### **Marte Otten**

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## **EDUCATION**

## PhD in Psycholinguistics, April 2008

University of Amsterdam, Amsterdam, The Netherlands

- Dissertation Title: Discourse based lexical anticipation in language comprehension
- Thesis Advisors: prof. dr. J.J.A. Van Berkum and prof. dr. J.G.W. Raaijmakers.

## MA in Biological & Cognitive Psychology, August 2001

Free University, Amsterdam, The Netherlands

- Thesis Project: Does the visual mismatch negativity depend on attention?
- Cum Laude
- Thesis Advisor: dr. D.J. Heslenfeld

## **GRANTS & AWARDS**

- Amsterdam Science and Inovation Award 2016: High Potential Award for *The feeling-thermometer: an online version of the Implicit Association Task to measure people's evaluations and associations*
- REA Marie Skłodowska-Curie Intra-European Research Fellowship: 2-year research fellowship at the University of Sussex, *Predictive coding in social perception: a social neuroscientific approach to study the dynamic social brain.*
- EASP meeting grant: Small Group Meeting on Extreme Emotions
- **NWO Rubicon**, 2 year post-doc scholarship: The First Impression: Using Event-related Potentials to Investigate the Timing and Persistence of Implicit Racial Stereotypes.
- Mind Science Foundation: The Effect of Implicit Racial Bias on Judicial Decision Making, in collaboration with Mahzarin R. Banaji (Harvard University), Andrew Perlman (Suffolk Law School) & Mark W. Bennet (US District Court Judge).
- American Bar Association, Section of Litigation Research Fund Award: The Effect of Implicit Racial Bias on Judicial Decision Making in Parental Rights Termination Proceedings, in collaboration with Mahzarin R. Banaji (Harvard University), Andrew Perlman (Suffolk Law School).

## **PUBLICATION HIGHLIGHTS**

- 15 peer-reviewed publications (10 first author publications)
- Journal impact factors for these publications average at 3.6 (range 1.472 to 7.332)
- Top 5 most cited publications range from 49 to 131 citations

### RESEARCH

## Assistant professor, Department of Brain and Cognition, 2015 - 2017

University of Amsterdam, Amsterdam, The Netherlands

- Fixed-term appointment, completing the Marie Curie research project
- Studying how outgroup membership changes the perception of linguistic errors
- Exploring whether negative outgroup primes can change awareness of negative stimuli using binocular rivalry and CFS

# Marie Curie fellowship, Department of Informatics, 2013 –2015<sup>1</sup>

University of Sussex, United Kingdom

- 2 year Marie Curie Research Fellowship with Professor Anil Seth
- Exploring the role of social predictive coding within perception using EEG/ERP and Granger Causality
- Exploring the interaction between affective language and facial emotion perception.
- Studying empathic pain perception in the in- and outgroup with Virtual Reality

## Post-doc, Department of Social Psychology, 2010 – 2013 <sup>2</sup>

University of Amsterdam, The Netherlands

Studying the determinants and consequences of humiliation, using measures from social psychology, psycholinguistics, cognitive psychology and neuroscience (EEG, fMRI, TMS).

# NWO Rubicon fellowship, Social Cognition Laboratory, 2008-2010

Harvard University, Cambridge, USA

- 2-year post-doc position with Professor Mahzarin Banaji.
- Behavioral and neurocognitive research exploring how (unconscious) stereotypical knowledge influences basic cognitive processes (e.g. attention, emotion perception, language processing)
- Investigating whether competition reinforces (implicit) dehumanization of competitors Researcher, Department of Social Psychology, 2007-2008

Radboud University Nijmegen, Nijmegen, The Netherlands

ERP/ EEG research exploring the influence of mood on the automatic processing of stimuli with an affective load

## PhD researcher, Department of Cognitive Psychology, 2002-2007

University of Amsterdam, Amsterdam, The Netherlands

- Investigated the effects of context on language comprehension, with a focus on predictive processes
- Acquired and analyzed EEG/ERP data (BrainVision recorder and analyzer) and reaction time data (self-paced reading, lexical decision).

Research Assistant, Department of Biological Psychology, 2001-2002

Vrije Universiteit, Amsterdam, The Netherlands

<sup>2</sup> During this appointment I have been on maternity leave from June until September 2011.

<sup>&</sup>lt;sup>1</sup> During this fellowship I have been on maternity leave from December 2013 until March 2014

### **TEACHING**

## Assistant professor, Department of Brain and Cognition, 2012-now

University of Amsterdam, Amsterdam, The Netherlands

- "Experimentatie", 3<sup>rd</sup> year Psychology BA, 6EC. I set up an interactive practical course aimed at introducing students in the 'Brain and Cognition' BA to research methods and paradigms in Cognitive Psychology
- "Sociale neurocognitie en neuroeconomie": 3<sup>rd</sup> year Psychobiology BA, 6EC
- "Advanced Topics in Memory and Language": Research MA, 6EC, in which student research, discuss and analyze current (unresolved) scientific debates.
- "Taal en het brein", 3<sup>rd</sup> year Psychobiology BA, 6EC
- "Taal", 3<sup>rd</sup> year Psychology BA
- Student supervision from the Psychology BA, Psychobiology BA, Research Master and Brain & Cognition Master for thesis projects, and independent writing assignments
  Post-doc, Department of Social Psychology, 2010 – 2013

University of Amsterdam, The Netherlands

- Taught seminar on EEG/ERP Research Methods, KLI workshop on Psychophysiological Methods
- Supervised students from the Social Psychology Bachelor and (Research) Master track, training them to design experiments, conduct research, analyze and interpret data, and write research reports, scientific essays or a (master-) thesis.

# Post-doc, Social Cognition Laboratory, 2008-2010

Harvard University, Cambridge, USA

- Taught seminar on Cognitive Research Methods for graduate students
- Prepared and gave lectures on the Psychology of Language for an introductory course on Cognitive Psychology (Bachelor)
- Supervised undergraduate students in designing and conducting research, analyzing and interpreting data, and writing research reports.

# Lecturer (part-time), Department of Cognitive Psychology, 2004-2006

University of Amsterdam, Amsterdam, The Netherlands

• Developed and taught the course "Cognitive Psychology" to first-year students (Psychobiology Bachelor) during 3 terms.

## PhD researcher, Department of Cognitive Psychology, 2002-2007

University of Amsterdam, Amsterdam, The Netherlands

- Prepared and gave lectures and designed a practical for the third-year bachelor course "Psychology of language"
- Supervised practical for second-year bachelor course on research methods.

### **PUBLICATIONS**

### Published

- Otten, M., Seth, A.K., Pinto, Y. (2016). A social Bayesian brain: how social knowledge can shape visual perception. *Brain and Cognition*. doi:10.1016/j.bandc. 2016.05.002
- Otten, M., Mann, L., Van Berkum, J.J.A.; Jonas, K.J. (2016) No Laughing Matter: How the presence of laughing witnesses changes the perception of insults. *Social Neuroscience*.
- Otten, M. (2016) Race Guides Attention in Visual Search. *PLoS ONE* 11(2): e0149158.
- Otten, M., & Jonas, K.J. (2014). Humiliation as an intense emotional experience: Evidence from the electro-encephalogram. *Social Neuroscience*, *9*(1), 23-35
- Jonas, K. J., **Otten, M.,** & Doosje, B. J. (2014). Humiliation underlying processes and effects of an extreme emotion on human thought and behavior. In Carsten de Dreu (Ed.), *Social conflict within and between groups*. Taylor & Francis.
- Otten, M., & Jonas, K.J. (2013). Out of the group, out of control? The brain responds to social exclusion with changes in cognitive control. *Social cognitive and affective neuroscience*, 8(7), 789-794.
- Otten, M., & Banaji, M.R. (2012). Social categories shape the neural representation of emotion: Evidence from a visual face adaptation task. *Frontiers in Integrative Neuroscience*, 6(9).
- Pinto, Y., **Otten, M.**, Cohen, M. A., Horowitz, T. S., & Wolfe, J. M., (2011). The boundary conditions for Bohr's law: when is reacting faster than acting? *Attention, Perception, & Psychophysics*, 73(2), 613-620
- Otten, M., & Van Berkum, J. J. A. (2009). Does working memory capacity affect the ability to predict upcoming words in discourse? *Brain research*, 1291, 92-101.
- Van Berkum, J.J.A., Holleman, B., Nieuwland, M.S., **Otten, M.**, & Murre, J. (2009). Right or wrong? The brain's fast response to morally objectionable statements. *Psychological Science*, 20(9), 1092-1099.
- Otten, M., & Van Berkum, J. J. A. (2008). Discourse-based lexical anticipation: prediction or priming? *Discourse Processes*, 45(6), 464-496.
- Otten, M., Nieuwland, M.S., & J.J.A. van Berkum (2007) Great expectations: Specific lexical anticipation influences processing of spoken language. *BMC neuroscience*, 8:89.
- Otten, M., & Van Berkum, J. J. A. (2007). What makes a discourse constraining? A comparison between the effects of discourse message and scenarios on the N400. *Brain Research*, 1153,166-177.
- Van Berkum, J.J.A., Koornneef, A.W., **Otten, M.**, & Nieuwland, M.S., (2007) Establishing reference in language comprehension: an electrophysiological perspective. *Brain Research*, *1146*, 158-171.
- Nieuwland, M.S., **Otten, M.** & Van Berkum, J.J.A. (2007). Who are you talking about? Tracking discourse-level referential processing with ERPs. *Journal of Cognitive Neuroscience*, *19*, 228-236.

# <u>Submitted</u>

- Otten, M., Pinto, Y., Paffen, C., Seth, A.K. Kanai, R. (under review). Central vision overflows peripheral vision. *Psychological Science*
- Pinto, Y., Vandenbroucke, A.R., **Otten, M.**, Sligte, I.G., Seth, A.K., Lamme, V.A.F. (under review) Conscious visual memory without attention. *Journal of Experimental Psychology: General*

## In preparation

- Otten, M., Pinto, Y. & Seth, A.K. Seeing emotion where there is none: contextually predicted emotion perception is similar to the perception of real emotional expressions.
- Otten, M., Thomson, J., & Banaji, M.R. Linguistic errors made by outgroup members stand out: behavioral and electrophysiological evidence.
- Pinto, Y., Neville, D.A., **Otten, M.,** Lamme, V.A.F., De Haan, E.H.F., Fabri, M. What is split in split-brain?
- Otten, M., Jonas, K., Doosje, E.J. & Erbas, Y. Approach- and avoidance-related response dynamics following vicarious humiliation.

## **TALKS**

- Otten, M. & Seth, A.K. (2015) Seeing emotion where there is none: contextually induced emotion perception is similar to the perception of real emotional expressions. Department of Brain & Cognition, University of Amsterdam, The Netherlands
- Otten, M. & Jonas, K. (2012) The effects of humiliation: Evidence from the Electro-Encephalogram. Small Group Meeting on Extreme Emotions in Human Interaction. Amsterdam. June 25-26.
- Otten, M. & Jonas, K. (2012) Humiliating experiences influence cognitive control: An EEG study. Kurt Lewin Institute Conference 2012, Zeist, May 10-11
- Otten, M. & Jonas, K. (2012) Humiliating experiences influence cognitive control: An EEG study. 4<sup>th</sup> European Emotion Conference of the Consortium of European Research on Emotion (CERE), Canterbury, may 2-5.
- Otten, M. & Y.Pinto (2011) Now you see it, now you don't: Race bias determines the conscious perception of other race faces. 13<sup>th</sup> NVP Winter Conference, Egmond aan Zee, December 15-16
- Otten, M., Jonas, K. & Doosje, E.J. (2011). Affective and behavioral consequences of humiliation. 16th EASP General Meeting, Stockholm, July 12-16
- Otten, M., & Banaji, M.R. (2011) The effects of race on perception: Emotion & Language. Radcliffe Exploratory Workshop, Cambridge, MA, February 5-6
- Otten, M., & Van Berkum, J.J.A., (2008). The stuff predictions are made of. 48th Annual Meeting of the Society for Psychophysiological Research, Austin, October 1 5
- Otten, M., & Van Berkum, J.J.A., (2005). Discourse based lexical anticipation during language processing: Prediction or Priming? IX international conference on neuroscience (ICON-2005), Havana, September 5-10
- Otten, M., & Van Berkum, J.J.A., (2005). Reading words in a constraining discourse context: Unraveling the effects of message-based word fit and lexical association by means of ERPs. IX international conference on neuroscience (ICON-2005), Havana, September 5-10
- Otten, M., & Van Berkum, J.J.A., (2005). Discourse based lexical anticipation during language processing: Prediction or Priming? 15<sup>th</sup> annual meeting of the Society for Text and Discourse (ST&D), Amsterdam, July 6-9.
- Otten, M., & Van Berkum, J.J.A., (2004). Discourse based lexical anticipation during language processing: Prediction or Priming? 3<sup>rd</sup> Endo-Neuro-Psychomeeting, Dorwerth, The Netherlands, June 1-4.

#### POSTER PRESENTATIONS

- Otten, M., Parkinson, J., Seth, A.K. (2015) Seeing emotion where there is none: contextually induced emotion perception is similar to the perception of real emotional expressions. *ASSC19*, July 7-10, Paris, France
- Otten, M., Banaji, M.R., Seth, A.K. (2015) Out of da group: linguistic errors made by outgroup members evoke larger error-related processing. *NVP15*, December 17-19, The Netherlands
- Otten, M., Mann, L., Van Berkum, J.J.A, & Jonas, K.J. (2015) No Laughing Matter: How the Presence of Laughing Witnesses Changes the Perception of Insults. *International Convention of Psychological Science*, Amsterdam March 12-14.
- Otten, M., Suzuki, K., Seth, A.K. (2014) Embodying the outgroup: Does virtually embodying an outgroup hand increase empathic response to outgroup pain? *Virtual Social Interaction Workshop*, London, UK, 4-5 September
- Pinto, Y, & **Otten, M**. (2011) Out of the group, out of consciousness. *ASSC16*, Brighton, UK, 2 6 July
- Otten, M., Thomson, J. & Banaji, M.R. (2011) Race changes language perception: Evidence from the N400 and the P600. *The KNAW Colloquium on the Neuroscience of Prejudice*, July 6-7, Amsterdam, The Netherlands
- Otten, M., Banaji, M.R. (2010). Looking for the angry man: Evidence for racially biased visual search. 11th Annual Society for Personality and Social Psychology Conference, January 28-30, Las Vegas.
- Otten, M., Banaji, M.R. (2009). Implicit attitudes about race can guide attention in a visual search task. *12<sup>th</sup> NVP Winter Conference*, December 18-19, Egmond aan Zee, The Netherlands
- Van Berkum, J.J.A., Holleman, B., Murre, J., Nieuwland, M.S., **Otten, M.,** (2007). So how do you feel about this? An ERP study on opinion poll comprehension. Annual meeting of the Cognitive Neuroscience Society (CNS-2007), May 5-8, New York.
- Otten, M., Huijpen, K., Van Berkum, J. J. A. (2006) Individual differences in the generation of specific lexical predictions: preliminary results. AMLaP 2006, August 30-September 1, Nijmegen, The Netherlands.
- Otten, M., & Van Berkum, J.J.A., (2005). Discourse-based Lexical Anticipation during Language Processing: An Auditory ERP Study. 10<sup>th</sup> NVP winter conference, Egmond aan zee, The Netherlands, December 16-17.
- Nieuwland, M. S., **Otten, M.** & Van Berkum, J.J.A., (2005). The 'Problem of 2' revisited: Tracking discourse-level referential processing with ERPs. ICON, September 5-11, Havana, Cuba.
- Otten, M., & Van Berkum, J.J.A., (2005). Discourse based lexical anticipation during language processing: Prediction or Priming? 18th Annual CUNY Sentence Processing Conference (CUNY-2005), Tucson, March 31 April 2.
- Otten, M., & Van Berkum, J.J.A., (2005). The influence of message-based predictability and lexical association on the N400 effect. Annual meeting of the Cognitive Neuroscience Society (CNS-2005), New York, April 9-12.
- Otten, M., & Van Berkum, J.J.A., (2004). Discourse based lexical anticipation during language processing: Prediction or Priming? Annual meeting of the Cognitive Neuroscience Society (CNS-2004), San Francisco, April 9-12.

### SKILLS

- Language: fluent in Dutch (native speaker) and English
- Software
  - EEG and ERP acquisition and analysis: Brain Vision Analyzer and Recorder, EEGlab
  - o fMRI analysis: FSL
  - o Programming experiments: Matlab, Presentation, Inquisit, e-Prime
  - o Statistical analyses: SPSS
  - o Basic programming in GAWK

### HONORS

- 1998 BA Psychology (cum laude), Vrije Universiteit Amsterdam
- 2001 MA Psychology (cum laude), Vrije Universiteit Amsterdam

# **INTERNATIONAL COLABORATIONS**

- University of Sussex: Anil Seth
- Harvard University: Mahzarin R. Banaji, Jenny Thomson
- Boston College: Andrea Heberlein

## OTHER

- **Organiser** of the Small Group meeting on Extreme Emotions in Human Interaction, Ansterdam, June 25-26, 2012
- Ad-hoc reviewer for Cortex, Basic and Applied Social Psychology, Social Cognition, Social Cognitive and Affective Neuroscience, PLOS one, JoCN, SPPS, Journal of Memory and Language, Emotion and Cognition, International Journal of Psychophysiology, Scientific Reports.