Willem S. van Boxtel

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PERSONALIA

<u>Citizen</u> of the Netherlands / European Union Citizen
<u>Settled Status</u> (Indefinite Leave to Remain) in the United Kingdom
<u>Visiting Scholar</u> (J–1) in the United States
Languages:
Dutch (native), English (nativelike), German (C2 CEFR), French, Turkish (basic)

EDUCATION & EMPLOYMENT

Louisiana State University, Baton Rouge (LA, USA)
Assistant Professor of Communication Sciences and Disorders (from August 2022)

Purdue University Aphasia Lab, West Lafayette (IN, USA)
Postdoctoral Fellow (August 2022 – July 2024)
Description: Implicit structural priming as a treatment component in aphasia.
Principal Investigator: Dr Jiyeon Lee, CCC-SLP.

University of Essex, Colchester (UK)
Doctor of Philosophy, Psycholinguistics (August 2022)
Thesis title: "A Matter of Memory: Sentence Comprehension in Healthy Aging"
Supervised by Dr Laurel Lawyer

University of Essex, Colchester (UK)
Master of Arts MA, Psycholinguistics (September 2019)
Completed with Distinction

Birmingham City University, Birmingham (UK)
Bachelor of Arts with Honours, English (July 2018)
Completed with Distinction

RESEARCH INTERESTS

- Sentence processing, complex syntactic operations, linguistic prediction, in adult neurogenic disorders and healthy aging;
- Cognitive mechanisms underlying sentence processing in impaired speech and speech across the lifespan (implicit learning, Working Memory, processing speed)
- Advanced statistical modelling, including multilevel modelling for proportional / bounded variables, applied Bayesian models, Beta and zero-inflated regression.
- Experimental methods applied to cognition and language impairments, using neuroimaging methods to study underlying cognitive patterns during language processing.
- Development & application of new experimental techniques, including webcam-based eye-tracking and structural priming.

AWARDS & HONORS

Speech, Language, and Hearing Sciences Outstanding Research Contribution Award	Feb 2024
Purdue Health and Human Sciences Life Inspired Research Event First Place Poster Award	March 2023
Associate Fellow of the United Kingdom Higher Education Academy (commended)	Jul 2021 - Present
Howard Jackson Prize (Birmingam City University)	Jun 2018

PUBLICATION RECORD

Van Boxtel, W.S. & Lawyer, L.A. (accepted). A Matter of Memory? Age-Invariant Relative Clause Disambiguation And Memory Interference in Older Adults. *Thematic Issue on Language Change and Impairment in Healthy Aging, Topics in Cognitive Science.* `https://osf.io/eympz/`.

Jerro, K., O'Gara, F., Ngoboka, J.P., Lawyer, L.A., and **Van Boxtel, W.S.** (accepted). Meaning or Morphology: Individual Differences in the Categorization of Kinyarwanda Nouns. *Glossa Psycholinguistics.*

Van Boxtel, W.S., Manning, R.C.G., and Lee, J. (under review). Eliciting the Dative Alternation in English-speaking Adults: Foundational Work for Clinical Populations. *Glossa Psycholinguistics.*

Van Boxtel, W.S., Linge, M., Manning, R.C.G., Haven, L., and Lee, J. (under review) Online eye-tracking for aphasiology and linguistics: a feasibility study. *Brain and Behavior.* `https://osf.io/n6gu7/`.

Van Boxtel, W.S., Cox, B.N., Keen, A., and Lee, J. (2023). Planning sentence production in aphasia: evidence from structural priming and eye-tracking. *Frontiers in Language Sciences, 2*, 1175579. `https://doi.org/10.3389/flang.2023.1175579`

Van Boxtel, W.S. & Lawyer, L.A. (2023). In the Prime of Life: ERP Evidence for Syntacic Comprehension Priming in Older Adults. *Journal of Language and Aging Research*, vol.1(1). `https://osf.io/3yrnv/`.

Van Boxtel, W.S., Cox, B., Keen, A., and Lee, J. (2023). Anticipatory processing in aphasia: Evidence from structural Priming. *Frontiers in Language Sciences*, 2:1175579 `https://doi.org/10.3389/flang.2023.1175579`.

Van Boxtel, W.S. & Lawyer, L.A. (2022). Syntactic Comprehension Priming and Lexical Boost Effects in Older Adults. *Language, Cognition, Neuroscience.* `https://doi.org/10.1080/23273798.2022.2091151`

Van Boxtel, W.S. & Lawyer, L.A. (2021). Sentence Comprehension in Aging and Alzheimer's Disease. *Language and Linguistics Compass*, vol.15(6). DOI: `https://doi.org/10.1111/lnc3.12430`.

Lee, J., **Van Boxtel, W.S.**, Keen, A., and Man, G. (in prep.) Visual attention in word order choice: evidence from eyetracking in aging and aphasia.

Lee, J., **Van Boxtel, W.S.**, Weirick, J.D., Martin, N., Ferreira, V., Bauman, E., Haven, L.N., Sayers, M. and Manning, R.C.G. (in prep.) Implicit structural priming as a treatment component for sentence production in aphasia: specifying essential treatment components.

SERVICE TO THE FIELD

Grant Reviewer – Indiana Clinical and Translational Studies Institute Postdoctoral Funding Challenge	**Spring 2023** **Spring 2024**
Grant Reviewer – European Science Foundation Research Foundation Flanders	**May-June 2023**
Judge – Purdue Office of Undergraduate Research Undergraduate Research Conference	**April 2023**
Conference Organisation – Language at the University of Essex	**Jan 2020 – July 2021**
Research Assistant – Language Attrition & EEG	**June 2021 - Aug 2022**

Ad–Hoc Journal Reviews:

Language, Cognition, Neuroscience	April 2024	**Journal of Neurolinguistics**	April 2024
Aphasiology	April 2023	**Frontiers in Psychology**	December 2022, July 2023
Nature Scientific Reports	October 2022	**Intl. Journal of Language and Communication Disorders**	August 2022
Neuropsychology Review	August 2022	**Cognition**	June 2022
Frontiers in Education	June 2022	**Essex Student Journal**	Febr '21 — July '22

COMMUNITY OUTREACH	**Tippecanoe County Senior Services** Educational Talk	**9th November 2023**
	Living Truth of Christ Church Outreach & Recruitment Session	**September 2022**

SKILLS

Tools: EEG/ERP recording, Eye-Tracking (including online), OpenSesame, PsychoPy/Pavlovia, E-Prime, EEGlab, EyeLink, PRAAT, Gorilla.sc
Coding: R (fluent), LaTeX (fluent), (R) Markdown (fluent), Unix/Linux (familiar), Python (familiar), Matlab/EEGlab (familiar).
General: advanced mixed regression modelling (including non–linear and Bayesian), descriptive/inferential statistics, experimental design

TEACHING EXPERIENCE

Main Instructor, Anatomy & Physiology for   **Fall 2024**
Speech and Hearing Sciences (Lousiana State COMD4250)

Main Instructor, Phonetics   **Fall 2024**
(Lousiana State COMD / LING 3150)

Co–Instructor, Language Disorders in Adults   **Spring 2024**
(Purdue Univ. SLHS 531)
Principal instructor: Dr Jiyeon Lee, CCC-SLP.

Visiting Lectures, Speech-Language Disorders   **Autumn 2023**
in Health Care Settings (Purdue Univ. SLHS 430)
Principal instructor: Dr Jiyeon Lee, CCC-SLP.

Postdoctoral Fellowship – Mentoring   **Aug 2022–present**
From August 2022 I took mentored four undergraduate, two graduate, and three PhD students in the use of behavioral and eye–tracking research methodology, lab management, and data analysis.

Postdoctoral Fellowship – Statistics Club   **Fall 2022–present**
As a postdoctoral fellow, I initiated and convened a lab-wide research methods and statistics reading and tutoring group.

Assistant Lecturer   **Oct 2020-Mar 2022**
University of Essex - Understanding Data in Linguistics

Graduate Teaching Assistant   **Oct-Dec 2019**
University of Essex - Child Language Development

INVITED TALKS	**Purdue University**	**20th November 2023**
	Speech, Language, and Hearing Sciences	
	Webcam-based eye tracking for clinical research: Evidence from healthy older adults and people with aphasia.	
	University of Essex	**19th October 2023**
	Department of Language and Linguistics	
	Language Rehabilitation through Syntactic Priming: Evidence from healthy older adults and people with aphasia	
	Beckman Institute / University of Illinois	**8th February 2023**
	Language Rehabilitation through Syntactic Priming: Evidence from healthy older adults and people with aphasia	
	Purdue National Student Speech, Language, and Hearing Association Assessment Tool Workshop	**9th November 2022**

FUNDING & GRANTS	**Purdue Center for Research on Brain, Behavior, and NeuroRehabilitation (CEREBBRAL) Pilot Grant Funding**	**April 2024** $5,000; returned
	Aiming to fund further studies exploring the efficacy of webcam–based eye–tracking to aphasia assessment, this grant aimed to apply a visual–world eye–tracking paradigm to patient groups online.	
	American Speech-Hearing Foundation **New Investigators Research Grant**	**Spring 2024** (Submitted)
	With the aim of extending the validation of online eye-tracking methods in combination with determining whether patients with aphasia use predictive processing during speech comprehension and production, this grant application seeks $10,000 in funding from the ASH Foundation.	
	National Aphasia Association **Barbara Martin Aphasia Research Grant**	**Summer 2023** (Applied; not funded)
	Purdue Institute for Integrative Neuroscience **Travel Award**	**12 Dec 2022** ($300)
	University of Essex Faculty of Social Sciences **Executive Dean's Fund**	**from Oct 2019** (£5,071)
	Psychology of Noun Classes in Kinyarwanda	
	Essex Social Sciences Doctoral Scholarship	**2019-2022**
	Sentence Comprehension in Healthy Aging	(Approx. £40,000)

CONFERENCE ATTENDACE

10/2023. Willem van Boxtel, Briana Cox, Austin Keen, & Jiyeon Lee. Priming from sentence comprehension to production in aphasia: evidence from eye-tracking. Academy of Aphasia Annual Meeting 2023, Reading, UK.

11/2023. Willem van Boxtel, Michael Linge, Rylee Manning, Lily Haven, & Jiyeon Lee. Online Eye-Tracking for Clinical Research: A Validation Study with Aphasia Patients. American Speech-Hearing Association Annual Convention, Boston, MA, USA.

10/2023. Willem van Boxtel, Michael Linge, Rylee Manning, Lily Haven, & Jiyeon Lee. Online Eye-Tracking for Clinical Research: A Validation Study with Aphasia Patients. Society for the Neurobiology of Language 2023, Marseille, France.

4/2023. Nadia Seye, Willem van Boxtel, Josua Weirick, & Jiyeon Lee. The influence of sentence production training on speech fluency in post-stroke aphasia and older adults. Purdue Undergraduate Research Conference, Purdue University, West Lafayette, IN.

3/2023. Willem van Boxtel, Michael Linge, Rylee Manning, Lily Haven, & Jiyeon Lee. Remote Eye-Tracking for Clinical Research: Designing a Validation Study with

Aphasia Patients. Health and Human Sciences Life Inspired Research Event, Purdue University, West Lafayette, IN.

10/2022. Willem van Boxtel & Laurel Lawyer. There Is No Age-Related Sentence Processing Deficit: Experimental Evidence and Implications for Aphasiology. Academy of Aphasia Annual Meeting 2022, Philadelphia, PA, United States.

10/2022. Willem van Boxtel & Laurel Lawyer. In the Prime of Life: ERP Evidence for Syntactic Comprehension Priming in Older Adults. (Poster). Society for the Neurobiology of Language Annual Meeting 2022, Philadelphia, PA, United States.

6/2022. Willem van Boxtel & Laurel Lawyer. In the Prime of Life: Learning of Syntactic Processing Is Intact in Older Adults. (Poster). Centre for Language Development throughout the Lifespan (LaDeLi), University of Essex, Colchester, UK.

4/2022. Willem van Boxtel & Laurel Lawyer. In the Prime of Life: Electrophysiological Evidence for Syntactic Comprehension Priming in Older Adults. (Poster). 2022 Cognitive Aging Conference, Atlanta, GA, United States.

3/2022. Willem van Boxtel & Laurel Lawyer. A Matter of Memory? Age-Invariant Relative Clause Disambiguation And Memory Interference in Older Adults. Corpora on Language and Aging Research 5 (CLARE5), Anchorage, AK, United States.

4/2021. Willem van Boxtel & Laurel Lawyer. Syntactic Representations Remain Intact in Aging: Evidence from Structural Comprehension Priming. International Workshop on Language in Healthy and Pathological Aging, University of Salamanca, Spain.

7/2020. Willem van Boxtel & Laurel Lawyer. The Bilingual Mind Matters: An EEGs Study into Inhibition Advantages in Sequential Bilinguals. UK Cognitive Linguistics Conference, Birmingham, UK.

6/2020. Kyle Jerro, Laurel Lawyer, Fate O'Gara, Willem van Boxtel. A Quantitative Study of Noun Classes in Kinyarwanda. Bantu 8. Colchester, UK.

6/2019. Willem van Boxtel. Inhibitory Control in a Bilingual Stroop Task: Evidence from ERPs and Reaction Time. LangUE. Colchester, UK.

RELEVANT COURSES	**Introduction to Python for Social Scientists (University of Essex)**	**Jul 2021**
	Virtual EEGLAB Workshop UC San Diego	**Jun 2021**
	Routes to Impact (University of Essex)	**17th Mar 2021**
	Cognitive and Affective Neurophysiology Summer School (University of Porto)	**7-10th Sep 2020**
	MATLAB & PsychToolBox (University of Essex)	**Jan 2020**