Willem S. van Boxtel

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PERSONALIA

<u>Citizen</u> of the Netherlands / European Union Citizen

Settled Status (Indefinite Leave to Remain) in the United Kingdom

Visiting Scholar (J–1) in the United States

Languages:

Dutch (native), English (nativelike), German (fluent), French (basic), Turkish (basic)

EDUCATION & EMPLOYMENT

Purdue University Aphasia Lab, West Lafayette (IN, USA)

Postdoctoral Fellow (August 2022 – present)

Description: this multi-site project funded by the National Institutes of Health investigates the role of implicit structural priming on language learning and recovery 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

- Cognitive mechanisms underlying sentence processing. Implicit/statistical learning, language, and aging. Working Memory, Processing Speed, and implicit learning across the lifespan.
- 'Atypical' sentence processing and use of impaired and aging data to inform linguistic and cognitive theory.
- 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, using neuroimaging methods to study underlying cognitive patterns during language processing.
- Development & application of new experimental techniques, including webcambased eye-tracking and structural priming.

PUBLICATION RECORD

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

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.

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

Van Boxtel, W.S. & Lawyer, L.A. (under review). 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/.

SERVICE TO THE FIELD

Reviewer – European Science Foundation / Research May-June 2023 Foundation Flanders Junior & Senior Research Projects

Judge – Purdue Office of Undergraduate Research April 2023 Undergraduate Research Conference

Reviewer – Indiana Clinical and Translational Studies Spring 2023 Institute Postdoctoral Funding Challenge

Conference Organisation – Language at the Jan 2020 – July 2021 University of Essex

Research Assistant – Language Attrition & EEG June 2021 - Aug 2022

Periodic Reviews:

	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 S Educational Talk	9th	9th November 2023	
	Living Truth of Chri Outreach & Recruitr			September 2022
AWARDS	Purdue Health and Human Sciences Life Inspired March 202 Research Event First Place Poster Award			March 2023

Howard Jackson Prize (Birmingam City University)

Associate Fellow of the United Kingdom

Higher Education Academy (commended)

Jun 2018

Jul 2021 - Present

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

Co-Instructor, Speech-Language Disorders in Health Care Settings (SLHS 430)

Autumn 2023

Postdoctoral Fellowship - Mentoring

Aug 2022-present

From August 2022 I took part in mentoring three 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

During my time as a postdoctoral fellow, I initiated and currently convene a lab-wide research methods and statistics reading and tutoring group, which seeks to instruct lab members on the interpretation and implementation of common data analysis methods.

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

Classroom Assistant

Nov 2017 - Jun 2018

Birmingham City University

INVITED TALKS University of Essex

19th October 2023

Department of Language and Linguistics

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

National Aphasia Association

Summer 2023

Barbara Martin Aphasia Research Grant (\$10,000; Under review) To conduct foundational research on the implicit and explicit memory mechanisms underlying sentence comprehension across the lifespan, this grant application seeks funding from the National Aphasia Association.

Purdue Institute for Integrative Neuroscience Travel Award 12 Dec 2022

(\$300)

(£5,071)

University of Essex Faculty of Social Sciences Executive Dean's Fund

from Oct 2019

Psychology of Noun Classes in Kinyarwanda

Essex Social Sciences Doctoral Scholarship

2019-2022

(Approx. £40,000)

CONFERENCE ATTENDACE 10/2023 (upcoming – accepted). 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 (upcoming – accepted). 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 (upcoming – accepted). 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.

4/2019. Willem van Boxtel. Passive Comprehension in English and Dutch Broca's Aphasia: Proposing a Comparative Cross-linguistic Study. Essex Graduate Conference in Linguistics. 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