

# Donald Gray Dunagan

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## 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., Bhattacharjee, 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>
- 3 **Dunagan, D.**, Zhang, S., Li, J., Bhattacharjee, 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

- 1 Stanojević, M., Bhattacharjee, S., **Dunagan, D.**, Campanelli, L., Steedman, M., Brennan, J., & Hale, J. (2021). Modeling incremental language comprehension in the brain with Combinatory Categorial Grammar. *Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics*, 23–38.  <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>

### Under Review

- 1 **Dunagan, D.**, Jordan, T., Hale, J. T., Pylkkänen, 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>
- 2 Franzluebbers, B., **Dunagan, D.**, Buys, J., & Hale, J. T. (Under Review). Multipath parsing in the brain. *arXiv*.  <https://doi.org/https://doi.org/10.48550/arXiv.2401.18046>
- 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/1LbGjGXaKQA8EyOnarA432CPAzLwzIXj1/view>

### In Prep

- 1 **Dunagan, D.**, McLendon, J., Khokhar, H., Hoque, Z., & Chacón, D. A. (In Prep). (Not) moving, fast: Wh-movement and Wh-in-situ structures in rapid parallel reading – EEG studies in English, Urdu, and Mandarin Chinese.

- 2 \*McLendon, J., \*Dunagan, D., 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

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|------|--|
| 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 zooms?: 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 zooms?: 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., Bhattacharjee, 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., Bhattacharjee, 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., Bhattacharjee, 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

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|-------------|---|
| 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 CVIOLG ITOS (Tuition Waiver + Stipend)                                    |
| 2018 – 2019 | ■ Undergraduate Student Data Analyst, with CVIOLG ITOS (Stipend)  |
|             | ■ Assistant in system administration and corpora curation, with Natural Language Corpora at UGA (Stipend)       |

## Teaching

### University of Georgia

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|-------------|---|
| 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++