# Steven Moran — Curriculum Vitae

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### Quick links:

https://www.spur.uzh.ch/en/aboutus/Personen/staff/postdocs/Steven-Moran.html https://scholar.google.com/citations?user=PpTOhO8AAAAJ&hl=en

https://github.com/bambooforest/

https://www.linkedin.com/in/steven-moran-b59b3b3/

https://twitter.com/stivits

# **EDUCATION**

2012 Ph.D. Linguistics (Computational Linguistics Track), University of Washington Dissertation: *Phonetics Information Base and Lexicon*. [pdf]

2006 M.A. Linguistics, Eastern Michigan University

Thesis: A Grammatical Sketch of Western Sisaala. [pdf]

2006 M.A. Certificate in Language Technology, Eastern Michigan University

2001 B.A. with honors in German, Linguistics and TESOL, Eastern Michigan University

2000 Sprachaufenthalt, Volkshochschule, Karlsruhe, Germany

1999 Austauschprogramm Deutsch in Graz, Graz, Austria

# ACADEMIC POSITIONS

### 2012–2020 University of Zurich

Postdoctoral researcher Language and Space Lab (2020). Postdoctoral researcher and instructor in the Department of Comparative Linguistics (2012–2019). Postdoctoral researcher and technical project manager for the ACQDIV project (2014–2019).

# 2013–2014 University of Marburg

Postdoctoral researcher and programmer in the Quantitative Language Comparison Research Unit in the Forschungszentrum Deutscher Sprachatlas.

# 2010–2013 University of Munich

Researcher and programmer in the Quantitative Language Comparison Research Unit.

# 2005–2010 University of Washington

Technical project manager for Phonetics Information Base and Lexicon (2009; UW Royalty Research Fund); Research assistant on Implementing the GOLD Community of Practice: Laying the Foundations for a Linguistics Cyberinfrastructure (2008; National Science Foundation (NSF) Grant BCS-0720670); User interface designer for UW Information Technology (2007–2008); Web programmer and Computer Assisted Language Learning specialist for UW Language Learning Center (2005–2007)

### 2001–2005 Eastern Michigan University

Project manager, web programmer and researcher on E-MELD (2003–2005; NSF Grant BCS-0094934); editor and research assistant (2001–2003; The Linguist List)

#### REFEREED JOURNAL ARTICLES

- 2020 Moran, Steven, Eitan Grossman and Annemarie Verkerk. Investigating diachronic trends in phonological inventories using BDPROTO. Language Resource and Evaluation. DOI: https://doi.org/10.1007/s10579-019-09483-3.
- 2019 Moran, Steven\*, Damián E. Blasi\*, Scott R. Moisik, Paul Widmer, Dan Dediu and Balthasar Bickel. Human sound systems are shaped by post-Neolithic changes in bite configuration. *Science*, 363, 6432. DOI: http://dx.doi.org/10.1126/science.aav3218. \*Shared first authorship.
- 2018 Moran, Steven, Damián E. Blasi, Robert Schikowski, Aylin C. Küntay, Barbara Pfeiler, Shanley Allen and Sabine Stoll. A universal cue for grammatical categories in the input to children: frequent frames. *Cognition*, 175, 131–140. DOI: https://doi.org/10.1016/j.cognition.2018.02.005.
- 2016 Moran, Steven. Commentary: Issues of time, tone, roots and replicability. *Journal of Lan-quage Evolution*, 1(1), 73-76. DOI: https://doi.org/10.1093/jole/lzv011
- 2015 Stoll, Sabine, Taras Zakharko, Steven Moran, Robert Schikowski and Balthasar Bickel. Syntactic mixing across generations in an environment of community-wide bilingualism. Frontiers in Psychology. Special Topic: Acquisition in Contact Research, Shannessy Carmel (ed). DOI: https://doi.org/10.3389/fpsyg.2015.00082.
- 2015 McCrae, John, Steven Moran, Sebastian Hellmann and Martin Brümmer. Multilingual Linked Open Data. Semantic Web, 6(4), 315-317. DOI: https://doi.org/10.3233/SW-150178. Online: http://www.semantic-web-journal.net/system/files/swj1042\_0.pdf.
- 2013 Moran, Steven and Jelena Prokić. Investigating the Relatedness of the Endangered Dogon Languages. Literary And Linguistic Computing, 28(4) 676–691. Oxford University Press. DOI: https://doi.org/10.1093/11c/fqt061
- 2012 Moran, Steven, Daniel McCloy and Richard Wright. Revisiting population size vs phoneme inventory size. Language, 88(4): 877–893. DOI: https://doi.org/10.1353/lan.2012.0087.
- 2012 Cysouw, Michael, Dan Dediu and Steven Moran. Comment on "Phonemic Diversity Supports a Serial Founder Effect Model of Language Expansion from Africa". Science, 335(6069):657. DOI: https://doi.org/10.1126/science.1208841.

## **BOOK**

2018 Moran, Steven and Michael Cysouw. The Unicode Cookbook for Linguists: Managing writing systems using orthography profiles. Translation and Multilingual Natural Language Processing series in Language Science Press. DOI: https://doi.org/10.5281/zenodo.1296780. Online: http://langsci-press.org/catalog/book/176.

## **BOOK CHAPTERS**

**Accepted.** Moran, Steven. Managing data in the development of PHOIBLE: the Phonetics Information Base and Lexicon (PHOIBLE) database. In Andrea L. Berez-Kroeker, Bradley

- McDonnell, and Eve Koller (eds), The Open Handbook of Linguistic Data Management: Open Handbooks in Linguistics. MIT Press.
- 2019 Moran, Steven and Christian Chiarcos. Linguistic Linked Open Data and Under-Resourced Languages: From Collection to Application. In Antonio Pareja-Lora, María Blume, Barbara C. Lust, and Christian Chiarcos (eds), Development of Linguistic Linked Open Data Resources for Collaborative Data-Intensive Research in the Language Sciences. MIT Press. DOI: https://doi.org/10.7551/mitpress/10990.001.0001. Online: https://mitpress.mit.edu/books/development-linguistic-linked-open-data-resources-collaborative-data-intensive-research-language
- 2018 Benitez-Burraco, Antonio and Steven Moran. The Adaptive Value of Languages: Non-Linguistic Causes of Language Diversity. In Benitez-Burraco, Antonio and Steven Moran (eds), *The Adaptive Value of Languages: Non-Linguistic Causes of Language Diversity*. Frontiers in Psychology. DOI: https://doi.org/10.3389/fpsyg.2018.01827.
- 2014 Moran, Steven and Damián Blasi. Cross-linguistic comparison of complexity measures in phonological systems. In Frederick J. Newmeyer and Laurel Preston (eds), *Measuring Grammatical Complexity*. Oxford University Press.
- **2013** Prokić, Jelena and Steven Moran. Black box approaches to genealogical classification and their shortcomings. In *Comparing Approaches to Measuring Linguistic Differences*, Lars Borin and Anju Saxena (eds), 429–446. Berlin, Boston: De Gruyter Mouton.
- 2013 Chiarcos, Christian, Steven Moran, Pablo N. Mendes, Sebastian Nordhoff, Richard Littauer. Building a Linked Open Data Cloud of Linguistic Resources: Motivations and Developments. In Iryna Gurevych and Jungi Kim (eds), The People's Web Meets NLP: Collaboratively Constructed Language Resources. Springer, Berlin, Heidelberg. DOI: https://doi.org/10.1007/978-3-642-35085-6\_12.
- 2012 Moran, Steven. Using Linked Data to Create a Typological Knowledge Base. In Linked Data in Linguistics: Representing and Connecting Language Data and Language Metadata, Christian Chiarcos, Sebastian Nordhoff and Sebastian Hellmann (eds). Springer, Heidelberg. DOI: https://doi.org/10.1007/978-3-642-28249-2\_13. Online: http://svn.aksw.org/papers/2012/LDL/1dl2012\_proceedings/public/moran.pdf.
- 2011 Moran, Steven. An Ontology for Accessing Transcription Systems. In Language Resources & Evaluation: Special Issue on African Language Technology, Guy De Pauw, Laurette Pretorius, Gilles-Maurice de Schryver and Lori Levin (eds). DOI: https://doi.org/10.1007/s10579-011-9158-8. Online: https://link.springer.com/article/10.1007/s10579-011-9158-8.
- 2010 Boynton, Jessica, Steven Moran, Helen Aristar-Dry and Anthony Aristar. Using the E-MELD School of Best Practices to Create Lasting Digital Documentation. In Language Documentation: Practice and Values, Lenore A. Grenoble and N. Louanna Furbee (eds), 133–146. John Benjamins. DOI: https://doi.org/10.1075/z.158.14boy.

# CONFERENCE & WORKSHOP PROCEEDINGS (PEER-REVIEWED)

2020 Lester, Nicholas, Balthasar Bickel, Steven Moran and Sabine Stoll. Speech Rates Differentiate Nouns and Verbs in Child-Surrounding and Child-Produced Speech: Evidence from Chintang. In M. M. Brown & A. Kohut (Eds.), Proceedings 44th Annual Boston University

- sity Conference on Language Development (BUCLD), 280–293. Somerville, MA: Cascadilla Press. Online: http://www.lingref.com/bucld/44/BUCLD44-23.pdf.
- 2020 Grossman, Eitan, Elad Eisan, Dmitry Nikolaev and Steven Moran. SegBo: A Database of Borrowed Sounds in the World's Languages. In Proceedings of the Twelfth International Conference on Language Resources and Evaluation (LREC 2020). Online: http://www.lrec-conf.org/proceedings/lrec2020/pdf/2020.lrec-1.654.pdf.
- 2020 Moran, Steven\*, Anna Jancso\* and Sabine Stoll. The ACQDIV Corpus Database and Aggregation Pipeline. In Proceedings of the Twelfth International Conference on Language Resources and Evaluation (LREC 2020). \*Shared first authorship. Online http://www.lrecconf.org/proceedings/lrec2020/pdf/2020.lrec-1.20.pdf.
- 2020 Grossman, Eitan, Elad Eisan, Dmitry Nikolaev and Steven Moran. Revisiting the Uniformitarian Hypothesis: Can we detect recent changes in the typological frequencies of speech sounds? In Proceedings of the 13th International Conference on the Evolution of Language (EVOLANG 2020). Online: https://brussels.evolang.org/proceedings/papers/EvoLang13\_paper\_182.pdf
- 2019 Loukatou, Georgia R., Steven Moran, Damián E. Blasi, Sabine Stoll and Alejandrina Cristia. Is word segmentation child's play in all languages? In Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics, 3931–3937. July 28 August 2, Florence, Italy. Online: https://www.aclweb.org/anthology/P19-1383.
- 2019 Moran, Steven, Nicholas A. Lester, Heath Gordon, Aylin Küntay, Barbara Pfeiler, Shanley Allen and Sabine Stoll. Variation Sets in Maximally Diverse Languages. In Proceedings 43rd annual Boston University Conference on Language Development (BUCLD). November 2–4, Boston, USA. Cascadilla Press. Online: http://www.lingref.com/bucld/43/BUCLD43-34.pdf
- 2018 Moran, Steven, Danica Pajović and Sabine Stoll. Cross-linguistically Small World Networks are Ubiquitous in Child-directed Speech. In Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018), 4100-4105. May 7-12, Miyazaki, Japan. Online: http://www.lrec-conf.org/proceedings/lrec2018/pdf/887.pdf
- 2018 Marsico, Egidio, Sebastien Flavier, Annemarie Verkerk and Steven Moran. BDPROTO: A Database of Phonological Inventories from Ancient and Reconstructed Languages. In Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018), 1654–1658. May 7–12, Miyazaki, Japan. Online: http://www.lrec-conf.org/proceedings/lrec2018/pdf/534.pdf
- 2018 McNew, Garland, Curdin Derungs and Steven Moran. Towards faithfully visualizing global linguistic diversity. In Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018), 805–809. May 7–12, Miyazaki, Japan. Online: http://www.lrec-conf.org/proceedings/lrec2018/pdf/813.pdf
- 2018 Moran, Steven and Annemarie Verkerk. Differential rates of change in consonant and vowel systems. In C. Cuskley and M. Flaherty and H. Little and Luke McCrohon and A. Ravignani and T. Verhoef (eds.), The Evolution of Language: Proceedings of the 12th International Conference (EVOLANGXII). April 16–19, Toruń, Poland. DOI: https://doi.org/10.12775/3991-1.077. Online: http://evolang.org/torun/proceedings/papertemplate.html?p=98.

- 2016 Moran, Steven, Robert Schikowski, Danica Pajović, Cazim Hysi and Sabine Stoll. The AC-QDIV Database: Min(d)ing the Ambient Language. In Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC 2016), 4423-4429. May 23-28, Portorož, Slovenia. Online: http://www.lrec-conf.org/proceedings/lrec2016/pdf/1198\_Paper.pdf.
- 2016 McCrae, John Philip, Christian Chiarcos, Francis Bond, Philipp Cimiano, Thierry Declerck, Gerard de Melo, Jorge Gracia, Sebastian Hellmann, Bettina Klimek, Steven Moran, Petya Osenova, Antonio Pareja-Lora and Jonathan Pool. The Open Linguistics Working Group: Developing the Linguistic Linked Open Data Cloud. In Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC 2016), 2435-2441. May 23-28, Portorož, Slovenia. Online: http://www.lrec-conf.org/proceedings/lrec2016/pdf/851\_Paper.pdf.
- 2014 Moran, Steven and Michael Cysouw. Typology with Graphs and Matrices. In Proceedings of the Third Workshop on Linked Data in Linguistics, Multilingual Knowledge Resources and Natural Language Processing, 55-60. Co-located with LREC 2014. May 27, Reykjavik, Iceland. Online: http://www.lrec-conf.org/proceedings/lrec2014/workshops/LREC2014Workshop-LDL2014%20Proceedings.pdf.
- 2014 Goldman, Jean-Philippe, Adrian Leemann, Marie-José Kolly, Ingrid Hove, Ibrahim Almajai, Volker Dellwo and Steven Moran. A Crowdsourcing Smartphone Application for Swiss German: Putting language documentation in the hands of the users. In Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC 14), Nicoletta Calzolari, Khalid Choukri, Thierry Declerck, Hrafn Loftsson, Bente Maegaard, Joseph Mariani, Asuncion Moreno, Jan Odijk and Stelios Piperidis (eds). May 26-31, Reykjavik, Iceland. Online: http://www.lrec-conf.org/proceedings/lrec2014/pdf/214\_Paper.pdf.
- 2013 Moran, Steven and Martin Brümmer. Lemon-aid: using Lemon to aid quantitative historical linguistic analysis. In Proceedings of the 2nd Workshop on Linked Data in Linguistics (LDL-2013): Representing and linking lexicons, terminologies and other language data. Christian Chiarcos, Philipp Cimiano, Thierry Declerck and John P. McCrae (eds). Association for Computational Linguistics. September, 23. Pisa, Italy. Online: http://aclweb.org/anthology/W/W13/W13-5505.pdf.
- 2013 Littauer, Richard, Boris Villazon-Terrazas and Steven Moran. Linguistic Resources Enhanced with Geospatial Information. In Proceedings of the 2nd Workshop on Linked Data in Linguistics (LDL-2013): Representing and linking lexicons, terminologies and other language data. Christian Chiarcos, Philipp Cimiano, Thierry Declerck and John P. McCrae (eds). Association for Computational Linguistics. September, 23. Pisa, Italy. Online: http://aclweb.org/anthology/W/W13/W13-5508.pdf.
- 2013 List, Johann-Mattis and Steven Moran. An Open Source Toolkit for Quantitative Historical Linguistics. In *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics*, pg 13–18, Sofia, Bulgaria, August 4–9, 2013. Online: http://aclweb.org/anthology/P/P13/P13-4003.pdf.
- 2012 Chiarcos, Christian, Sebastian Hellmann, Sebastian Nordhoff, Steven Moran, Richard Littauer, Judith Eckle-Kohler, Iryna Gurevych, Silvana Hartmann, Michael Matuschek and Christian M. Meyer. 'The Open Linguistics Working Group'. In *Proceedings from LREC 2012*, pg 3603–3610, Istanbul, Turkey, May 23–25. Online: http://www.lrec-conf.org/

- proceedings/lrec2012/pdf/912\_Paper.pdf.
- 2012 Moran, Steven, Daniel McCloy and Richard Wright. 'Revisiting the population vs phoneme-inventory correlation'. In *Extended abstracts in eLanguage from LSA 2012*. DOI: http://dx.doi.org/10.3765/exabs.v0i0.601.
- 2009 Moran, Steven. An Ontology for Accessing Transcription Systems. In *Proceedings from the African Language Technology Workshop at the European Association for Computational Linguistics*. Athens, Greece, March 31. Online: http://www.aclweb.org/anthology/W09-0716.
- 2008 Farrar, Scott and Steven Moran. The e-Linguistics Toolkit. In *Proceedings e-Humanities* an emerging discipline: Workshop in the 4th IEEE International Conference on eScience. Indianapolis, Indiana. Online: http://www.zora.uzh.ch/id/eprint/84686/1/
  FarrarMoran2008.pdf
- 2008 Trippel, Thorsten, Michael Maxwell, Greville Corbett, Cambell Prince, Christopher Manning, Stephen Grimes and Steven Moran. Lexicon Schemas and Related Data Models: When Standards Meet Users. In *Proceedings of the 6th International Conference on Language Resources and Evaluation (LREC)*. Marrakech, Morocco. Online: http://www.lrec-conf.org/proceedings/lrec2008/pdf/812\_paper.pdf.
- 2008 Fox, Naomi and Steven Moran. Non-traditional Dissemination of Fieldwork: From the Field to the World. In *Proceedings from the 20th Northwest Linguistics Conference (NWLC)*, Steven Moran, Darren S. Tanner and Michael Scanlon (eds). Seattle, Washington. Online: https://depts.washington.edu/uwwpl/vol27/uwwpl\_vol27\_2008.pdf.
- 2006 Boynton, Jessica, Steven Moran, Anthony Aristar and Helen Aristar-Dry. E-MELD and the School of Best Practices: An Ongoing Community Effort. In *Proceedings from Sustainable Data from Digital Fieldwork*. Sydney University Press. Online: https://ses.library.usyd.edu.au/bitstream/2123/1296/1/9FH2006.pdf.
- 2006 Moran, Steven. From Field Methods to Best Practice: A Case Study of Western Sisaala. E-MELD School of Best Practices. http://emeld.org/school/case/sisaala/
- 2005 Moran, Steven. The E-MELD School of Best Practices in Digital Language Documentation. In *Proceedings from the Annual Meeting of the Chicago Linguistic Society*, 41(2), 71–80. Chicago Linguistic Society.
- 2004 Ferrara, Marisa and Steven Moran. Review of DBMS for Linguistic Purposes. In *Proceedings* from the E-MELD 2004: Conference on Linguistic Databases and Best Practices. http://emeld.org/workshop/2004/papers.html

# **EDITED VOLUMES**

- **Accepted.** Levshina, Natalia and Steven Moran (eds). Efficiency in human languages: corpus evidence for universal principles. *Linguistics Vanguard*.
- 2018 Benitez-Burraco, Antonio and Steven Moran (eds). The Adaptive Value of Languages: Non-Linguistic Causes of Language Diversity. Frontiers in Psychology. Online: http://journal.frontiersin.org/researchtopic/5478/the-adaptive-value-of-languages-non-linguistic-causes-of-language-diversity

- 2015 Hellmann, Sebastian, Steven Moran, Martin Brümmer and John McCrae (eds). Special Issue on Multilingual Linked Open Data (MLOD). Semantic Web, 6(4). Online: https://content.iospress.com/journals/semantic-web/6/4.
- 2008 Moran, Steven, Darren Tanner and Michael Scanlon (eds). Proceedings from the 20th Northwest Linguistics Conference (NWLC). University of Washington Working Papers in Linguistics Vol. 27. Online: http://depts.washington.edu/uwwpl/vol27/.
- 2007 Moran, Steven (ed). University of Washington Working Papers in Linguistics Vol 26. Online: http://depts.washington.edu/uwwpl/vol26/.
- 2006 Moran, Steven (ed). University of Washington Working Papers in Linguistics Vol. 25. Online: http://depts.washington.edu/uwwpl/vol25/.
- 2005 Jinguji, Dan and Steven Moran (eds). University of Washington Working Papers in Linguistics Vol. 24. Online: http://depts.washington.edu/uwwpl/vol24/.
- 2001-2005 Moran, Steven (ed). The Linguist List. ISSN: 1068-4875. 420 issues. Online: http://linguistlist.org.

# **RESPONSES**

- 2020 Moran, Steven and Balthasar Bickel. Rejoinder to Huijbregts's: Biting into Evolution of Language. *Journal of Language Evolution*. DOI: https://doi.org/10.1093/jole/lzaa005.
- 2020 Blasi, Damián E., Steven Moran, Scott R. Moisik, Paul Widmer, Dan Dediu and Balthasar Bickel. Languages, evolution and statistics: human sound systems were shaped by changes in bite configuration. Response to Tarasov & Uyeda (2020). bioRxiv. DOI: https://doi.org/10.1101/2020.02.27.965400.

### **OUTREACH**

- 2019 Die Ernährung verändert die Sprache. 3sat Nano TV Program. Online: https://www.3sat.de/wissen/nano/191209-sprache-nano-104.html.
- 2019 Moran, Steven and Balthasar Bickel. Softer, processed foods changed the way ancient humans spoke. The Conversation. Online: https://theconversation.com/softer-processed-foods-changed-the-way-ancient-humans-spoke-113599. Translated into Bahasa Indonesian by Jamiah Solehati (https://theconversation.com/makanan-olahan-yang-lebih-lembut-ubah-cara-manusia-purba-berbicara-115509).
- 2018 What it means to be open and community-based: The Unicode cookbook as a showcase. Interview with Sebastian Nordhoff of Language Science Press. Online: https://userblogs.fu-berlin.de/langsci-press/2018/07/11/what-it-means-to-be-open-and-community-based-the-unicode-cookbook-as-a-showcase/.

### PUBLISHED DATASETS AND SOFTWARE

2020 Grossman, Eitan, Elad Eisen, Dmitry Nikolaev, and Steven Moran. segbo-db/segbo (Version v1.0.0) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.3633917. Online: https://github.com/segbo-db/segbo.

- 2019 Moran, Steven, Anna Jancso and Sabine Stoll. ACQDIV database (public) (Version 1.0.0) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.3558641.
- 2019 Moran, Steven and Anna Jancso. ACQDIV database aggregation pipeline (Version 1.0.0). Zenodo. https://doi.org/10.5281/zenodo.3558641. Online: https://github.com/acqdiv/acqdiv.
- 2019 Moran, Steven and Eitan Grossman. BDPROTO 1.1 (Version 1.1) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.3522973. Online: https://github.com/bdproto.
- 2019 Marsico, Egidio, Sébastien Flavier and Steven Moran. BDPROTO 1.0 (Version 1.0) [Data set]. Zenodo. https://doi.org/10.5281/zenodo.3521639. Online: https://github.com/bdproto.
- 2019 Moran, Steven and Daniel McCloy (eds). PHOIBLE 2.0. Jena: Max Planck Institute for the Science of Human History. DOI: https://doi.org/10.5281/zenodo.2562766. Online: http://phoible.org.
- 2017 Moran, Steven and Robert Forkel. cldf/segments: segments 1.1.1 (Version v1.1.1). Zenodo. DOI: https://doi.org/10.5281/zenodo.1051158. Online: https://pypi.org/project/segments.
- 2016 Moran, Steven, Forkel, Robert and Jeffrey Heath (eds). Dogon and Bangime Linguistics. Jena: Max Planck Institute for the Science of Human History. Online: http://dogonlanguages.org.
- 2015 Naumann, Christfried, Moran, Steven, Segerer, Guillaume and Robert Forkel (eds). Tsammalex: A lexical database on plants and animals. Leipzig: Max Planck Institute for Evolutionary Anthropology. DOI: https://doi.org/10.5281/zenodo.596403. Online: http://tsammalex.clld.org.
- 2014 Moran, Steven, McCloy, Daniel and Richard Wright (eds). PHOIBLE Online. Leipzig: Max Planck Institute for Evolutionary Anthropology. DOI: https://doi.org/10.5281/zenodo. 2562767. Online: http://phoible.org.
- 2014 Vaux, Bert, Leemann, Adrian, Wanitsch, Daniel, Moran, Steven, Grimm, Sarah, Robert, Sylvain, Zhakarko, Taras and Scherrer, Yves. US Dialect App. Previously online via Apple App Store.

## ENCYLOPEDIA ARTICLE (PEER-REVIEWED

2019 Moran, Steven. Phonological inventories. In Oxford Research Encyclopedia of Linguistics. Oxford University Press. DOI: http://dx.doi.org/10.1093/acrefore/9780199384655.013.112.

# REVIEW ARTICLE

2014 Wichmann, Søren & Anthony P. Grant (eds). 2012. Quantitative approaches to linguistic diversity: commemorating the centenary of the birth of Morris Swadesh. Amsterdam / Philadelphia: John Benjamins [Benjamins Current Topics 46]. x+182 pp. (ISBN 78 90 272 0265 9) in Studies in Language 38(1), 220–233.

# UNPUBLISHED MANUSCRIPTS, PREPRINTS, AND WORK IN PROGRESS

- van Gijn, Rik, Alena Witzlack-Makarevich and Steven Moran. *Typology in Practice*. A course text book for typology using quantitative approaches.
- Moran, Steven. A Grammar of Isaala (Western Sisaala [ssl]). Unpublished manuscript (work in progress). 117pp. Online: https://github.com/bambooforest/sisaala.
- Moran, Steven. A Grammatical Sketch of Toro So [dts] and accompanying French English Toro So Dictionary. Work in progress which requires additional on-site fieldwork.
- Moran, Steven, Robert Schikowski and Sabine Stoll. ACQDIV Corpus Database User Manual. Unpublished manuscript for ERC project: Acquisition processes in maximally diverse languages: min(d)ing the ambient language. Includes description of the longitudinal corpus data, the extract transform load (ETL) processes for making the data interoperable, and the database design. 92pp. Online: https://github.com/acqdiv/corpus\_manual/blob/master/corpus\_manual.pdf

### INVITED PRESENTATIONS

- 2019 'ACQDIV project, corpus database, methodological approaches using different types of entropy and statistical regressions'. Paper presented at Emergent constructions big data in learner language analyses, University of Basel. May 30, Basel, Switzerland. With Nicholas Lester.
- 2018 'Building an evolutionary timeline of phonetic features'. Paper presented in the Department of Comparative Cognition in the Institute of Biology, University of Neuchâtel. November 29, Neuchâtel, Switzerland.
- 2017 'ACQDIV PHON: Worldwide phoneme frequency predicts age of production'. Paper presented at the ESRC International Centre for Language and Communicative Development (LuCiD) research colloquium. October 3, Manchester, UK. With Sabine Stoll.
- 2017 'Linked Data for Linguistic Research: Phonetics'. Paper presented at the LD4LR workshop for the Dutch CLARIAH project. February 6-7. Utrecht, The Netherlands. https://www.clariah.nl/en/new/blogs/linked-data-for-linguistic-research
- 2015 'The ACQDIV project and database'. Paper presented in the Seminar Series at the Dynamique du Langage lab (DDL) of the Centre national de la recherche scientifique (CNRS). September 21. Lyon, France. With Sabine Stoll.
- **2015** 'Introduction to ACQDIV corpora'. Workshop: Acquisition processes in maximally diverse languages (ACQDIV). June 10–13. Kappel am Albis, Switzerland.
- 2015 'Visualizing WALS data'. Workshop: Language Comparison with Linguistic Databases. Organized by the URPP Language and Space at the University of Zurich. April 30. Leipzig, Germany. With Garland McNew.
- 2015 'Dogon languages project'. Primera Escuela Latinoamericana de Tipología y Documentación Lingüística. Escuela Nacional de Estudios Superiores, UNAM. March 19–28. Morelia, Mexico
- 2015 'Documenting typological diversity for real: the need of language acquisition studies'. Primera Escuela Latinoamericana de Tipología y Documentación Lingüística. Escuela Nacional de

- Estudios Superiores, UNAM. March 19–28. Morelia, Mexico. With Dagmar Jung and Sabine Stoll.
- 2014 'Studies in phonological typology with PHOIBLE'. Workshop on Language Comparison with Linguistic Databases: RefLex and Typological Databases. October 7–9. Nijmegen, The Netherlands.
- 2014 'Linguistic (Linked) Open Data: From collection to application'. **Keynote** presentation at the workshop on 'Collaboration and Computing for Under-resourced Languages in the Linked Open Data Era (CCURL 2014)'. May 26. Reykjavik, Iceland. With Christian Chiarcos.
- 2014 'Qualitative analysis and quantitative comparison of Dogon languages'. Paper presented in the Seminar Series at the Dynamique du Langage lab (DDL) of the Centre national de la recherche scientifique (CNRS). January 24. Lyon, France.
- 2013 'Qualitative analysis and quantitative comparison of Dogon languages'. Paper presented in the Seminar Series at the Department of Linguistics, University of Stockholm. December 12. Stockholm, Sweden.
- 2013 'Diversity of Language Sources: Challenges in Digitization, Interoperation and Analysis'. Paper presented at the Language Diversity Congress: Computational Issues in Studying Language Diversity. July 18–20. Groningen, The Netherlands. With Jelena Prokić.
- 2013 'Obstruents and latitude: acoustic adaptation, thermal influence or spurious statistics?'. Poster presented at the Language Diversity Congress: Computational Issues in Studying Language Diversity. July 18–20. Groningen, The Netherlands. With Damián Blasi.
- **2012** 'Geolinguistic Diffusion of Language Change'. Paper presented at the Simulation of Diachrony workshop. November 5–6. Zurich, Switzerland. With Jelena Prokić.
- 2012 'Research Unit: Quantitative Language Comparison'. Paper presented at the RefLex meeting (CNRS). June 5–7. Lyon, France.
- 2011 'Technological infrastructure for comparative linguistics and linguistic fieldwork: some case studies'. Paper presented at the Max Planck Institute for Evolutionary Anthropology. January 27, Leipzig, Germany.
- 2008 'The e-Linguistics Toolkit'. Paper presented at the Institute for Language Information and Technology (The Linguist List). December 18, Ypsilanti, Michigan. With Scott Farrar.
- **2006** 'From Documentation to Computation'. Paper presented at the Max Planck Institute for Evolutionary Anthropology. September 13, Leipzig, Germany.

#### REFEREED PRESENTATIONS

- 2019 'The typology of phonological segment borrowing'. Paper presented at the 13th Conference of the Association for Linguistic Typology. September 4–6, Pavia, Italy. With Eitan Grossman, Dmitry Nikolaev, Elad Eisen, Ronén Júda, Schwartz Layla and Yoav Yosef.
- 2019 'How different were phonological distributions? The typology of phonological segment borrowing and the Uniformitarian Assumption'. Paper presented at the 52nd Annual Meeting of the Societas Linguistica Europaea. August 21–24, Leipzig, Germany. With Eitan Grossman and Dmitry Nikolaev.

- 2019 'What contact typologists want from grammatical descriptions'. Paper presented at Descriptive grammars and typology: The challenges of writing grammars of underdescribed and endangered languages. March 27–29, Helsinki, Finland. With Eitan Grossman.
- 2018 'Variation sets in maximally diverse languages'. Poster presented at the 43rd Boston University Conference on Language Development (BUCLD). November 2–4, Boston, USA. With Sabine Stoll.
- 2018 'Acquisition processes in maximally diverse languages: min(d)ing the ambient language'. Paper presented at the Days of Swiss Linguistics. October 12, Bern, Switzerland. With Sabine Stoll, Damian Blasi, Dagmar Jung and Jekaterina Mazara.
- 2018 'Worldwide frequency distribution of phoneme types predicts their order of acquisition'. Paper presented at the 51st Annual Meeting of the Societas Linguistica Europaea (SLE). August 29–September 1, Tallinn, Estonia. With Sebastian Sauppe, Nicholas Lester and Sabine Stoll.
- 2018 'Comparative corpus linguistics: New perspectives and applications'. Paper presented at the 51st Annual Meeting of the Societas Linguistica Europaea (SLE). August 29–September 1, Tallinn, Estonia. With Natalia Levshina and Annemarie Verkerk.
- 2018 'Cross-linguistically Small World Networks are Ubiquitous in Child-directed Speech'. Paper presented at the Eleventh International Conference on Language Resources and Evaluation (LREC 2018). May 7–12, Miyazaki, Japan. With Danica Pajović and Sabine Stoll.
- 2018 'BDPROTO: A Database of Phonological Inventories from Ancient and Reconstructed Languages'. Paper presented at the Eleventh International Conference on Language Resources and Evaluation (LREC 2018). May 7–12, Miyazaki, Japan. With Egidio Marsico, Sebastien Flavier and Annemarie Verkerk.
- 2018 'Towards faithfully visualizing global linguistic diversity'. Paper presented at the Eleventh International Conference on Language Resources and Evaluation (LREC 2018). May 7–12, Miyazaki, Japan. With Garland McNew and Curdin Derungs.
- 2018 'Differential rates of change in consonant and vowel systems'. Paper presented at the 12th International Conference on the Evolution of Language (EVOLANGXII). April 16–19, Toruń, Poland. With Annemarie Verkerk.
- 2018 'Probing the biological conditions for modern phonologies: The late emergence of labiodentals'. Paper presented at the 12th International Conference on the Evolution of Language (EVOLANGXII). April 16–19, Toruń, Poland. With Damián Blasi, Scott Moisik, Ani Margvelashvili, Paul Widmer, Dan Dediu and Balthasar Bickel.
- 2017 'Phylogenesis of phonetic features'. Paper presented at the 12th Conference of the Association for Linguistic Typology (ALT). December 11–15, Canberra, Australia.
- 2017 'Probing the biological conditions for modern phonologies: the late emergence of labiodentals'. Paper presented at the 48th annual meeting of the Australian Linguistics Society (ALS). December 4–7, Sydney, Australia. With Damián Blasi, Scott Moisik, Ani Margvelashvili, Paul Widmer, Dan Dediu and Balthasar Bickel.
- 2017 'Worldwide frequency of phonemes predicts their age of acquisition'. Poster presented at the 42nd Boston University Conference on Language Development (BUCLD). November 3–5, Boston, USA. With Sabine Stoll.

- 2017 'The Unicode Cookbook for Linguists'. Paper presented at the 47th Poznań Linguistic Meeting. September 18–20, Poznań, Poland. With Michael Cysouw.
- 2017 'Molecular Anthropology as a window on language contact: diffusion probabilities in phonology and grammar'. Paper presented at the 50th Annual Meeting of the Societas Linguistica Europaea (SLE). September 10–13, Zurich, Switzerland. With Balthasar Bickel, Damián Blasi and Brigitte Pakendorf.
- 2017 'Probing the biological conditions for modern phonologies: the late emergence of labiodentals'. Paper presented at the 50th Annual Meeting of the Societas Linguistica Europaea (SLE). September 10–13, Zurich, Switzerland. With Damián Blasi, Scott Moisik, Ani Margvelashvili, Paul Widmer, Dan Dediu and Balthasar Bickel.
- 2017 'Introduction to the SLE workshop: Non-linguistic causes of linguistic diversity'. Paper presented at the 50th Annual Meeting of the Societas Linguistica Europaea (SLE). September 10–13, Zurich, Switzerland. With Antonio Benítez-Burraco and Dan Dediu.
- 2017 'Investigating the phylogenesis of phonetic features'. Poster presented at the 25th Manchester Phonology Meeting. May 25–27, Manchester, UK.
- 2016 'Evaluating information loss from phonological dimensionality reduction'. Paper presented at The Role of Predictability in Shaping Human Language Sound Patterns (satellite event at the 16th Speech Science and Technology Conference). December 10–11, Sydney, Australia. With Jayden Macklin-Cordes and Erich Round.
- 2016 'Frequent frames in maximally diverse languages'. Paper presented at the Boston University Conference on Language Development (BUCLD). November 4–6, Boston, USA. With Damián Blasi and Sabine Stoll.
- 2016 'How to study variation in language acquisition: a new cross-linguistic corpus approach'. Paper presented at the 9th Days of Swiss Linguistics. June 29–July 1, Geneva, Switzerland.
- 2016 'Visualizing development in longitudinal language acquisition data'. Poster presented at the 9th Days of Swiss Linguistics. June 29–July 1, Geneva, Switzerland. With Danica Pajović, Jekaterina Mazara and Sabine Stoll.
- 2016 'The ACQDIV Database: Min(d)ing the Ambient Language'. Paper presented at the Tenth International Conference on Language Resources and Evaluation (LREC 2016). May 23–28, Portorož, Slovenia. With Robert Schikowski, Danica Pajović, Cazim Hysi and Sabine Stoll.
- 2015 'Syntactic mixing across generations in an environment of community-wide bilingualism'. Paper Presented at 48th Annual Meeting of the Societas Linguistica Europaea (SLE). September 2–5. Leiden, The Netherlands. With Balthasar Bickel, Taras Zakharko, Robert Schikowski and Sabine Stoll.
- 2015 'Phonological features from a quantitative typological perspective'. Paper Presented at the Conference: Diversity Linguistics: Retrospect and Prospect. May 1–3. Leipzig, Germany. With Balthasar Bickel and Taras Zakharko.
- 2015 'Tsammalex'. Paper Presented at the Conference: Diversity Linguistics: Retrospect and Prospect. May 1–3. Leipzig, Germany. With Christfried Naumann, Robert Forkel and Lena Sell.
- 2015 'Syntactic mixing across generations in a Chintang/Nepali bilingual environment'. Paper Presented at the Conference: Diversity Linguistics: Retrospect and Prospect. May 1–3.

- Leipzig, Germany. With Sabine Stoll, Taras Zakharko, Robert Schikowski and Balthasar Bickel.
- 2014 'Subject agreement suspension and information structure: a view from Dogon languages'. Paper Presented at 8th Days of Swiss Linguistics. June 19–21. Zurich, Switzerland. With Giorgio Iemmolo.
- **2014** 'Average in phonological typology: phoneme inventories'. Paper Presented at 8th Days of Swiss Linguistics. June 19–21. Zurich, Switzerland. With Taras Zakharko.
- 2014 'Structural diversity in phonological systems'. Paper Presented at 8th Days of Swiss Linguistics. June 19–21. Zurich, Switzerland. With Balthasar Bickel and Taras Zakharko.
- 2014 'A Crowdsourcing Smartphone Application for Swiss German: Putting Language Documentation in the Hands of the Users'. Poster presented at LREC 2014. May 26–31. Reykjavik, Iceland. With Jean-Philippe Goldman, Adrian Leemann, Marie-José Kolly, Ingrid Hove, Ibrahim Almajai and Volker Dellwo.
- 2013 'Lemon-aid: using Lemon to aid quantitative historical linguistic analysis'. Paper presented at the 2nd Workshop on Linked Data in Linguistics: Representing and linking lexicons, terminologies and other language data. September 23. Pisa, Italy. With Martin Brümmer.
- 2013 'Linguistic Resources Enhanced with Geospatial Information'. Paper presented at the 2nd Workshop on Linked Data in Linguistics: Representing and linking lexicons, terminologies and other language data. September 23. Pisa, Italy. With Richard Littauer and Boris Villazon-Terrazas.
- 2013 'Cross-linguistic Comparison of Complexity Measures in Phonological Systems'. Paper Presented at the 44th Poznań Linguistic Meeting (PLM 2013). August 29–September 1. Poznań, Poland. With Damián Blasi.
- 2013 'Application and Evaluation of Quantitative Comparative Methods on Dogon'. Paper presented at the Colloquium on African Languages and Linguistics (CALL). August 26–28. Leiden, The Netherlands. With Jelena Prokić.
- 2013 'Estimating Diachronic Preferences of Phonological Features Cross-linguistically'. Paper Presented at the Association for Linguistic Typology. August 15–18. Leipzig, Germany. With Taras Zakharko and Balthasar Bickel.
- 2013 'Typology with Graphs and Matrices'. Paper Presented at the Association for Linguistic Typology. August 15–18. Leipzig, Germany. With Michael Cysouw.
- 2013 'An Open Source Toolkit for Quantitative Historical Linguistics'. Paper Presented at the Association for Computational Linguistics. August 4–9. Sofia, Bulgaria. With Johann-Mattis List.
- 2013 'Digital technology and endangered Dogon languages'. Paper Presented at 19th LIPP-Symposium: Gefährdete Sprachen. July 10–12. Munich, Germany. With Jelena Prokić.
- 2013 'Revisiting "The role of features in phonological inventories". Paper presented at the CUNY Conference on the Feature in Phonology and Phonetics. January 16–18. New York, NY. With Daniel McCloy and Richard Wright. http://dan.mccloy.info/pubs/McCloyEtAl2013\_cunyFeatureConf.pdf.
- 2012 'Automatic Detection of Borrowings in Lexicostatistic Datasets: A Workflow for Automatic

- Linguistic Reconstruction'. Paper Presented at the Workshop on Quantitative Approaches to Areal Typology. December 13–14. Amsterdam, Netherlands. With Johann-Mattis List and Jelena Prokić.
- 2012 'A Python Toolkit for Quantitative Tasks in Historical-Comparative Linguistics'. Paper Presented at the Phylometric and Phylogenetic Approaches in the Humanities Workshop. November 24. Bern, Switzerland. With Johann-Mattis List.
- 2012 'Investigating the Genealogical Relatedness of the Dogon Languages'. Paper Presented at the Biological Evolution and Diversification of Languages Workshop [BEDLAN]. September 19–21. University of Turku, Finland. With Jelena Prokić.
- 2012 'Dogon classification'. Paper presented at Proto-Niger-Congo: Comparison and Reconstruction International Congress. September 18–21. Paris, France. With Kirill Prokhorov and Jeffrey Heath.
- 2012 'A Python Library for Historical Comparative Linguistics'. Paper presented at EuroSciPy 2012. August 23–27. Brussels, Belgium. With Johann-Mattis List. Awarded best paper.
- 2012 'Investigating the Genealogical Relatedness of the Endangered Dogon Languages'. Paper presented at Digital Humanities 2012. July 16–22. Hamburg, Germany. With Jelena Prokić.
- 2012 'Using Linked Data to create a typological knowledge base'. Paper presented at Linked Data in Linguistics (DGfS 2012). March 6–9. Frankfurt, Germany.
- 2011 'Black box statistical approaches'. Paper presented at the Workshop on Comparing Approaches to Measuring Linguistic Differences. October 24–25. Gothenburg, Sweden. With Jelena Prokić.
- 2011 'Phonemic Inventories as a Phylogenetic Characteristic'. Paper presented at the 20th International Conference on Historical Linguistics (ICHLXX). July 25–30, Osaka, Japan. With Michael Cysouw.
- 2011 'Oblique Cases and Semantic Roles'. Paper presented at the Workshop on Semantic Role Complexes: (New) Approaches to Defining Semantic Roles. April 4–5, Zurich, Switzerland. With Jeffrey Heath.
- 2009 'Dogon Linguistics and Typology on the Web'. Poster presented at the Association for Linguistic Typology (ALT08). July 24–25, Berkeley, California. With Laura McPherson.
- 2009 'The Dogon Languages of Mali'. Paper presented at the Annual Conference on African Linguistics (ACAL). April 9–12, Indiana University, Bloomington, Indiana. With Jeffrey Heath and Abbie Hantgan.
- **2008** 'The e-Linguistics Toolkit'. Paper presented at e-Humanities an emerging discipline: Workshop in the 4th IEEE International Conference on e-Science. December 10, Indianapolis, Indiana. With Scott Farrar.
- 2008 'From the Field to the World'. Paper presented at the 20th Northwest Linguistics Conference (NWLC). May 3–4, Seattle, Washington. With Naomi Fox.
- 2006 'Moodle: A CALL Environment for Language Documentation and Revitalization'. Poster presented at the 2nd annual Conference on Endangered Languages and Cultures of Native America (CELCNA). March 31–April 2, Salt Lake City, Utah.

- 2006 'Best Practices in Practice: Documentation of Western Sisaala'. Poster presented at the annual meeting of the Linguistic Society of America, January 5–8, Albuquerque, New Mexico.
- **2006** 'APEC: A tool for automatic phonological analysis of field data'. Software demonstration at the E-MELD Workshop on Digital Language Documentation, Tools and Standards: the state of the art. June 20–22, Lansing, Michigan. With Shauna Eggers.
- 2006 'Creating a Video Clip Resource to Enhance Linguistics Courses'. Poster presented at the University of Washington Teaching and Learning Symposium. April 25, Seattle, Washington. With Sharon Hargus.
- 2005 'Creating Language Resources that Last: The E-MELD School of Best Practices in Digital Language Documentation'. Poster presented at the 2005 LSA Summer Institute event: Language Documentation: Theory, Practice, and Values. July 9–11. Harvard University, Cambridge, Massachusetts. With Helen Aristar-Dry, Antony Aristar, Naomi Fox, Susan Hooyenga and Megan Zdrojkowski.
- 2005 'Ensuring that Digital Data Last: Archiving and Linguistic Resources'. Paper presented at the 34th annual meeting of the Linguistic Association of the Southwest. October 7–9, Lubbock, Texas.
- 2005 'Creating Language Resources that Last: The E-MELD Project and Best Practices in Digital Language Documentation'. Poster presented at the E-MELD Workshop 2005: Linguistic Ontologies and Data Categories for Linguistic Resources, July 1–3, Cambridge, Massachusetts. With Susan Hooyenga and Megan Zdrojkowski.
- 2005 'The E-MELD School of Best Practices in Digital Language Documentation'. Paper presented at the 41st annual meeting of the Chicago Linguistics Society 41. April 7–9, Chicago, Illinois.
- 2005 'Endo and Exocentric Compounding in Western Sisaala'. Paper presented at the 31st annual meeting of the Berkeley Linguistics Society. February 18–20, Berkeley, California.
- 2005 'Challenges in Fieldwork: Review of Databases for Linguistic Purposes'. Poster presented at the annual meeting of the Linguistic Society of America. January 6–9, Oakland, California.
- 2004 'Review of DBMS for Linguistic Purposes'. Paper presented at the E-MELD Conference 2004: Linguistic Databases and Best Practice. July 15–18, Detroit, Michigan. With Marisa Ferrara.
- 2002 'English Loanwords in Maori'. Paper presented at the Eastern Michigan University Undergraduate Symposium. March 22, Ypsilanti, Michigan.

#### WORKSHOPS ORGANIZED

- **TBA** 'How did spoken phonology evolve in humans?' Co-sponsored by the Swiss Society for Linguistics and the Department of Comparative Linguistics, University of Zurich.
- 2019 'Current research in phonological typology', with Eitan Grossman, hosted at the 13th meeting of the Association for Linguistic Typology (ALT). September 4–6, Pavia, Italy.
- **2019** 'Phonological (in)stability', with Eitan Grossman, hosted at the 52nd Annual Meeting of the Societas Linguistica Europaea (SLE). August 21–24, Leipzig, Germany.
- 2018 'Comparative corpus linguistics: new perspectives and applications', with Natalia Levshina

- and Annemarie Verkerk, hosted at the 51st Annual Meeting of the Societas Linguistica Europaea (SLE). August 29 September 1, Tallinn, Estonia.
- 2017 'Non-linguistic causes of linguistic diversity', with Antonio Benítez Burraco and Dan Dediu, hosted at the 50th Annual Meeting of the Societas Linguistica Europaea (SLE). September 10–13, Zurich, Switzerland.
- **2012** Workshop organizer: Multilingual Linked Open Data for Enterprises (MLODE) workshop, co-located with Leipziger Semantic Web day. September 24–25, Leipzig, Germany, with Sebastian Hellmann.

## NON-REFEREED PRESENTATIONS

- 2019 'Current research in phonological typology: Introduction'. Paper presented at the 13th Conference of the Association for Linguistic Typology. September 4–6, Pavia, Italy. With Eitan Grossman.
- 2016 'Tracing the origin of human speech sounds: evolutionary and historical perspectives'. Paper presented at the Genetics and Animal Communication Workshop hosted by the University Research Priority Program: Evolution in Action. November 21–22, Zurich, Switzerland. With Balthasar Bickel, Damián Blasi and Paul Widmer.
- 2016 'Statistical Signals of the Trans-Pacific Migrations in Language'. Paper presented at the Linguistics and Genetics Workshop in Zurich 2016. University of Zurich. March 13. Authors: Balthasar Bickel, Curdin Derungs, Steven Moran, Sean Roberts and Dan Dediu.
- 2015 'Making the data usable: issues in unifying language acquisition corpora'. Paper presented at the Inter-Lab Workshop on Data and Standards: How to make data reusable? University of Zurich. May 29. With Robert Schikowski.
- **2015** 'ACQDIV: data, infrastructure, future'. Paper Presented at the Research Colloquium of the Department of Comparative Linguistics at the University of Zurich. May 22.
- 2014 'Language Geography and Dogon'. Paper Presented at the Maps and Grammar Workshop at the University of Zurich. March 21. With Curdin Derungs and Simon Etter.
- 2013 'Estimating Diachronic Preferences of Phonological Features Cross-linguistically'. Paper Presented at the Research Colloquium of the General Department of Linguistics at the University of Zurich. October 25. With Taras Zakharko and Balthasar Bickel.
- 2012 'Research Unit: Quantitative Language Comparison'. Paper presented at the Institute for Language Information and Technology (The Linguist List). September 12, Ypsilanti, Michigan.
- 2011 'Orthography Profiles'. Paper presented at the Phonetics Lab Meeting, LMU, München. May 18, Munich, Germany. With Jelena Prokić.
- 2006 'Benefits for Using the LKB and Grammar Engineering for Field Linguists'. Paper presented at the 2nd annual Deep Linguistic Processing with HPSG (DELPH-IN) meeting. June 12–17, Fefor, Norway.
- 2006 'The E-MELD Project and Tools for Field Linguists'. Demo presented at the Microsoft / UW Symposium in Computational Linguistics. February 3, Redmond, Washington.

#### TEACHING EXPERIENCE

# University courses (instructor)

- Introduction to First Language Acquisition from a Cross-linguistic Perspective (301: Einführung in die Spracherwerbsforschung). University of Zurich, Spring 2019 & Spring 2016.
- The Nature and Evolution of Phonology (605: Sprachvergleich). University of Zurich, Fall 2018.
- Linguistic Field Methods (501: Feldforschungsmethoden). University of Zurich, Fall 2017 (Galanguage) & Fall 2016 (Akan language).
- Anthropological Linguistics: Social and Cultural Perspectives (302a: Ethnolinguistik). University of Zurich, Fall 2015.
- Qualitative and Quantitative Analysis (102: Methoden und Anwendungen). University of Zurich, Spring 2015 & Fall 2013.
- Introduction to Anthropological Linguistics (302: Ethnolinguistik). University of Zurich, Fall 2014. Taught with Balthasar Bickel.
- Introduction to Morphology (LING 481). University of Washington, annually 2007–2010.

### University courses (teaching assistant)

- Deep Processing Techniques for Natural Language Processing (LING 571). University of Washington. Winter 2010 & 2009.
- Introduction to Computational Linguistics (CSE/LING 472). University of Washington. Spring 2010.

### Summer schools (instructor)

- Methods and practical applications for language documentation (Métods e instruments prácticos para la documentación lingüística, with Heriberto Avelino). Primera Escuela Latinoamericana de Tipología y Documentación Lingüística Alemania-México. Nacional de Estudios Superiores, UNAM. Morelia, Mexico. March 23–28, 2015.
- Database Design for Linguists. Quantitative Analysis of Linguistic Data (QUALD) doctoral seminar, University of Zurich, Summer 2014.

### RESEARCH PROJECT TEAM MEMBER

- 2020 Non-randomness in Morphological Diversity: A Computational Approach Based on Multilingual Corpora. Swiss National Science Foundation. Primary Investigator (PI) Tanja Samardzic (U. Zurich). Positions: postdoctoral researcher and technical project manager. http://p3.snf.ch/project-176305. Project homepage: https://www.spur.uzh.ch/en/departments/research/textgroup/MorphDiv.html.
- 2014—2019 ACQDIV: Acquisition processes in maximally diverse languages: Min(d)ing the ambient language. European Research Council Consolidator Grant ERC-2013-CoG, SH4, RCN: 615988. PI Sabine Stoll (U. Zurich). Positions: postdoctoral researcher and technical project manager. https://cordis.europa.eu/project/rcn/191230/. Project homepage: http://www.acqdiv.uzh.ch.

- 2013—2016 Dogon Languages of Mali. National Science Foundation (NSF) award no. BCS-1263150. PI Jeffrey Heath (U. Michigan). Positions: field researcher and technical lead. https://www.nsf.gov/awardsearch/showAward?AWD\_ID=1263150. Project webpages: http://dogonlanguages.org & http://tsammalex.clld.org/.
- 2010–2014 Quantitative modeling of historical-comparative linguistics: Unraveling the phylogeny of native South American languages (QuantHistLing). European Research Council Starting Grant ERC-2009-StG, SH4, RCN: 191230. PI Michael Cysouw (U. Marburg). Position: postdoctoral researcher. https://cordis.europa.eu/project/rcn/93461/.
- 2009—2013 Dogon Languages of Mali. National Science Foundation (NSF) award no. BCS-0853364. PI Jeffrey Heath. Positions: field researcher and technical lead. https://www.nsf.gov/awardsearch/showAward?AWD\_ID=0853364.
- 2009–2010 Phonetics Information Base and Lexicon (PHOIBLE). UW Royalty Research Fund Grant. PI Richard Wright (U. Washington). Positions: lead developer and project manager. http://phoible.org/
- 2008-2010 Lexicon Integration with the Gold Ontology (LEGO). National Science Foundation (NSF) award no. BCS-0753321. PIs Helen Aristar-Dry (EMU) and Jeff Good (U. Buffalo). Positions: programmer and data provider. https://www.nsf.gov/awardsearch/showAward?AWD\_ID=0753321. Project homepage: http://lego.linguistlist.org/.
- 2008-2009 GOLD Community of Practice: Laying the Foundations for a Linguistics Cyberin-frastructure. National Science Foundation (NSF) award no. BCS-0720670. PI Scott Farrar. Positions: programmer and researcher. https://www.nsf.gov/awardsearch/showAward? AWD ID=0720670.
- 2006—2009 Languages of the Dogon. National Science Foundation (NSF) award No. BCS-0537435. PI Jeffrey Heath. Position: field researcher and technical lead. https://www.nsf.gov/awardsearch/showAward?AWD\_ID=0537435.
- 2004–2005 Creating a Grammar, Dictionary, and Texts of the Dogon Languages of Mali, West Africa. National Endowment for the Humanities (NEH) award no. PA-50643. PI Jeffrey Heath. Position: programmer.
- 2003–2005 Description of Chorote, Nivaclé and Kadiwéu: three of least known and most endangered languages of the Chaco. Endangered Languages Documentation Programme (Rausing Charitable Fund), SOAS, University of London. Pls Lyle Campbell (U. Utah), Verónica Grondona (EMU) and Filomena Sandalo (IEL-Unicamp). Position: programmer.
- 2001—2005 Electronic Metastructure for Endangered Languages Data (E-MELD). National Science Foundation (NSF) award No. BCS-0094934. PIs Helen Aristar-Dry and Anthony Aristar (WSU). Positions: project manager and lead web developer. https://www.nsf.gov/awardsearch/showAward?AWD\_ID=0094934. Project homepage: http://emeld.org/

### VISITING SCIENTIST

- 2010 Max Planck Institute for Evolutionary Anthropology January, Leipzig, Germany.
- 2006 Max Planck Institute for Evolutionary Anthropology August–September, Leipzig, Germany.

# TECHNICAL SKILLS (PAST & PRESENT)

- Basic statistics, Command line, Coldfusion, CSS, Git, HTML, Javascript, Jupyter, LATEX, Linked Data, Linux, Markdown, MySQL, OS X, OWL, Photoshop, PHP, Python, R, RDF, SPARQL, SQL, Unix, XML
- Extensive experience in: the Unicode Standard and multilingual character encodings, text processing and data mining, orthographic segmentation, syntactic & semantic data interoperation, database design and implementation, web applications development, digital archiving & digitizing language documentation and multimedia, qualitative and quantitative analysis
- For various coding projects, see: https://github.com/bambooforest/
- Data creator and curator of PHOIBLE Online (http://phoible.org/), a broad coverage cross-linguistic database of phonological inventory data on sounds of the world's languages
- Data contributor and curator the Dogon and Bangime Linguistics project website (http://dogonlanguages.org/), a comprehensive multilingual and multimedia resource on the Dogon language family in Mali

### **FIELDWORK**

- Toro So (Dogon; ISO 639-3: dts) in Bobo-Dioulasso, Burkina Faso (Mali unsafe during this period, 2013); continuation of grammar and dictionary development
- Toro So in Douentza and Sangha, Mali (2009); initial English–French–Toro So dictionary and grammar development
- Western Sisaala (Niger-Congo; Gur; ISO 639-3: ssl) in Lambussie, UWR, Ghana (2003); orthography, dictionary and grammar development; extensive grammatical knowledge

# **LANGUAGES**

- English native
- German near native
- French basic
- Toro So extensive grammatical knowledge through on-site fieldwork
- Sisaala extensive grammatical knowledge through on-site fieldwork
- Akan taught field methods course
- Ga taught field methods course
- Tigrinya field methods course participant
- Sisaala field methods course participant

### INVITED PARTICIPANT

- 2017 'Quantitative Methods Spring School 2017', sponsored by the Max Planck Institute for the Science of Human History (MPI SSH). May 8–14. Jena, Germany.
- 2017 'LD4LR: Linked Data for Linguistic Research', sponsored by the Common Lab Research Infrastructure for the Arts and Humanities (CLARIAH) initiative. February 6-7. Utrecht, The Netherlands. Online: https://www.clariah.nl/en/new/blogs/linked-data-for-linguistic-research.
- 2015 'Workshop on Language Comparison with Linguistic Databases', sponsored by the Max Planck Institute for Evolutionary Anthropology. April 30. Leipzig, Germany. Online: https://www.eva.mpg.de/linguistics/conferences/2014-ws-lanclid2/index.html.
- 2014 'Workshop on Language Comparison with Linguistic Databases: RefLex and Typological Databases', sponsored by the Max Planck Institute for Psycholinguistics. October 7-9. Nijmegen, The Netherlands. Online: http://www.mpi.nl/events/language-comparison-with-linguistic-databases-reflex-and-typological-databases.
- **2012** 'Simulation of Diachrony', sponsored by the Department of General Linguistics, University of Zurich. November 5–6. Zurich, Switzerland.
- 2012 'Multilingual Web Workshop: Linked Open Data and Multilingual Web-LT Requirements', sponsored by the World Wide Web Consortium (W3C), Trinity College Dublin, and the European Commission. June 11–13. Dublin, Ireland. Online: https://www.multilingualweb.eu/documents/dublin-workshop/dublin-cfp.
- **2012** 'Typological databases in RDF', sponsored by the Max Planck Institute for Evolutionary Anthropology. March 14–15, Leipzig, Germany.
- 2009 'Cyberling 2009', sponsored by the Linguistic Society of America, the US National Science Foundation, and the University of California, Berkeley. July 17–19. Berkeley, California. Online: https://www.linguisticsociety.org/sites/default/files/Cyberling2009Workshop\_FinalReport.pdf.
- 2009 'Dogon Dictionary Development', sponsored by the Centre National de la Recherche Scientifique et Technologique (CNRST), Mali. June 8–10, Bamako, Mali, West Africa. Workshop coordinator with Jeffrey Heath.
- 2009 'Lexicon Integration with the Gold Ontology (LEGO)', sponsored by the Institute for Language Information and Technology and Eastern Michigan University. March 6–8, Ypsilanti, Michigan.
- 2007 'Toward the Interoperability of Language Resources Working group on Lexicon Schemas and Related Data Models', sponsored by the US National Science Foundation, Stanford University, the University of Kansas, Eastern Michigan University, and The Linguist List. July 13–15, Stanford University, Palo Alto, California.
- **2006** 'Digital Tools Summit in Linguistics (DTSL)', sponsored by the US National Science Foundation. Working group on Fieldwork and Archiving. June 22–23, Lansing, Michigan.

### **AWARDS**

2013 Nominated for the E.W. Beth Dissertation Prize for outstanding dissertations in the fields

- of Logic, Language, and Information (FoLLI—the Association for Logic, Language, and Information) by Professors Emily Bender and Richard Wright (UW).
- **2013** Nominated for the University of Washington's Graduate School Distinguished Dissertation Award 2013 by the UW Linguistics Department (one nomination annually per department).
- 2012 Awarded best paper for 'A Python Library for Historical Comparative Linguistics' (with Johann-Mattis List), presented at EuroSciPy 2012. August 23–27. Brussels, Belgium.
- **2010** Excellence in Linguistic Research Graduate Award, Linguistics Department, University of Washington. **One award annually**.
- 2006 Fulbright Scholar alternate.
- **2001** Distinguished Undergraduate Student in Linguistics, Eastern Michigan University. **One** award annually.
- 1999–2001 Dean's List, Eastern Michigan University.

### **GRANTS**

- **2019** Swiss National Science Foundation (SNSF) Eccellenza Professorial Fellowship. Project title: 'Evolution of phonetics and phonology (EVOPHON)'. Duration 2020–2025. Steven Moran, Principal Investigator. Awarded 1,890,688 CHF (\$1,914,298).
- 2016 'TYPDB: a unified interface to typological databases' with Balthasar Bickel, Paul Widmer and Taras Zakharko. Grant awarded from the UFSP Sprache und Raum, University of Zurich. Awarded 10,000 CHF.
- 2013 'Combining geography and language data to investigate the vertical diffusion of linguistic features due to language contact' with Curdin Deungs and Balthasar Bickel. Grant awarded from the UFSP Sprache und Raum, University of Zurich. Awarded 10,000 CHF.
- **2008** PHOIBLE: Phonetics Information Base and Lexicon, with Richard Wright. Royalty Research Fund, University of Washington. Awarded \$37,375.
- **2007** Student Technology Fund Proposal 2007–059–1, University of Washington Language Learning Center, Open Lab Upgrade. Awarded \$60,795.65.
- **2006** Student Technology Fund Proposal 2006–069–2, University of Washington Language Learning Center, PC Lab Replacement. Awarded \$84,829.88.
- 2013 Travel grant for fieldwork in Burkina Faso, Swiss Society of Endangered Languages.
- 2013–2019 Travel grants for conference travel, University of Zurich.
- 2006–2010 Travel grants for conference travel, University of Washington.
- 2001–2005 Travel grants for conference travel, Eastern Michigan University.

### ACADEMIC SERVICE

- **2019**—**pres** Elected member of the board of the eLinguistics Foundation (legal owner of the Linguist List and its intellectual property).
- 2019—pres Language Science Press Advisory Board.

- 2013-pres Linguist List Advisory Panel.
- 2007–2012 Linguistic Society of America Technology Advisory Committee (LSA-TAC).
- 2020 Journal reviewer: Diachronica; Frontiers Psychology; Linguistics Vanguard; Scientific Reports. Abstract reviewer: 5th Usage-Based Linguistics conference. Scientific committee: Evolution of Language International Conferences (EVOLANG 2020); 12th Language Resources and Evaluation (LREC 2020). Program committee: 7th Workshop on Linked Data in Linguistics (LDL-2020).
- 2019 Scientific committee: Language, Data, and Knowledge (LDK 2019). Journal reviewer: Lingua; Linguistics Vanguard; Open Handbook of Linguistic Data Management. Grant reviewer: Endangered Language Documentation Programme (ELDP). Program committee: Association Linguistic Typology (ALT 2019); Language, Data and Knowledge (LDK 2019).
- 2018 Journal reviewer: PLoS ONE; Journal of Language Evolution; Linguistic Typology. Program committee: 6th Workshop on Linked Data in Linguistics (LDL-2018): Towards Linguistic Data Science; Conference on Computational Linguistics (COLING 2018); International Conference for Graduate students on Diverse Approaches to Linguistics (IGDAL 7). Proof reader: Language Science Press. Scientific committee: 3rd Computational Methods for Endangered Languages (ComputEL-3); 11th Language Resources and Evaluation Conference (LREC-2018); Evolution of Language International Conferences (EVOLANG 2018). Grant reviewer: Biotechnology and Biological Sciences Research Council (BBSRC); National Science Center, Poland.
- **2017** Journal reviewer: Journal of Language Evolution; Laboratory Phonology; Linguistic Typology. Program Committee: 1st International Conference on Language, Data and Knowledge (LDK 2017).
- 2016 Journal reviewer: Journal of Language Evolution; Journal of the International Phonetic Association; Laboratory Phonology; Phonology. Scientific Committee: 10th International Conference on Language Resources and Evaluation (LREC 2016); 2nd Workshop on Computational Methods for Endangered Languages (Computed 2016). Program Committee: CCURL 2016 Towards an Alliance for Digital Language Diversity; Linked Data in Linguistics (LDL-2016); Terminology and Knowledge Engineering (TKE 2016: Term Bases and Linguistic Linked Open Data). Program Committee: First Workshop on Knowledge Extraction and Knowledge Integration (KEKI); International Conference on Computational Linguistics (COLING-2016). Grant reviewer: Endangered Language Documentation Programme (ELDP).
- 2015 Journal reviewer: Journal of the International Phonetic Association; LRE Journal Special Issue: 'Under-resourced Languages, Collaborative Approaches and Linked Open Data: Resources, Methods and Applications'; Phonology. Program committee: 4th Workshop on Linked Data in Linguistics: Resources and Applications (LDL-2015). Scientific committee: Association for Linguistic Typology (ALT 11).
- 2014 Journal reviewer: Histoire Épistémologie Langage; LRE Journal Special Issue: 'Underresourced Languages, Collaborative Approaches and Linked Open Data: Resources, Methods and Applications'. Program committee: Collaboration and Computing for Under-resourced Languages in the Linked Open Data Era (CCURL 2014); Linked Data in Linguistics (LDL-2014). Organizing committee: Multilingual Linked Open Data for Enterprises (MLODE 2014) workshop. Scientific committee: 8th Days of Swiss Linguistics; 9th International

- Conference on Language Resources and Evaluation (LREC 2014); ComputEL: The use of computational methods in the study of endangered languages (ACL 2014).
- 2013 Journal reviewer: Language Dynamics and Change; Linked Data in Linguistics: Representing and linking lexicons, terminologies and other language data; Semantic Web Journal; Studies in Language.
- 2012 Program committee: Deutsche Gesellschaft für Sprachwissenschaft (DGfS) Workshop: Linked Data in Linguistics; European Association of Computational Linguistics (EACL) Workshop: LINGVIS & UNCLH; Proceedings of Annual Conference on African Linguistics.
- **2011** Reviewer: Selected Proceedings of the 42nd Annual Conference on African Linguistics: African Languages in Context (edited by Michael R. Marlo, Nikki B. Adams, Christopher R. Green, Michelle Morrison and Tristan M. Purvis).
- 2006 Technical liaison for the 25th West Coast Conference on Formal Linguistics. April 28–30. University of Washington, Seattle, Washington.
- **2006** Media coordinator for Word Languages Day 2006. March 3. University of Washington, Seattle, Washington.
- 2005–2009 Editor of the University of Washington Working Papers in Linguistics.
- 2005 Liaison and media coordinator at the Breath of Life Conference at the University of Washington. September 12–16, Seattle, Washington.
- 2005 Working group liaison at the E-MELD Workshop 2005: Conference on Linguistic Ontologies and Data Categories for Language Resources. July 1–3, Cambridge, Massachusetts.
- **2004** Working group liaison for the E-MELD Workshop 2004: Conference on Linguistic Databases and Best Practice. July 15–18, Detroit, Michigan.
- 2003 Voluntary instructor of English Grammar and Conversation. Lambussie Secondary School. Lambussie, Ghana.
- **2002** Working group liaison for the E-MELD Workshop 2002: Conference on Digitizing Lexical Information. August 2–5, Ypsilanti, Michigan.

### STUDENT ADVISING

- **2020** Elad Eisan. The Typology of Phonological Segment Borrowing. M.A. thesis. Department of Linguistics, The Hebrew University of Jerusalem.
- **2019** Cazim Hysi. Implementing Diachronic Language Simulation in Python. B.A. thesis. Department of Computational Linguistics, University of Zurich.
- **2016** Danica Pajovič. ACQDIVIZ: Visualising Development in Longitudinal First Language Acquisition Data. M.A. thesis. Department of Computational Linguistics, University of Zurich.
- 2015 Melanie Widmer. Die Rolle distributioneller Information im Spracherwerb: Kategorisierung mit Hilfe von häufigen Frames. B.A. thesis. Department of Comparative Linguistics, University of Zurich.

# PROFESSIONAL MEMBERSHIPS (PAST & PRESENT)

• American Association for the Advancement of Science (AAAS)

- Association of Computational Linguistics (ACL)
- Association of Linguistic Typology (ALT)
- Center for the Interdisciplinary Study of Language Evolution (ISLE)
- European Language Resources Association (ELRA)
- Linguistic Society of America (LSA)
- Linguistics Society at the University of Washington (LSUW)
- Open Working Group in Linguistics (OWLG)
- Schweizerische Gesellschaft für bedrohte Sprachen (SGBS)
- Societas Linguistica Europaea (SLE)
- Züricher Kompetenzzentrum Linguistik (ZüKL)