Daniel Barrera-Rivera

✉ neophilology@gmail.com
✆ +49 152 9260 9750 • ☞ LinkedIn

Profile

Digital humanities researcher bridging literary narratology and computational methods. My work develops an "AI narratology" to analyze how narrative emerges across texts, translations, and algorithmic systems.

Education

2023-2025 — Master's in English Literatures and Cultures
University of Tübingen, Germany
Thesis: "Beyond Homer and the Human: Affects and Algorithms in Posthuman Odysseys"

2021-2022 — Data Science (Professional Certificate)
University of Toronto, Canada

2021 — Digital Humanities (Advanced Diploma)
Universidad Iberoamericana, CDMX, México

2016-2020 — Bachelor's in Modern Languages & Literatures (English)
Universidad Nacional Autónoma de México (UNAM) - Graduated with Honors

Supplementary Coursework:
- AI Fiction
- Topics in Philosophy of AI
- Functions of Fiction
- Data Science for Linguists
- Understanding LLMs
- Reinforcement Learning for LLMs

Research & Scholarly Activity

Projects

- **Homer's Living Network:** Digital humanities investigation using data science methods to analyze cultural transformation across English translations of Homer's Odyssey.
- **Perilexia:** Developed a five-stage algorithm identifying "perilexia" (a coined term)—previously unrecognized lexical patterns structuring character transformation in Victorian novels.
- **Homerica (Dataset):** A fluid archive documenting the ongoing entanglement between Homeric epic and Anglophone cultural production—a living dataset of retellings, translations, adaptations, and transfigurations.

Presentations

- ACLA Annual Meeting, Chicago, USA (2020)
- ACLA Annual Meeting, Utrecht, Netherlands (2017)
- CLASH, Adam Mickiewicz University, Poznan, Poland (2016)

Grants

- National Endowment for the Arts and Culture (FONCA) Creative Writing Fellowship, one-year grant for fiction writing in Spanish, México (2014)

Experience

2023 — Editor & Quality Auditor: Department of Public Education (SEP) — CDMX, México
- Edited and proofread manuscripts, ensuring compliance with academic and publishing standards.
- Collaborated with educators, linguists, and publishing teams to enhance content clarity and structure.

2022 — Quality Auditor | Editorial & SEO Specialist: StudySmarter — Germany
- Audited high school and university-level educational content for accuracy and SEO optimization.
- Managed content creator teams, improving editorial workflows and quality assurance processes.
- Developed a natural language processing (NLP) application for cross-platform content consistency.

2021-2022 — Quality Auditor & Content Developer: OpenTec — CDMX, México
- Supervised e-learning content for major clients, aligning it with instructional design best practices.
- Managed relationships with content teams and corporate partners, ensuring timely project delivery.
- Audited language management systems for factual accuracy and learning experience optimization.

2018-2021 — Editor & Proofreader: Aliat Universidades — CDMX, México
- Ensured metadata and citation accuracy for higher education and PhD-level research materials.
- Reviewed academic manuscripts, ensuring compliance with academic publishing standards.
- Conducted content audits, proofreading, and stylistic edits, improving clarity and reader engagement.

Skills and Tools

Programming & Data Science
- Python (data science, machine learning, NLP, data visualization)
- Libraries & frameworks: NLTK, spaCy, HuggingFace Transformers, Textacy, Gensim, Regex
- Custom tool development (e.g., text etymology attribution)
- Basic R

Digital Humanities & Editorial
- Computational text analysis, corpus construction, stylometry, and distant reading methods
- Markdown, HTML, LaTeX
- Content management systems (CMS), editorial workflows

Data Visualization & Analysis
- Pandas, Matplotlib, Seaborn, Plotly
- Experience creating visualizations for manuscript distributions and lexical networks

Collaboration & Project Management
- Git & version control for collaborative development
- Asana, Trello, Slack, Google Workspace, Microsoft Office Suite

Languages
- English (fluent), Spanish (fluent), German (basic)