





# Donald Gray Dunagan

✉ dgd45125@uga.edu

## Education

- 2020 –  *University of Georgia*, Ph.D. Linguistics | Anticipated graduation 05/25
- 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.**, 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*, 1–19. [🔗 https://doi.org/10.1162/nol\\_a\\_00110](https://doi.org/10.1162/nol_a_00110)
- 2 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*. [🔗 https://doi.org/https://doi.org/10.1111/cogs.13312](https://doi.org/https://doi.org/10.1111/cogs.13312)
- 3 **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](https://doi.org/10.1016/j.bandl.2022.105110)

### Conference Proceedings

- 1 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. *Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics*, 23–38. [🔗 https://doi.org/10.18653/v1/2021.cmcl-1.3](https://doi.org/10.18653/v1/2021.cmcl-1.3)
- 2 **Dunagan, D. G.**, & Renwick, M. E. (2020). Word-boundary palatalization and production planning in UK English. *Proceedings of Meetings on Acoustics 179ASA*, 42(1), 060005. [🔗 https://doi.org/10.1121/2.0001394](https://doi.org/10.1121/2.0001394)

### In Press

- 1 Franzluebbbers, B., **Dunagan, D.**, Stanojević, M., Buys, J., & Hale, J. T. (2024). Multipath parsing in the brain. *In Press for ACL 2024*. [🔗 https://doi.org/https://doi.org/10.48550/arXiv.2401.18046](https://doi.org/https://doi.org/10.48550/arXiv.2401.18046)

### 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/https://doi.org/10.1101/2024.05.06.592830](https://doi.org/https://doi.org/10.1101/2024.05.06.592830)
- 2 **Dunagan, D.**, Jordan, T., Hale, J. T., Pykkänen, L., & Chacón, D. A. (Under Review). Rapid visual form-based processing of (some) grammatical features in parallel reading: An EEG study in English. [🔗 https://doi.org/https://doi.org/10.1101/2024.04.10.588861](https://doi.org/https://doi.org/10.1101/2024.04.10.588861)
- 3 Ireland, K., Bridwell, K., Samples, T., & **Dunagan, D.** (Under Review). Digital legalese: Syntactic complexity in online terms-of-use and privacy policies.

- 4 Wolfman, M., **Dunagan, D.**, & Hale, J. T. (Under Review). Finding syntax in the brain with Transformer Grammars. <https://drive.google.com/file/d/1LbGjGXaKQA8Ey0narA432CPAzLwzIXj1/view>

## 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.

## 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 <sup>rd</sup> 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

### Peer-Reviewed Conference Posters

- 1 **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*.

- 2 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*.
- 3 Wolfman, M., **Dunagan, D.**, & Hale, J. T. (2024). Finding syntax in the brain with Transformer Grammars. *37th Annual Conference on Human Sentence Processing*.
- 4 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*.
- 5 **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*.
- 6 **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*.
- 7 **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*.
- 8 **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.
- 9 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-Reviewed 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)

## Languages and Skills

---

- Languages     English: native | Spanish: basic | French: beginner
- Programming  Primary: Python | Secondary: R | Have Used: Java, JavaScript MATLAB, C++