Curriculum vitae

Peter Hendrix

Personal information

Name	Petrus Hendrikus Gertrudis Hendrix
Address	Warandelaan 2, Room D141
	Department of Cognitive Science and Artificial Intelligence
	Tilburg University
	5037 AB, Tilburg
	Netherlands
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Telephone	+31 (0)649207716
Date of Birth	March 13, 1981
Place of Birth	Grubbenvorst, The Netherlands

Academic career

2020-present	Assistant professor (tenured)
	Department of Cognitive Science and Artificial Intelligence
	Tilburg, The Netherlands
2016-2020	Postdoctoral researcher
	Individual research grant: "*It's about time: distributional analyses of psycholinguistic data*"
	(Deutsche Forschungsgemeinschaft, grant number 387774888)
	Seminar für Sprachwissenschaft, Eberhard Karls Universität Tübingen
	Tübingen, Germany
2011-2016	PhD in Quantitative Linguistics (summa cum laude)
	"*Experimental explorations of a discrimination learning approach to language processing*"
	Supervisor: Prof. Dr. Harald Baayen
	Seminar für Sprachwissenschaft, Eberhard Karls Universität Tübingen, Tübingen, Germany
2009-2011	PhD in Psycholinguistics
	Supervisor: Prof. Dr. Harald Baayen
	Department of Linguistics, University of Alberta
	Edmonton, Alberta, Canada
	(Note: unfinished, Supervisor Harald Baayen was awarded an Alexander von Humboldt professorship in Germany. Upon his invitation, I transferred to Tübingen with him.)
2005-2008	MSc in Cognitive Neuroscience (cum laude)
	Radboud Universiteit
	Nijmegen, The Netherlands

2000-2005	BA in Dutch Language and Literature (cum laude)
	Radboud University
	Nijmegen, The Netherlands

Work experience

2016	Freelance research scientist
	GGTracker
	New York City, New York, United States
	Developed machine learning algorithms for the automatic evaluation of strengths and weaknesses of chess players.

2012	Software engineering intern
	Facebook
	Menlo Park, California, United States
	Designed and implemented the internationalization of the "What are you doing?" function.

2009-2011	Research and teaching assistant
	University of Alberta
	Edmonton, Alberta, Canada
	Provided statistical support for graduate and undergraduate students. Created large-scale resources for the psycholinguistic research community.

2006-2008	Research and teaching assistant
	Max Planck Institute for Psycholinguistics
	Nijmegen, The Netherlands
	Provided statistical support for graduate and undergraduate students. Designed, ran and analysed psycholinguistic experiments.

Publications

Journal articles

Chuang, Y. Y., Vollmer, M. L., Shafaei-Bajestan, E., Gahl, S., Hendrix, P., & Baayen, R. H. (2021). The processing of pseudoword form and meaning in production and comprehension: A computational modeling approach using Linear Discriminative Learning. *Behavior Research Methods*, *53*(3), 945-876. [impact factor: 4.063]

Hendrix, P. & Sun, C. C. (2021). A word or two about nonwords: nonword frequency and semantic neighborhood density effects in the lexical decision task. *Journal of Experimental Psychology: Learning, Memory and Cognition*, *47*(1), 157-183. [impact factor: 2.319]

Hendrix, P. & Sun, C. C. (2020). The role of information theory for compound words in Mandarin Chinese and English, *Cognition*, *205*, 104389. [impact factor: 3.537]

Hendrix, P., Ramscar, M., & Baayen, R. H. (2019). NDRa: a single route model of response times in the reading aloud task based on discriminative learning. *PLOS ONE*, *14*(7). [impact factor: 2.776]

Tomaschek, F., Hendrix, P., & Baayen, R. H. (2018). Strategies for addressing collinearity in multivariate linguistic data. *Journal of Phonetics*, *71*, 249-267. [impact factor: 1.598]

Sun, C. C., Hendrix, P., Ma, J., & Baayen, R. H. (2018). Chinese Lexical Database (CLD). *Behavior research methods*, *50*(6), 2606-2629. [impact factor: 4.063]

Hendrix, P., Bolger, P., & Baayen, R. H. (2017). Distinct ERP signatures of word frequency, phrase frequency, and prototypicality in speech production. *Journal of Experimental Psychology: Learning, Memory and Cognition*, *43*(1), 128-149. [impact factor: 2.319]

Milin, P., Feldman, L. B., Ramscar, M., Hendrix, P., & Baayen, R. H. (2017). Discrimination in lexical decision. *PLOS ONE*, *12*(2), e0171935. [impact factor: 2.776]

Ramscar, M., Sun, C. C., Hendrix, P., & Baayen, R. H. (2017). The mismeasurement of mind: Lifespan changes in paired associate test scores reflect the 'cost' of learning, not cognitive decline. *Psychological Science*, *28*(8), 1171-1179. [impact factor: 6.128]

Ramscar, M., Hendrix P., Shaoul C., Milin P., & Baayen, R. H. (2014). The myth of cognitive decline: Non-linear dynamics of lifelong learning. *Topics in Cognitive Science*, *6*, 5-42. [impact factor: 2.284]

Baayen, R. H., Hendrix, P., & Ramscar, M. (2013). Sidestepping the combinatorial explosion: An explanation of n-gram frequency effects based on naive discriminative learning. *Language and Speech*, *56*, 329-347. [impact factor: 1.436]

Ramscar, M., Hendrix, P., Love, B., & Baayen, R. H. (2013). Learning is not decline: The mental lexicon as a window into cognition across the lifespan. *The Mental Lexicon*, *8*(3), 450-481. [impact factor: 0.780]

Baayen, R. H., Milin, P., Filipović-Đurđević, D., Hendrix, P., & Marelli, M. (2011). An amorphous model for morphological processing in visual comprehension based on naïve discrimination learning. *Psychological Review*, *118*, 438-482. [impact factor: 6.266]

Book chapters

Sun, C. C., Hendrix, P., Baayen, R. H., & Ramscar, M. (2018). The price of knowledge: A bilingual paired associate learning study. In Fon, J. (Ed.). *Cognitive Linguistics Research Series: Dimensions of Diffusion and Diversity* (p. 149-176). Berlin: De Gruyter Mouton.

Baayen, R. H., & Hendrix, P. (2017). Two-layer networks, non-linear separation, and human learning. In Wieling, M., Kroon, M., Van Noord, G. & Bouma, G. (Eds.). *From Semantics to Dialectometry: Festschrift in honor of John Nerbonne* (p. 13-22). London: College Publications.

Peer-reviewed conference proceedings

Chuang, Y. Y., Vollmer, M. L., Shafaei-Bajestan, E., Gahl, S., Hendrix, P., & Baayen, R. H. On the processing of nonwords in word naming and auditory lexical decision. In S. Calhoun, P. Escudero, M. Tabain, & P. Warren (Eds.), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne*, Australia (p. 1233-1237).

Hendrix, P. & Sun, C. C. (2019). A time-to-event analysis of auditory lexical decision data. In S. Calhoun, P. Escudero, M. Tabain, & P. Warren (Eds.), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne*, Australia (p. 1218-1222).

Sun, C. C. & Hendrix, P. (2019). N-gram frequency effects on speech production in Mandarin Chinese. In S. Calhoun, P. Escudero, M. Tabain, & P. Warren (Eds.), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne*, Australia (p. 1357-1361).

Ramscar, M., Sun, C. C., Hendrix, P. & Baayen, R. H. (2016). The mismeasurement of mind: How neuropsychological testing creates a false picture of cognitive aging. *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (p. 2441-2446). Philadelphia.

Ramscar, M., Hendrix, P., & Baayen, R. H. (2013). The myth of cognitive decline. In Knauff, M. (Ed.) *Proceedings of the 35th Annual Meeting of the Cognitive Science Society. Cooperative Minds: Social Interaction and Group Dynamics* (p. 1193-1198). Berlin.

Ramscar, M., Smith, A. H., Dye, M., Futrell, R., Hendrix, P., Baayen, R. H., & Starr, R. (2013). The 'universal' structure of name grammars and the impact of social engineering on the evolution of natural information systems. *Proceedings of the 35th Meeting of the Cognitive Science Society*, Berlin, 3245-3250.

Software packages

Hendrix, P. (2019). NDRa: Naive Discriminative Reading Aloud. Version 1.0. Available at `https://github.com/PeterHendrix13/NDRa`.

Sun, C. C. & Hendrix, P. (2017). The Chinese Lexical Database (CLD). Version 2.1. Available at `http://www.chineselexicaldatabase.com`.

Arppe, A., Hendrix, P., Milin, P., Baayen, R. H., Sering, T., & Shaoul, C. (2015). ndl: Naive Discriminative Learning [Computer software manual]. Available from `http://CRAN.R-project.org/package=ndl` (R package).

Presentations

Refereed conference presentations

(Co-authored work presented by others is omitted from this list.)

Hendrix, P. (2021). On the connection between language processing and language evolution. A non-linear time-to-event analysis. *Oral presentation at the 51th Annual Meeting of the Society for Computers in Psychology (SCiP)*, virtual conference.

Hendrix, P. (2019). Time-to-event analysis of linguistic data. *Oral presentation at the Annual Meeting of the Society for Computers in Psychology (SCiP)*, Montreal, Canada.

Hendrix, P. (2018). A word or two about nonwords. *Oral presentation at the Eleventh International Conference on the Mental Lexicon,* Edmonton, Canada.

Hendrix, P. (2018). A cross-linguistic investigation of response time distributions in lexical decision. *Poster presentation at the Eleventh International Conference on the Mental Lexicon,* Edmonton, Canada.

Hendrix, P. (2018). A word or two about nonwords. *Poster presentation at the Twenty-fourth Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP)*, Berlin, Germany.

Hendrix, P. (2018). A cross-linguistic investigation of response time distributions in lexical decision. *Poster presentation at the Twenty-fourth Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP)*, Berlin, Germany.

Hendrix, P., Baayen, R. H. & Ramscar, M. (2016). The NDRa: single route discrimination learning model of reading aloud. *Poster presentation at Tenth International Conference on the Mental Lexicon*, Ottawa, Canada.

Hendrix, P., Nick, J., Shaoul, C. & Baayen, R. H. (2014). Compound reading in natural discourse contexts. *Oral presentation at the Ninth International Conference on the Mental Lexicon*, Niagara-on-the-Lake, Canada.

Sun, C. C., Hendrix, P., Baayen, R. H. & Ramscar, M. (2014). The price of knowledge: bilingual paired associate learning. *Poster presentation at the Ninth International Conference on the Mental Lexicon*, Niagara-on-the-Lake, Canada.

Hendrix. P., Bolger, P. & Baayen, R. H. (2013). Distinct ERP signatures of word frequency, phrase frequency and prototypicality in speech production. *Oral presentation at the Eighth International Morphological Processing Conference (MoProc)*, Cambridge, United Kingdom.

Baayen, R. H. & Hendrix, P. (2011). Sidestepping the combinatorial explosion: Towards a processing model based on discriminative learning. *Poster presentation at the 85th Annual Meeting of the Linguistic Society of America. Workshop: Empirically examining parsimony and redundancy in usage-based models,* Pittsburgh, United States.

Baayen, R. H., Hendrix, P., Marelli, M. & Milin, P. (2010). A new model of morphological processing in reading aloud using discriminative learning. *Oral presentation at the Sixteenth Annual Conference on Architectures and Mechanisms for Language Processing (AMLaP)*, York, United Kingdom.

Hendrix, P., Tremblay, A., Tabak, W., Schreuder, R. and Baayen, R. H. (2009). Electrophysiological effects in language production: a picture naming study using generalized additive modeling. *Oral presentation at Sixth Morphological Processing Conference (MoProc)*, Turku, Finland.

Teaching

Courses

Statistics (2021-present). Undergraduate course. Tilburg University, Tilburg, The Netherlands.

Linear Algebra (2020-present). Undergraduate course. Tilburg University, Tilburg, The Netherlands.

Data Structures and Algorithms (2020). Undergraduate course. Tilburg University, Tilburg, The Netherlands.

Regression analysis (2020). Undergraduate course. Eberhard Karls Universität, Tübingen, Germany.

Time-to-event analysis of linguistic data (2019). Graduate course. Eberhard Karls Universität, Tübingen, Germany.

Introduction to Statistics (2007). Undergraduate course. Radboud University, Nijmegen, The Netherlands.

(Note: I was freed from teaching duties throughout my PhD, and have likewise been freed from teaching duties during my position as a post-doctoral researcher. I am voluntarily teaching in the academic year 2019-2020.)

Guest lectures

I have given guest lectures on topics in linguistics, statistics, machine learning, and cognitive science in a variety of graduate and undergraduate courses (running total: 24).

Invited talks

Hendrix, P. (2021). Distributional analyses in the GAMM framework. *DFG Research Training Group "Statistical Modeling in Psychology" (SMiP)*, University of Manheim, Mannheim, Germany.

Hendrix, P. (2021). Piece-wise exponential additive mixed models (PAMMs). *Spring Training in Experimental Psycholinguistics*. University of Alberta, Edmonton, Canada.

Hendrix, P. (2019). Distributional analyses of linguistic data in the GAMM framework. National Taiwan University, Taipei, Taiwan.

Hendrix, P. (2019). Introduction to statistical analysis with PAMMs and QGAMMs. *Workshop at the International Morphological Processing Conference (MoProc)*, Tübingen, Germany.

Hendrix, P. (2013). An introduction to R. *One-day course at Nijmegen Spring School in Digital Humanities*, Nijmegen, The Netherlands.

Hendrix, P. (2011). ERP analysis with generalized additive models. Seminar für Sprachwissenschaft, Eberhard Karls Universität Tübingen.

Supervision

Master's students

I served as a supervisor for the MA theses of 21 students in Linguistics, Cognitive Science, and Data Science.

Professional service

Peer review

I have reviewed manuscripts for the following journals (in alphabetical order): Behavior Research Methods, Cognition, Cognitive Science, Cortex, Journal of Experimental Psychology: Language, Memory, and Cognition, PLOS ONE, and The Mental Lexicon. Furthermore, I reviewed for the Oxford Research Encyclopedia of Linguistics.