

PhD candidate in Theoretical and Experimental Linguistics

Member of the Neurolinguistics and Experimental Pragmatics Lab (NEPLab).

Summary

Currently, I am a PhD candidate (XLI cycle) in **Theoretical and Experimental Linguistics** at **IUSS Pavia**, where I pursue research in both theoretical and experimental linguistics. My doctoral position is funded by the ERC project “**PROcessing METaphors: Neurochronometry, Acquisition and DEcay**” (**PROMENADE**), with a research focus on **sentence structure and metaphorical expressions**. My research investigates the structure and interpretation of sentences by integrating **theoretical approaches** – formal syntactic and semantic principles, with particular attention to **Generative Grammar**, the syntax–pragmatics interface, and predicative relations in sentence structure and metaphorical expressions – with **experimental methods** drawn from psycholinguistics and neurolinguistics.

Research Interests

Linguistics, Clinical Linguistics, Neurolinguistics, Psycholinguistics, Cognitive Science, Categorization, Semantic Representation.

Education

2025- Present **PhD Candidate in Theoretical and Experimental Linguistics (XLI cycle)**

IUSS Pavia – Institute for Advanced Study, Pavia, Italy

ERC Project “**PROcessing METaphors: Neurochronometry, Acquisition and DEcay**” (**PROMENADE**)

2024- 2025 **Postgraduate Specialization in Clinical Linguistics (60CFU)**

University of Bologna, Italy. – **30L**

Advanced training in linguistic analysis of language disorder across developmental, adult, and degenerative stages in monolingual and multilingual context.

Neurolinguistics, Psycholinguistics and Specific Language Disorders (e.g., aphasia, dementia, dysarthria).

Developed skills in using standardized diagnostic tools.

Explored ethical and statistical aspects related to clinical and linguistic research.

Project Work: Metaphorical analysis of TikTok texts related to “recovery” subjects, using MIP as the primary methodological framework; development of a gold standard annotation, serving as a benchmark for evaluating annotations produced by two research interns; categorization of the semantic domains underlying the identified metaphors, aimed at exploring the conceptual structures embedded in the discourse

2020- 2023 **M.A. in Linguistics** | Italian Studies, European Literacy Cultures, Linguistics, Bologna, Italy.

Thesis in Semantic and Lexical Analysis: *Indagine sulla distribuzione delle categorie*

semantiche nell'intersezione tra specificità e concretezza. (110/110 cum laude).

Supervisors: Marianna M. Bolognesi, Francesca Masini and Caterina Villani.

Researcher conducted in collaboration with the ERC-funded **ABSTRACTION** project (Grant Agreement: ERC-2021-STG-101039777).

Courses Taken:

- Cognitive Sciences 6 cfu (L-LIN/01): 30L
- Didactics of the Italian Language 12 cfu (L-FIL-LET/12): 30
- Historical Linguistics 6 cfu (L-LIN/01): 30
- Language Automatic Processing 12 cfu (L-LIN/01): 30
- Literature and Rhetoric 12 cfu (L-FIL-LET/10): 30L
- Logic 6 cfu (M-FIL/02): 30
- Morphosyntax 6 cfu (L-LIN/01): 30
- Phonetics and Phonology 6 cfu (L-LIN/01): 30L
- Psycholinguistics (1) 6 cfu (M-PSI/01): 25
- Psycholinguistics (2) 6 cfu (M-PSI/01): 30
- Semantics and Lexicon 6 cfu (L-LIN/01): 29
- Typological Linguistics 6 cfu (L-LIN/01): 28

2016- 2020 **B.A. in Humanities** | University of Bologna, Italy.

Thesis in Italian Literature: *Il Bertoldo di Giulio Cesare Croce: il demone contadino, araldo degli oppressi (104/110).*

Supervisors: Angelo M. Mangini, Edoardo Ripari

Professional Experience

2023- 2025 **Predocctoral Researcher** | Dept. Modern Languages, Literatures, and Cultures, University of Bologna, Italy.

Conducting research within the **PRIN 2022 national project** “**WEMB: Word Embeddings from Cognitive Linguistics to Language Engineering and Back**” [2022EPTPJ9_002] in collaboration with ISTI-CNR of Pisa and Abstraction research group of Bologna.

- Performing manual semantic annotation of abstract and concrete concepts for advanced NLP applications.
- Analyzing mechanisms of semantic categorization in human cognition and their computational counterparts.

August 2023 **Research Collaborator – Internal Project** | ADLab, University of Bologna, Italy.

Collaborated informally on research project coordinated by Matteo Viale, focusing on changes in academic writing across 4000 Italian high school graduation essays (themes of maturity) from the late 1960s to 2012.

Conducted transcription of scanned graduation exams for quantitative analysis

2021- 2022 **Curricular Internship** – Linguistic Data Analysis, **project “UNIVERS-ITA”** | University of Bologna.

Participated in the PRIN 2017 (prot. 107LAP429_001) project “UNIVERS-ITA.

L’italiano scritto degli studenti universitari: quadro sociolinguistico, tendenze tipologiche, implicazioni didattiche”, coordinate by Nicola Grandi, aimed at mapping

written Italian by integrating sociolinguistic and typological dimensions.
Collected and archived formal and semi-informal texts for the project under the supervision of Silvia Ballarè, contributing to the construction of a linguistic corpus
Analyzed the linguistic constructions “*Andare a + infinito*” using Excel, Sketch Engine and R.
Examined the semantic class of the verb “*andare*” in the construction “*andare a è infinito*”, considering linguistic parameters such as subject insertion, additional linguistic material, negation, verb tense and mood usage, subject animacy, and semantic class of the main verb.

Other Experience

2021- 2022 **Blended Learning Tutor (225 hours)** | University of Bologna, Italy.

2020- 2021 **Student Collaboration - Library Services (150 hours)** | University of Bologna, Italy.

Teaching Activities

April 2025 **Guest Lecturer** (2hours) MA in Italian Culture and Language for Foreigners course, Idioms and Language course held by prof. Marianna M. Bolognesi, Dept. of Modern Language, Literatures, and Cultures, University of Bologna, Italy.
Title: Word Ladders: language-mediated abstraction

Organization of Scientific Events

April 2025 **Local Organizer**: “Conversational Dynamics: How Abstraction and Abstractness Ebb and Flow in Interaction”.
Seminar with international invited speakers, University of Bologna.

April 2025 **Co-Curator** of the Abstraction research group **exhibition** at the Dept. of Modern Languages, Literatures, and Cultures, University of Bologna, Italy.
Title: “Alla scoperta dell’astrazione linguistica”.

Dissemination Activities

October 2025 Lucca Comics & Games 2025

NEPLab outreach and educational activities within the project “*Trova la Metafora*”, titled “NEPLab at Lucca Comics & Games 2025: Metaphors, Cosplay and Creativity”. The activities aimed to engage the public in scientific research, fostering awareness of metaphor use in everyday communication.

July 2025 CogSci

47th Annual Meeting of the Cognitive Science Society (CogSci 2025) |
San Francisco, USA

Talk: Villani, C., Adele, L., Bolognesi, M. M. *Development of Linguistic-Mediated Abstraction: Insights from the Word Ladders Task.*

June 2025 Poster session at the Second Edition of the Doctoral Conference of the Bologna Linguistic Circle (PhD CLUB) | *Development of Abstraction Skills in School-Age Children*.

Sep. 2024 Pre-registration Poster Presentation at XPrag 2024 | Venice, Italy, September 26-27 on *Evaluating Misspelling Patterns in Gamified Data: A Sociodemographic Analysis for Linguistic Research*.

May 2024 Word Ladders: Scale di Parole. Workshops, primary and middle School, Imola, Italy.

Technical Skills

Linguistic Analysis Tools:

Proficient in Excel, Sketch-Engine, R, tools for corpus-based linguistic analysis

Data Annotation:

Experience in semantic annotation

Publications

1. **Loia, Adele**, Sperduti, Gianluca, & Bolognesi, Marianna M. Evaluating Misspelling Patterns in Gamified Data: A Sociodemographic Analysis for Linguistic Research (*under review*)
2. Villani, Caterina, **Loia, Adele**, & Bolognesi, Marianna M. (2025, March 21). Development of Linguistic-Mediated Abstraction: Insights from Word Ladders task (*under review*)
3. Villani, Caterina, **Loia, Adele**, Bolognesi, Marianna M., The semantic content of concrete, abstract, specific, and generic concepts, «LANGUAGE AND COGNITION», 2024, First View, pp. 1 – 28
4. Bolognesi, Marianna Marcella; Collacciani, Claudia; Ferrari, Andrea; Genovese, Francesca; Lamarra, Tommaso; **Loia, Adele**; Rambelli, Giulia; Ravelli, Andrea Amelio; Villari, Caterina. Word Ladders: A Mobile Application for Semantic Data Collection, 2024. arXiv:2404.00184.

