

# Michael C. Stern

## *Curriculum Vitae*

Yale Linguistics Department  
37 Hillhouse Ave, New Haven, CT 06511  
michael.stern@yale.edu  
22 September 2025

## EDUCATION

- 2020-2026     **PhD, Linguistics, Yale University**  
Expected graduation: May 2026  
Dissertation: *Dynamics of articulatory movement and control across prosodic contexts in English and Mandarin*  
Advisor: Jason A. Shaw  
Committee: Khalil Iskarous, Tom McCoy
- 2017-2020     **MA, Linguistics, The Graduate Center, City University of New York**  
Thesis: *Testing the perceptual magnet effect in monolinguals and bilinguals*  
Advisors: Kyle Gorman, Gita Martohardjono
- 2012-2016     **BA, Social Thought & Political Economy, University of Massachusetts Amherst**  
Minor in Arabic Language, Commonwealth Honors College, Phi Beta Kappa  
Thesis: *Reflections on being a stranger: A collection of nonfiction prose*  
Advisor: Connie D. Griffin
- 2015     **School for International Training, Amman, Jordan**  
Thesis: *Effects of social identity on Jordanian youth perceptions of activism*  
Advisors: Ashraf Alqudah, Marwan Al-Zoubi

## FELLOWSHIPS AND AWARDS

- 2020-2026     University Fellowship, Yale University
- 2025     Recipient, Raymond H. Stetson Scholarship in Phonetics and Speech Production, Acoustical Society of America
- 2024     Honorable Mention, Raymond H. Stetson Scholarship in Phonetics and Speech Production, Acoustical Society of America
- 2023     MacMillan Center International Conference Travel Grant, Yale University
- 2022-2024     Graduate Student Assembly Conference Travel Fellowship, Yale University
- 2021-2022     Franklin S. Cooper Fellowship Fund, Yale University
- 2021     Student presenter honorarium, Conference on Central Asian Languages and Linguistics (ConCALL-4)
- 2020     Dean's Thesis Prize for Outstanding Thesis, The Graduate Center, CUNY
- 2019-2020     Linguistics Program academic scholarship, The Graduate Center, CUNY
- 2019     Student travel award, Workshop on Sound Change (WSC-5)
- 2018-2019     MA student conference travel awards, The Graduate Center, CUNY

## PUBLICATIONS

### JOURNAL ARTICLES

- [8]     **Stern, M. C. & Piñango, M. M.** (under review). Contextual modulation of language comprehension in a dynamic neural model of lexical meaning. *arXiv:2407.14701*.

- [7] Shaw, J. A. & **Stern, M. C.** (under review). Interaction between speech planning and articulation. *Oxford Research Encyclopedia of Linguistics*.
- [6] **Stern, M. C.** & Shaw, J. A. (2025). Nonlinear second-order dynamics describe labial constriction trajectories across languages and contexts. *Journal of Phonetics*, 111.
- [5] Siriwardena, Y. M., Boyce, S. E., Tiede, M. K., Oren, L., Fletcher, B., **Stern, M. C.**, & Espy-Wilson, C. Y. (2024). Speaker-Independent Speech Inversion for Recovery of Velopharyngeal Port Constriction Degree. *Journal of the Acoustical Society of America*, 156(2).
- [4] Chen, W., **Stern, M. C.**, Whalen, D. H., Derrick, D., Carignan, C., Best, C. T., & Tiede, M. K. (2024). Assessing ultrasound probe stabilization for quantifying speech production contrasts using the Adjustable Laboratory Probe Holder for UltraSound (ALPHUS). *Journal of Phonetics*, 105.
- [3] **Stern, M. C.** & Shaw, J. A. (2023). Neural inhibition during speech planning contributes to contrastive hyperarticulation. *Journal of Memory and Language*, 132.
- [2] **Stern, M. C.**, Stover, L., Guerra, E., & Martohardjono, G. (2021). Syntactic and semantic influences on the time course of relative clause processing: The role of language dominance. *Brain Sciences*, 11(8), 1–35.
- [1] **Stern, M. C.**, Madsen II, C. N., Stover, L. M., Lowry, C., & Martohardjono, G. (2019). Language history attenuates syntactic prediction in L1 processing. *Journal of Cultural Cognitive Science*, 4(2), 235-255.

#### BOOK CHAPTERS

- [2] **Stern, M. C.**, Dayal, V., Martohardjono, G., Chen, M., & Madsen II, C. N. (2022). Definiteness and argument position in the interpretation of bare nouns: From L1 Mandarin to L2 English. In: T. Leal, E. Shimanskaya, and C. A. Isabelli (Eds.), *Generative SLA in the Age of Minimalism. Features, Interfaces, and Beyond. Selected Proceedings of the 15<sup>th</sup> Generative Approaches to Second Language Acquisition Conference*. Amsterdam: John Benjamins.
- [1] Stover, L., **Stern, M. C.**, Lowry, C., Martohardjono, G., & Madsen II, C. N. (2021). Effects of language dominance on L1 relative clause processing. In: *Syntax Processing* (pp. 206-233). Newcastle upon Tyne: Cambridge Scholars Publishing.

#### CONFERENCE PROCEEDINGS

- [8] **Stern, M. C.** (2025). Dynamic Field Theory unifies discrete and continuous aspects of linguistic representations. *Proceedings of the Linguistic Society of America*, 10(1).
- [7] **Stern, M. C.**, & Shaw, J. A. (2024). Towards a minimal dynamics for gestures: a law relating velocity and position. *Proceedings of the 13<sup>th</sup> International Seminar on Speech Production (ISSP)*.
- [6] Tiede, M., Boyce, S., **Stern, M. C.**, Rebernik, T., & Wieling, M. (2024). Production allophones of North American English liquids. *Proceedings of the 13<sup>th</sup> International Seminar on Speech Production (ISSP)*.
- [5] **Stern, M. C.**, & Shaw, J. A. (2023). Not all phonological neighbors affect production equivalently: predictions from a neural dynamic model. In: Radek Skarnitzl & Jan Volin (Eds.), *Proceedings of the 20th International Congress of Phonetic Sciences (ICPhS)* (pp. 4002-4006). Guarant International.
- [4] Kramer, B., **Stern, M. C.**, Wang, Y., Liu, Y., & Shaw, J. A. (2023). Synchrony and stability of articulatory landmarks in English and Mandarin CV sequences. In: Radek

- Skarnitzl & Jan Volín (Eds.), *Proceedings of the 20th International Congress of Phonetic Sciences (ICPhS)* (pp. 1022-1026). Guarant International.
- [3] Liu, Y., Wang, Y., **Stern, M. C.**, Kramer, B., & Shaw, J. A. (2023). Temporal scope of articulatory slowdown under informational focus: data from English and Mandarin. In: Radek Skarnitzl & Jan Volín (Eds.), *Proceedings of the 20th International Congress of Phonetic Sciences (ICPhS)* (pp. 1691-1695). Guarant International.
  - [2] **Stern, M. C.**, Chaturvedi, M., & Shaw, J. A. (2022). A dynamic neural field model of phonetic trace effects in speech errors. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 44.
  - [1] **Stern, M. C.** (2021). Phonological contrast drives phonetic implementation: Evidence from category goodness ratings. *University of Pennsylvania Working Papers in Linguistics*, 27(1), 221–230.

## PRESENTATIONS

### CONFERENCE TALKS

- [26] **Stern, M. C.** & Shaw, J.A. (2026). Articulatory movement and coordination under prosodic modulation in English and Mandarin. Talk to be presented at the Linguistic Society of America Annual Meeting (LSA 2026), New Orleans, LA.
- [25] **Stern, M. C.** (2025). Modulation of dynamic control parameters underlies supralaryngeal articulation of contrastive focus in English and Mandarin. Talk presented at Phonetics and Phonology in the Northeast (PhPhoNE), MIT.
- [24] **Stern, M. C.** (2025). Dynamic Field Theory (DFT): An introduction. Talk presented as part of symposium: *Dynamic Field Theory for unifying discrete and continuous aspects of linguistic representations*, 2025 Linguistic Society of America Annual Meeting (LSA 2025), Philadelphia, PA.
- [23] **Stern, M. C.** & Shaw, J. A. (2024). Investigating speech articulatory control through dynamical model fitting. Lightning talk presented at the 187<sup>th</sup> Meeting of the Acoustical Society of America (ASA).
- [22] **Stern, M. C.**, Piñango, M. M., & Shaw, J. A. (2024). Neural dynamic architecture of language linking the sensory-motor to the conceptual domain via lexical items. Talk presented as part of symposium: *How does the sensory-motor brain integrate and give rise to cognition and learning?* CogSci 2024, Rotterdam, Netherlands.
- [21] Tiede, M., Whalen, D. H., Shadle, C., Koenig, L., & **Stern, M. C.** (2024). Ultrasound imaging of the larynx. Talk presented at Ultrafest XI, University of Aizu, Aizu Wakamatsu, Japan.
- [20] Shaw, J. A. & **Stern, M. C.** (2024). A new dynamics for prosodically-conditioned variation in articulation. Talk presented at the 19<sup>th</sup> Conference on Laboratory Phonology (LabPhon 19), Hanyang Institute for Phonetics and Cognitive Sciences of Language (HIPCS), Hanyang University, Seoul, Korea.
- [19] Tiede, M., Boyce, S., **Stern, M. C.**, Rebernik, T., & Wieling, M. (2024). Production allophones of North American English liquids. Talk presented at the 13<sup>th</sup> International Seminar on Speech Production (ISSP), Autrans, France.
- [18] **Stern, M. C.** & Piñango, M. M. (2024). Dynamic neural field model of lexical meaning predicts contextual modulation during real-time comprehension. Talk presented at the 2024 Linguistic Society of America Annual Meeting (LSA 2024), New York, NY.

- [17] **Stern, M. C.** (2023). Articulatory coordination in CV syllables: movement stiffness and onset lag. Talk presented at the 24<sup>th</sup> Annual SYNC (Stony Brook, Yale, NYU, CUNY) Conference, Stony Brook University.
- [16] Macey, N., **Stern, M. C.**, Lee-Kim, S., & Shaw, J. A. (2023). A dynamic neural model of the interaction between social and lexical influences on speech production: the case of retroflex sibilants in Taiwan Mandarin. Talk presented at the 51<sup>st</sup> New Ways of Analyzing Variation Conference (NWAV 51), Queens College.
- [15] **Stern, M. C.**, & Shaw, J. A. (2023). Not all phonological neighbors affect production equivalently: predictions from a neural dynamic model. Talk presented at the 20th International Congress of Phonetic Sciences (ICPhS), Prague, Czech Republic.
- [14] Kramer, B., **Stern, M. C.**, Wang, Y., Liu, Y., & Shaw, J. A. (2023). Synchrony and stability of articulatory landmarks in English and Mandarin CV sequences. Talk presented at the 20th International Congress of Phonetic Sciences (ICPhS), Prague, Czech Republic.
- [13] Liu, Y., Wang, Y., **Stern, M. C.**, Kramer, B., & Shaw, J. A. (2023). Temporal scope of articulatory slowdown under informational focus: data from English and Mandarin. Talk presented at the 20th International Congress of Phonetic Sciences (ICPhS), Prague, Czech Republic.
- [12] **Stern, M. C.** & Shaw, J. A. (2023). Coupling the neural dynamics of phonetic and lexical planning in speech production. Talk presented at the 23<sup>rd</sup> Annual SYNC (Stony Brook, Yale, NYU, CUNY) Conference, Yale University.
- [11] **Stern, M. C.**, Whalen, D. H., & Tiede, M. K. (2022). Quantifying tongue shape in the coronal dimension. Talk presented at the 10<sup>th</sup> Conference on Ultrasound Imaging for Speech and Language Research (Ultrafest X), Manchester, UK.
- [10] **Stern, M. C.**, Shaw, J. A., & Kawahara, S. (2022). Assessing phonological control of parasagittal tongue shape in Japanese sibilants. Talk presented at the 96<sup>th</sup> Annual Meeting of the Linguistic Society of America (LSA), Washington, DC.
- [9] Porru, I., **Stern, M. C.**, & Martohardjono, G. (2021). Comparing dominance measures in bilingual speakers of typologically different languages. Talk presented virtually at the 4th Conference on Central Asian Languages and Linguistics (ConCALL-4), Indiana University.
- [8] **Stern, M. C.**, Gorman, K., & Martohardjono, G. (2020). Subcategorical representations of corner vowels versus non-corner vowels. Talk accepted at the 44<sup>th</sup> Penn Linguistics Conference (PLC 44), University of Pennsylvania (canceled due to COVID-19).
- [7] Porru, I., **Stern, M. C.**, & Martohardjono, G. (2020). Explicit and implicit measures of language dominance in Turkish-English bilinguals. Talk presented at the 3<sup>rd</sup> Boğaziçi University Student Conference on Theoretical & Experimental Linguistics (BUSCTEL), Istanbul, Turkey.
- [6] **Stern, M. C.**, Martohardjono, G., Dayal, V., & Madsen II, C. N. (2019). Definiteness and maximality in the interpretation of L2 English ungrammatical bare nouns. Talk presented at the Experimental Psycholinguistics Conference, Palma de Mallorca, Spain.
- [5] Stover, L. M., **Stern, M. C.**, Lowry, C., Martohardjono, G., & Madsen II, C. N. (2019). Language dominance affects bilingual processing of L1 relative clauses. Talk presented at the Experimental Psycholinguistics Conference, Palma de Mallorca, Spain.

- [4] Stover, L. M., **Stern, M. C.**, Lowry, C., Martohardjono, G., & Madsen II, C. N. (2019). Effects of language dominance on the predictive processing of L1 relative clauses. Talk presented at Psycholinguistics in Iceland – Parsing and Prediction (PIPP), Reykjavik, Iceland.
- [3] **Stern, M. C.**, Madsen II, C. N., Dayal, V., & Martohardjono, G. (2019). From determiner-less L1 to L2 acquisition of determiners: The unambiguity hypothesis. Talk presented at the 15th Annual Generative Approaches to Second Language Acquisition conference (GASLA 15), University of Nevada, Reno.
- [2] **Stern, M. C.**, Martohardjono, G., Dayal, V., & Madsen II, C. N. (2019). Semantic transfer effects in the L2 interpretation of English ungrammatical bare nouns. Talk accepted at the Second International Conference on Theoretical East Asian Psycholinguistics (ICTEAP-2), Tsinghua University.
- [1] **Stern, M. C.** (2018). Revisiting the “perceptual magnet effect”: Language experience and perceptual warping. Talk presented at the 20th Annual SYNC Conference, Stony Brook University.

#### CONFERENCE POSTERS

- [15] **Stern, M. C.**, Tiede, M. K., & Tilsen, S. (2025). Articulatory control parameters underlying speech rate variation. Poster to be presented at the Joint Meeting of the Acoustical Society of America (ASA) and the Acoustical Society of Japan (ASJ), Honolulu, HI.
- [14] **Stern, M. C.**, & Shaw, J. A. (2025). Prosodic modulation of articulatory dynamics in English and Mandarin. Poster presented at the 5th Biennial Boston Speech Motor Control Symposium (BSMCS), Boston, MA.
- [13] Macey, N., **Stern, M. C.**, Lee-Kim, S., & Shaw, J. A. (2024). A dynamical theory of latent phonological contrasts. Poster accepted at the 19<sup>th</sup> Conference on Laboratory Phonology (LabPhon 19), Hanyang Institute for Phonetics and Cognitive Sciences of Language (HIPCS), Hanyang University, Seoul, Korea.
- [12] **Stern, M. C.** & Shaw, J. A. (2024). Towards a minimal dynamics for gestures: a law relating velocity and position. Poster presented at the 13<sup>th</sup> International Seminar on Speech Production (ISSP), Autrans, France.
- [11] Wang, Y., Kramer, B., Macey, N., **Stern, M. C.**, Liu, Y., & Shaw, J. A. (2023). Cross-linguistic influence on the gestural dynamics of focus prosody in native Mandarin learners of L2 English. Poster presented at the 3<sup>rd</sup> Hanyang International Symposium on Phonetics and Cognitive Sciences of Language (HISPhonCog 2023), Seoul, Korea.
- [10] **Stern, M. C.**, Chaturvedi, M., & Shaw, J. A. (2022). A dynamic neural field model of phonetic trace effects in speech errors. Poster presented at the 44<sup>th</sup> Annual Meeting of the Cognitive Science Society (CogSci), Toronto, ON.
- [9] **Stern, M. C.** & Shaw, J. A. (2022). Minimal-pair-induced phonetic change over multiple timescales. Poster presented at the 18<sup>th</sup> Conference on Laboratory Phonology (LabPhon).
- [8] **Stern, M. C.**, & Shaw, J.A. (2022). Neural inhibition during speech planning contributes to contrastive hyperarticulation. Poster presented at the 12<sup>th</sup> International Workshop on Language Production (IWOLP), Pittsburgh, PA.
- [7] **Stern, M. C.** & Shaw, J. A. (2021). [tongue fold] as an emergent distinctive feature: kinematic evidence from Japanese sibilants. Poster presented virtually at the Annual Meeting on Phonology (AMP), Toronto, ON.

- [6] **Stern, M. C.**, Chen, M., Dayal, V., & Martohardjono, G. (2020). Discourse versus syntax: The interpretation of ungrammatical bare nouns in L2 English. Poster presented virtually at the first Experiments in Linguistic Meaning (ELM) conference, University of Pennsylvania.
- [5] **Stern, M. C.**, Gorman, K., & Martohardjono, G. (2020). Measuring subcategorical representations of speech sounds. Poster presented at the Berkeley Linguistics Society special workshop, Phonological Representations: At the Intersection of Categoricity and Gradience, University of California, Berkeley.
- [4] **Stern, M. C.** (2019). The perceptual magnet effect as a mechanism of contact-induced sound change. Poster presented at the 5th Workshop on Sound Change, University of California, Davis.
- [3] **Stern, M. C.** (2019). Magnet effects in monolingual and bilingual perception. Poster presented at the 27th Manchester Phonology Meeting, The University of Manchester.
- [2] **Stern, M. C.**, Martohardjono, G., & Dayal, V. (2019). The acquisition of (in)definiteness: From L1 Mandarin to L2 English. Poster presented at the Workshop on Identifying (In)definiteness: From Silent Morphosyntax to Semantics, Yale University.
- [1] Madsen II, C. N., **Stern, M. C.**, Stover, L. M., Lowry, C., & Martohardjono, G. (2019). Eye-tracking investigation of relative clause processing in two groups of bilingual speakers. Poster presented at the 93rd Annual Meeting of the Linguistic Society of America (LSA), New York, NY.

#### INVITED TALKS

- [6] **Stern, M. C.** (2025). Prosodic influences on the dynamics of articulatory movement and control across prosodic contexts in English and Mandarin. Invited talk at the Action, Computation, and Thinking (ACT) Lab, Department of Psychology, Yale University.
- [5] **Stern, M. C.** (2025). Prosodic influences on the dynamics of articulatory movement and control. Invited talk at DYMOS: Dynamical Models of Speech, University of Oregon.
- [4] **Stern, M. C.** (2024). Articulatory dynamics across languages and prosodic contexts. Invited talk at the Penn Phonetics Lab, University of Pennsylvania.
- [3] **Stern, M. C.** (2024). Tutorial for neural dynamic modeling of speech planning and discussion of Stern & Shaw (2023). Guest lecture for Jason Shaw's seminar "Linguistic Structure in Speech Planning and Production", Yale University.
- [2] **Stern, M. C.** (2022). Psycholinguistic models. Guest lecture for Jason Shaw's class "Introduction to Linguistics", Yale University.
- [1] **Stern, M. C.**, Franciotti, P., & Stover, L. M. (2019). Eye-tracking in bilingualism research. Guest lecture for Irina Sekerina's class "Introduction to Psycholinguistics: Eye-Tracking", The Graduate Center, CUNY.

#### WORKSHOP TALKS

- [2] **Stern, M. C.** (2018). Context effects on acceptability judgments. Talk presented at the 13th Annual Showcasing Quirky and Unusual Ideas in Development (SQUID), The Graduate Center, CUNY.
- [1] Madsen II, C. N., **Stern, M. C.**, Stover, L. M., Lowry, C., & Martohardjono, G. (2018). Eye-tracking investigation of relative clause processing in Spanish heritage speakers. Talk presented at Connecting Innovative Research in CUNY Linguistics (CIRCL), The Graduate Center, CUNY.

## RESEARCH POSITIONS

|           |  |
|-----------|--|
| 2022-     | Research Assistant, Haskins Laboratories/Child Study Center, New Haven, CT<br>NIH grant 5R01DC022097-02: Sensorimotor Basis of Speech Motor Learning and Retention (PI: David Ostry)<br>NSF grant BCS-2141275: Estimating Articulatory Constriction Place and Timing from Speech Acoustics (PIs: Mark Tiede, Carol Espy-Wilson, Suzanne Boyce)<br>NIH grant DC-002717: Links Between Production and Perception in Speech (PI: Doug Whalen) |
| 2019-2021 | Research Consultant to Veneeta Dayal, Yale University  |
| 2018-2020 | Research Coordinator, Second Language Acquisition Lab, The Graduate Center, CUNY   |
| 2017-2018 | Research Assistant, Second Language Acquisition Lab, The Graduate Center, CUNY   |

## TEACHING

|             |   |
|-------------|---|
| Summer 2025 | Instructor, Dynamics of Speech Production, LSA Summer Institute, University of Oregon (co-taught with Jason Shaw) |
| Spring 2025 | Part-time Acting Instructor, Dynamics of Speech, Yale University (co-taught with Jason Shaw)                      |
| Spring 2024 | Teaching Fellow, Language and Gender, Yale University   |
| Spring 2023 | Teaching Fellow, Cognitive Science of Language, Yale University   |
| Fall 2022   | Teaching Fellow, Introduction to Linguistics, Yale University   |
| 2016-2017   | English Language Instructor, Chungdahm Learning, South Korea  |

## PROFESSIONAL ACTIVITY

### REVIEWS

|       |  |
|-------|--|
| 2020- | 5 manuscript reviews for: <i>Journal of Phonetics</i> ; <i>Cognitive Science</i> ; <i>Language Acquisition: A Journal of Developmental Linguistics</i> ; <i>Proceedings of the Experimental Psycholinguistics Conference</i> |
| 2023- | 5 abstract reviews for: 24 <sup>th</sup> Annual SYNC Conference, Stony Brook University; 23 <sup>rd</sup> Annual SYNC Conference, Yale University  |

### ORGANIZATION

|           |  |
|-----------|--|
| 2024-     | Member, Dynamics Group, Yale University                                      |
| 2023-2023 | Co-organizer, 23 <sup>rd</sup> Annual SYNC Conference, Yale University       |
| 2021-2022 | Co-organizer, Linguistics Colloquium Series, Yale University                 |
| 2021-2023 | Lead organizer, Phonetics/Phonology Reading Group, Yale University           |
| 2020-     | Member, Phonetics/Phonology Reading Group, Yale University                   |
| 2019-2020 | Lead organizer, Phonetics/Phonology Reading Group, The Graduate Center, CUNY |
| 2018-2019 | Member, Bilingualism Reading Group, The Graduate Center, CUNY                |