NAOMI TACHIKAWA SHAPIRO

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AFFILIATION

Visiting Researcher, Centre for Language Studies, 1/2025–*present*
Radboud Universiteit

Postdoctoral Researcher, Centre for Language Studies, 1/2024–12/2024
Radboud Universiteit
NWO funded "The statistics of language as a novel window into the multilingual mind"
PI: Stefan Frank

EDUCATION

Ph.D., Linguistics (Computational Linguistics Track), 2023
University of Washington
Dissertation: "On the diverse language experiences of humans and machines"
Committee: Shane Steinert-Threlkeld (chair), Qi Cheng, Naja Ferjan Ramírez, and Fei Xia

M.S., Computational Linguistics, 2021
University of Washington

— Visiting Student Researcher at Stanford University, Autumn 2019

M.S., Symbolic Systems, 2016
Stanford University

B.A., Linguistics and Communication with Honors, 2011
University of Washington

AWARDS

— University of Washington Presidential Dissertation Fellowship, 2022–2023
— University of Washington Department of Linguistics Excellence in Research Graduate Fellowship, 2021–2022
— Eero and Helli Tetri Endowed Fund for Finnish Studies Scholarship, 2019–2020
— Foreign Language and Area Studies (FLAS) Academic Year Fellowship – Modern Hebrew, 2018–2019

PAPERS

Stefan L. Frank and Naomi Tachikawa Shapiro. In press. Connectionist models of second language acquisition and processing. In Hilary Nesi and Petar Milin (eds.), *International Encyclopedia of Language and Linguistics* (3rd Edition).

Naomi Tachikawa Shapiro, Andrew Hedding, and Shane Steinert-Threlkeld. 2024. Iconic artificial language learning in the field: An experiment with San Martín Peras Mixtec speakers. *Proceedings of the 46th Annual Meeting of the Cognitive Science Society*, 3686–3692.

Naomi Tachikawa Shapiro and Shane Steinert-Threlkeld. 2023. Iconic artificial language learning: A conceptual replication with English speakers. *Proceedings of the 45th Annual Meeting of the Cognitive Science Society*, 146–152.

Naomi Tachikawa Shapiro, Amandalynne Paullada, and Shane Steinert-Threlkeld. 2021. A multilabel approach to morphosyntactic probing. *Findings of the Association for Computational Linguistics: EMNLP 2021*, 4486–4524.

Naomi Tachikawa Shapiro, Daniel Hippe, and Naja Ferjan Ramírez. 2021. How chatty are daddies? An exploratory study of infants' language environments. *Journal of Speech, Language, and Hearing Research, 64*(8), 3242–3252.

Naomi Tachikawa Shapiro and Arto Anttila. 2021. On the phonology and semantics of deaccentuation. *Proceedings of the 2020 Annual Meeting on Phonology* (AMP).

Naja Ferjan Ramírez, Daniel Hippe, and Naomi Tachikawa Shapiro. 2021. Exposure to electronic media between 6 and 24 months of age: An exploratory study. *Infant Behavior and Development, 63*, 101549.

Arto Anttila, Timothy Dozat, Daniel Galbraith, and Naomi Tachikawa Shapiro. 2020. Sentence stress in presidential speeches. In Gerrit Kentner and Joost Kremers (eds.), *Prosody in Syntactic Encoding* (pp. 17–50). De Gruyter.

Arto Anttila and Naomi Tachikawa Shapiro. 2017. The interaction of stress and syllabification: Parallel or serial? *Proceedings of the 34th West Coast Conference on Formal Linguistics* (WCCFL), 52–61.

Naomi Tachikawa Shapiro. 2016. Splitting compounds with ngrams. *Proceedings of the 26th International Conference on Computational Linguistics: Technical Papers* (COLING), 630–640.

IN PREP

Naomi Tachikawa Shapiro, Qi Cheng, Barbara Citko, and Shane Steinert-Threlkeld. Iconic artificial languages: Distinguishing universality from transfer effects.

Emily Atkinson, Naomi Tachikawa Shapiro, Aaron Apple, and Akira Omaki. Developing sensitivity to linguistic cues in children's processing of verb complement ambiguity.

Michelle Suijkerbuijk, Naomi Tachikawa Shapiro, Peter de Swart, and Stefan L. Frank. The need for human data when analysing the human-likeness of syntactic representations in neural language models: The case of English *wh*-island constraints.

CONFERENCE TALKS & POSTERS

Naomi Tachikawa Shapiro, Barbara Citko, and Shane Steinert-Threlkeld. Accepted. Language universals vs. crosslinguistic influence: The case of morpheme-ordering biases. *The 15th International Symposium on Bilingualism* (ISB). Donostia-San Sebastián.

Naomi Tachikawa Shapiro and Stefan L. Frank. Accepted. Modeling bilingual reading comprehension with language models. *The 15th International Symposium on Bilingualism* (ISB). Donostia-San Sebastián.

Naja Ferjan Ramírez, Daniel Hippe, and Naomi Tachikawa Shapiro. 4/2021. Exposure to electronic media between 6 and 24 months of age: An exploratory study. *Society for Research in Child Development (SRCD) Biennial Meeting*. Virtual.

Naomi Tachikawa Shapiro, Amandalynne Paullada, and Shane Steinert-Threlkeld. 11/2020. Mighty morpho-probing models. *The 3rd BlackboxNLP Workshop on Analyzing and Interpreting Neural Networks for NLP (BlackboxNLP)*. Virtual.

Naomi Tachikawa Shapiro, Daniel Hippe, and Naja Ferjan Ramírez. 11/2020. How chatty are daddies? Parental differences in the language environments of infants. *The 45th Boston University Conference on Language Development (BUCLD)*. Virtual.

Arto Anttila and Naomi Tachikawa Shapiro. 9/2020. Invited tutorial: Corpus studies in phrasal prosody. *Workshop on Intonation*, *Annual Meeting on Phonology (AMP)*. UC Santa Cruz / Virtual.

Emily Atkinson, Ian Rigby, Naomi Tachikawa Shapiro, Brent Woo, and Akira Omaki. 3/2018. Syntactic adaptation effects do not transfer across tasks. *CUNY Conference on Human Sentence Processing*. UC Davis.

INVITED TALKS

Thoughts on language models and cognition
— Computational Cognitive Science (CCS) Lab, Donders Institute (5/13/2024)

Transfer effects in humans and machines
— Department of Linguistics, University of British Columbia (5/11/2024)
— Centre for Language Studies, Radboud Universiteit (4/21/2023)
— Allen Institute (4/21/2023)

RESEARCH ASSISTANTSHIPS

Humanities Data Science Summer Institute, University of Washington, 6/2023–7/2023
PI: Melanie Walsh
Mentored a team of undergraduate students as we analyzed and visualized the Twitter afterlife of James Baldwin.

Phonetics Lab + Language Development & Processing Lab, University of Washington, 12/2020–3/2021
PIs: Richard Wright and Marina Oganyan
Analyzed visual world eye-tracking data to study the effects of sonority and salience on the perception of novel consonant clusters.

Language Development & Processing Lab, University of Washington, 12/2019–3/2020; 9/2020–12/2020
PI: Naja Ferjan Ramírez
Used mixed-effects linear regression to analyze Language ENvironmental Analysis (LENA) recordings. Focused on infant volubility and its associations with parental speech and electronic media exposure.

Language Development & Processing Lab, University of Washington, 9/2017–3/2018
PI: Akira Omaki
Studied filler-gap dependencies and syntactic adaptation with adults via reading-based eye-tracking experiments. Investigated how children process verb-complement ambiguities using the visual world paradigm.

Linguistics Department, Stanford University, 1/2015–9/2015; 6/2016–12/2017
PI: Arto Anttila
Investigated Finnish phonotactics and English sentential prosody via computational and information-theoretic approaches. Created the Python package *FinnSyll* for the automatic syllabification of Finnish.

TEACHING

University of Washington
— Instructor of Record, LING 599 Linguistics Proseminar, Academic Year 2021–2022
  * Developed new yearlong course sequence
  Course website: https://tsnaomi.net/uw/ling-proseminar/
— Lead Teaching Assistant, Department of Linguistics, Academic Year 2021–2022
  * Advised TAs on TA-ing and coordinated the 2021 UW Linguistics TA Workshop (with Laura McGarrity)
— Instructor of Record, LING/CSE 472 Introduction to Computational Linguistics, Spring 2021
— Teaching Assistant, LING 200 Introduction to Linguistic Thought, Spring 2020
— Teaching Assistant, LING 200 Introduction to Linguistic Thought, Spring 2018

Girls Who Code
— Lead Instructor, Summer Immersion Program in Computer Science (Redmond, WA), Summer 2019

Stanford University
— Teaching Assistant, SYMSYS 100 Minds and Machines, Autumn 2015

ADVISING

Radboud Universiteit
— Michelle Suijkerbuijk (Linguistics Ph.D. candidate), 2024–*present*

University of Washington
— Dinou Zhou (Computational Linguistics M.S. student), 2024–*present*
— Smith Rothchild (Linguistics B.A. student), 2024–*present*
— Junyin Chen (Computational Linguistics M.S. student), 2022–2023
— Amelia Stockdill (Linguistics B.A. student), 2022–2023

INDUSTRY

Summer Associate, RAND Corporation, 6/2020–9/2020
Worked on supervised and weakly supervised methods for text classification.

Backend Engineer, Venyooz, 6/2014–12/2014; 2/2017–9/2017
Built the beta version of *SchoolSpace*, web-based software for school districts to manage facility rentals.

Production Engineer, Wavii (acquired by Google in 2013), 3/2012–3/2013
Managed the content of a news aggregator app. Annotated snippets for genre, named entities, and predicate relations.

SERVICE

Guest Speaker at TA Training Workshop, Linguistics Department, University of Washington
— "Diversity, equity, and inclusion in the classroom", 9/2022
— "Reducing barriers and fostering equity, accessibility, and inclusion", 9/2021 (with Trent Ukasick)
— "Dealing with classroom challenges", 9/2021 (with Laura McGarrity)
— "Planning your sections: Transitioning from in-person to online teaching", 9/2020 (with Anna Moroz)

President, Linguistics Society at the University of Washington (LSUW), 2020–2021

Faculty Search Committee (Subfield: Language Acquisition & Morphosyntactic Processing), Linguistics Department, University of Washington, 2019-2020

Admissions Reading Committee, Symbolic Systems M.S. Program, Stanford University, 2015–2016

Reviewer
— The Annual Meeting of the Cognitive Science Society (CogSci), 2024
— The Association for Computational Linguistics Rolling Review (ARR), 2022
— The Workshop on Natural Language Processing for Positive Impact (NLP4PI), 2022
— The Conference on Empirical Methods in Natural Language Processing (EMNLP), 2021
— The Annual Meeting of the Association for Computational Linguistics (ACL), 2021
— The University of Washington Working Papers in Linguistics (UWWPL), 2020
— The International Conference on Computational Linguistics (COLING), 2018

LANGUAGES

English (native), Modern Hebrew (intermediate), Japanese (beginner-intermediate)

CODE

— *Languages*: Python, R, JavaScript, Ruby, HTML/CSS
— *Deep learning libraries*: PyTorch, Keras, TensorFlow (coursework)
— *Web frameworks*: Django, Flask, Node.js (coursework), Rails
— *Databases*: PostgreSQL, MongoDB (coursework)
— *Experiment builders*: jsPsych