

Nathan Sanders

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Updated 4 March 2018

Education

- 1996–2003 University of California, Santa Cruz
MA (2000) and PhD (2003) in Linguistics
dissertation title: *Opacity and sound change in the Polish lexicon*
dissertation committee: Jaye Padgett (chair), Junko Ito, Armin Mester, Caro Struijke
- 1992–1996 Massachusetts Institute of Technology
SB in Mathematics, minor in Linguistics

Employment

- 2017–present University of Toronto, Department of Linguistics
Assistant Professor, Teaching Stream
- 2016–2017 Haverford College, Department of Linguistics
(with joint appointments at Bryn Mawr College and Swarthmore College)
Visiting Assistant Professor
- 2010–2016 Swarthmore College, Department of Linguistics
Visiting Assistant Professor
- 2003–2010 Williams College, Linguistics Program
Assistant Professor and Coordinator

Books and Refereed Journal Articles

- In progress **Sanders, Nathan.** *A modular introduction to phonetics and phonology* [working title].
Oxford University Press. Expected publication in 2018.
- 2016 **Sanders, Nathan,** and Donna Jo Napoli. A cross-linguistic preference for torso stability in
the lexicon: Evidence from 24 sign languages. *Sign Language & Linguistics* 19(2).
197–231. <<http://doi.org/10.1075/sll.19.2.02san>>
- 2016 **Sanders, Nathan.** Constructed languages in the classroom. *Language* 92(3). e192–e204.
<<https://doi.org/10.1353/lan.2016.0055>>
- 2016 **Sanders, Nathan,** and Donna Jo Napoli. 2016. Reactive effort as a factor that shapes sign
language lexicons. *Language* 92(2). 275–297. <<https://doi.org/10.1353/lan.2016.0032>>

- 2014 Napoli, Donna Jo, **Nathan Sanders**, and Rebecca Wright. 2014. On the linguistic effects of articulatory ease, with a focus on sign languages. *Language* 90(2). 424–456. <<https://doi.org/10.1353/lan.2014.0026>>

Conference Proceedings, Book Chapters, and Other Publications

- In progress **Sanders, Nathan**. A primer on constructed languages. In Jeffrey Punske, Amy Fountain, and Nathan Sanders, eds. *Language invention for linguistics pedagogy and outreach*. Cambridge, UK: Cambridge University Press. [expected publication in 2019]
- In progress **Sanders, Nathan**, and Christine Schreyer. Moving beyond linguistics: The interdisciplinarity of conlangs. In Jeffrey Punske, Amy Fountain, and Nathan Sanders, eds. *Language invention for linguistics pedagogy and outreach*. Cambridge, UK: Cambridge University Press. [expected publication in 2019]
- In progress **Sanders, Nathan**. Some issues in the perceptual phonetics of sign language: Motion-in-depth and the horizontal-vertical illusion. In *Toronto Working Papers in Linguistics* 40. Special issue from the 2017 CRC-Sponsored Summer Phonetics/Phonology Workshop.
- 2016 **Sanders, Nathan**, and Donna Jo Napoli. Signs of efficiency: Maintaining torso stability affects sign language vocabulary. *Natural History* 124(9). 28–32.
- 2010 **Sanders, Nathan**, and Jaye Padgett. Predicting vowel inventories from a dispersion-focalization model: New results. In Max Bane, Juan José Bueno Holle, Thomas Grano, April Lynn Grotberg, and Yaron McNabb, eds. *CLS 44: The Panels. Papers from the 44th Meeting of the Chicago Linguistic Society*. Vol. 2. Chicago Linguistic Society. 293–307.
- 2002 **Sanders, Nathan**. Dispersion in OT: Color contrast in Middle Polish nasal vowels. In Line Mikkelsen and Christopher Potts, eds. *WCCFL 21 Proceedings*. Somerville, MA: Cascadilla Press. 415–428.
- 2001 **Sanders, Nathan**. Preserving synchronic parallelism: Diachrony and opacity in Polish. In Mary Andronis, Christopher Ball, Heidi Elston, and Sylvain Neuvel, eds. *CLS 37: The Main Session. Papers from the 37th Meeting of the Chicago Linguistic Society*. Vol. 1. Chicago Linguistic Society. 501–516.
- 1999 Kurisu, Kazutaka, and **Sanders, Nathan**. Infixal nominal reduplication in Maġarayi. In Adam Ussishkin, Dylan Herrick, Kazutaka Kurisu, and Nathan Sanders, eds. *Phonology at Santa Cruz* 6. 47–56
- 1997 **Sanders, Nathan**. On sympathetic correspondence. In Rachel Walker, Daniel Karvonen, and Motoko Katayama, eds. *Phonology at Santa Cruz* 5. 91–102.

Conference Presentations with Refereed Abstracts

- 2018 **Sanders, Nathan**. A case study in teaching linguistics to middle school students with language-based learning differences. Expanding the Reach of Linguistics: Collaborations with Other Disciplines and Beyond organized session (poster). The 92nd Annual Meeting of the Linguistics Society of America.

- 2017 **Sanders, Nathan.** Constructed languages as a bridge to interdisciplinary teaching. Teaching Linguistics with Invented Languages organized session. The 91st Annual Meeting of the Linguistic Society of America.
- 2014 **Sanders, Nathan.** Gradient (dis)harmony: Hidden harmony and anti-harmony. Annual Meetings on Phonology (Phonology 2014) poster session, MIT.
- 2012 **Sanders, Nathan,** and K. David Harrison. Discovering new vowel harmony patterns using a pairwise statistical model. The 20th Manchester Phonology Meeting poster session, University of Manchester, UK.
- 2010 **Sanders, Nathan,** and Jaye Padgett. Exploring the role of production in predicting vowel inventories. The 2nd Pan-American/Iberian Meeting on Acoustics poster session. Accepted but not presented.
- 2009 **Sanders, Nathan,** and Jaye Padgett. Exploring the role of production in predicting vowel inventories. The 83rd Annual Meeting of the Linguistic Society of America.
- 2009 Cerny, Jacob, Christopher Paci, and **Nathan Sanders.** Towards a classification of the northern Berkshires dialect of English. The 83rd Annual Meeting of the Linguistic Society of America poster session.
- 2008 **Sanders, Nathan,** and Jaye Padgett. Predicting vowel inventories from a dispersion-focalization model: New results. 44th Meeting of the Chicago Linguistics Society, Main Session: Modeling Language Evolution, University of Chicago.
- 2004 **Sanders, Nathan.** Opacity from contrast: Neutral segments in harmony systems. The 12th Manchester Phonology Meeting, University of Manchester, UK.
- 2002 **Sanders, Nathan.** Dispersion in OT: Color contrast in Middle Polish nasal vowels. West Coast Conference on Formal Linguistics 21, UCSC.
- 2001 **Sanders, Nathan.** Preserving synchronic parallelism: Diachrony and opacity in Polish. 37th Meeting of the Chicago Linguistic Society poster session, University of Chicago. Also presented at Trilateral Phonology Weekend, Stanford University, and at Generative Linguistics in Poland 3, Uniwersytet Warszawski.
- 1999 **Sanders, Nathan.** Same-edge alignment with opposite-edge effects. West Coast Conference on Formal Linguistics 18, University of Arizona, Tucson. Also presented at Trilateral Phonology Weekend, Stanford University.

Invited Talks and Other Presentations

- 2018 **Sanders, Nathan.** Articulatory and perceptual patterns in sign language lexicons. Keynote speech at the 11th Annual Toronto Undergraduate Linguistics Conference [TULCon11].
- 2017 **Sanders, Nathan.** Articulatory and perceptual patterns in sign language lexicons. Invited talk at SUNY Buffalo.
- 2017 **Sanders, Nathan.** Articulatory and perceptual patterns in sign language lexicons. Invited talk at Carleton University.

- 2017 **Sanders, Nathan.** Some issues in the perceptual phonetics of sign language: Motion-in-depth and the horizontal-vertical illusion. 2017 CRC-Sponsored Summer Phonetics/Phonology Workshop at the University of Toronto.
- 2017 **Sanders, Nathan.** Scales of effort in sign language articulation and perception. Invited talk at the University of Delaware.
- 2017 **Sanders, Nathan.** What sign languages tell us about phonetics: Expanding the notion of articulatory effort. Invited talk at the University of Toronto on joint work with Donna Jo Napoli.
- 2015 **Sanders, Nathan.** Active and reactive effort in sign language phonetics. Invited talk for the Tri-College Linguistics Lecture Series at Swarthmore College on joint work with Donna Jo Napoli and Rebecca Wright.
- 2014 **Sanders, Nathan.** Active and reactive effort in sign language phonetics. Invited talk at the University of Georgia on joint work with Donna Jo Napoli and Rebecca Wright.
- 2011 **Sanders, Nathan.** Some aspects of ease of articulation in American Sign Language. Invited talk at Stony Brook University on joint work with Donna Jo Napoli and Rebecca Wright.
- 2010 **Sanders, Nathan.** Predicting vowel inventories from a dispersion-focalization model: New results. Invited talk at Swarthmore College on joint work with Jaye Padgett.
- 2008 **Sanders, Nathan,** and Jaye Padgett. The role of dispersion, focalization, and articulation in vowel system simulations. Invited talk at the Massachusetts Institute of Technology.
- 2008 **Sanders, Nathan,** and Jaye Padgett. Articulatory parameters in a dispersion-focalization model of vowel systems. UC Santa Cruz Linguistics Alumni Conference.
- 2005 **Sanders, Nathan.** Written language. Invited lecture for BILL W120: Ideas that Changed the World, Berkshire Institute for Lifetime Learning.
- 2003 **Sanders, Nathan.** Opacity and the optimal lexicon: The case of [ɔ]-raising in Polish. Invited talk at Williams College.

Edited Volumes

- In progress Punske, Jeffrey, Amy Fountain, and **Nathan Sanders.** *Language invention in linguistics pedagogy.* [expected publication in 2019]
- 2000 Chung, Sandy, Jim McCloskey, and **Nathan Sanders.** *Jorge Hankamer WebFest.* <<http://babel.ucsc.edu/Jorge/>>.
- 1999 Ussishkin, Adam, Dylan Herrick, Kazutaka Kurisu, and **Nathan Sanders.** *Phonology at Santa Cruz 6.*

Software, Unpublished Manuscripts, and Other Work

- In progress **Sanders, Nathan.** Lexical asymmetries in sign language movement due to perception. Article.

- In progress Napoli, Donna Jo, and **Nathan Sanders**. The movement parameter in the historical study of sign languages. Article.
- 2016 **Sanders, Nathan**. ns\IPA. Unicode IPA keyboard layout and documentation. v1.0.
- 2006/2014 **Sanders, Nathan**. OTtblx. L^AT_EX software package and documentation. v0.4.
- 2012 Harrison, K. David, **Nathan Sanders**, Rachel Killackey, Kathryn Montemurro, and Peter Nilsson. The Tuvan Machine Translation Project. Swarthmore College.
- 2000 **Sanders, Nathan**. Intra-representational correspondence and the realization of empty morphemes. Qualifying exam paper.
- 2000 **Sanders, Nathan**. The double object construction. Qualifying paper.
- 1999 **Sanders, Nathan**. Intra-representational correspondence and truncation. Rutgers Optimality Archive #394.
- 1998 **Sanders, Nathan**. Same-edge alignment with opposite-edge effects: An analysis of reversal ludlings. Qualifying paper.

Teaching Experience

- 2017–present courses taught at University of Toronto (semesters)
 LIN 200: Introduction to Language (×2)
 LIN 305: Quantitative Methods in Linguistics (×1)
 LIN 1121: Phonological Theory (×1)
- 2016–2017 courses taught at Haverford College (semesters)
 LING 113: Syntax I (×1)
 LING 115: Phonetics and Phonology (×1)
- 2016 courses taught at Bryn Mawr College (semesters)
 LING 101: Introduction to Linguistics (×1)
- 2010–2017 courses taught at Swarthmore College (semesters)
 LING 045: Phonetics and Phonology (×9)
 LING 052: Historical and Comparative Linguistics (×5)
 LING 115: Linguistic Typology and Constructed Languages (×4)
 LING 100: Research Seminar (×4)
 LING 001: Introduction to Linguistics (×3)
 LING 040: Syntax (×2)
 LING 050: Semantics (×2)
 LING 040: Advanced Research Methods in Linguistics (×2)
 LING 093: Directed Reading (phonology + historical linguistics; ×1)

- 2003–2010 courses taught at Williams College (semesters and January Winter Study Periods)
 LING 397/398: Independent Study (×6)
 LING 111/210: Articulatory and Acoustic Phonetics (×5)
 LING 131/230/PHIL 131: Introduction to Logic and Semantics (×5)
 LING 121/220/ENGL 122: The Syntactic Structure of English (×4)
 LING 101/100/ANTH 107: Introduction to Linguistics (×3)
 LING 211/310: Phonology (×3)
 LING 212/340: Historical Linguistics (×3)
 LING 010: Linguistic Typology and the Science of Constructed Languages (×2)
 LING 400: Linguistics Research Seminar (×1)
 LING 010: Surviving Your Fifteen Minutes (×1)
- 2000–2002 courses taught at UCSC (quarters and five-week intensive summer sessions)
 LING 80G: Introduction to Unix (×2)
 LING 51: Phonetics (×2)
 LING 101: Phonology I (×1)
- 1996–2003 courses assisted at UCSC (quarters)
 COWELL/LING 80G: The Nature and Language of Computers (×3)
 LING 51: Phonetics; LING 101: Phonology I; LING 108: Poetry and Language; LING 55: Syntactic Structures; LING 140: Language Change; MATH 19A: Calculus for Science, Engineering, and Mathematics; PHIL 9: Introduction to Logic; PHIL 117: Intermediate Logic (×1 each)
- 1996 courses assisted at MIT (semesters and January Independent Activity Periods)
 18.01: Calculus I; 18.03: Differential Equations (×1 each)

Supervised Graduate Student Research

Doctoral dissertation committees

2018 Heather Hamilton. *Phonotactics and signed languages*. Gallaudet University.

University of Toronto graduate generals papers

2018 Katharina Pabst. Comparing lifespan developments in spoken and written language: A case study of Margaret Atwood's use of subject relativizers. Third reader.

University of Toronto graduate research assistants

2017–2018 Andrei Munteanu. Sign language phonetics.

Supervised Undergraduate Student Research

Swarthmore College summer undergraduate research assistants

2015 Aurora Martinez del Rio and David Zuckerman. Sign language phonetics.

2012 Rachel Killackey, Kathryn Montemurro, and Peter Nilsson. Tuvan-English machine translation. With K. David Harrison.

Tri-College (Swarthmore/Bryn Mawr/Haverford) senior theses

2015–2016 Lewis Esposito. *'I am a perpetual underdog': Lady Gaga's use of creaky voice in the construction of a sincere pop-star persona*. Honours.

Jared Golant. *Prosodic structure in Nuxalk*.

Laura Katz. *Morphophonology of the Maung language*.

Melina Koukoutchos. *Improving Langscape's text-based language identification tool*.

Lucy Shaw. *Varied routes of tonogenesis: The case of three Chamic languages*.

Rachel Vogel. *Problems in Bantawa phonology: A statistically driven approach to vowels*. Presented at the 13th Annual Undergraduate Linguistics Colloquium at Harvard.

Rachel Weissler. *Intraspeaker variation: Stop devoicing in elderly black speakers*. Honours. Mellon Mays Undergraduate Fellowship. Presented at the 3rd Annual Scarborough Undergraduate Linguistics Conference.

Zhenglong Zhou. *Historical phonology should be conducted with a basis in phonetics: An argument for the use of Articulatory Phonology in diachronic phonology with an example analysis of Icelandic preaspiration*. Presented at the 13th Annual Undergraduate Linguistics Colloquium at Harvard and the Sixth Annual Hunter College Linguistics and Language Studies Conference.

2013–2014 Lisa Bao. *Applying translation theory to a corpus-based analysis of The Count of Monte Cristo*. Honours.

Sofia Berlin. *Domain dependency in sentiment analysis*.

Shohini Bhattasali. *Correlations between sentiment analysis of movie tweets, film critics reviews, and box office earnings*.

Sarah Bristow. *An examination of American pediatric policy on language for deaf and hard of hearing children*.

Karuna Doraiswamy. *Heritage languages among South Asian Americans*.

Kelsey Ryan. *Tolkien's tongues: The phonetics and phonology of Tolkien's Quenya language*.

Alison Ryland. *A phonetic exploration of the English of Portland, Maine*.

Congwen Wang. *A sociophonetic analysis of American Theater Speech as exemplified by Katharine Hepburn's filmography*.

2012–2013 Daniel Duncan. *A sociophonetic analysis of country music*. Honours.

Celia Abernathy. *Computational generation of referring expressions containing relational descriptions*.

Reed Coke. *A corpus study of conjoined comparatives*.

Rachel Killackey. *Statistical machine translation from English to Tuvan*.

Kathryn Montemurro. *A strong lexicon optimization analysis of the Acholi plural*.

Vicki Sear. *Kanza and Osage: Language materials, revival and the necessity for phonetic analysis*.

2011–2012 Allyson Bunch. *Textual variation and the representation of dialect in Petronius' Satyricon*. Honours. Hannah Hollborn Gray Fellowship.

Andrew Cheng. *Finding Remo: A preliminary phonetic analysis of the language*. Honours.

Charlie Huntington. *Despite the great distance, existence unites the two: Translating the poetry of Fadwa Tuqan*. Honours.

Marjorie Herbert. *Pluralization in German Sign Language*. Honours.

Jennifer Johnson. *Linguistic acculturation in Siletz Dee-ni*. Honours.

Rebecca Knowles. *Vowel harmony: Statistical methods for linguistic analysis*. Honours.

Mary Lane. *English loans in German and the borrowing of meaning*.

Amira Silver-Swartz. *Lexical variation in Italian Sign Language*.

Louise St. Amour. *Verbal morphology of the Southern Unami dialect of Lenape*.

Williams College senior theses

2008–2009 Jacob Cerny. *An in-depth analysis of the Miami dialect*. Honours. Presented at McGill's Canadian Conference for Linguistics Undergraduates 2009.

Alex Ratté. *A dialectal and phonological analysis of Penghu Taiwanese*. Honours. Accepted for presentation at the 3rd Biennial Meeting of the Rice Linguistics Society.

Anna Scholtz. *A phonetic study of the status of three mergers in the Trøndersk dialect of Norwegian*. Honours.

2007–2008 Jeremy Doernberger. *American dialects at college*. Honours.

2005–2006 Lindsey Corbin. *The phonetics and phonology of s-lenition and vowel laxing in Eastern Andalusian Spanish*. Honours.

Williams College independent research

2009–2010 Petya Miteva. Hungarian vowel harmony.

2010 Shara Singh. Phonetics of Inari Sámi. Gaudino Winter Study Fellows Program.

2008–2009 Patricia Cho. Second-language acquisition of Chinese tone and fricatives. Mellon Mays Undergraduate Fellowship.

Brian Kim. Representing fricatives with auditory features: Evidence from Ukrainian. Paper presented at McGill's Canadian Conference for Linguistics Undergraduates 2009.

2008 Andrew Goldston. Vowel harmony in Québécois French.

2007–2008 Jacob Cerny and Christopher Paci. The vowels of the Berkshires. Paper presented at Cornell Undergraduate Linguistics Colloquium 2008.

- 2007 Jacob Cerny and Jeremy Doernberger. The low back merger in Miami. Poster presented at New Ways of Analyzing Variation 36. Selected as Best Student Poster and published in *University of Pennsylvania Working Papers in Linguistics* 14.2, 2008.
- Eric Wirkerman. Allomorphy of the definite article in French Caribbean creoles.

Research Positions

- 2016–2017 Swarthmore College, Department of Psychology
Visiting Scholar
Sponsor: Dan Grodner
- 2006–2007 University of Massachusetts, Amherst, Department of Linguistics
Visiting Scholar
Sponsor: Elisabeth Selkirk
- 1999 University of California, Department of Psychology
Perceptual Sciences Laboratory
Research Assistant
Principal Investigators: Dominic Massaro and Michael Cohen
- 1999 University of California, Department of Linguistics
Research Assistant
Principal Investigators: Junko Ito and Armin Mester
- 1998 University of California, Department of Linguistics
Research Assistant
Principal Investigator: Jorge Hankamer

Professional Activities

- 2018 reviewer for *Toronto Working Papers in Linguistics*
- 2017 reviewer for *Canadian Journal of Linguistics* and the Fifteenth Old World Conference in Phonology

panelist for discussion on “Where do Conlangs Belong in the Academy?” at the 7th Language Creation Conference
- 2017 reviewer for *Language and Speech*
- 2016 linguistics outreach lecture to middle school students at AIM Academy, Conshohocken, PA

panelist for discussion on “The Copyrightability of Constructed Languages” at the New York Chapter of the Copyright Society of the USA

reviewer for *Natural Language & Linguistic Theory*, the Fourteenth Old World Conference in Phonology, *Language and Speech*, and *Phonology*
- 2015 reviewer for *Glossa*, *Lingua*, the Polish-U.S. Fulbright Commission, and the 90th Annual Meeting of the Linguistic Society of America

search committee for Visiting Assistant Professor in Linguistics at Swarthmore College
 2014–2015 Assessment Liaison for the Department of Linguistics at Swarthmore College
 2014 reviewer for the Twelfth Old World Conference in Phonology
 search committee for Visiting Assistant Professor in Linguistics at Swarthmore College
 2013 reviewer for the National Science Foundation and the Eleventh Old World Conference in Phonology
 search committee for Visiting Assistant Professor in Linguistics at Swarthmore College
 2012 reviewer for *Poznań Studies in Contemporary Linguistics*
 2011 reviewer for *Canadian Journal of Linguistics* and *Phonology*
 2010 reviewer for *Gastronomica* and *Lingua*
 2003–2010 Williams College Dively Committee
 2004–2005 Chair
 2009 panelist at the Mellon 23 Linguistics Workshop at Swarthmore College
 2007–2009 Williams College Winter Study Committee
 2008 organized WillLing 2008 at Williams College (two-day colloquium series for local undergraduates to present their linguistics research)
 reviewer for *Phonology* and *Poznań Studies in Contemporary Linguistics*
 2007 organized WillLing 2007 at Williams College
 2006–2007 search committee for Mellon Post-Doc in Linguistics at Williams College
 2005–2006 search committee for Visiting Assistant Professor in Linguistics at Williams College
 2003–2006 Williams College LGBT Advisory Committee
 2001–2003 UCSC Graduate Student Commons Governance Board
 2001–2003 Graduate Student Representative
 2001 Chair
 1997–2003 SLUG Pubs (publisher of UCSC linguistics PhD dissertations)
 Co-Founder and Executive Director
 2001–2002 West Coast Conference on Formal Linguistics 21 organizing committee, Web Designer
 2001 search committee for the UCSC Graduate Student Commons Facilities Manager
 1999–2000 UCSC Graduate Student Commons Planning Committee, Co-Chair
 Graduate Student Representative to the UCSC Department of Linguistics Faculty

- 1999 reviewer for *Phonology at Santa Cruz* 6
- 1998–1999 Graduate Student Representative to the UCSC Alumni Association
- 1997–1999 Graduate Student Representative to the UCSC Graduate Council, UCSC
- 1996–1999 UCSC Graduate Student Association Council
 1998–1999 President
 1997 Internal Vice-President
 1996–1997 Representative from the Linguistics department
- 1997–1998 UCSC Linguistics Colloquium Committee
- 1997 search committee for the UCSC Director of the GLBT Resource Center
 reviewer for *Phonology at Santa Cruz* 5

Fellowships, Honours, and Awards

- 2014 ranked #1 on a poll of students conducted by Swarthmore College’s *Daily Gazette* for “Professors you should take if your discipline is social sciences” and ranked #3 for “Swat professors that will change your life” <<http://daily.swarthmore.edu/2014/11/26/swat-visually-swarthmore-professor-and-course-rankings/>>
- 2001 Doctoral Student Sabbatical Fellowship (one quarter), UCSC
- 2001 Outstanding Teaching Assistant Award, UCSC
- 1998 Student Affairs Division Incentive Award, UCSC
- 1996 Regent’s Fellowship (three quarters), UCSC

Languages and Other Skills

English: native proficiency German: elementary proficiency
 French: intermediate proficiency ASL: beginning proficiency

Proficiency with various Unix, Macintosh, and Windows operating systems; with Praat; with Experiment Builder and the EyeLink 1000; with basic statistics and the R programming language; with L^AT_EX; with C-shell scripting; with basic HTML; and with numerous text, data, and graphics applications, including Microsoft Word, Microsoft Excel, Adobe Photoshop, Adobe Illustrator, and Adobe Dreamweaver.