

Samuel Tilsen

tilsen@cornell.edu
conf.ling.cornell.edu/~tilsen

Cornell University
Department of Linguistics
203 Morrill Hall
Ithaca, NY 14853-4701

12/26/2019

Curriculum Vitae

Academic appointments

2017- Associate Professor, Cornell University, Department of Linguistics
2017-2018 Visiting Scholar, Wolfson College, Oxford University
2011-2017 Assistant Professor, Cornell University, Department of Linguistics
2009-2011 NIH NRSA Postdoctoral Fellow, University of Southern California
Hearing and Communication Neuroscience

Education

2009 Ph.D. Linguistics, University of California, Berkeley
Dissertation: Interactions between speech rhythm and gesture
2006 M.A. Linguistics, University of California, Berkeley
2001 B.A. Linguistics, B.A. English, Northwestern University

Fellowships, awards, grants

2016 (Co-PI) Mario Einaudi Center for International Studies Small Grant: LabPhon15: Speech Dynamics and Phonological Representation (\$5,000).
2016 (Co-PI) Cornell University Institute for the Social Sciences Small Grant: LabPhon15 - Speech Dynamics and Phonological Representation (\$3,500).
2016 (Co-PI) NSF Conference Grant: LabPhon 15 - Speech Dynamics and Phonological Representation, Award #1551588, (\$24,845).
2013 Cornell Center for Teaching Excellence Faculty Grant: Earmaster: a phonetic transcription game.
2012 Cornell University Institute for the Social Sciences Small Grant: Visualizing speech: real-time MRI of the vocal tract (\$10,680).
2009 NIH Ruth L. Kirschstein-NRSA Institutional Research Training Grant, University of Southern California.
2008 NSF Doctoral Dissertation Improvement Grant, Award #0817767.
2001 Daniel Bonbright Award, Weinberg College of Arts and Sciences, Northwestern University.

Manuscripts under review

2020 Detecting anticipatory information in speech with signal chopping. Tilsen, S.

Peer-reviewed publications

2019 Motoric mechanisms for the emergence of non-local phonological patterns. Tilsen, S. *Frontiers in Psychology*. DOI:10.3389/fpsyg.2019.02143
2019 Syntax with oscillators and energy levels. Tilsen, S. *Language Science Press*.
2019 Space and time in models of speech rhythm. Tilsen, S. *Annals of The New York Academy of Sciences*. doi:10.1111/nyas.14102
2018 Analysis of Speech Production Real-time MRI. Ramanarayanan, V., Tilsen, S., Proctor, M., Toger, J., Goldstein, L., & Nayak, K., Narayanan, S. *Computer Speech & Language*. 52: 1-22. doi:10.1016/j.csl.2018.04.002
2017 Exertive modulation of speech and articulatory phasing. Tilsen, S. *Journal of Phonetics*. dx.doi.org/10.1016/j.j.wocn.2017.03.001.
2016 Shared representations underlie metaphonological judgments and speech motor control. Tilsen, S. & Cohn, A. *Laboratory Phonology: Journal of the Association for Laboratory Phonology*, 7(1): 14, pp. 1-33, doi:10.5334/labphon.52
2016 Selection and coordination: the articulatory basis for the emergence of phonological structure. Tilsen, S. *Journal of Phonetics*, 55: 53-77. doi:10.1016/j.wocn.2015.11.005
2016 Anticipatory Posturing of the Vocal Tract Reveals Dissociation of Speech Movement Plans from Linguistic Units. Tilsen, S., Spincemaille, P., Xu, B., Doerschuk, P., Luh, W.-M., Feldman, E., Wang, Y. *PLoS ONE* doi:10.1371/journal.pone.0146813

- 2015 Real-time articulatory biofeedback with electromagnetic articulography. Tilsen, S., Das, D., & McKee, B. *Linguistics Vanguard* doi:10.1515/lingvan-2014-1006
- 2014 Selection and coordination in temporally constrained production. Tilsen, S. *Journal of Phonetics*, 44: 26-46.
- 2013 A dynamical model of hierarchical selection and coordination in speech planning. Tilsen, S. *PLoS ONE* 8(4): e62800. doi:10.1371/journal.pone.0062800
- 2013 Speech rhythm analysis with decomposition of the amplitude envelope: Characterizing rhythmic patterns within and across languages. Tilsen, S. & Arvaniti, A. *Journal of the Acoustical Society of America*, 134, 1: 628-639. doi:10.1121/1.4807565
- 2013 Inhibitory mechanisms in speech planning maintain and maximize contrast. Tilsen, S. In A. Yu (Ed.), *Origins of Sound Patterns: Approaches to Phonologization*. 112-127. Oxford: Oxford University Press.
- 2012 Articulatory gestures are individually selected in production. Tilsen, S. & Goldstein, L. *Journal of Phonetics*, 40: 764-779.
- 2012 Utterance preparation and stress clash: planning prosodic alternations. Tilsen, S. In Fuchs, S., Perrier, P., Weirich, M. & Pape, D. (Eds.) *Speech production and perception: Planning and dynamics*, pp. 119-156. Frankfurt Am Main: Peter Lang Verlag.
- 2011 Effects of syllable stress on articulatory planning observed in a stop-signal experiment. Tilsen, S. *Journal of Phonetics*, 39: 642-659.
- 2011 Metrical regularity facilitates speech planning and production. Tilsen, S. *Laboratory Phonology*, 2: 1, 185-218.
- 2010 Automated measurement of vowel formants in the Buckeye Corpus. Yao, Y., Tilsen, S., Sprouse, R., & Johnson, K. *Gengo Kenkyu* (Journal of the Linguistic Society of Japan), 138: 99-113.
- 2009 Multi-timescale dynamical interactions between speech rhythm and gesture. Tilsen, S. *Cognitive Science*, 33, 839-879.
- 2009 Subphonemic and cross-phonemic priming in vowel shadowing: evidence for the involvement of exemplars in production. Tilsen, S. *Journal of Phonetics*, 37:3, 276-296.
- 2008 Low-frequency Fourier analysis of speech rhythm. Tilsen, S. & Johnson, K. *Journal of the Acoustical Society of America*, 124:2, EL34-39.

Conference proceedings

- 2019 Strength and structure: coupling tones with oral constriction gestures. Mücke, D., Hermes, A., & Tilsen, S. *Proc. Interspeech 2019*, 914-918.
- 2016 A shared control parameter for F0 and intensity. Tilsen, S. *Proc. Speech Prosody 2016*, 1066-1070.
- 2016 Early Prosodic Manifestations of Disfluency. Li, J. & Tilsen, S. *Proc. Speech Prosody 2016*, 1235-1239.
- 2015 Structured nonstationarity in articulatory timing. Tilsen, S. *Proceedings of the 18th International Congress of Phonetic Sciences*.
- 2015 Relation between syllable count judgments and durations of English liquid rimes. Cohn, A. & Tilsen, S. *Proceedings of the 18th International Congress of Phonetic Sciences*.
- 2015 Phonetic evidence for two types of disfluency. Li, J. & Tilsen, S. *Proceedings of the 18th International Congress of Phonetic Sciences*.
- 2015 The articulatory tone-bearing unit: Gestural coordination of lexical tone in Thai. Karlin, R. & Tilsen, S. *POMA*, 22, 060006.
- 2015 A gestural account of mandarin tone sandhi. Yi, H. & Tilsen, S. *POMA*, 22, 060003.
- 2015 A real-time MRI investigation of anticipatory posturing in prepared responses. Tilsen, S., Spincemaille, P., Xu, B., Doerschuk, P., Karlin, R., Yi, H., Feldman, E., Luh, W., Wang, Y. *POMA*, 22, 060001.
- 2014 Some people are eager to be heard: anticipatory posturing in speech production. Tilsen, S., Spincemaille, P., Xu, B., Doerschuk, P., Karlin, R., Yi, H., Feldman, E., Luh, W., Wang, Y. *168th Meeting of the Acoustical Society of America Lay Language Papers*.
- 2013 Comparison of native and non-native consonant articulation with real-time magnetic resonance imaging of the vocal tract. Tilsen, S., Xu, B., Spincemaille, P., Srivastava, M., Doerschuk, P., Wang, Y. *POMA*, 19, 060246.
- 2013 Acoustic and articulatory evidence for the phonological status of liaison consonants. L'Esperance, M.-J. & Tilsen, S. *POMA*, 19, 060245.
- 2008 Relations between speech rhythm and segmental deletion. Tilsen, S. *Proceedings from the Annual Meeting of the Chicago Linguistic Society*, 44:1, 221-223.

Working papers

- 2018 Three mechanisms for modeling articulation: selection, coordination, and intention Tilsen, S. *Cornell Working Papers in Phonetics and Phonology 2018*.
- 2016 Correlations between speech behavior and social network structure in a constrained vocabulary game Tilsen, S. *Cornell Working Papers in Phonetics and Phonology 2016*.
- 2015 Speech and social network dynamics in a constrained vocabulary game: design and hypotheses. Tilsen, S. *Cornell Working Papers in Phonetics and Phonology 2015*.
- 2014 Syllable count judgments and durations of liquid rimes in English. Tilsen, S., Cohn, A., & Ricciardi, E. *Cornell Working Papers in Phonetics and Phonology 2014*.

- 2014 Selection-coordination theory. Tilsen, S. *Cornell Working Papers in Phonetics and Phonology 2014*.
- 2013 Imitation of intonational gestures: a preliminary report. Tilsen, S., Burgess, D., & Lantz, E. *Cornell Working Papers in Phonetics and Phonology 2013*.
- 2012 Acoustic analysis of the effects of metrical regularity on interval durations. Tilsen, S., Cibelli, E., Kang, S., Houde, J., Nagarajan, S. *Cornell Working Papers in Phonetics and Phonology 2012*.
- 2012 A cross-linguistic investigation of articulatory coordination in word-initial consonant clusters. Tilsen, S., Zec, D., Bjoerndahl, C., Butler, B., L Esperance, M. J., Fisher, A., Heimisdottir, L., Renwick, M., Sanker, C. *Cornell Working Papers in Phonetics and Phonology 2012*.
- 2009 Toward a dynamical interpretation of hierarchical linguistic structure. Tilsen, S. *UC Berkeley Phonology Lab Annual Report*, 462-512.
- 2008 Preliminary results of a stop-signal experiment. Tilsen, S. *UC Berkeley Phonology Lab Annual Report*, 686-712.
- 2007 Vowel-to-vowel coarticulation and dissimilation in response-priming. Tilsen, S. *UC Berkeley Phonology Lab Annual Report*, 416-458.
- 2007 Low-frequency Fourier analysis of speech rhythm in the VIC corpus. Tilsen, S. *UC-Berkeley Phonology Lab Annual Report*, 686-712.
- 2006 Rhythmic coordination in repetition disfluency: a harmonic timing effect. Tilsen, S. *UC Berkeley Phonology Lab Annual Report*, 73-114.