

Mental Models

THE COMPUTER
AND THE MIND
AN INTRODUCTION
TO COGNITIVE SCIENCE

HOW WE
REASON

Reasoning
Structure and Content
P.C. Wason and
P.N. Johnson-Laird

THE MEETING
IN HONOR OF

PHIL
JOHNSON-
LAIRD

Philip N. Johnson-Laird
Philip N. Johnson-Laird

JULY 20 + 21 2023



DEDUCTION
DEDUCTION
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Ruth M. J. Byrne
P. N. Johnson-Laird and
Ruth M. J. Byrne

AND
HUMAN
AND



DIVISION OF PSYCHOLOGY AND LANGUAGE SCIENCES
UNIVERSITY COLLEGE LONDON

The Meeting in Honor of Phil Johnson-Laird

Organizers:

Monica Bucciarelli (UNITO, Italy)
Sunny Khemlani (Naval Research Laboratory, USA)
Marco Ragni (TU Chemnitz, Germany)

Location:

Division of Psychological and Language Sciences
University College London
26 Bedford Way, WC1H 0AP

Thursday 20th July 2023: Lecture Theatre LG04 (lower ground floor)

8:40–9:10	Tea & Coffee in 26 Bedford Way Café (3rd floor)	
9:20–9:30	Welcome remarks by Peter Fonagy (University College London)	
PART 1: “The history of mental models” (Chair: Ana Cristina Quelhas)		
9:30–9:50	Salvador Mascarenhas <i>Institut Jean-Nicod, France</i>	Model theory in meaning and reasoning
9:50–10:10	Ana Cristina Quelhas, Célia Rasga <i>ISPA, Portugal</i>	A brief history of mental models in Portugal...and a brief illustration of mental models in the world
10:10–10:30	Philipp Koralus <i>Oxford University, UK</i>	The erotetic theory, or how to be a mental model radicalist
10:30–10:50	Tea & Coffee in 26 Bedford Way Café (3rd floor)	
PART 2: “The psychology of moral reasoning” (Chair: Ruth M.J. Byrne)		
11:00–11:20	Geoffrey Goodwin <i>University of Pennsylvania, USA</i>	People make sub-optimal moral decisions about euthanizing humans as compared with animals
11:20–11:40	Monica Bucciarelli <i>UNITO, Italy</i>	To believe is to like
11:40–12:00	Robert Mackiewicz <i>SWPS University, Poland</i>	Assessments of similarity: How theories in cognitive science lead to political predictions (and manipulations)
12:00–12:20	David Lagnado <i>University College London, UK</i>	Is the witness lying? Mental models of deception
12:20–13:40	Lunch (complimentary options provided by UCL at 26 Bedford Way Café, 3rd floor)	

PART 3: “When negation is easier than affirmation” (Chair: Sergio Moreno-Ríos)		
13:50–14:10	Mark T. Keane, Molly S. Quinn <i>University College Dublin, Ireland</i>	Thinking about the unexpected: Is it familiar or unfamiliar?
14:10–14:30	Isabel Orenes, Sergio Moreno-Ríos, Orlando Espino <i>UNED, University of Granada, and University of La Laguna, Spain</i>	The compatibility heuristic and negation
14:30–14:50	Peter Ayton <i>University of Leeds, UK</i>	The devil you don’t know: how mental models and uncertainty aversion increase the risk of failure
14:50–15:10	Maya Bar-Hillel <i>The Hebrew University, Israel</i>	Phil, Stumpers, and I
15:10–15:30	Tea & Coffee in 26 Bedford Way Café (3rd floor)	
PART 4: “Space to think” (Chair: Markus Knauff)		
15:40–16:00	Barbara Tversky <i>Stanford University, USA</i>	Spatial mental models
16:00–16:20	Walter Schaeken <i>University of Leuven, Belgium</i>	Children’s spatial reasoning with visual mental model input
16:20–16:40	Sunny Khemlani <i>Naval Research Laboratory, USA</i>	Tracking spatial relations in the real world
End of Day 1		

Friday 21st July 2023: Lecture Theatre LG04 (lower ground floor)

8:40–9:10	Tea & Coffee in 26 Bedford Way Café (3rd floor)	
PART 5: “Reasoning, imagining, and creating” (Chair: Orlando Espino)		
9:20–9:40	Donatella Ferrante <i>University of Trieste, Italy</i>	Pragmatic factors, mental models, and counterfactual thinking
9:40–10:00	Ruth M.J. Byrne <i>Trinity College Dublin, Ireland</i>	Are counterfactual explanations similar to causal explanations?
10:00–10:20	Bob Rehder <i>New York University, USA</i>	A process model of causal reasoning: The mutation sampler
10:20–10:40	Clare Walsh <i>University of Plymouth, UK</i>	Generating lies: The link between counterfactual thinking and deception
10:40–11:00	Tea & Coffee in 26 Bedford Way Café (3rd floor)	
PART 6: “Cognition, computers, and mental models” (Chair: Markus Knauff)		
11:10–11:30	Marco Ragni, Max Mittenbühler, Daniel Brand <i>TU Chemnitz, Germany</i>	Of generalized syllogisms and the future resilience of models
11:30–11:50	Mark Steedman <i>University of Edinburgh, USA</i>	Inference in the time of GPT
11:50–13:10	Lunch (complimentary options provided by UCL at 26 Bedford Way Café, 3rd floor)	
PART 7: “Logical thinking: Does it occur in daily life? Can it be taught?” (Chair: Sunny Khemlani)		
13:20–13:40	Vinod Goel <i>York University, Canada</i>	Feeling the coherence
13:40–14:00	Pierre Barrouillet <i>University of Geneva, Switzerland</i>	Mental models, development, and working memory
14:00–14:20	Alan Garnham <i>University of Sussex, UK</i>	How people structure mental models
14:20–14:40	Ken Manktelow <i>University of Wolverhampton, UK</i>	Wason & Johnson-Laird
14:40–15:00	Tea & Coffee in 26 Bedford Way Café (3rd floor)	

PART 8: “The doctrine of mental logic” (Introduction: Monica Bucciarelli)

P.N. Johnson-Laird, Ruth M.J. Byrne, Sunny
Khemlani

15:10–15:40

*Princeton University, New York University,
USA; Trinity College Dublin, Ireland; Naval
Research Laboratory, USA*

Goodbye to logic!

15:40–17:30

**Prosecco reception in honor of the 40th Anniversary of *Mental Models*
in the 26 Bedford Way Café (3rd floor)**

18:00

Dinner at China City, 50 Woburn Place, W.C.1

Useful Information

Events

Talks will be held at the **Lecture Theatre LG04** at the University College London's Division of Psychology and Language Sciences Building (26 Bedford Way). It is situated on the **lower ground floor** of the building; to access it, it is necessary to enter main entrance of the building up the stairs from the street level and take the elevators or stairs down to the lower ground floor.

Coffee breaks, refreshments, and lunches will be offered on the **third floor cafe** of the building; exit the elevators on the third floor and turn right to access the cafe (vegetarian, vegan, and gluten free options available).

Wi-Fi can be accessed through SSID: **UCLGuest**. You will need to create a Sky WiFi account. (When you choose a password, we suggest Johnson-Laird1983). UCL also provides access to an **eduroam** network.

The **conference dinner** will be held at China City, 50 Woburn Place, W.C.1.

How to get to the meeting

The Division of Psychology and Language Sciences building is across the street from Tavistock Square Gardens. The closest London Underground stop is Euston. The address is 26 Bedford Way:

