

Donald Gray Dunagan

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Employment History

2025 – 2026 Postdoctoral Fellow, Johns Hopkins University

Education

2020 – 2025 University of Georgia, Ph.D. Linguistics
2019 – 2020 University of Georgia, M.S. Artificial Intelligence
2013 – 2019 University of Georgia, B.S. Computer Science
 University of Georgia, A.B. Linguistics

Publications

Journal Articles

- 1 **Dunagan, D.**, Jordan, T., Hale, J. T., Pytkänen, L., & Chacón, D. A. (2025). Evaluating the timecourses of morpho-orthographic, lexical, and grammatical processing following rapid parallel visual presentation: An EEG investigation in English. *Cognition*, 229.
🔗 <https://doi.org/10.1016/j.cognition.2025.106080>
- 2 **Dunagan, D.**, Stanojević, M., Coavoux, M., Zhang, S., Bhattasali, S., Li, J., Brennan, J., & Hale, J. (2023). Neural correlates of object-extracted relative clause processing across English and Chinese. *Neurobiology of Language*, 4(3), 455–473. 🔗 https://doi.org/10.1162/nol_a_00110
- 3 Stanojević, M., Brennan, J. R., **Dunagan, D.**, Steedman, M., & Hale, J. T. (2023). Modeling structure-building in the brain with CCG parsing and large language models. *Cognitive Science*, 47(7), e13312. 🔗 <https://doi.org/10.1111/cogs.13312>
Among Top 10% of Most-Cited Articles in *Cognitive Science* in 2023
- 4 **Dunagan, D.**, Zhang, S., Li, J., Bhattasali, S., Pallier, C., Whitman, J., Yang, Y., & Hale, J. (2022). Neural correlates of semantic number: A cross-linguistic investigation. *Brain and Language*, 229, 105–110.
🔗 <https://doi.org/10.1016/j.bandl.2022.105110>

Conference Proceedings (Refereed)

- 1 Franzluebbers, B., **Dunagan, D.**, Stanojević, M., Buys, J., & Hale, J. (2024). Multipath parsing in the brain. In L.-W. Ku, A. Martins, & V. Srikumar (Eds.), *Proceedings of the 62nd annual meeting of the association for computational linguistics (volume 1: Long papers)* (pp. 12215–12229). Association for Computational Linguistics. 🔗 <https://doi.org/10.18653/v1/2024.acl-long.660>
- 2 Wolfman, M., **Dunagan, D.**, Brennan, J., & Hale, J. (2024). Hierarchical syntactic structure in human-like language models. In T. Kuribayashi, G. Rambelli, E. Takmaz, P. Wicke, & Y. Oseki (Eds.), *Proceedings of the workshop on cognitive modeling and computational linguistics* (pp. 72–80). Association for Computational Linguistics. 🔗 <https://doi.org/10.18653/v1/2024.cmcl-1.6>
- 3 Stanojević, M., Bhattasali, S., **Dunagan, D.**, Campanelli, L., Steedman, M., Brennan, J., & Hale, J. (2021). Modeling incremental language comprehension in the brain with Combinatory Categorical Grammar. In E. Chersoni, N. Hollenstein, C. Jacobs, Y. Oseki, L. Prévot, & E. Santus (Eds.), *Proceedings of the workshop on cognitive modeling and computational linguistics* (pp. 23–38). Association for Computational Linguistics. 🔗 <https://doi.org/10.18653/v1/2021.cmcl-1.3>

- 4 **Dunagan, D. G.**, & Renwick, M. E. (2020). Word-boundary palatalization and production planning in UK English. *Proceedings of Meetings on Acoustics* 179ASA, 42(i), 060005.
<https://doi.org/10.1121/2.0001394>

Under Review

- 1 Chacón, D. A., **Dunagan, D.**, McLendon, J., Khokhar, H., & Hoque, Z. (Under Review). Quick, don't move!: Wh-movement and Wh-in-situ structures in rapid parallel reading - EEG studies in English, Urdu, and Mandarin Chinese. <https://doi.org/10.1101/2024.05.06.592830>

In Prep

- 1 ***Dunagan, D.**, *McLendon, J., Jordan, T., & Chacón, D. A. (In Prep). Rapid parallel visual presentation provides a new perspective on relative clause processing in Mandarin Chinese.
<https://doi.org/10.1101/2024.08.13.607840>
- 2 **Dunagan, D.**, Stanojević, M., & hale, J. (In Prep). Tree change: A novel application of Kullback-Leibler divergence as an information-theoretical complexity metric.
- 3 Ireland, K., Bridwell, K., Samples, T., & **Dunagan, D.** (In Prep). Digital legalese: Syntactic complexity in online terms-of-use and privacy policies.
- 4 Jordan, T., Tadavarthy, H., **Dunagan, D.**, & Chacón, D. A. (In Prep). Multimodal morphological decomposition in EEG.
- 5 Khokar, H., Hoque, Z., McLendon, J., **Dunagan, D.**, & Chacón, D. A. (In Prep). Seeking universal visual word form area: An EEG investigation into word-specific responses to occipito-temporal cortex in English, Chinese, and Urdu using SLORETA.
- 6 Wolfman, M., **Dunagan, D.**, & Chacón, D. A. (In Prep). Two sides of ambiguity: Garden pathing and local coherence in rapid parallel visual presentation.

Awards and Honors

2024	■ UGA Dissertation Completion Award (Tuition Waiver + Stipend)
	■ UGA Institute for Artificial Intelligence Research Award (\$1,500)
2023	■ UGA Graduate School International Travel Award (\$1,250)
	■ UGA Department of Linguistics Outstanding Qualifying Paper
2022	■ 3 rd place best poster, UGA AI Research Day (\$200)
	■ Society for the Neurobiology of Language Travel Award (\$550)
	■ UGA Outstanding Teaching Assistant Award
2019	■ UGA Foreign Travel Assistance Program (\$900)
	■ UGA Institute for Artificial Intelligence Travel Assistance (\$600)
	■ UGA Department of Linguistics Outstanding Undergraduate in Linguistics Award

Talks

Conference Talks

- 1 **Dunagan, D.**, & Chacón, D. A. (2024). Syntax in 300ms?: An EEG study on rapid parallel visual presentation in English. *8th Annual Linguistics Conference at UGA*.
- 2 **Dunagan, D.**, & Chacón, D. A. (2024). Syntax in 300ms?: An EEG study on rapid parallel visual presentation in English. *2024 Annual Meeting of the Linguistic Society of America*.

- 3 Hoque, Z., McLendon, J., **Dunagan, D.**, Khokhar, H., & Chacón, D. A. (2024). Is the 'visual word form area' universal?: An HD-EEG study in Urdu, English, and Mandarin. *Formal Approaches to South Asian Linguistics* 14.
- 4 Wolfman, M., & **Dunagan, D.** (2024). Syntax in the brain: Modeling human language processing with a syntax-knowledgeable LLM. *8th Annual Linguistics Conference at UGA*.
- 5 Ireland, K., Samples, T., & **Dunagan, D.** (2023). Syntactic complexity in smartphone application contracts. *XIV Congreso Internacional de Lingüística de Corpus*.

Invited Talks

- 1 Hale, J., & **Dunagan, D.** (2022). Brain-Inspired AI: Natural Language. *University of Georgia Meeting for Brain-Inspired AI*.

Posters

Refereed Conference Posters

- 1 Chacón, D. A., **Dunagan, D.**, & Jordan, T. (2024). An explicit comparison of word-internal and word-external semantic violations, an HD-EEG study in English. *16th Annual Meeting of the Society for the Neurobiology of Language* (accepted; not presented).
- 2 Chacón, D. A., **Dunagan, D.**, & Jordan, T. (2024). Readers extract some grammatical information in a single fixation, across sentence structures. *16th Annual Meeting of the Society for the Neurobiology of Language* (sandbox session).
- 3 **Dunagan, D.**, Jordan, T., Wolfman, M. A., & Chacón, D. A. (2024). An EEG investigation into early syntactic processing: A rapid parallel visual presentation study of agreement and WH-dependencies in English. *37th Annual Conference on Human Sentence Processing*.
- 4 Jordan, T., **Dunagan, D.**, & Chacón, D. A. (2024). Whisps and whisp-ers in the Brain: A crossmodel investigation into amodal representation in English morphological processing using HD-EEG. *16th Annual Meeting of the Society for the Neurobiology of Language* (sandbox session).
- 5 Khokhar, H., McLendon, J., **Dunagan, D.**, Hoque, Z., & Chacón, D. A. (2024). Seeking visual word form area in EEG: A study in three languages and four orthographies. *16th Annual Meeting of the Society for the Neurobiology of Language* (accepted; not presented).
- 6 Khokhar, H., McLendon, J., **Dunagan, D.**, Hoque, Z., Jordan, T., & Chacón, D. A. (2024). Not moving, fast: An HD-EEG parallel reading study on Urdu and Mandarin Chinese wh-in-situ. *37th Annual Conference on Human Sentence Processing*.
- 7 Khokhar, H., McLendon, J., **Dunagan, D.**, Hoque, Z., Jordan, T., & Chacón, D. A. (2024). Quick, don't move!: Wh-movement and Wh-in-situ structures in rapid parallel reading – EEG studies in English, Urdu, and Mandarin Chinese. *16th Annual Meeting of the Society for the Neurobiology of Language*.
- 8 Wolfman, M., **Dunagan, D.**, & Hale, J. T. (2024). Finding syntax in the brain with Transformer Grammars. *37th Annual Conference on Human Sentence Processing*.
- 9 Chacón, D. A., & **Dunagan, D.** (2023). An EEG functional localizer for identifying visual word form responses in sensor and source space. *15th Annual Meeting of the Society for the Neurobiology of Language*.
- 10 **Dunagan, D.**, & Chacón, D. A. (2023). An EEG investigation into early syntactic processing: A rapid parallel visual presentation study of agreement and WH-dependencies in English. *15th Annual Meeting of the Society for the Neurobiology of Language*.
- 11 **Dunagan, D.**, Coavoux, M., Zhang, S., Bhattasali, S., Li, J., Pallier, C., Spreng, R. N., Brennan, J., & Hale, J. T. (2022). Long-distance dependencies in Chinese, English, and French brains. *14th Annual Meeting of the Society for the Neurobiology of Language*.

- 12 **Dunagan, D.**, Zhang, S., Li, J., Pallier, C., Whitman, J., & Hale, J. T. (2020). Grammatical number in French and Chinese brains. *12th Annual Meeting of the Society for the Neurobiology of Language*.
- 13 **Dunagan, D. G.**, & Renwick, M. E. (2020). Word-final palatalization and production planning in English. *The Journal of the Acoustical Society of America*, 148(4), 2506–2506.
- 14 Brennan, J., Martin, A. E., **Dunagan, D.**, Meyer, L., & Hale, J. (2019). Resolving dependencies during naturalistic listening. *11th Annual Meeting of the Society for the Neurobiology of Language*.

Non-Refereed Poster Presentations

- 1 **Dunagan, D.**, Chacón, D. A., & Hale, J. T. (2024). Incremental left-corner generative dependency parsing as a model of language processing. *University of Georgia Artificial Intelligence Research Day*.
- 2 **Dunagan, D.**, Coavoux, M., Zhang, S., Bhattasali, S., Li, J., Brennan, J., & Hale, J. T. (2022). Long-distance dependencies in Chinese and English brains. *University of Georgia Artificial Intelligence Research Day*.
- 3 **Dunagan, D.**, Coavoux, M., Zhang, S., Bhattasali, S., Li, J., Brennan, J., & Hale, J. T. (2022). Long-distance dependencies in Chinese, and English brains. *Collaborative Research in Computational Neuroscience Principal Investigator Meeting*.

Assistantships

University of Georgia

- 2020 – 2024  Graduate Research Assistantship, with Prof. John Hale (Tuition Waiver + Stipend)
- Spring 2021  Teaching and Technology Assistant, with Prof. Margaret Renwick, Quantitative Methods in Linguistics (Stipend)
- 2019 – 2020  Graduate Student Data Analyst, with CVIOG ITOS (Tuition Waiver + Stipend)
- 2018 – 2019  Undergraduate Student Data Analyst, with CVIOG ITOS (Stipend)
-  Assistant in system administration and corpora curation, with Natural Language Corpora at UGA (Stipend)

Teaching

University of Georgia

- Spring 2024  Python Programming for Language and Linguistics (IoR)
- Spring 2023  Natural Language Processing (TA)
- Fall 2021  Natural Language Processing (TA)
- Spring 2021  Quantitative Methods in Linguistics (TA)

Mentoring

University of Georgia

- 2025  Tyson Jordan, M.S. Artificial Intelligence
-  Jill McLendon, A.B. Linguistics
- 2024  Michael Wolfman, M.A. Linguistics

Service

Reviewing

Attention, Perception, & Psychophysics

Languages and Skills

Languages  English: native | Spanish: basic | French: beginner

Programming  Primary: Python | Secondary: R | Have Used: C++, Java, JavaScript, MATLAB