

Daniele Gatti

ResearchGate: <https://www.researchgate.net/profile/Daniele-Gatti>

Google Scholar: <https://scholar.google.it/citations?user=wUIPmTsAAAAJ&hl=it>

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Research Experience

From Mar. 2023 Postdoc Research Fellow

Department of Brain and Behavioral Sciences – University of Pavia

Main theme of Research: “Neurostimulation and individual differences”. Specific topics investigated include: false memory, semantic memory

Supervisor: Prof. Tomaso Vecchi

Aug. 2022 – Mar. 2023 Visiting Postdoc Research Fellow

Department of Psychology – Humboldt-Universität zu Berlin

Main theme of Research: “What’s in a name? Computational modeling and experimental investigations on the non-arbitrariness of word label choices”. Specific topics investigated include: language, semantic memory

Supervisor: Prof. Fritz Günther

Jan. 2022 – Aug. 2022 Postdoc Research Fellow

Department of Brain and Behavioral Sciences – University of Pavia

Main theme of Research: “Neurostimulation and individual differences”. Specific topics investigated include: false memory, semantic memory

Supervisor: Prof. Tomaso Vecchi

Oct.2018 – Dec.2021 Ph.D. in Psychology, Neuroscience and Data Science

Department of Brain and Behavioral Sciences – University of Pavia

Dissertation title: “The Binding of False Memory: behavioral and brain stimulation evidence”

Date of thesis defense: May, 26th, 2022.

Supervisor: Prof. Tomaso Vecchi

Nov.2017 – Feb.2018 Research Assistant

University of Pavia

Main theme of Research: “Cerebellum and visual impairments: a study on biological motion”

Supervisor: Prof. Tomaso Vecchi

Sept.2017 – Oct.2018 Psychology intern

University of Pavia

A year of post-degree internship in Experimental Psychology working on behavioral and neurostimulation research projects

May.2016 – Nov.2016 Research intern

University of Pavia

Six months of pre-degree internship in Experimental Psychology working on brain stimulation

Education

2015 – 2017 Master of Science in Psychology cum Laude

University of Pavia

2012 – 2015 Bachelor of Science in Psychology

University of Pavia

Publications

Peer-reviewed publications

31. Talbot, J, **Gatti, D**, [...] & Mazzoni, G (2024). Dimensions of a hyper memory: investigating the factors modulating exceptional retrieval in Highly Superior Autobiographical Memory (HSAM). *Memory*.
30. Bonandrini, R, & **Gatti, D**. (2024). fastText subword vectors. *International Encyclopedia of Language and Linguistics*.
29. Petilli, M, Marelli, M, Mazzoni G, Marchetti, M, Rinaldi, L, & **Gatti, D** (2024). From Vector Spaces to DRM lists: False Memory Generator, a software for automated generation of lists of stimuli inducing false memories. *Behavior Research Methods*.
28. **Gatti, D**, Raveling L, Petrenco A, & Günther F (2024). Valence without meaning: investigating form and semantic components in pseudowords valence. *Psychonomic Bulletin & Review*.
27. **Gatti, D**, Günther, F, & Rinaldi, L (2024). A body map beyond perceptual experience. *Journal of Cognition*, 7.1 (2024).
26. **Gatti, D**, Rinaldi, L, Mazzoni, G, & Vecchi, T (2024). Semantic and episodic processes differently predict false memories in the DRM task. *Scientific Reports*, 14(1), 256.
25. **Gatti, D**, Marelli, M, & Rinaldi, L (2024). Predicting hand movements with distributional semantics: evidence from mouse-tracking. *Cognitive Science*, 48(1), e13372.
24. Rodio, F M, Petilli, M, **Gatti, D**, Rinaldi, L, & Marelli M (2024). Predire falsi ricordi con una rete neurale convoluzionale: l'effetto della somiglianza visiva in un paradigma DRM con stimoli visivi. *Sistemi Intelligenti*.
23. **Gatti, D**, Rinaldi, L, Vecchi, T, Ferrari, C (2023). Understanding cerebellar cognitive and social functions: methodological challenges and new directions for future TMS studies. *Current Opinion in Behavioral Sciences*, 53, 101300.
22. Perrone, S, Rinaldi, L, **Gatti, D**, & Girelli, L (2023). Temporal perception in closed-skill sports: an experimental study on expert swimmers and runners. *Psychology of Sport & Exercise*, 69, 102500.
21. **Gatti, D***, Stagnitto, S M*, Basile, C, Mazzoni, G, Vecchi, T, Rinaldi, L, & Lecce, S (2023). Individual differences in theory of mind correlate with the occurrence of false

- memory: a study with the DRM task. *Quarterly Journal of Experimental Psychology*, 76(9), 2107-2121.
20. **Gatti, D**, Marelli, M, Vecchi, T, & Rinaldi, L (2022). Spatial representations without spatial computations. *Psychological Science*, 33(11), 1947-1958.
 19. **Gatti, D**, Marelli, M, & Rinaldi, L (2022). Out-of-vocabulary but not meaningless: Evidence for semantic-priming effects in pseudoword processing. *Journal of Experimental Psychology: General*, 152(3), 851–863.
 18. Talbot, J, **Gatti, D**, [...] & Mazzoni, G (2022). Stimulating a hyper memory: A single case TMS study on an individual with Highly Superior Autobiographical Memory. *Brain Stimulation*. 15(5), 1122-1124.
 17. **Gatti, D**, Stockner, M, [...] & Mazzoni, G (2022). I due volti del falso ricordo: tra distorsioni adattive e confabulazioni, alcune implicazioni per la testimonianza. *Giornale Italiano di Psicologia*. 1(1), 137-176.
 16. **Gatti, D**, Stockner, M, [...] & Mazzoni, G (2022). Memoria e testimonianza: tra psicologia e prassi forense. *Giornale Italiano di Psicologia*. 1(1), 231-240.
 15. **Gatti, D**, Marelli, M, Mazzoni, G, Vecchi, T, & Rinaldi, L (2022). Hands on false memory: a mouse-tracking study with the DRM task. *Psychological Research*, 87(4), 1129-1142.
 14. **Gatti, D**, Rinaldi, L, Marelli, M, & Vecchi, T (2022). Cerebellar involvement in distributional semantic learning: insights from a combined TMS-computational approach. *Brain Stimulation*, 15(4), 999-1001.
 13. **Gatti, D**, Rinaldi, L, Marelli, M, Mazzoni, G, & Vecchi, T (2022). Decomposing the semantic processes underpinning veridical and false memories. *Journal of Experimental Psychology: General*, 151(2), 363–389.
 12. Marchetti, M, **Gatti, D**, Inguscio, L, & Mazzoni G (2022). Psychological well-being and lockdown: a study on an Italian sample during the first COVID-19 wave. *Psychology Hub*, 39(1), 17-24.
 11. Somos, E, Mazzoni, G, **Gatti, D**, & Jellema, T (2022). "Be careful what you recall": Retrieval induced forgetting of genuine real-life autobiographical memories. *Quarterly Journal of Experimental Psychology*, 76(1), 84-92.
 10. Marchetti, M, **Gatti, D**, Inguscio, L, & Mazzoni G (2022). One wave or another in the pandemic: Psychological well-being during the third COVID-19 wave. *Health Psychology Report*, 10(1), 13-19.
 9. **Gatti, D**, Somos, E, Mazzoni, G, Jellema, T (2022). Could direct and generative retrieval be two flips of the same coin? A dual-task paradigm study. *Cognitive Processing*, 23(3), 513-519.
 8. Circi*, R, **Gatti*, D**, Russo, V, & Vecchi, T (2021). The Foreign Language Effect on decision making: a meta-analysis. *Psychonomic Bulletin & Review*, 28(4), 1131-1141.
 7. **Gatti, D**, Vecchi, T, & Mazzoni, G (2021). Cerebellum and semantic memory: a TMS study using the DRM paradigm. *Cortex*, 135, 78-91.
 6. **Gatti, D**, & Vecchi, T (2021). Il futuro nella memoria: ricordo, dimenticanza e previsione. *Ricerche di Psicologia*, 1.
 5. Pizzoli, S, Marzorati, C, **Gatti, D**, Monzani, D, Mazzocco, K, & Pravettoni, G (2021). A meta-analysis on heart rate variability biofeedback and depressive symptoms. *Scientific Reports*, 11, 1-10.
 4. **Gatti, D**, Rinaldi, L, Cristea, I, & Vecchi, T (2021) Probing cerebellar involvement in cognition through a meta-analysis of TMS evidence. *Scientific Reports*, 11, 1-17.
 3. **Gatti, D**, Rinaldi, L, Ferreri, L, & Vecchi, T (2021) The Human Cerebellum as a Hub of the Predictive Brain. *Brain Sciences*. 11, 1492.

2. **Gatti, D** & Vecchi, T (2020). Memory and Cerebellum. *Confinia Cephalalgica et Neurologica*, 30(3), 137-138.
1. **Gatti, D**, VanVugt, F, & Vecchi, T (2020). A causal role for the cerebellum in semantic integration: a transcranial magnetic stimulation study. *Scientific Reports*, 10, 1-12.

Books

- Vecchi T & **Gatti D** (2020). *Memory as prediction: from looking back to looking forward*. MIT Press.
- **Gatti D** & Vecchi T (2020). *Che cos'è la memoria?*. Carocci Editore.
- **Gatti D** & Vecchi T (2019). *Memoria. Dal ricordo alla previsione*. Carocci Editore.

* indicates shared first authorship.

Teaching activities

- Lecturer in the course Psychology of Learning and Memory (42 hours) as part of the Psychology Master of Science. (A.Y. 2023/2024). University of Pavia.
- Lecturer in the course Psychology of Learning and Memory (42 hours) as part of the Psychology Master of Science. (A.Y. 2022/2023). University of Pavia.
- Lecturer in the course Psychology of Learning and Memory (54 hours) as part of the Psychology Master of Science. (A.Y. 2021/2022). University of Pavia.
- Lecturer in a seminar on memory and prediction (12 hours) – course of Experimental Psychology – English taught MSc in Psychology, Neuroscience and Human Sciences (A.Y. 2021/2022). University of Pavia.
- Senior Psychology Tutor (10 hours). (A.Y. 2021/2022). Almo Collegio Borromeo (Borromeo College in Pavia).
- Lecturer in a seminar on memory and prediction (12 hours) – course of Experimental Psychology – English taught MSc in Psychology, Neuroscience and Human Sciences (A.Y. 2020/2021). University of Pavia.
- Senior Psychology Tutor (10 hours). (A.Y. 2020/2021). Almo Collegio Borromeo (Borromeo College in Pavia).
- Lecturer in a seminar on memory and prediction (12 hours) – course of Experimental Psychology – English taught MSc in Psychology, Neuroscience and Human Sciences (A.Y. 2019/2020). University of Pavia.
- Didactic Tutor – course of Experimental Psychology – English taught MSc in Psychology, Neuroscience and Human Sciences (A.Y. 2019/2020). University of Pavia.

Oral communications and poster sessions

- **Gatti D** (2024). Pseudogeography. LaP 2024. Kittila, Finland. Poster session.
- **Gatti D** (2024). Explicit meaning beyond explicit meaning. CSA 2024. Brixen, Italy. Oral communication.
- **Gatti D** (2023). L'orientamento temporale della nostra memoria: dal ricordo del passato alla previsione del futuro. AIP 2023. Lucca, Italy. Oral communication.
- **Gatti D** (2023). From Milan to Rome: spatial, temporal and linguistic components of cognitive maps. ESCoP 2023. Oporto, Portugal. Oral communication.
- **Gatti D** (2022). Semantic components of veridical and false memory. AIP 2022. Padua, Italy. Oral communication.

- **Gatti D**, Marelli M, Vecchi T, & Rinaldi L (2022). Spatial representations without spatial computations. AIP 2022. Padua, Italy. Oral communication.
- **Gatti D** (2022). The Binding of False Memory: behavioral and brain stimulation evidence (PhD Thesis presentation). AIP 2022. Padua, Italy. Oral communication.
- **Gatti D** (2022). Spatial representations without spatial computations. CSA 2022. Brixen, Italy. Oral communication.
- **Gatti D**, Rinaldi L, Marelli M, & Vecchi T (2021). Processing of semantic associations in the cerebellum: a TMS study. 28th Annual Meeting of the Cognitive Neuroscience Society – CNS 2021. Virtual meeting. Poster session.
- **Gatti D**, Rinaldi L, Marelli M, & Vecchi T (2021). Processing of semantic associations in the cerebellum: a TMS study. SRCA 2021. Virtual meeting. Poster session.
- **Gatti D**, Vecchi T, & Mazzoni G (2021). Cerebellum and semantic memory: a TMS study with the DRM task. SRCA 2021. Virtual meeting. Poster session.
- **Gatti D**, Rinaldi, L, Marelli, M, Mazzoni, G, & Vecchi, T (2021). Hands-on false memories: A combined study with distributional semantics and mouse-tracking. AIP 2021. Lecce, Italy. Oral communication.
- **Gatti D**, Marelli, M, Mazzoni, G, Rinaldi, L, & Vecchi, T (2021). Il coinvolgimento del cervelletto nella memoria semantica: evidenze di neurostimolazione. SIPF 2021. Palermo, Italy. Oral communication.
- **Gatti D**, Mazzoni G, Van Vugt F, & Vecchi T (2020). Cerebellum and semantic memory: a TMS study with the DRM task. 27th Annual Meeting of the Cognitive Neuroscience Society – CNS 2020. Virtual meeting. Poster session.
- **Gatti D**, Mazzoni G, Van Vugt F, & Vecchi T (2020). Cerebellum and semantic memory: a TMS study with the DRM task. First annual meeting of neuroscience and neurorehabilitation Italian IRCCS – RIN 2020. Virtual meeting. Poster session.
- **Gatti D**, Rinaldi L, Marelli M, Mazzoni G, & Vecchi T (2020). Decomposing the semantic processes underpinning veridical and false memories. XXVI Italian Association for Psychology Congress, Experimental Section – AIP 2020. Virtual meeting. Oral communication.
- **Gatti D**, Stramba-Badiale C, Ferrari C, & Vecchi T (2019). Cervelletto e memoria semantica: uno studio con TMS. XXV Italian Association for Psychology Congress, Experimental Section – AIP 2019. Milan, Italy. Oral communication.
- **Gatti D**, Ferrari C, & Vecchi T (2019). A role for the cerebellum in semantic memory: a TMS study. 10th International Symposium of the society for Research on the Cerebellum and Ataxias – SRCA 2019. Sheffield, United Kingdom. Poster session.
- **Gatti D**, Ferrari C, & Vecchi T (2019). A role for the cerebellum in semantic memory: a TMS study. 21st European Society for Cognitive Psychology Conference – ESCoP 2019. Tenerife, Spain. Poster session.

Other information

Editorial roles:

Associate Editor for: Journal of Cognitive Psychology

Ad hoc reviewer for:

- | | |
|--|---|
| <ul style="list-style-type: none"> ▪ Behavior Research Methods ▪ Psychonomic Bulletin & Review ▪ Cerebral Cortex ▪ Journal of Memory and Language ▪ Neurological Sciences | <ul style="list-style-type: none"> ▪ Cerebellum ▪ Journal of Experimental Psychology: Human Perception and Performance ▪ Cognition and Emotion ▪ Cortex |
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- Brain Research
- Memory & Cognition
- Computational Linguistics

Language: Italian – mother tongue; English – production C1, listening C1, reading C1; Spanish – production B1, listening B1, reading B1.

Awards:

- ESCoP 2022 early career publication award for PhD students
- AIP 2022 Best PhD thesis (Experimental Psychology section)
- Best graduate student of the Department of Brain and Behavioral Sciences, University of Pavia (A.Y. 2016/2017)

Personal: Blood donor, avid reader and passionate chess player
