#### Via Bellini, 17 Legnano Italy ★ 12 May 1997 ☐ +39 346 827 0424 ☑ m.ciapparelli1@campus.unimib.it

# Marco Ciapparelli

## Current position

Dec 2024 – **Postdoctoral Fellow**, *Università degli Studi di Milano-Bicocca*, Milan, Italy current

#### Education

Nov 2021 – Ph.D., Experimental Psychology, Linguistics and Cognitive Neuro-Nov 2024 science, *Università degli Studi di Milano-Bicocca*, Milan, Italy

Supervisor: Marco Marelli; Co-supervisor: Carlo Reverberi

Thesis: Multiple routes to conceptual combination: A distributional modeling approach

Oct 2023 – **Visiting Ph.D. student**, *University of Pennsylvania*, Philadelphia, PA, USA

Mar 2024 Supervisor: Sharon Thompson-Schill

Oct 2019 – M.S., Applied Experimental Psychological Sciences, Università degli

Oct 2021 Studi di Milano-Bicocca, Milan, Italy, 110/110 cum laude

Thesis: Predicting the memory advantage of counterintuitive concepts: The participation coefficient as a measure of recall

Oct 2016 – **B.S., Psychological Sciences and Techniques**, Università degli Studi di Oct 2019 Milano-Bicocca, Milan, Italy, 110/110 cum laude

Thesis: Distributional models for grounded cognition: explaining semantic priming

#### Further Education

25 Mar 2019 - International Interdisciplinary Computational Cognitive Science 31 Mar 2019 Spring School, Bernstein Center, Freiburg, Germany

9 May 2021 – Eye tracking technology: A training workshop on methods for 13 May 2021 psychological and educational research, *University of Oslo*, Oslo, Norway

#### Teaching

Apr 2024 – **Tutoring**, Tutor of the Computational modelling course from the Applied Ex-May 2024 perimental Psychological Sciences (AEPS) Master course (25 hours), University of Milan-Bicocca, Milan, Italy

22 Apr 2024 Seminar, Participated in the Multi-Variate Pattern Analysis (MVPA) for neuroimaging seminars with a lecture titled: "Semantic composition in the brain: A representational similarity approach" (2 hours), University of Milan-Bicocca, Milan, Italy

- 4 Jul 2024 Workshop, Held the minicons and large language models practical workshop (2 hours), Belgrade University, Belgrade, Serbia
- 24 Jun 27 Workshop, Held the Python for linguists practical workshop (4 hours), Birm-Jun 2025 ingham University, Birmingham, UK
- 26 Jun 27 Workshop, Held the Large language models for (psycho)linguistics practical Jun 2025 workshop (6 hours), Birmingham University, Birmingham, UK

#### Publications

- Petilli, M. A., Günther, F., Vergallito, A., Ciapparelli, M., & Marelli, M. (2021). Datadriven computational models reveal perceptual simulation in word processing. *Journal of Memory and Language*, 117, 104194
- 2. Ciapparelli, M., Zarbo, C., & Marelli, M. (2025). Conceptual Combination in Large Language Models: Uncovering Implicit Relational Interpretations in Compound Words with Contextualized Word Embeddings. *Cognitive Science*, 49(3), e70048.
- 3. Ciapparelli, M., Marelli, M., Graves, W., & Reverberi, C. (accepted). Compositionality in the semantic network: A model-driven representational similarity analysis. *Cerebral Cortex*.

# Book Chapters, Textbook Contributions

- 1. De Varda., A, & Ciapparelli, M. (2024). Word semantic similarity norms. In press
- 2. Ciapparelli, M., & De Varda., A, (2025). BERT pre-trained models. In press

#### Conferences and Seminars

- 25 Mar 2019 International Interdisciplinary Computational Cognitive Science 31 Mar 2019 Spring School, Bernstein Center, Germany, Poster presentation. Petilli, M. A., Günther, F., Vergallito, A., Ciapparelli, M., & Marelli, M. (2019). Does word processing involve visual simulations? An experiment with semantic priming and vision-based distributional models
- 15 Dec 2022 **Italian Association of Cognitive Sciences**, *Università di Trento*, Rovereto, 17 Dec 2022 Italy, *Oral presentation*. **Ciapparelli, M.**, Günther, F., & Marelli, M. (2023). Semantic transparency in compound word reading: A computational investigation
- 4 May 2023 Workshop on Concepts, Actions, and Objects, CIMeC, Rovereto, Italy, 6 May 2023 Poster presentation. Ciapparelli, M., Reverberi, C., & Marelli, M. (2023). Semantic composition in the brain: A representational similarity approach
- 29 May 2023 **Psycholinguistics in Flanders Conference**, University of Ghent, Ghent, 31 May 2023 Belgium, Oral presentation. **Ciapparelli, M.**, & Marelli, M. (2023). Modeling compound word relational interpretations with contextualized word embeddings
- 6 Sep 2023 9 Conference of the European Society for Cognitive Psychology (ES-Sep 2023 COP), University of Porto, Porto, Portugal, Oral presentation. Ciapparelli, M., Zarbo, C., & Marelli, M. (2023). Contextualized word embeddings capture compound words' implicit relational interpretations

- 4 Jul 2024 6 International Word Processing Conference (WoProc), Belgrade Uni-Jul 2024 versity, Belgrade, Serbia, Oral presentation. Ciapparelli, M., Zarbo, C., & Marelli, M. (2024). Uncovering implicit relational interpretations of compound words with contextualized word embeddings
- 8 Jul 2024 11 **Highlights in the Language Sciences**, Radboud University, Nijmegen, Jul 2024 Netherlands, Poster presentation. Ciapparelli, M., Reverberi, C., & Marelli, M. (2024). Neural representations of combinatorial semantics: A model-based fMRI reanalysis
  - 5 Nov 2024 Invited talk, RWTH Aachen University, Aachen, Germany, Oral presentation.

    Predicting the appearance of novel combined concepts via language-vision alignment
  - 7 May 2025 Workshop on Concepts, Actions, and Objects, CIMeC, Rovereto, Italy, 9 May 2025 Poster presentation. Ciapparelli, M., & Thompson-Schill, S. (2025). Predicting the appearance of novel combined concepts via language-vision alignment
    - 23 Jun 27 **MEDAL Summer School in Computational Modelling**, Birmingham Jun 2025 University, Birmingham, UK, Invited plenary talk (with Marco Marelli) Understanding the unknown: How to make sense of unfamiliar words, from a computational psycholinguistic perspective

## Languages

Italian Native language

English Fluent (C1 level)

Mandarin Early beginner (A1 level)

Chinese

## Computer skills

MATLAB, R, Python, Qualtrics, PsychoPy3, SPM12