

# **Do you see what I'm thinking about? How adults' eye-movements are influenced by representations of mental states.**

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## **Description of the research project**

Following recent eye-tracking research on perspective-taking and false-belief reasoning in adults (Keysar, Lin & Barr, 2003; Ferguson, Scheepers & Sanford, 2010; Rubio-Fernandez & Glucksberg, *under review*), we propose to investigate the processes and representations that underlie eye-movements in Theory of Mind tasks. Focusing on those patterns of eye-movements that have been interpreted as evidence of an 'egocentric bias' in adult false-belief reasoning, our primary aim is to test hypotheses about which representations control eye-movements during comprehension of narratives involving false beliefs. Our collaborative research should thereby contribute to controversies concerning the nature and development of Theory of Mind cognition.

## **Aims and outcome of the meeting**

In the last meeting of our project, we had planned to pilot the study that we had designed in our previous meeting in August. For this purpose, I needed to get some training with the EyeLink Experimenter Builder that they use at Daniel Richardson's lab, as I only had experience with E-Prime but Daniel Richardson didn't have a license for that programme. We successfully set up the task and ran a small pilot with a few UCL undergrads, although we realized that we needed to make some adjustments before we can run the final version in the second term. Since I will be teaching weekly at UCL between January and March, the plan is that I will visit Daniel Richardson's lab in that time to run the actual experiment.

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### **EDUCATION AND RESEARCH**

Post-Doctoral Research Project  
University College London / Princeton University (2005 – 2010)  
*Inferential processes in language interpretation.*

Ph.D.  
University of Cambridge (2001– 2005)  
*Pragmatic processes and cognitive mechanisms in lexical interpretation.*  
Ph.D. Thesis approved *without corrections*

M.Phil. in English and Applied Linguistics  
University of Cambridge (2000 – 2001)  
*Distinction with Honours*

Research Stay  
University College London (2000)  
M.A. in Theoretical Linguistics  
University of Reading (1998 – 1999)  
*Distinction with Merit*

Certificate in English Studies  
Coventry University (1996 – 1997)  
Erasmus Programme

First Degree in Spanish Language and Literature  
Universidad de Oviedo, Spain (1994 – 1999)

### **RECENT AWARDS**

Economic and Social Research Council (ESRC) International Training and Networking  
Opportunities for Early-Career Researchers (2010-2012)

Marie Curie Outgoing International Fellowship (2006-2010)

British Academy Post-Doctoral Fellowship (2005-2008)

## **INVITED TALKS AND CONFERENCE PRESENTATIONS SINCE 2004**

June 2009. 'A third theory of pretense', invited talk given at the workshop on *Metarepresentation and Non-Literal Language Use*, CSMN, Oslo.

July 2008. 'Eye-tracking the classic Sally-Ann task: An investigation of on-line adult Theory of Mind', poster presented at the *XXIX International Congress of Psychology*, Berlin.

May 2008. 'What can Sally and Ann tell us about adult theory of mind?' poster presented at the *20th Annual Convention of the Association for Psychological Science*, Chicago (USA).

May 2008. 'Does communication depend on our ability to take the speaker's perspective?' paper presented at a meeting of the RoLaP group (*Research on Language at Princeton*).

April 2008. 'What can Sally and Ann tell us about adult theory of mind?' poster presented at the *Workshop on Pragmatics and Social Cognition*, UCL (London).

April 2008. 'How egocentric are we? Or rather, how good are we at taking other people's perspectives?' paper presented at the *2008 British Academy Post-Doctoral Symposium*, London.

Aug 2007. 'Do ducks lay eggs? How people interpret generic assertions', paper presented in collaboration with Sangeet Khemlani, Sarah-Jane Leslie and Sam Glucksberg at the *2007 Meeting of the Cognitive Science Society (CogSci07)*, Nashville (USA).

April 2007. 'Associative and inferential processes in lexical interpretation', paper presented at the *Cognitive Research Seminar* of the Psychology Department, Princeton University (USA).

## **RECENT PUBLICATIONS**

Under review (with Sam Glucksberg). Reasoning about other people's beliefs: Bilinguals have an advantage. *Journal of Experimental Psychology: Learning, Memory and Cognition*.

Under review. 'On the Intentional theory of early pretense: Object substitution and sound effects'. *Language and Cognition*.

Under review. 'Associative and inferential processes in lexical interpretation: One or two pragmatic systems?' *Language and Cognitive Processes*. 4

2008. 'On the automaticity of egocentricity: A review of the Egocentric Anchoring and Adjustment model of perspective taking'. *UCL Working Papers in Linguistics* 20, 247-274.

2008. 'Concept narrowing: The role of context-independent information in concepts'. *Journal of Semantics* 25(4):381-409.

2007 (with Sangeet Khemlani, Sarah-Jane Leslie and Sam Glucksberg). 'Do ducks lay eggs? How people interpret generic assertions'. *Proceedings of the 2007 Meeting of the Cognitive Science Society (CogSci07)*.

2007. 'Suppression in metaphor interpretation: Differences between meaning selection and meaning construction'. *Journal of Semantics*, 24 (4), 345-371.