

Katie Mudd

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ACADEMIC POSITIONS

- 2025 - 2026 **Postdoctoral Associate at the Institute for Advanced Computational Science**
Stony Brook University, United States
PI: Margaret Schedel
Topic: Creativity and signal space constraints in music and language
- 2024 **Postdoctoral Fellow at the Department of Linguistics and Communication**
University of Birmingham, England
PI: Adam Schembri
Topic: Artificial language learning study of morphological complexity
- 2022 - 2023 **Postdoctoral Fellow at the Institute for Language, Logic and Computation**
University of Amsterdam, the Netherlands
PIs: Marieke Schouwstra and Robert van Rooij
Topic: Online interactive experiment to study lexical variation
- 2022 **Postdoctoral Fellow at the Artificial Intelligence Laboratory**
Department of Computer Science, Vrije Universiteit Brussel, Belgium
PI: Bart de Boer
Topic: Computational modeling of gene-culture coevolution in sign languages

EDUCATION

- 2017 - 2022 **PhD, Artificial Intelligence Laboratory, Vrije Universiteit Brussel**
Thesis: “How social structure affects the persistence and features of shared sign languages” (Supervisors: Bart de Boer and Connie de Vos)
- 2016 - 2017 **MSc Evolution of Language & Cognition, University of Edinburgh**
Thesis: “Improvised word order biases are not modality specific: evidence from vocal charades” (Supervisors: Marieke Schouwstra and Simon Kirby)
- 2013 - 2016 **Interdepartmental Bachelor in Humanities and Social Science (Linguistics & Psychology), University College Utrecht**

SUMMER SCHOOLS

- 2026 Diverse Intelligences Summer Institute (Geneva, New York, USA)
- 2019 BEHAVE Agent-Based Modeling (Brescia, Italy)

GRANTS AND AWARDS

2026	Award for Career Exploration (375.00 dollars)
2022	ABC Talent Grant, University of Amsterdam (125.000 euros)
2018	VUB Doctoral School, NSE Travel Grant (750 euros)
2017	MSc thesis Highly Commended Dissertation Prize

JOURNAL PUBLICATIONS

Lutzenberger, H., **Mudd, K.**, Stamp, R. & Schembri, A. (2023). *The social structure of signing communities and lexical variation: A cross-linguistic comparison of three unrelated sign languages*. Glossa. 8(1). doi: <https://doi.org/10.16995/glossa.10229>

Mudd, K., de Vos, C. & de Boer, B. (2022). *Shared context facilitates lexical variation in sign language emergence*. Languages. 7(1), 31. <https://doi.org/10.3390/languages7010031>

Mudd, K., Lutzenberger, H., de Vos, C., de Boer, B., Fikkert, P. & Crasborn, O. (2020). *The effect of sociolinguistic factors on sign variation in the Kata Kolok lexicon*. Asia-Pacific Language Variation. 6(1), 53-88. <https://doi.org/10.1075/aplv.19009.mud>

Mudd, K., de Vos, C. & de Boer, B. (2020). *An agent-based model of sign language persistence informed by real-world data*. Language Dynamics and Change. 10, 158-187. <https://doi.org/10.1163/22105832-bja10010>

Mudd, K., de Vos, C. & de Boer, B. (2020). *The effect of cultural transmission on shared sign language persistence*. Palgrave Communications. 6. <https://doi.org/10.1057/s41599-020-0479-3>

PUBLICATIONS IN REVIEW / PREPARATION

Lutzenberger, H., **Mudd, K.**, Satyawati & de Vos, C. (accepted). How social networks shape lexical variation in Kata Kolok signers and Balinese homesigners. Language in Society.

Mudd, K., Cuskley, C. & Schouwstra, M. (submitted). Shared context and lexical alignment: an experimental investigation.

Mudd, K., Fox, N., Smith, K. & Schembri, A. (In prep). The learnability of sign language morphology: an experimental investigation.

Oomen, M., **Mudd, K.** & de Ronde, T. (In prep). Do signers interpret R-loci as regions or points? An on-line probe recognition task.

BOOKS AND BOOK CHAPTERS

Mudd, K. & de Boer, B. (2025). Computational methods for language variation and convergence. In Limor Raviv and Cedric Boeckx (Eds.), *The Oxford Handbook of Approaches to Language Evolution*.

Mudd, K. (2022). *How social structure affects the persistence and features of shared sign languages*. Doctoral dissertation, Vrije Universiteit Brussel.

PEER REVIEWED CONFERENCE PROCEEDINGS

Mudd, K., Youngblood, M. & Schedel, M. (2026, April). Signal space exploration and divergent creativity in a rhythm creation task. In *The Evolution of Language International Conferences (EVOLANG)*. Plovdiv, Bulgaria.

Fox, N., **Mudd, K.**, Smith, K. & Schembri, A. (2026, April). The learnability of sign language morphology: an artificial language learning study. In *The Evolution of Language International Conferences (EVOLANG)*. Plovdiv, Bulgaria.

Mudd, K. & Schouwstra, M. (2024, July). Shared context and lexical alignment: an experimental investigation. CogSci 2024. In *44th Annual Meeting of the Cognitive Science Society (CogSci 2024)*. Cognitive Science Society. Rotterdam, the Netherlands.

Mudd, K. & Schouwstra, M. (2024, May). Limited context leads to alignment. In *The Evolution of Language International Conferences (EVOLANG)*. Madison, Wisconsin, United States.

Mudd, K., Lutzenberger, H., de Vos, C., & de Boer, B. (2021). Social structure and lexical uniformity: A case study of gender differences in the Kata Kolok community. CogSci 2021. In *43rd Annual Meeting of the Cognitive Science Society (CogSci 2021)*. Cognitive Science Society.

Mudd, K., Lutzenberger, H., de Vos, C., de Boer, B., Fikkert, P. & Crasborn, O. (2020, April). *How does social structure shape language variation? A case study of the Kata Kolok lexicon*. In *The Evolution of Language International Conferences (EVOLANG)*. Brussels, Belgium. (Canceled due to covid).

ORGANIZED WORKSHOPS, SYMPOSIA & CONFERENCES

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| 2026 | Scientific committee member of The Evolution of Language International Conferences (EVOLANG) . Plovdiv, Bulgaria. |
| 2025 | Workshop: “ Crowdsourcing and experimental procedures ”. Stony Brook University, USA. |
| 2025 | Organizational committee member of “ Sign Language Genetics ” Conference. École des Hautes Études en Sciences Sociales (EHESS), France. |
| 2025 | Workshop: “ Collective Creativity ”. Stony Brook University, USA. |
| 2024 | Scientific committee member of The Evolution of Language International Conferences (EVOLANG) . University of Wisconsin-Madison, USA. |
| 2023 | Workshop: “ Let’s evolve languages in the lab ”. University of Amsterdam, the Netherlands. |
| 2022 | Workshop: “ Social structure and linguistic diversity ”. Radboud University, the Netherlands. |

- 2021 Symposium: “**Language preservation and agent-based computer simulations**”. Vrije Universiteit Brussel, Belgium.
- 2020 Scientific and organizational committee member of **The Evolution of Language International Conferences (EVOLANG)**. Vrije Universiteit Brussel, Belgium (Canceled due to COVID).
- 2020 Workshop: “**Hands on sign language emergence: current methods**”. The Evolution of Language International Conference (EVOLANG). Vrije Universiteit Brussel, Belgium (Canceled due to COVID).

DATASETS

de Vos, C., Kanta, K., Lutzenberger, H., **Mudd, K.**, Sumarni, N. (2007-2021). Item “*Kata Kolok Corpus*” (2023). In collection “Vos”. The Language Archive. <https://hdl.handle.net/1839/58506aa9-8122-48bf-93b1-f353a2d65ab1>. [Spontaneous conversational and elicited data from adult Kata Kolok signers from generation two through five, including monologues, dialogues, multi-party conversations, elicited data, experimental data.]

Lutzenberger, H., & **Mudd, K.** (2018-2020). Item “Variation Project [Dataset]” in collection “Vos”. The Language Archive. [<https://hdl.handle.net/1839/a57f7c5f-fca9-40e8-903d-6b626117ede9>]. [Dataset including culturally appropriate picture stimuli of five semantic domains to elicit lexical signs to study lexical variation.]

TEACHING

- 2025 AI and Creativity, Stony Brook University
- 2020, 2021 Methods for scientific research (TA), Vrije Universiteit Brussel

GUEST LECTURES

- 2026 The Evolution of Language and Music, University of Amsterdam
- 2022, 2024 Agent-based cognitive modeling, Radboud University
- 2023 State-of-the-art language and evolution, University of Amsterdam
- 2022 Cognitive modeling, University of Amsterdam

SUPERVISION

PhD STUDENTS

- 2025 Alina Shabaeva, Institute for Advanced Computational Science, Stony Brook University
Topic: Word order and creativity

MA STUDENTS

- 2020 - 2021 Jordy Berlander, Artificial Intelligence Laboratory, Vrije Universiteit Brussel
Topic: Using agent-based modeling techniques to investigate the retention of iconicity in language emergence

2020 - 2021 Cassandra Moyson, Artificial Intelligence Laboratory, Vrije Universiteit Brussel
Topic: Emergence of phonology in sign language

BA STUDENTS

2023 Alessandro Pecoraro, Linguistics, University of Amsterdam
Topic: Gestural improvisation experiment with participants in the lab

2023 Francijn Keur, Cognition, Language and Communication, University of Amsterdam
Topic: Lexical variation and network structure in sign language communities

AD-HOC REVIEWING

Cognitive Science, Journal of Computational Social Science, Glossa, Linguistics Vanguard

INVITED TALKS

Mudd, K. (2026, April). Signal space exploration and divergent creativity in a rhythm creation task
Language Evolution Lab, University of Amsterdam, Amsterdam, the Netherlands.

Mudd, K. (2026, March). Sociolinguistic ecology and variation in sign languages. Research group
of Noga Zaslavsky, Psychology Department, New York University, New York, USA.

Mudd, K. (2025, November). Gene-culture coevolution and sign language persistence. Sign
Language Genetics Conference. École des Hautes Études en Sciences Sociales (EHESS), Paris,
France.

Mudd, K. (2025, October). A multi-methodological approach to understanding lexical variation in
sign languages. Institute for Advanced Computational Science, Stony Brook University, New York,
USA.

Mudd, K. (2025, April). Linking Sign Language and Creativity Research. Collective Creativity
Workshop, Institute for Advanced Computational Science, Stony Brook University, New York,
USA.

Mudd, K. (2024, December). *The learnability of sign language morphology: an experimental
investigation*. Language Evolution and Adaptation in Diverse Situations (LEADS) meeting. Max
Planck Institute for Psycholinguistics, Nijmegen, the Netherlands.

Mudd, K. (2024, February). *Shared context and lexical variation*. Cognitive AI research group, Vrije
Universiteit Brussel, Belgium.

Mudd, K. & Lutzenberger, L. (2023, January). The social structure of signing communities and
lexical variation: A cross-linguistic comparison of three unrelated sign languages. Language
Evolution and Emergence (LEE) Group. Max Planck Institute for Psycholinguistics, Nijmegen, the
Netherlands.

Mudd, K. (2022, November). *Lexical variation in language emergence*. TiCC Colloquium, Tilburg
University, Tilburg, the Netherlands.

Mudd, K. (2022, October). *Lexical variation in language emergence*. Multimodal Language Department, Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands.

Mudd, K. (2022, September). *Using agent-based models to study sign language persistence*. Workshop “Machine Learning and the Evolution of Language: Building a bridge between communities” organized by Limor Raviv and Bart de Boer at The Evolution of Language International Conferences (EVLANG). Kanazawa, Japan.

Mudd, K. (2021, September). *Lexical variation and social structure*. ELISA project meeting, Tilburg University, the Netherlands.

Mudd, K. (2021, October). *Shared context facilitates lexical variation in sign language emergence*. Artificial Intelligence Laboratory, Vrije Universiteit Brussels, Belgium.

Mudd, K. (2020, December). *A reanalysis of a Kata Kolok lexical elicitation study*. Creative Intelligence Lab, Leiden University, the Netherlands.

Mudd, K. (2019, November). *Incorporating naturalistic data into sign language models*. Interactive Workshop, Vrije Universiteit Brussel, Belgium.

CONFERENCE PRESENTATIONS

Mudd, K., Youngblood, M & Schedel, M. (2026, May). Constraint and communicative pressure shape creativity in a musical task. In *Cultural Evolution Society Conference (CES)*, Rabat, Morocco.

Mudd, K. (2026, April). How the genetics of deafness and sociolinguistic ecologies of signing communities affect language persistence. In: Giuseppe Longobardi, Dimitar Kazakov and Cristina Guardiano, eds., *The EvoLang XVI Workshop Triangulating Human Diversity: bringing together linguistic, biological and socio-cultural differences*. Plovdiv, Bulgaria.

Oomen, M., **Mudd, K.** & de Ronde, T. (2025, July). Do signers interpret R-loci as regions or points? An on-line probe recognition task. In *The 10th Conference of the International Society for Gesture Studies (ISGS)*, Nijmegen, the Netherlands.

Mudd, K., Fox, N., Smith, K. & Schembri, A. (2025, February). The learnability of sign language morphology: an experimental investigation. In *Culture Conference*, Utrecht, the Netherlands.

Mudd, K. & Schouwstra, M. Iconicity mediates the relationship between shared context and lexical variation. (2025, February). In *Dimensions of Iconicity in the Visual Modality*, Göttingen, Germany.

Lutzenberger, H., **Mudd, K.**, Lanesman, S., Stamp, R. & Schembri, A. (2023, June). The social structure of signing communities and lexical variation. In *United Kingdom Language Variation & Change 14 (UKLVC14)*, Edinburgh, Scotland.

Mudd, K., Lutzenberger, H., Schembri, A., Ohanin, O., & Stamp, R. (2022, September). The social structure of signing communities and lexical variation: A cross-linguistic comparison of three unrelated sign languages. In *Theoretical Issues in Sign Language Research (TISLR)*, Osaka, Japan.

Mudd, K., de Vos, C. & de Boer, B. (2020, June). A preliminary study of the iconic preferences of Kata Kolok signers. In *Cognitive and Cultural Influences on Language Emergence (CCILE)*, Istanbul, Turkey. (Canceled due to covid)

Mudd, K., Lutzenberger, H., de Vos, C., de Boer, B., Fikkert, P. & Crasborn, O. (2019, July). The effect of sociolinguistic factors on sign variation in Kata Kolok. In *Symposium on sociolinguistic variation in signed and spoken languages of the Asia-Pacific region*, Preston, United Kingdom.

Mudd, K. & de Boer, B. (2018, November). Adding culture to a model of sign language persistence. In *The Cognition, Behavior & Evolution Network*. Antwerp, Belgium.

Mudd, K., Jadoul, J., de Vos, C. & de Boer, B. (2018, October). Investigating the factors maintaining sign languages using an agent-based model. In *Cultural Evolution Society Conference (CES)*, Tempe, Arizona, USA.

Mudd, K., Kirby, S. & Schouwstra, M. (2018, April). Improvised word order biases are not modality specific: Evidence from non-linguistic vocalizations. In: Hannah Little and Ashley Micklos, eds., *The EvoLang XII Workshop Modality Matters*. Toruń, Poland.

CONFERENCE POSTER PRESENTATIONS

Mudd, K., Youngblood, M & Schedel, M. (2026, July). Dynamics of creative exploration: A study of signal space constraints in music and communication. In *46th Annual Meeting of the Cognitive Science Society (CogSci 2026)*, Rio de Janeiro, Brazil.

Mudd, K., Youngblood, M & Schedel, M. (2026, May). Constraint and communicative pressure shape creativity in a musical task. In *Human Behavior and Evolution Society (HBES)*, Rabat, Morocco.

Schembri, A. Fox, N., Lutzenberger, H., **Mudd, K.**, Proctor, H., Safar, J., Brown, M. & Smith, K. (2025, September). Seeing the signs of morphology: iconicity and learnability in BSL grammar. Sign Café 3, Warsaw, Poland.

Oomen, M., **Mudd, K.** & de Ronde, T. (2025, September). Do signers interpret R-loci as regions or points? An on-line probe recognition task

Mudd, K., Fox, N., Smith, K. & Schembri, A. (2025, July-August). The learnability of sign language morphology: an experimental study. In *45th Annual Meeting of the Cognitive Science Society (CogSci 2025)*, San Francisco, United States.

Mudd, K. & Schouwstra, M. (2023, July). Iconicity, shared context and lexical variation. In the workshop *From icon to abstraction: how iconicity shapes the lexicon*. Birmingham, United Kingdom.

Mudd, K. (2022, October). Lexical variation in language emergence. *Amsterdam Brain and Cognition Day*. University of Amsterdam, the Netherlands.

Mudd, K., Van Soom, M. & de Boer, B. (2022, September). The effect of social network structure on lexical variation in language emergence. In *Joint Conference on Language Evolution*, Kanazawa, Japan.

Mudd, K., de Vos, C. & de Boer, B. (2019, September). The role of marriage patterns on the persistence of shared sign languages. In *Theoretical Issues in Sign Language Research (TISLR)*, Hamburg, Germany.

Mudd, K. & de Boer, B. (2019, March). Investigating the conditions allowing for sign language persistence. In *Inaugural workshop of the Center for the Interdisciplinary Study of Language Evolution (ISLE)*, Zurich, Switzerland.

Mudd, K., Jadoul, J., de Vos, C. & de Boer, B. (2018, June). Investigating the factors maintaining sign languages using an agent-based model. In *International Max Planck Research Schools (IMPRS)*, Nijmegen, Netherlands.

SCIENCE COMMUNICATION

Mudd, K. (2018, November). Using AI to learn about sign language evolution. *Dag van de Wetenschap*. Brussels, Belgium.

LANGUAGES

Fluent English, French

Conversational Belgian French Sign Language (LSFB), Dutch, Spanish