misidentification*** Roblin Meeks ***Inferences About Person Identity*** Sergy Blok, George Newman, Jennifer Behr, Lance Rips	Paper Session: **Theories of Mind** *DHT Faculty Room South* Session Chair: TBA ***Distributed Cognition in Apes*** Christine Johnson, Tasha Oswald ***Metarepresentation in Psychology, Philosophy and Primate Cognition*** Sam Scott ***Emotional Impact on Logic Deficits May Underlie Psychotic Delusions in Schizophrenia*** Lilianne Mujica-Parodi, Tsafrir Greenberg, Robert Bilder, Dolores Malaspina

18:00–19:30	**Poster Session II** Playfair Library, Old College

20:00–01:00	**Conference Dinner** *8:00pm Drinks Reception and Announcement of 2002 Rumelhart Prize Winner* *8:30pm Dinner 10:00pm Ceilidh* Dynamic Earth, Holyrood Road

Saturday 4 August

8:00–9:00	**Journal Sub-Committee Meeting** HCRC Seminar Room
9:00–10:30	**PLENARY** *Mind, Modularity and Culture* *Dan Sperber (CNRS, Paris)* David Hume Lecture Theatre A
10:30–11:00	**Coffee** David Hume Tower

	Invited Symposium: **Representation and Modularity** *DHT Lecture Theatre A*	Paper Session: **Memory and Language** *DHT Lecture Theatre B* Session Chair: TBA	Paper Session: **Collaboration and Coreference** *DHT Lecture Theatre C* Session Chair: Steven Sloman	Paper Session: **Categorisation and Perception** *DHT Faculty Room South* Session Chair: TBA
11:00–12:45	**Presenters:** Annett Karmiloff-Smith, Institute of Child Health, London Lawrence Hirschfeld, University of Michigan Dylan Evans, King's College, London	*An Influence of Spatial language on Recognition Memory for Spatial Scenes* Michele Feist, Dedre Gentner *The Influence of Casual Interpretation on Memory for System States* Wolfgang Schoppek *Comprehension of Action Sequences: The Case of Paper, Sissors, Rock* Patric Bach, Guenter Knoblich, Angela D. Friederici, Wolfgang Prinz *Semantic Effect on Episodic Associations* Yaron Silberman, Risto Miikkulainen, Shlomo Bentin	*Interactive models of Collaborative Communication* Michael Matessa *The Emergence of Effects of Collaboration in a Simple Discovery Task* Kazuhisa Miwa *Constraints on Linguistic Coreference: Structural vs. Pragmatic Factors* Frank Keller, Ash Asudeh *Dissecting Common Ground: Examining an Instance of Reference Repair* Timothy Koschmann, Curtis LeBaron, Charles Goodwin, Paul Feltovich	*That's odd! How Scientists Respond to Anomalous Data* Susan Trickett, Gregory Trafton, Christian Schunn, Anthony Harrison *Imagery, Context Availability, Contextual Constraint and Abstractness* Katja Wiemer-Hastings, Jan Krug, Xu Xu *A Model of Perceptual Change by Domain Integration* Gert Westermann *Understanding Recognition from the Use of Visual Information* Phillipe Schyns, Lizann Bonnar, Frederic Gosslein

12:45–14:30	**LUNCH (Not hosted)** **Business Meeting** - Faculty Room South, David Hume Tower

(continued)

Saturday 4 August *(continued)*

| 14:30–16:10 | Symposium:
The Interaction of Explicit and Implicit Learning

DHT Lecture Theatre A
Organisers: Ron Sun, Robert Matthews

Presenters

Axel Cleermans,
Zoltan Dienes,
Robert Matthews, Louisiana State University

Ron Sun, University of Missouri-Columbia | Paper Session:
Development

DHT Lecture Theatre B
Session Chair: Peter Wiemer-Hastings

The Emergence of Words
Terry Regier, Bryce Corrigan, Rachael Cabasaan, Amanda Woodward, Michael Gasser, Linda Smith

On Choosing the Parse with the Scene: The Role of Visual Context and Verb Bias in Ambiguity Resolution
Jesse Snedeker, Kristen Thorpe, John Trueswell

Do Perceptual Complexity and Object Familiarity Matter for Novel Word Extension?
Catherine Sandhofer, Linda Smith

Modality Preference and its Change in the Course of Development
Amanda Napolitano, Vladimir Sloutsky, Sarah Boysen | Paper Session:
Concept Learning I

DHT Lecture Theatre C
Session Chair: TBA

On the Rational Basis of Representativeness
Joshua Tenenbaum, Thomas Griffiths

On the Normativity of Failing to Recall Valid Advice
David Noelle

Randomness and Coincidences:Reconciling Intuition and Probability Theory
Thomas Griffiths, Joshua Tenenbaum

Cascade Explains and Informs the Utility of Fading Examples to Problems
Randolph Jones, Eric Fleischmann | Paper Session:
Analogy

DHT Faculty Room South
Session Chair: Dedre Gentner

Similarity Processing depends on the Similarities Present
Mark Keane, Deirdre Hackett, Jodi Davenport

Reference-point Reasoning and Comparison Asymmmetries
Brian Bowdle, Douglas Medin

Episode Blending as a Result of Analogical Problem Solving
Boicho Kokinov, Neda Zareva-Toncheva

Working-memory Modularity in Analogical Reasoning
Robert Morrison, Keith Holyoak, Bao Truong |
| 16:10–16:40 | **TEA**
David Hume Tower | | | |

(continued)

Saturday 4 August *(continued)*

16:40–18:20	Symposium: **The Cognitive Basis of Science: The View from Science** *DHT Lecture Theatre A* Organiser: Nancy Nersessian **Presenters** Stephen Stich, Rutgers University Ronald N. Giere, University of Minnesota Nancy J. Nersessian, Georgia Tech **Discussant** Dedre Gentner, Northwestern University	Paper Session: **The Lexicon** *DHT Lecture Theatre B* Session Chair: Terry Regier *For Better or Worse: Modelling Effects of Semantic Ambiguity* Jennifer Rodd, Gareth Gaskell, William Marslen-Wilson *Testing the Distributional Hypothesis: The Influence of Context on Judgemens of Semantic Similarity* Scott McDonald, Michael Ramscar *Graded Lexical Activation by Pseudowords in Cross-Modal Semantic Priming: Spreading of Activation, Backward Priming or Repair?* Jens Bölte *Real World Constraints on the Mental Lexicon: Assimilation, the Speech Lexicon and the Information Structure of Spanish Words* Monica Tamariz, Richard Shillcock	Paper Session: **Concept Learning II** *DHT Lecture Theatre C* Session Chair: TBA *A Knowledge Reasonance (KRES) Model of Category Learning* Bob Rehder, Gregory Murphy *Reversing Category Exclusives in Infant Perceptual Categorisation: Simulations and Data* Robert French, Martial Mermillod, Paul Quinn, Denis Mareschal *Self-Organising Networks for Classification Learning from Normal and Aphasic Speech* Sheila Garfield, Mark Elshaw, Stefan Wermter *The Interaction of Explict and Implicit: An Intergrated Model* Ron Sun, Paul Slusarz	
18:20	**FINISH** *Beannachd Leibh*		