

Thomas Hörberg - Curriculum Vitae

Contact information

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Education

Ph.D. Linguistics

SU, Stockholm, 2008-2016.
With a focus on statistics, experimental methods and psycho/neurolinguistics

LSA Linguistic Institute

UC Berkeley, Berkeley, California, 2009.

Leipzig Spring School

University of Leipzig, Leipzig, Germany, 2008.

M.A. in General Linguistics, 240 HEC.

SU, Stockholm, 2000-2007.
With a focus on language philosophy and psycholinguistics

Scholarships and grants

Swedish Royal Academy of Sciences grant (grant no. 2021-03440, 5 046 000 SEK), 2021.
Riksbankens Jubileumsfond grant (grant no. P17-0536:1, 2 295 000 SEK), 2017.
Swedish Royal Academy of Sciences travel grant (24 486 SEK), 2017.
K & A Wallenberg Foundation travel grant (17 000 SEK), 2017.
Åke Wiberg Foundation grant (60 000 SEK), 2016.
Rhodin Foundation grant (118 575 SEK), 2014.
K & A Wallenberg Foundation travel grant (13 000 SEK), 2010.
Kungliga Vitterhetsakademien travel grant (20 000 SEK), 2009.
Helge Ax:son Johnson scholarship (25 000 SEK), 2009.
Gålö Foundation scholarship (30 000 SEK), 2009.

Work experience (academic)

Principal Investigator - Dept. of Linguistics, SU, Stockholm, 2019-present
Substitute senior lecturer - Dept. of Linguistics, SU, Stockholm, 2021
Research engineer - School of engineering and computer science, KTH, 2021
Part-time researcher - Dept. of Psychology, SU, Stockholm, 2020-2021
Post-doctoral researcher - Dept. of Psychology, SU, Stockholm, 2018-2020
Part-time lecturer / researcher / statistician - Dept. of Linguistics, SU, Stockholm, 2014-2017.
Doctoral student - Dept. of Linguistics, SU, Stockholm, 2008-2014.
Teaching assistant - Dept. of Linguistics, SU, Stockholm, 2005-2007.

Work experience (non-academic)

Amusement park staff / customer service assistant - Gröna Lund, Stockholm, 2005-2007.
Student union election staff - The student union, SU, Stockholm, 2005.
Kiosk staff - Pressbyrån Norrmalmstorg (Pressbyrån AB), Stockholm, 2002-2004.
Theatre staff - The China and Oskar theatres (Curkus HB), Stockholm, 2001-2002.

Restaurant staff / runner / waiter - Fishmarket, Great Eastern Hotel, London, 2000.
 Market researcher - Taylor-Nelson Sofres, London, 2000.
 Café and grill assistant - Café Oasen (AB Trafikrestauranger), Stockholm, 1999.
 Restaurant and grill assistant / waiter - Restaurant/pizzeria Rico´s, Stockholm, 1998-2001.

Teaching and tutorials

Course coordination and lecturing

Lang. evolution, evolvment and variation 7.5 HEC - First level education, Dept of Linguistics, SU, 2021
 Lang. scientific working methods 7.5 HEC - First level education, Dept. of Linguistics, SU, 2009-2016; 2021.
 Psycho- and neurolinguistics 7.5 HEC- First level education, Dept. of Linguistics, SU, 2009-2017.

Lecturing, group exercises and laboratory work

Ethics in language scientific work, 7.5 HEC - Higher level education, Dept. of Linguistics, SU, 2021.
 Neuroscience, cognition & teaching II, 7.5 HEC - Psychology programme, Dept of Psychology, SU, 2020.
 Languages of the world, 7.5 HEC - First level education, Dept. of Linguistics, SU, 2016.
 Experimental linguistics, 15 HEC - First level education, Dept. of Linguistics, SU, 2014-2016.
 Neurolinguistics, 3.5 HEC - Speech and language therapy programme, Dept. of Linguistics, SU, 2011-2016.
 Linguistic theory and methodology, 7.5 HEC - Master programme, Dept. of Linguistics, SU, 2009-2016; 2021.
 Introduction to EEG and eye-tracking, 7.5 HEC - PhD programme, Dept. of Linguistics, SU, 2014.
 Introduction to linguistics, 7.5 HEC - First level education, Dept. of Linguistics, SU, 2005-2008.
 General linguistics, 7.5 HEC - First level education, Dept. of Linguistics, SU, 2005-2008.

Workshops and tutorials

MNE-python workshop on analysis of EEG / ERP data. Dept of Linguistics, SU, 2021.

Supervision

Bachelor and magister theses

Keidel, Alejandra. Qualitative differences in L3 learners' neurophysiological response to L1 versus L2 transfer.
 Magister thesis, Dept. of Linguistics, SU, 2016.
 Matz, Henriette. De som (som) vi använder: En korpusstudie av optionell 'som' i svenska objektsrelativsatser.
 Bachelor thesis, Dept. of Linguistics, SU, 2009.

Group projects

Experimental studies about the production and comprehension of transitive sentences in Swedish. Three group projects within the course "Language scientific working methods", 7.5 HEC, 2021.
 Influence of task awareness on the ERP response to semantic anomalies. Group project within the course Research methodology in the study programme in Speech-Language Pathology, 10 HEC, 2017.
 Reading comprehension of transitive sentences. Three group projects within the course "Language scientific working methods", 7.5 HEC, 2016.
 Corpus studies about the relationship between subjunction omission and the accessibility of the subject of the embedded clause. Three group projects within the course "Language scientific working methods", 7.5 HEC, 2012.
 Aljobair, J. et al. Korpusundersökning: När verbet tro tar en bisats som objekt ökar frekvensen av utelämnade att med bisatssubjektets tillgänglighet. Group project within the course "Language scientific working methods", 7.5 HEC, 2009.

Publications and conference presentations

Journal articles (peer reviewed)

Hörberg, T. & Sjons, J. under review. Speakers balance their use of cues to grammatical functions in informative discourse contexts.
Hörberg, T., Larsson, M. & Olofsson, J. K. under review. The semantic organization of the English odor vocabulary using natural language data.

- Hörberg, T.** & Jaeger, F. 2021. A rational model of incremental argument interpretation: the comprehension of Swedish transitive clauses. *Frontiers in Psychology*, 12:674202 (special issue on rational approaches in language sciences).
- Pelligrino, B., **Hörberg, T.**, Olofsson, J. K. & Luckett, C. 2021. Duality of Smell: Route-dependent Effects on Olfactory Perception and Language. *Chemical Senses*, 46.
- Hörberg, T.**, Larsson, M., Ekström, E., Sandöy, C., Lundén P. & Olofsson, J. K. 2020. Olfactory influences on visual categorization: Behavioral and ERP evidence. *Cerebral Cortex*, 2020(0), 30(7), 4220–4237.
- Hörberg, T.** 2018. Functional motivations behind direct object fronting in written Swedish: A corpus-distributional account. *Glossa: A Journal of General Linguistics*, 3(1), 81.
- Gerholm, T., **Hörberg, T.**, Tonér, S., Kallioinen, P., Frankenberg, S., Kjellander, S., Palmer, A. & Lenz Taguchi, H. 2018. A protocol for a three-arm cluster randomized controlled superiority trial investigating the effects of two pedagogical methodologies in Swedish preschool settings on language and communication, executive functions, auditive selective attention, socioemotional skills and early maths skills. *BMC Psychology*, 6(29).
- Börstell, C., **Hörberg, T.** & Östling, R. 2016. Distribution and duration of signs and parts of speech in Swedish Sign Language. *Sign Language and Linguistics*, 19(2).
- Vejdemo, S. & **Hörberg, T.** 2016. Semantic factors predict the rate of lexical replacement of content words. *PLoS ONE*, 11(1), e0147924.
- Hörberg, T.**, Kallioinen, P. & Koptjevskaja-Tamm, M. 2013. The neurophysiological correlate to grammatical function reanalysis in Swedish. *Language & Cognitive Processes*, 28(3), 388-416.
- Hörberg, T.** 2008. Influences of form and function on the acceptability of projective prepositions in Swedish. *Spatial Cognition and Computation*, 8(3), 193-218.
- Conference presentations**
- Hörberg, T.** & Jaeger, F. 2021. Bayesian surprise predicts incremental processing of grammatical functions. Presentation at the 34th Annual CUNY Conference on Human Sentence Processing, on-line.
- Hörberg, T.** 2020. Expectation-based encoding of grammatical functions in spoken discourse contexts. Poster presentation at The 26th Architectures and Mechanisms for Language Processing Conference, on-line, University of Potsdam.
- Hörberg, T.** 2019. The Processing of Grammatical Functions in Swedish is Expectation-based. Rational Approaches in Language Sciences (RAILS) 2019, Saarland University, Saarbrücken, Germany.
- Hörberg, T.** & Olofsson, J. K. 2019. The Semantic Organization of the English Odor Vocabulary. The Swedish Workshop on Data Science (SweDS) 2019, Royal Institute of Technology (KTH), Stockholm, Sweden.
- Hörberg, T.** 2019. The Processing of Grammatical Functions in Swedish is Expectation-based. The Swedish Workshop on Data Science (SweDS) 2019, Royal Institute of Technology (KTH), Stockholm, Sweden.
- Hörberg, T.** 2019. The Processing of Grammatical Functions in Swedish is Expectation-based. Poster presentation at Discourse Expectations: Theoretical, Experimental, and Computational perspectives (DETEC) 2019, Leibniz-Centre General Linguistics (ZAS), Berlin, Germany.
- Hörberg, T.**, Larsson, M. & Olofsson, J. K. 2019. The Semantic Organization of the English Odor Vocabulary. Poster presentation at the XXIX Annual Meeting of the European Chemoreception Research Organization, Trieste, Italy.
- Olofsson, J. K., Sandöy, C., **Hörberg, T.**, Larsson, M. & Ekström, I. 2019. Incongruent odors suppress perceptual categorization of visual objects. Poster presentation at the XXIX Annual Meeting of the European Chemoreception Research Organization, Trieste, Italy.
- Hörberg, T.** 2019. Incongruent odors suppress perceptual categorization of visual objects. *Olfactus* 2019, SUBIC, SU.
- Hörberg, T.** 2019. Expectation-based processing of grammatical functions in Swedish. Poster presentation at the Lund Symposium on Cognition, Communication and Learning, Skissernas Museum, Lund, Sweden.
- Olofsson, J. K., **Hörberg, T.**, Ekström, I., Sandöy, C. & Larsson, M. 2019. Olfaction Dominates Visual Perception: Behavioral and Cortical Effects. Digital poster presentation at AChemsS 2019 (the annual meeting of the Association for Chemoreception Sciences), Bonita Springs, Florida.

- Pellegrino, R., Olofsson, J. K., **Hörberg, T.** & Luckett, C. 2019. The effect of presentation route on olfaction perception. Poster presentation at AChemS 2019 (the annual meeting of the Association for Chemoreception Sciences), Bonita Springs, Florida.
- Brandtler, J., Håkansson, D. & **Hörberg, T.** 2018. Subjektet – en svårplacerad mittfältare. Om den relativa ledföljden mellan subjekt och negation i modern svenska. Conference presentation at Grammatikk i Norden 2 (GRAMINO), Dept. of Linguistics and Scandinavian Studies, University of Oslo.
- Hörberg, T.** & Jaeger, T. Florian. 2017. Deriving argument ordering biases from expectation-based processing. Workshop presentation at the 12th Conference of the Association for Linguistic Typology, Australian National University, Canberra.
- Keidel, A. & **Hörberg, T.** 2017. Qualitative differences in L3 learners' neurophysiological response to L1 versus L2 transfer. Paper presented at Interspeech 2017, Stockholm.
- Sjons, J., **Hörberg, T.**, Östling, R. & Bjerva, J. 2017. Articulation rate in Swedish child-directed speech increases as a function of the age of the child even when surprisal is controlled for. Paper presented at Interspeech 2017, Stockholm.
- Sjons, J. & **Hörberg, T.** 2016. Articulation rate in child-directed speech increases as a function of child age. Paper presented at Fonetik 2016, Stockholm.
- Hörberg, T.** 2015. Incremental syntactic prediction in the comprehension of Swedish. Conference presentation at New Developments in the Quantitative Study of Language, Helsinki.
- Hörberg, T.** 2011. The neurophysiological correlate to grammatical function reanalysis in Swedish. Poster presentation at The 3rd Conference of the Scandinavian Association for Language and Cognition, Copenhagen.

Theses

- Hörberg, T.** 2016. Probabilistic and prominence-driven incremental argument interpretation in Swedish. Ph.D. thesis. ISBN: 978-91-7649-418-9
- Hörberg, T.** 2007. Influences of form and function on spatial relations: Establishing functional and geometric influences on projective prepositions in Swedish. Magister's thesis.
- Hörberg, T.** 2004. Projektiva prepositioner och perspektivtagande: en experimentell studie om tre faktorerers relativa betydelse för användning av projektiva prepositioner i svenska. Bachelor's thesis.

Colloquia and presentations

- Hörberg, T.** 2021. Is the encoding of grammatical functions during spoken language production expectation-based? Invited talk at the Psycholinguistics Colloquium, Dept. Linguistics, of Goethe University Frankfurt, Frankfurt, Germany (on-line).
- Hörberg, T.** 2019. Lets talk about smells: Mapping the semantic organization of the English odor vocabulary. Dept. of Linguistics, SU.
- Hörberg, T.** 2019. Expectation-based processing of grammatical functions in Swedish. CLASP seminar, at CLASP, Dept. of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Gothenburg.
- Hörberg, T.** 2019. Reconsidering visual dominance: An example of olfactory dominance of vision with behavioral and ERP evidence. The general seminar series, Dept. of Psychology, SU.
- Brandtler, J., Håkansson, D. & **Hörberg, T.** 2018. Subjektet – en svårplacerad mittfältare. Om den relativa ledföljden mellan subjekt och negation i modern svenska. The grammar colloquium, Dept. of Scandinavian Languages and Multilingualism, SU.
- Hörberg, T.** 2018. Prior knowledge and prior expectations give rise to a P600 response to semantically incongruous words. The general seminar series, Dept. of Psychology, SU.
- Hörberg, T.** 2017. Objektsinitiala transitiva satser i svenska och potentiell tvetydighet. The grammar colloquium, Dept. of Scandinavian Languages and Multilingualism, SU.
- Hörberg, T.** 2015. Seven years and counting: Grammatical relations from a functional-typological, corpus-distributional and neurocognitive perspective. Dept. of Linguistics, SU.
- Hörberg, T.** 2011. Cue-based argument interpretation. Brain and Cognitive Sciences, University of Rochester, Rochester, US.
- Hörberg, T.** 2010. Hjärnans aktivitet vittnar om omanalys vid förståelse av svenska objektstopikaliserade satser. Dept. of Linguistics, SU.

Hörberg, T. 2007. Projektiva prepositioner och funktionella relationer. Dept. of Linguistics, SU.

Work-in-progress seminars

Hörberg, T. 2021. The odor SeRC project. Dept. of Linguistics, SU.

Hörberg, T. 2019. Language processing in natural discourse - exploring the interplay between language production and comprehension of grammatical functions in short story contexts. Dept. of Linguistics, SU.

Hörberg, T. 2017. Prior knowledge and prior expectations give rise to a P600 response to semantically incongruous words. Dept. of Linguistics, SU.

Hörberg, T. 2017. Fisherman's friend: An R-based tool for exploration of high-density ERP data. Dept. of Linguistics, SU.

Sjons, J. & **Hörberg, T.** 2016. Artikulationshastighet i barnriktat tal ökar med barnets ålder. Dept. of Linguistics, SU.

Hagos, D. & **Hörberg, T.** 2016. The processing of the Swedish light verb construction. Dept. of Linguistics, SU.

Hörberg, T. 2014. Hjärnans svar på skrift – språkrelaterade ERP-komponenter i Svenska. Dept. of Linguistics, SU.

Hörberg, T. 2013. Work in progress – Argument interpretation cues. Dept. of Linguistics, SU.

Other presentations

Hörberg, T. 2017. Prior knowledge and prior expectations give rise to a P600 response to semantically incongruous words. Short presentation at the Centre for Cognitive and Systems Neuroscience (CCSN), University of South Australia, Adelaide, Australia.

Hörberg, T. 2016. Thematic fit predicts reading times during SPR. PhD festival, Dept. of Linguistics, SU.

Hörberg, T. 2015. Neurophysiological evidence for the functional-typological view of grammatical relations. PhD festival, Dept. of Linguistics, SU.

Hörberg, T. 2014. Predicting efforts in the on-line processing of argument interpretation on the basis of usage frequencies in Swedish texts. PhD Festival, Dept. of Linguistics, SU.

Hörberg, T. 2012. The correspondence between usage and performance preferences of grammatical relations in Swedish. PhD Festival, Dept. of Linguistics, SU.

Reviewing

Journal reviews

2022: *Journal of Germanic Linguistics; Chemical Senses*

2021: *Journal of Cognitive Neuroscience; Linguistic Typology at the Crossroads*

2020: *Cognitive Science; Chemical Senses*

2019: *Journal of Experimental Psychology: Human Perception and Performance; Chemical Senses; Cognitive Science*

2017: *Linguistic Typology*

Theses

2020. Reviewer and mock opponent of Fredrik Valdeson's thesis manuscript *Ditransitives in Swedish: A usage-based study of the double object construction and semantically equivalent prepositional object constructions 1800–2016* in Scandinavian languages.

Awards

2019. Best poster presentation award for the poster *The Semantic Organization of the English Odor Vocabulary* at the XXIX Annual Meeting of the European Chemoreception Research Organization, Trieste, Italy.

Media coverage

2020. Coverage of our study on olfactory dominance

Forskning.se 9/4 2020: *Doftsinnen kan dominera synsinnen*. <https://www.forskning.se/2020/04/09/doftsinnen-kan-dominera-synsinnen/>

doktorn.com 15/4 2020: *Ditt mest dominanta sinne – kanske inte det du tror.*

<https://www.doktorn.com/artikel/ditt-mest-dominanta-sinne-kanske-inte-det-du-tror/>

gentlemannaguiden.com 1/4 2020: *Ny studie visar att det är doftsinnet som dominerar bland våra sinnen.*

<https://gentlemannaguiden.com/ny-studie-visar-att-det-ar-doftsinnet-som-dominerar-bland-vara-sinnen/>

2020. Interviewed in *Språktidningen* 2/2020: *Orden speglar vårt luktsinne*

2019. Featured in *Språktidningen* 6/2019: *Språk + Matematik = Sant*

Computer and technical skills

- Solid knowledge of R / R-studio, Matlab, Excel and SPSS, very good knowledge of statistical analysis and statistical modeling more generally
- Good knowledge of the programming languages S- / S-plus, PHEC / MySQL, Python, Perl and Visual Basic
- Solid knowledge of e-prime and Psychopy and good knowledge of experimental design more generally
- Good knowledge of distributional-semantic word space modeling with word2vec.
- Great experience with various corpus search and corpus analysis tools such as TigerSEARCH, grep and the search tools of Språkbanken
- Great experience with EEG-data collection / processing with Hydrocel Geodesics nets, Netstation, Biosemi, EEGlab, MNE python
- Good experience with desktop publishing / graphics programs such as Photoshop and Microsoft Publisher

Responsibilities at the Department of Linguistics, SU

- Scheduling of courses for first level education, 2005-2007.
- Student counselor, 2005-2007.
- Organizer of the linguists' job fair, 2006-2008.
- Web editor of the section of general linguistics' home page, 2009.
- Vice president of the PhD student council, 2009-2010.
- Departmental administrator for archiving in the digital archive DIVA, 2008-2011.
- Foreign exchange coordinator, 2008-2012.
- Member in a working group that changed the courses of the second semester, 2013.
- Organizer of the PhD festival , 2015.