

# Franziska Christiane Hartung

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## Education

- 2012 – 2016 PhD (awarded 2017) in Cognitive Neuroscience, Radboud University (RU) IMPRS Graduate School for Language Sciences, Nijmegen  
Supervised by Dr. Roel M. Willems, and Prof. Peter Hagoort  
*Thesis: Getting under your skin: The role of perspective and simulation of experience in narrative comprehension. Available online: <http://bit.ly/2sg3Qul>*
- 2006 – 2011 Magister Artium in German Linguistics (Major), General Linguistics and Psychology at Ludwigs-Maximilians University (LMU) of Munich

## Employment

- 2016 – Postdoctoral researcher at the Center for Cognitive Neuroscience, Neurology Department, University of Pennsylvania (PI: Prof. Anjan Chatterjee)
- 2015 Guest lecturer (3 months) at the Faculty of Humanities, Utrecht University  
Interdisciplinary undergraduate course *The narrating brain* for the minor *Brains & bodies* (in Dutch), student evaluation 4/5 for teacher and course quality (full report in Dutch upon request), (Prof. Jos van Berkum, Dr. Frank Hakemulder)
- 2012 – 2016 PhD student at the Neurobiology of Language Department at the Max Planck Institute (MPI) for Psycholinguistics and Donders Institute for Brain, Cognition, and Behaviour
- 2012 Research Assistant (9 months) at the Department of Cognitive Psychology, VU University Amsterdam (Dr. A. Belopolsky)  
Data collection and processing for behavioral, EEG, and eye tracking experiments, management of behavioral labs.
- 2009 – 2010 Teaching Assistant (1 year) at the Institute for Theoretical Linguistics, LMU Munich (Prof. D. Zaefferer)  
Preparing teaching materials for a full semester lecture about the co-evolution of language and culture; full semester tutorial about empirical methods for linguists.
- 2009 – 2010 Research Assistant (1 year) at the Emmy-Noether-Group for Memory Consolidation (PI: Dr. S. Gais), LMU Munich  
Data collection and processing for behavioral and EEG experiments, and analysis of sleep EEG data

## Journal Articles

**Hartung, F.**, Withers P, Hagoort P and Willems RM (2017). When Fiction Is Just as Real as Fact: No Differences in Reading Behavior between Stories Believed to be Based on True or Fictional Events. *Frontiers in Psychology*, 8:1618, doi: 10.3389/fpsyg.2017.01618

**Hartung, F.**, Hagoort, P., & Willems, R. M. (2017). Readers select a comprehension mode independent of pronoun: Evidence from fMRI during narrative comprehension. *Brain and Language*, 170, 29–38. <http://doi.org/10.1016/j.bandl.2017.03.007>

van den Hoven, E., **Hartung, F.**, Burke, M., & Willems, R. M. (2016). Individual Differences in Sensitivity to Style During Literary Reading: Insights from Eye-Tracking. *Collabra*, 2(1), 25. doi: <http://doi.org/10.1525/collabra.39>

**Hartung, F.**, Burke, M., Hagoort, P., Willems, R.M. (2016). Taking Perspective: Personal Pronouns Affect Experiential Aspects of Literary Reading. *PLoS ONE* 11(5): e0154732. doi: 10.1371/journal.pone.0154732.

## Preprints

Klenovsak, D., **Hartung, F.**, Santiago, L., & Zaefferer, D. (2018, January 22). Are Tims hot and Toms not? The effect of sound symbolism on perception of facial attractiveness. <https://psyarxiv.com/9ctq5/>

Willems, R. M., & **Hartung, F.** (2017, June 20). Engaging regularly with fiction influences connectivity in cortical areas for language and mentalizing. <http://bit.ly/2gIAQYW>

## Invited Talks

2018 The role of perspective and individual differences for narrative comprehension. Brain, Language and Computation Lab, Pennsylvania State University, State College.

2015 Experimental methods in discourse processing. Workshop at the Methods and Linguistic Theories (MaLT) Symposium, University of Bamberg.

2015 Your mind in story worlds. MPI for Psycholinguistics, Nijmegen.

2015 Aspects of Narratives: What stories can teach us about language comprehension. Colloquium at Radboud University, Grammar and Cognition Group, Nijmegen.

2014 Perspective taking in story comprehension. Platform Narratives Meeting, Utrecht University.

2014 Perspective taking and mental simulation in narrative comprehension. MPI for Empirical Aesthetics, Language and Literature Department. Frankfurt am Main.

2014 Getting under your skin: narrative perspective in story comprehension. Symposium in honor of Professor Winfried Menninghaus, founding director of the new Max Planck Institute of Empirical Aesthetics, Frankfurt (D). MPI for Psycholinguistics, Nijmegen.

## Conference Talks

**Hartung, F.**, Hagoort, P., & Willems, R. M. (2015). *Simulation versus mental imagery: commonalities and differences*. Embodied and Situated Language Processing

Conference, 29-30th July 2015, Lyon.

**Hartung, F.,** Burke, M., Hagoort, P., & Willems, R. M. (2014). *The embodied reader: The effect of narrative perspective on literature understanding and appreciation*. Meeting of the International Society for the Empirical Study of Literature, 21-25th July, Turin.

**Hartung, F.,** Burke, M., Hagoort, P., & Willems, R. M. (2014). *Getting under your Skin: The role of perspective in narrative comprehension*. Cognitive Futures in the Humanities, 2nd International Conference, 24-26th April 2014, Durham.

### Conference Posters

**Hartung, F.,** Jamrozik, A., Aguerre, G., Rosen, M. E., Sarwer, D.B., Chatterjee, A. (2018). *Increased response to facial attractiveness in visual areas reflects saliency, not reward*. Annual Meeting of the Cognitive Neuroscience Society, 24-27th March 2018, Boston.

**Hartung, F.,** Hagoort, P., & Willems, R. M. (2017). *Readers select a comprehension mode independent of pronoun: Evidence from fMRI during narrative comprehension*. Annual Meeting of the Cognitive Neuroscience Society, 25-28th March 2017, San Francisco.

**Hartung, F.,** Hagoort, P., & Willems, R. M. (2015). *Simulation and mental imagery of complex events: differences and commonalities*. Annual Meeting of the Society for the Neurobiology of Language, 15-17th October 2015, Chicago.

**Hartung, F.,** Burke, M., Hagoort, P., & Willems, R. M. (2014). *Narrative perspective influences immersion in fiction reading: Evidence from skin conductance response*. Annual Meeting of the Society for the Neurobiology of Language, 27-28th August 2014, Amsterdam.

**Hartung, F.,** Burke, M., Hagoort, P., & Willems, R. M. (2014). *Personal pronouns influence arousal during story comprehension. Embodiment and the reading experience*. Embodied and Situated Language Processing Conference 19-21st August 2014, Rotterdam.

**Hartung, F.,** Klenovsak, D., Santiago dos Santos, L., Strobl, C., Zaefferer, D. (2009). *Are Tims hot and Toms not? Probing the effect of sound symbolism on perception of facial attractiveness*. 31st Annual Conference of the Cognitive Science Society, 29th July-1st August 2009, Amsterdam.

### Awards

Postdoctoral fellow award of the Cognitive Neuroscience Society (2017)

### Skills

Designing behavioral and neuroimaging experiments for human cognitive psychology.  
Designing experiments with naturalistic stimuli.

Advanced technical knowledge for research MRI, including scanning protocols and parameter selection, and experimental equipment.

Software for stimulus presentation (OpenSesame, Presentation, PsyScope, E-Prime).

Collecting, preprocessing, and analysis of fMRI, behavioral, electrodermal activity, and questionnaire data.

Statistical analysis with Matlab, RStudio, SPM, SPSS, JASP. Proficient in frequentist statistics including linear mixed effect models, currently learning Bayesian statistics.

### **Additional Qualifications**

GCP (Good Clinical Practice) license, obtained in NL (2014)

BHV license holder (first aid, fire safety, reanimation, and evacuation training)

Advanced technical qualification for Siemens Tim Trio 3T and Siemens Prisma 3T MRI scanners

### **Supervision**

2016-2018 Alexander Coburn (PhD student at Cambridge University, visiting student at University of Pennsylvania)

2017 Miriam Esther Rosen (Intern from University of Pittsburgh Medical School)

2013 - 2014 Emiel van den Hoven (Research Master *Language and Communication*, School of Humanities, Tilburg University); Thesis: *Effects of Foregrounding on Reading Behavior: An Eye-tracking Study*

### **Reviewer for**

Cerebral Cortex, Language, Cognition, and Neuroscience, Poetics, Scientific Study of Literature.

### **Professional Memberships**

Society for the Neurobiology of Language

Cognitive Neuroscience Society

International Society for the Empirical Study of Literature (IGEL)

### **Languages**

German (native), English (near native), Dutch (fluent)

### **Collaborations outside current & previous research groups**

Dr. Emily Coderre, Department of Communication Sciences and Disorders, University of Vermont (together with Dr. Stacey Humphries, Neurology Department, University of Pennsylvania): The causal role of perspective taking for comprehending action and mentalizing events, in literal and metaphoric sentences in narratives. 3-Part project comparing discourse comprehension performance in patients with Autism Spectrum Disorder, Parkinson's disease, and parietal lesions.