

## CAROLINE BEESE

Max Planck Institute for Human Cognitive and Brain Sciences  
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## CURRICULUM VITAE

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### ACADEMIC EXPERIENCE AND EDUCATION .....

#### *Current Position*

2020 – **Post-doc**  
pres. *Max Planck Institute for Human Cognitive and Brain Sciences,  
Department of Neuropsychology, Leipzig, Germany*

#### *Previous Positions*

2019 – **Post-doc**  
2020 *Max Planck Institute for Human Development,  
Center for Lifespan Psychology, Berlin, Germany*

#### *Education*

2014 – **Dr. rer. nat. Psychology** (summa cum laude)  
2019 *Max Planck Institute for Human Cognitive and Brain Sciences,  
Department of Neuropsychology, Leipzig, Germany*  
Supervisors: Dr Lars Meyer, Prof Dr Angela Friederici  
Thesis: The Effects of Neurocognitive Aging on Sentence Processing

2012 – **MSc, Cognitive Neuroscience**  
2014 *Radboud University, Nijmegen, The Netherlands*  
Supervisor: Dr Diana Dimitrova  
Thesis: The role of syntactic cueing on the memory for focus and non-focus  
information during reading

2009 – **BA Honours, International Studies: Language and Culture**  
2012 *University of Greenwich, London, UK*  
Supervisor: Dr Maria J. Arche  
Thesis: The role of syntactic complexity and working memory in comprehending  
structures involving syntactic movement

#### *Previous Research Experience*

2013 – **Student Assistantship**  
2014 *Max Planck Institute for Psycholinguistics,  
The Language Archive, Nijmegen, The Netherlands*  
Advisor: Dr Sebastian Drude

2012 – **Student Assistantship**  
2013 *Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands*  
Research Group on Syntax, typology and information structure  
Advisor: Dr Dejan Matić

2012 **Research Internship**  
*Potsdam Research Institute for Multilingualism, Potsdam, Germany*  
Advisor: PD Dr Claudia Felser

2011      **Research Internship**  
             *Max Planck Institute for Human Cognitive and Brain Science,*  
             *Department of Neuropsychology, Leipzig, Germany*  
             Advisor: Dr Anja Fengler

## PEER-REVIEWED PUBLICATIONS .....

- in prep*      Van Scherpenberg, C., Martin, S., Hartwigsen, G., Obrig, H. & **Beese, C.** (*in prep*) Age-related decline of semantic inhibition despite the preservation of semantic memory
- Beese, C.**, Ghazaryan, G., Nikulin, V., Schaadt, G., Männel, C., Meyer, L. (*in prep*) Longitudinal changes in resting-state EEG markers predict language and memory performance in children
- In revision*      Vassileiou, B., **Beese, C.**, Friederici, A. D., & Meyer, L. (*in revision*) Interaction of white-matter connectivity and oscillatory desynchronization explains sentence encoding performance.
- published*      **Beese, C.**, Vassileiou, B., Friederici, A. D., & Meyer, L. (2019). Age Differences in Encoding-Related Alpha Power Reflect Sentence Comprehension Difficulties. *Frontiers in Aging Neuroscience*, 11, 183
- Beese, C.**, Werkle-Bergner, M., Lindenberger, U., Friederici, A. D. & Meyer, L. (2019) Adult age differences in the benefit of syntactic and semantic constraints for sentence processing. *Psychology and Aging*, 34, 43–55
- Vassileiou, B., Meyer, L., **Beese, C.** & Friederici, A.D. (2018) Alignment of alpha-band desynchronization with syntactic structure predicts successful sentence comprehension. *NeuroImage*, 175, 286–296
- Beese, C.**, Meyer, L., Vassileiou, B. & Friederici, A.D. (2017). Temporally and spatially distinct theta oscillations dissociate a language-specific from a domain-general processing mechanism across the age trajectory. *Scientific Reports*, 7, 11202

## AWARDS .....

2020      PhD Award, Research Academy Leipzig

## GRANTS .....

2018      Research Academy Leipzig, Travel Grant

2017      Vision in Science, Travel Grant

2016      Research Academy Leipzig, Travel Grant

2014 –      International Max Planck Research School on Neuroscience of Communication,  
 2019      PhD Scholarship

## TALKS .....

*invited*

- 2020      **Beese, C.** Electrophysiological aging disentangles aspects of preservation and decline in sentence processing across the life span. Neurolinguistic Seminar, Center for Language and Brain, HSE University Moscow, April 2020
- 2019      **Beese, C.** *Age differences in Syntactic but not Semantic Processing*, Presented at Leibniz-Zentrum Allgemeine Sprachwissenschaft, Berlin, Germany, April 2019
- Beese, C.** *Age-Related Decline in Sentence Processing: Deriving Corpus-Linguistic Hypotheses from Psycholinguistic Data*, Presented at CLARe4, Helsinki, Finland, February 2019
- 2018      **Beese, C.** *Electrophysiological Basis of Sentence Processing across the Life Span*, University of Oldenburg, Oldenburg, Germany, December 2018
- Beese, C.** *Age differences in the use of Linguistic Constraints during sentence processing*. Presented at Potsdam University, Potsdam, Germany, June 2018
- Beese, C.** *Oscillatory Fingerprints of Language Comprehension across the Lifespan*. Talk presented as Chair (Co-Chair: Lars Meyer) in the Symposium “Advances in Language Electrophysiology: from Auditory Processing to Sentence Comprehension” at Psychologie und Gehirn, Gießen, Germany, May/June 2018
- Beese, C.** *The role of verbal working memory in sentence processing across the lifespan*. Presented at the University Hospital of Leipzig, Germany, May 2018
- Beese, C.** *The role of age differences in verbal working memory on sentence processing*. Presented at a colloquium at the Max Planck Institute for Human Development, Berlin, Germany, January 2018
- 2017      **Beese, C.** *The electrophysiological integrity of sentence processing across the life span*. Presented at Donders Discussions 2017, Nijmegen, The Netherlands, October 26, 2017

## POSTERS .....

- 2019      van Scherpenberg, C., Martin, S., Hartwigsen, G., Obrig, H., & **Beese, C.** (2019) Age-related decline of semantic inhibition despite the preservation of semantic memory. paEpsy, Tagung der Fachgruppen Pädagogische Psychologie und Entwicklungspsychologie, September, 9-12, Leipzig, Germany
- 2018      **Beese, C.**, Werkle-Bergner, M., Lindenberger, U., Friederici, A. D., & Meyer, L. 2018 *Age differences in the use of syntactic and semantic associations during sentence processing*. AMLaP, September 7, 2018, Berlin, Germany
- Beese, C.**, Vassileiou, B., Friederici, A.D., & Meyer, L. 2018. *From Desynchronization to Synchronization: A Lifespan Shift of Alpha-Band Power During Sentence Comprehension*. Poster presented at SNL, August 15, 2018, Quebec, Canada

- Vassileiou, B., **Beese, C.**, Friederici, A.D., & Meyer, L. 2018 White-matter connectivity interacts with oscillatory desynchronization to explain sentence encoding. Poster presented at the Tenth Annual Society for the Neurobiology of Language (SNL) Conference, August 17, 2018, Québec City, Québec, Canada
- 2017 Vassileiou, B., Meyer, L., **Beese, C.**, & Friederici A. D. 2017. *Syntax is the key to memorizing long sentences: The role of brain oscillations*. Poster presented at the Conference on Interdisciplinary Approaches to Linguistic Theory 1, Crete, Greece
- Vassileiou, B., Meyer, L., **Beese, C.**, & Friederici A. D. 2017. *Syntax is the key to memorizing long sentences: The role of brain oscillations*. Poster presented at Architectures and Mechanisms of Language Processing, Lancaster, UK
- Beese, C.**, Meyer, L., Werkle-Bergner, M., Düzel, S., Kühn, S., Demith, I., Lindenberger, U., & Friederici, A.D. *The benefit of syntactic chunking for language comprehension in the aging brain*. Poster presented at IMPRS Summer School, London, UK
- Vassileiou, B., Meyer, L., **Beese, C.** & Friederici, A.D. *Syntax is the key to memorizing long sentences: The role of oscillations*. Poster presented at IMPRS Summer School, London, UK
- Beese, C.**, Meyer, L., Vassileiou, B. & Friederici, A.D. *Resting State Theta Power as Marker of Successful Language Comprehension across the Lifespan*. Poster presented at Neural Oscillations in Speech and Language Processing, Berlin, Germany
- Vassileiou, B., Meyer, L., **Beese, C.** & Friederici, A.D. *Syntax is the key to memorizing long sentences: The role of oscillations*. Poster presented at Neural Oscillations in Speech and Language Processing, Berlin, Germany
- Vassileiou, B., Meyer, L., **Beese, C.** & Friederici, A.D. *The function of alpha band oscillations in successful sentence encoding*. Poster presented at OHBM, Vancouver, Canada
- 2016 **Beese, C.**, Meyer, L., Vassileiou, B. & Friederici, A.D. *Resting State Theta Power as Marker of Successful Language Comprehension across the Lifespan*. Poster presented at Society for Neuroscience, San Diego, US
- Beese, C.**, Meyer, L., Vassileiou, B. & Friederici, A.D. *Resting-State EEG as Joint Marker of Language Performance and Age-Related Cognitive Decline*. Poster presented at IMPRS Summer School, Leipzig, Germany

# REVIEWER FOR.....

European Journal of Neuroscience  
 NeuroImage  
 Psychology and Aging

Frontiers in Human Neuroscience

Neuropsychologia

Journal of Neuroscience Methods

Neurobiology of Aging

## OUTREACH .....

- 2019      **Beese, C.** *Wie versteht das Gehirn Sprache?* (How does the brain understand language?) Talk presented at the Open School Day at the MPI for Human Cognitive and Brain Sciences, Leipzig, Germany, April 4
- 2018      **Beese, C.** *Wie versteht das Gehirn Sprache?* (How does the brain understand language?) Talk presented at the Open School Day at the MPI for Human Cognitive and Brain Sciences, Leipzig, Germany, March 27
- 2017      **Beese, C.** *Forever Young – Language Resists Aging.* Science Slam Talk presented at the Vision in Science, Berlin, Germany, October 1

## MEMBERSHIPS .....

- 2018/19      Society for the Neurobiology of Language
- 2016/17      Society for Neuroscience

## TEACHING .....

### *Courses*

- 2021      **BA Psychology**  
*Applied University Fresenius, Berlin, Germany*  
Course: Psychology of Language (1h/w)
- 2020/21      **BA Linguistics**  
*University of Vienna, Austria*  
Course: Introduction to Experimental Psychology (1h/w)
- BA Linguistics**  
*University of Vienna, Austria*  
Course: Psycholinguistics and Clinical Linguistics (2h/w)
- 2015/16      **BSc Psychology**  
*University of Leipzig, Germany*  
Course: Introduction to Experimental Psychology (2h/w)

### *Single Lectures*

- 2017      **MSc European Masters in Clinical Linguistics**  
*University of Potsdam, Germany*  
Lecture: Does sentence comprehension decline with age?

## **SUPERVISION** .....

- 2020/21     **Master Thesis**  
              Moana Moesslang  
              Title: Modulating the Perception of Elderspeak
- 2018/19     **Master Thesis**  
              Gayane Ghazaryan, University of Osnabrück, MSc  
              Title: Resting-state EEG markers of age-related changes in language acquisition.
- 2018         **Research intern**  
              Veronica Baldin, University of Salzburg, BA
- 2016/17     **Research intern**  
              Fernando Ardente, University of Saarbrücken, MA
- 2016         **Research intern**  
              Johanna Tegtmeyer, University of Leipzig, MSc
- 2015         **Research intern**  
              Marie-Theres Götze, University of Leipzig, BA

## **ORGANISATIONAL EXPERIENCE** .....

- 2021         Leipzig Lectures of Language  
              Online Series of Talks  
              *Leipzig, Germany*
- 2013         M24 workshop on Common Language Resources and Technology Infrastructure  
              *Nijmegen, The Netherlands*