

David Strohmaier

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Work Experience

2019–Ongoing Research

Associate

University of Cambridge
ALTA Institute
NLP technologies for language learning

2021–22 Supervisor: Prolog

Robinson College
University of Cambridge

2016 Internship

Hamburg Institute for
Social Research (HIS)

2013–14 Student Assistant

University of Göttingen

Awards & Grants

2018 Postgraduate Researcher
Experience Programme

2015–18 AHRC Competition
Studentship

2015 Best Social Science BA
Diss. University of
Göttingen

2013 Niedersachsenstipendium

2011 Deutschlandstipendium

Selected Projects

2024 **Character-Level Model**
Training a character-level
LM from scratch

2022 **Modelling Complexity**
Using pymc and pyTorch
to model lexical
complexity datasets

2020–21 **WSD Systems**
Multiple word-sense
disambiguation systems

2018 **Adaptive Utility**
Interactive visualisation of
motivational change

Scientific Interests

- Modelling Cognitive Processes
- Deep Learning
- Decision Theory
- Bayesian Methods

Education

January 2023 – January 2026 **PhD in Computer Science** University of Cambridge
Investigating second language acquisition using transformer LMs

2018–19 **MPhil in Advanced Computer Science** University of Cambridge
Awarded with Distinction

2015–18 **PhD in Philosophy** University of Sheffield
Without Corrections

2014–15 **MA in Philosophy** University of Sheffield
Awarded with Distinction

2012–14 **BA in Philosophy and Sociology** University of Göttingen

2011–14 **BA in Sociology** University of Göttingen

Skills

Python pyTorch numpy Transformers spaCy sklearn pymc Anaconda
Prolog emacs Git LaTeX

Publications

Books

2024 Strohmaier, D., Messerli, M.. Preference Change. *Cambridge University Press*.

Journal Papers & Proceedings

2024 Strohmaier, D., Buttery, P. Semantic Error Prediction: Estimating Word Production Complexity. *Proceedings of NLP4CALL 2024*.

2023 Wimmer, S., Strohmaier D, Contrafactuals and Learnability: An Experiment with Propositional Constants. *Post-Proceedings of Logic and Engineering of Natural Language Semantics 19*.

2022 Wimmer, S., Strohmaier, D. Contrafactuals and Learnability. *Amsterdam Colloquium*.

2022 Tyen, G., Strohmaier, D. (equal contribution) A Category Theory Framework for Sense Systems. *GLOBALEX 2022 @ LREC*.

2021 Yuan, Z., Tyen, G., Strohmaier, D. Cambridge at SemEval-2021 Task 1: An Ensemble of Feature-Based and Neural Models for Lexical Complexity Prediction. *SemEval-2021*.

2021 Cambridge at SemEval-2021 Task 2: Neural WiC-Model with Data Augmentation and Exploration of Representation. *SemEval-2021*. Model achieved best results on some tracks.

2021 Strohmaier, D. Organisation as Computing Systems. *Journal of Social Ontology*.

2021 Strohmaier, D. Ontology, Neural Networks, and the Social Sciences. *Synthese*.

2020 Strohmaier, D., Gooding, S., Taslimipoor, S., Kochmar, E. SeCoDa: Sense Complexity Dataset. *LREC 2020*.

2020 Strohmaier, D. Social-Computation-Supporting Kinds. *Canadian Journal of Philosophy*.

2020 Strohmaier, D. Two Theories of Group Agency. *Philosophical Studies*.

2018 Strohmaier, D. Group Membership and Parthood. *Journal of Social Ontology*.

Book Reviews

2021 Strohmaier, D. Review of Richard Pettigrew's "Choosing for Changing Selves". *The Philosophical Quarterly*.

2019 Strohmaier, D. Review of Richard Bradley's "Decision Theory with a Human Face". *Philosophical Psychology*.