MARCO A. PETILLI

CURRICULUM VITAE
Web of Science Researcher ID: AAQ-3337-2020
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CURRENT POSITION

MARCH 2025 – PRESENT
ASSISTANT PROFESSOR / TENURE-TRACK RESEARCHER IN PSYCHOMETRICS (PSIC-01/C - formerly M-PSI/03)
DEPARTMENT OF PSYCHOLOGY, UNIVERSITY OF MILANO-BICOCCA

QUALIFICATIONS AND EDUCATION

CERTIFICATIONS

DECEMBER 2023
NATIONAL SCIENTIFIC QUALIFICATION FOR ASSOCIATE PROFESSOR
Disciplinary Field: 11/E1 – General Psychology, Psychobiology, and Psychometrics
ASN 2021-2023. Validity: 12/12/2023 - 12/12/2035

FEBRUARY 2020
STATE EXAMINATION FOR PROFESSIONAL QUALIFICATION AS PSYCHOLOGIST
University of Milano-Bicocca

ACADEMIC DEGREES

FEBRUARY 2018
PH.D. IN PSYCHOLOGY, LINGUISTICS, AND COGNITIVE NEUROSCIENCE (XXX CYCLE)
Department of Psychology, University of Milano-Bicocca
Supervisor: Professor Roberta Daini
Thesis Title: "Proactive top-down processes in visual search".

JULY 2013
MASTER'S DEGREE IN CLINICAL, DEVELOPMENTAL, AND NEUROPSYCHOLOGY
(110/110 cum laude)
Department of Psychology, University of Milano-Bicocca
Supervisor: Professor Roberta Daini
Thesis Title: "Dynamic assessment of drawing: spatial and temporal indicators of neuropsychological disorders"

JULY 2010
BACHELOR'S DEGREE IN PSYCHOLOGICAL SCIENCE AND TECHNIQUES
(110/110 cum laude)
Department of Psychology, University of Milano-Bicocca
Supervisor: Professor Roberta Daini
Thesis Title: "Visual discrimination of numerosity: No psychophysical evidence for the subitizing phenomenon"

TEACHING EXPERIENCE

BACHELOR'S DEGREE COURSES

2025 – PRESENT
ELEMENTS OF PSYCHOMETRICS
Bachelor's Degree Program in Psychological Sciences and Techniques
Department of Psychology, University of Milano-Bicocca
42 hours

MASTER'S DEGREE COURSES

2025 – PRESENT
QUANTITATIVE METHODS FOR DEVELOPMENTAL PSYCHOLOGY
Master's Degree Program in Developmental Psychology and Educational Processes
Department of Psychology, University of Milano-Bicocca
28 hours

2025 – PRESENT
METHODOLOGY LAB – QUANTITATIVE MODULE
Master's Degree Program in Social, Economic and Decision-Making Psychology
Department of Psychology, University of Milano-Bicocca
24 hours

2017 – 2022; 2024 – 2025
MATLAB LAB FOR COGNITIVE PSYCHOLOGY
Master's Degree Program in Applied Experimental Psychological Sciences
Department of Psychology, University of Milano-Bicocca
16 hours

2020 – 2021
COGNITIVE AND BEHAVIORAL MEASURES
Master's Degree Program in Applied Experimental Psychological Sciences
Department of Psychology, University of Milano-Bicocca
32 hours

PH.D. COURSES

2017 – 2024
MATLAB: EXPERIMENT DESIGN AND DATA ANALYSIS
Ph.D. Program in Psychology, Linguistics, and Cognitive Neuroscience
Department of Psychology, University of Milano-Bicocca
24 hours per year

RESEARCH EXPERIENCE

MAIN RESEARCH INTERESTS

Psychometrics and quantitative methods for psychological research

Computerised tools for cognitive and psychological assessment

Computational modelling of conceptual representations through vector-space approaches

The role of linguistic, visual, and multimodal experience in semantic representation

Visual search and attentional guidance in real-world object recognition

DATA ANALYSIS TECHNIQUES

Statistical methods: t-tests, linear regression (simple and multiple), ANOVA, ANCOVA, correlations, General Linear Models and Linear Mixed-Effects Models, Generalized Additive Models

Data reduction methods: Principal Component Analysis, Factor Analysis

Computational methods: Vector spaces, Convolutional Neural Networks (CNN), Distributional Semantic Models (DSM)

Electrophysiological data analysis: EEG, EMG, HR

COMPUTER SKILLS

Programming and Data Analysis: MATLAB (advanced), R (advanced), Python (basic), Jamovi, SPSS, EEGLAB

Experiment Development and Stimulus Control: Psychophysics Toolbox, Qualtrics

LANGUAGES

Italian: Native
English: Fluent

RESEARCH APPOINTMENTS

MARCH 2021 – FEBRUARY 2025
Post-Doctoral Research Fellow,
Department of Psychology, University of Milano-Bicocca
Duration: 24+24 months
Supervisor: Prof. Marco Marelli
Project: "Proactive control processes for distractor filtering in the laboratory and real life"

SEPTEMBER 2020 – FEBRUARY 2021
Post-Doctoral Research Fellow,
Department of Psychology, University of Milano-Bicocca

Duration: 24 months (terminated early due to new appointment)
Supervisor: Prof. Roberta Daini
Project: "The time of remote lessons: Identifying factors affecting students' sustained attention in online classes"

APRIL 2018 – JULY 2019
Post-Doctoral Research Fellow
Department of Psychology, University of Milano-Bicocca
Duration: 16 months
Supervisor: Prof. Marco Marelli
Project: "Development of a distributed multimodal model of the conceptual system"

FEBRUARY 2020 – MAY 2020
Research Fellowship
Department of Psychology, University of Milano-Bicocca
Duration: 4 months
Supervisor: Prof. Marco Marelli
Project: "Computer vision and linguistic processing"

SEPTEMBER 2019 – DECEMBER 2019
Research Fellowship
Department of Psychology, University of Milano-Bicocca
Duration: 4 months
Supervisor: Prof. Emanuela Bricolo
Project: "A new paradigm for studying attention across the lifespan using virtual reality"

FEBRUARY 2014 – DECEMBER 2014
Research Collaboration
IRCCS Don Carlo Gnocchi Foundation, Milan
Contract Duration: 10 months
Supervisor: Dr. Marco Rovaris
Project: "Evaluation of the effectiveness of a new drug on neurodegeneration and cognitive disorders in multiple sclerosis patients"

RESEARCH STAYS

OCTOBER 2016 – OCTOBER 2017
VISITING PHD STUDENT
SWARTZ CENTER FOR COMPUTATIONAL NEUROSCIENCE, UNIVERSITY OF CALIFORNIA SAN DIEGO, CALIFORNIA (USA)
Research Topic: Studying expectations and attention in visual search using electrophysiological techniques.
Duration: 12 months
Supervisor: Prof. Scott Makeig

RECOGNITIONS

RESEARCH FUNDING

2025 – PRESENT
UNIVERSITY OF MILANO-BICOCCA – FUND FOR COMPETITIVE RESEARCH (FAQC)
Project: Guiding Visual Search into the Real World with Multimodal Learned Object Representations
Funding Amount: €25,000
Role: Principal Investigator
Notes: Competitive internal funding for the consolidation of ERC Starting Grant proposals positively evaluated at the 2025 ERC Starting Grant call (Step 2, B).

2022 – 2024
FUNDING FOR PROJECTS OF NATIONAL INTEREST (PRIN 2022)

Project: “The World in Words: Moving Beyond a Spatiocentric View of the Human Mind”
PRIN – BANDO 2022 PROT. 2022TE3XMT
Funding Amount: €208,770
Role: Co-investigator, P.I.: Prof. Luca Rinaldi

2020-2022
GERMAN RESEARCH FOUNDATION (DEUTSCHE FORSCHUNGSGEMEINSCHAFT)
Project : “SYSTEMATICALLY EVALUATING THE PSYCHOLOGICAL VALIDITY OF COMPUTER-VISION MODELS FOR VISION-BASED CONCEPTUAL REPRESENTATIONS”
DFG – 2020 Call, Prot. 452322374
Funding Amount: €22,000
Role: Co-investigator, P.I.: Dr. Fritz Günther

AWARDS

2023
Best Poster Presentation, Bicocca Research Day 2023
University of Milano-Bicocca (€500)
Title: "Visual search and stimulus similarity in the era of deep learning: an empirical investigation using real image stimuli"

2023
3rd Place, Vittorio Girotto Award for Best AISC 2022 Paper
Article published in 2024, "Sistemi Intelligenti", Il Mulino
Authors: Rodio F., Petilli M.A., Gatti D., Rinaldi L., & Marelli M.
Title: "Predicting false memories with a convolutional neural network: The effect of visual similarity in a DRM paradigm with visual stimuli"

2022
Best Poster Presentation, Bicocca Research Day 2022
University of Milano-Bicocca (€500)
Title: "The Vision Space (ViSpa) project: Vision-based concept representations induced from computer vision models"

2021
Best Poster Presentation, Bicocca Research Day 2021
University of Milano-Bicocca (€250)
Title: "Tablet-based Rey Figure Copy task differentiates constructional, organizational, and motor abilities”

SCIENTIFIC OUTPUT

PEER-REVIEWED JOURNAL ARTICLES

* corresponding author; [1] first co-authorship

Petilli, M. A.*, Rodio, F. M., Gatti, D., Marelli, M., & Rinaldi, L. (2025). Multimodal prior knowledge determines false memory formation.
Journal of Experimental Psychology: General, 155(2), 327–343.
https://doi.org/10.1037/xge0001852

Petilli, M. A.***,** Rodio, F., Günther, F., & Marelli, M. (2025).
Visual search and real-image similarity: an empirical assessment of the search surface through the lens of deep learning.

Psychonomic Bulletin & Review, 32(2), 822–838.
https://doi.org/10.3758/s13423-024-02583-4

Massironi, A.*, **Petilli, M. A.,** Lega, C., Fontana, S., & Bricolo, E. (2025). Prepared for the expected but unready for the unexpected: Unmet distractor expectations slow braking responsiveness but improve lane-keeping precision in a virtual driving simulation.
PLOS ONE, 20(12), e0338124.
https://doi.org/10.1371/journal.pone.0338124

Bovolon, L., Perrone, S., Lega, C., Girelli, L., Mattavelli, S., & **Petilli, M. A.** (2025). Playing sports to shape attention: enhanced feature-based selective attention in invasion sports players. *Psychology of Sport and Exercise, 80*, 102929.
https://doi.org/10.1016/j.psychsport.2025.102929

Frigeni, M.*, **Petilli, M. A.,** Gobbo, S., Daini, R., & Cavallini, A. (2024). Tablet-based Rey–Osterrieth Complex Figure copy task: a novel application to assess spatial, procedural, and kinematic aspects of drawing in children. *Scientific Reports, 14*, 16787.
https://doi.org/10.1038/s41598-024-67076-9

Gatti, D.*, **Petilli**, M.A., Marchetti, M., Vecchi, T., Mazzoni, G., Rinaldi, L., & Marelli, M. (2025). False memories from nowhere: Humans falsely recognize words that are not attested in their vocabulary.
Psychonomic Bulletin & Review*, 32*(4), 1922–1931.
https://doi.org/10.3758/s13423-025-02677-7

de Varda, A.*, **Petilli**, M. A., & Marelli, M. (2025). SemanticScape: A Distributional Model of Concepts Grounded in Distance Patterns between Objects.
Journal of Memory and Language, 142, 104624.
https://doi.org/10.1016/j.jml.2025.104624

Petilli, M. A.*, 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
https://doi.org/10.3758/s13428-024-02425-0

Petilli, M. A.*, & Marelli, M. (2024)
Visual intuitions in the absence of visual experience: The role of direct experience in concreteness and imageability judgements.
Journal of Cognition, 7(1)
https://doi.org/10.5334/joc.328

Rodio, F.*, **Petilli**, M. A., Gatti, D., Rinaldi, L., & Marelli, M. (2024).
Predicting false memories with convolutional neural networks: the effect of visual similarity in a DRM paradigm with pictorial stimuli.
Sistemi intelligenti, 36(1), 73-96
https://www.rivisteweb.it/doi/10.1422/112960

Giraud, M.*, Zapparoli, L., Basso, G., **Petilli**, M. A., Paulesu, E., Nava, E. (2024)
Mapping the Emotional Homunculus with fMRI
iScience, 27(6).
https://doi.org/10.1016/j.isci.2024.109985

Gregorini, C.*, De Carli, P., Parolin, L. A. L., **Petilli** M. A., Konvalinka, I., & Preti, E. (2024)
Stable asynchrony? Association between borderline personality traits and interpersonal asynchrony.
Personality Disorders: Theory, Research, and Treatment
https://doi.org/10.1037/per0000684

Günther, F.*, Marelli, M., Tureski, S., & **Petilli,** M. A. (2023)

ViSpa (Vision Spaces): A computer-vision-based representation system for individual images and concept prototypes, with large-scale evaluation.
Psychological Review, 130(4), 896
https://doi.org/10.1037/rev0000392

Pancani, L.*, **Petilli**, M. A., Riva, P., & Rusconi, P. (2023)
I can't live without you: delay discounting in smartphone usage.
Journal of Cognitive Psychology, 35(4), 441-455.
https://doi.org/10.1080/20445911.2023.2195031

Petilli, M. A.*, Günther, F., & Marelli, M. (2022)
The Flickr frequency norms: What 17 years of images tagged online tell us about lexical processing.
Behavior Research Methods, 56(1), 126-147
https://doi.org/10.3758/s13428-022-02031-y

Günther, F.*, **Petilli**, M. A., Vergallito, A., & Marelli, M. (2022)
Images of the unseen: Extrapolating visual representations for abstract and concrete words in a data-driven computational model.
Psychological Research, 86(8), 2512-2532
https://doi.org/10.1007/s00426-020-01429-7

Petilli, M. A.*, Daini, R., Saibene, F. L., & Rabuffetti, M. (2021)
Automated scoring for a Tablet-based Rey Figure copy task differentiates constructional, organisational, and motor abilities.
Scientific Reports, 11(1), 14895
https://doi.org/10.1038/s41598-021-94247-9

Petilli, M. A.*, Günther, F., Vergallito, A., Ciapparelli, M., & Marelli, M. (2021)
Data-driven computational models reveal perceptual simulation in word processing.
Journal of Memory and Language, 117, 104194
https://doi.org/10.1016/j.jml.2020.104194

Petilli, M. A.*, Marini, F., & Daini, R. (2020)
Distractor context manipulation in visual search: How expectations modulate proactive control.
Cognition, 196, 104129
https://doi.org/10.1016/j.cognition.2019.104129

Petilli, M. A., Rinaldi, L., Trisolini, D. C., Girelli, L., Vecchio, L. P., & Daini, R.* (2020)
How difficult is it for adolescents to maintain attention? The differential effects of video games and sports.
Quarterly Journal of Experimental Psychology, 73(6), 968-982
https://doi.org/10.1177/1747021820908499

Günther, F.*, **Petilli**, M. A., & Marelli, M. (2020)
Semantic transparency is not invisibility: A computational model of perceptually-grounded conceptual combination in word processing.
Journal of Memory and Language, 112, 104104
https://doi.org/10.1016/j.jml.2020.104104

Vergallito, A.*, **Petilli**, M. A., & Marelli, M. (2020)
Perceptual modality norms for 1,121 Italian words: A comparison with concreteness and imageability scores and an analysis of their impact in word processing tasks.
Behavior Research Methods, 52(4), 1599-1616
https://doi.org/10.3758/s13428-019-01337-8

Vergallito, A. [1]*, **Petilli**, M. A. [1], Cattaneo, L., & Marelli, M. (2019)
Somatic and visceral effects of word valence, arousal and concreteness in a continuum lexical space.
Scientific Reports, 9(1), 20254
https://doi.org/10.1038/s41598-019-56382-2

Petilli, M. A.*, Trisolini, D. C., & Daini, R. (2018)
Sustained-paced finger tapping: A novel approach to measure internal sustained attention.
Frontiers in Psychology, 9, 292606
https://doi.org/10.3389/fpsyg.2018.00881

Trisolini, D. C., **Petilli**, M. A., & Daini, R.* (2018)
Is action video gaming related to sustained attention of adolescents?
Quarterly Journal of Experimental Psychology, 71(5), 1033-1039
https://doi.org/10.1080/17470218.2017.1310912

Feldmann-Wüstefeld, T.*, Miyakoshi, M., **Petilli**, M. A., Schubö, A., & Makeig, S. (2017)
Reduced visual attention in heterogeneous textures is reflected in occipital alpha and theta band activity.
PLOS One, 12(12), e0187763
https://doi.org/10.1371/journal.pone.0187763

BOOK CHAPTERS AND ENCYCLOPAEDIA ENTRIES

Petilli, M. A.*, & Günther, F. (2025). Image-based word frequency norms.
In *Reference Module in Social Sciences*. Elsevier.
https://doi.org/10.1016/B978-0-323-95504-1.00859-0

Petilli, M. A.*, & Günther, F. (2024). Vision Spaces (ViSpa) in Language Sciences.
In *Reference Module in Social Sciences*. Elsevier.
https://doi.org/10.1016/B978-0-323-95504-1.00221-0

PEER-REVIEWED CONFERENCE PROCEEDINGS

Fontana, S.*, Massironi, A., **Petilli,** M. A., Lega, C., Bricolo, E. (2024)
A protocol to evaluate the impact of visual distractors on driving attention using a virtual reality simulator.
CEUR Workshop Proceedings, 2024, 3903, pp. 8–16
https://ceur-ws.org/Vol-3903/AIxHMI2024_paper2.pdf

Günther, F.*, Marelli, M., & **Petilli,** M.A. (2024).
Improved classification accuracy in deep vision models does not come with better predictions of perceptual similarity.
In Proceedings of the *Annual Meeting of the Cognitive Science Society* (Vol. 46).
https://escholarship.org/content/qt5rq7811b/qt5rq7811b_noSplash_0fccd918b2a0d65d55f51c22e3abd2e9.pdf?t=sgrig2

DOCTORAL THESIS

Petilli, M. A. (2018). Proactive top-down processes in visual search. (PhD Thesis).

MAIN PRESENTATIONS

INVITED TALKS AND LECTURES

When vision and language act together: Multimodal contributions to false memory formation
Invited symposium talk at *TeaP 2026 – 67th Conference of Experimental Psychologists*, University of Tübingen, March 15–18, 2026, Tübingen, Germany. Symposium chaired by Prof. Fritz Günther and Prof. Markus Kiefer.

Studying semantic memory through vector spaces
Invited discussant at the *XXX Congress of the AIP Experimental Section*, invited by Dr. Daniele Gatti, September 23, 2024, Noto, Italy.

Vector space models for concept representation: Exploring the role of visual and linguistic experience in memory
Invited lecture presented as part of the *Applied Psycholinguistics* course, University of Milano-Bicocca, invited by Dr. Simona Amenta, April 18, 2024, Milan, Italy.

Understanding the factors that guide visual search through computational models
Invited talk presented at the *Words as Pseudo-Worlds* workshop, University of Pavia, invited by Prof. Luca Rinaldi, February 7, 2024, Pavia, Italy.

Exploring the role of visual and linguistic representations in cognition: Insights from Convolutional Neural Networks and Distributional Semantic Models
Invited talk presented at the *Cognition and Computation Distinguished Seminars*, University of Padua, invited by Prof. Marco Zorzi and Dr. Alberto Testolin, December 21, 2023, Padua, Italy.

Predicting false memories with computational models: The effect of visual and semantic similarity in a DRM paradigm with pictorial stimuli
Invited talk presented at the *Workshop on Computational Models in Psycholinguistics*, Humboldt-Universität zu Berlin, invited by Dr. Fritz Günther, February 13, 2023, Berlin, Germany.

SELECTED CONFERENCE PRESENTATIONS

Petilli, M.A., Rodio, F., Günther, F. & Marelli, M.
Visual search and stimulus similarity: Modelling search efficiency with hierarchical visual features. *44th European Workshop on Cognitive Neuropsychology (EWCN)*, January 26-30, 2026 – Bressanone, Italy. Oral presentation.

Petilli, M. A., Rodio, F., Gatti, D., Marelli, M., & Rinaldi, L.
Multimodal Memory Traces Determine False Memory Formation. *Embodied and Situated Language Processing Conference (ESLP 2025),* September 23–26, 2025 – Aix-en-Provence, France. Poster presentation.

Petilli, M.A., Marelli, M., Mazzoni, G., Marchetti, M., Rinaldi, L., & Gatti, D.
False Memory Generator: Software for the Automatic Generation of DRM Stimulus Lists from Vector Spaces. *Psychonomic Society 65th Annual Meeting*, November 21-24, 2024 – New York City, New York, **USA.** Poster presentation**.**

Petilli, M.A., Rodio, F., Günther, F. & Marelli, M.
Visual Search and Stimulus Similarity: An Empirical Study with Real Images and Convolutional Neural Networks. *46th European Conference on Visual Perception (ECVP)*, August 25-29, 2024 – Aberdeen, UK. Oral presentation.

Petilli, M.A., Günther, F. & Marelli, M.
Improved Classification Accuracy in Deep Vision Models Does Not Come with Better Predictions of Perceptual Similarity.
45th Annual Meeting of the Cognitive Science Society (CogSci), July 24-27, 2024 – Rotterdam, Netherlands. Oral presentation.

Petilli, M.A., Marelli, M., Mazzoni, G., Marchetti, M., Rinaldi, L., & Gatti, D.
False Memory Generator: Leveraging Vector Spaces to Generate Word Lists that Induce False Memories. *International Word Processing Conference (WoProc 2024)*, July 4-6, 2024 – Faculty of Philosophy, University of Belgrade, Belgrade, Serbia. Oral presentation.

Petilli, M.A., Rodio, F., Günther, F. & Marelli, M.
Visual Search and Stimulus Similarity Revisited in the Era of Deep Learning: An Empirical Investigation using Real Image Stimuli.

29th Conference of the Italian Association of Psychology (AIP) – Experimental Section, September 18-20, 2023 – Lucca, Italy. Oral presentation.

Petilli, M.A., Rodio, F., Gatti D., Rinaldi, L. & Marelli, M.
Predicting False Memories with Data-Driven Computational Models: The Role of Visual and Linguistic Similarity in the DRM Paradigm.
23rd Conference of the European Society for Cognitive Psychology (ESCOP), September 6-9, 2023 – Porto, Portugal. Oral presentation.

Petilli, M.A. & Marelli, M.
Visual Intuitions in Blind People: The Role of Direct Sensory Experience on Concreteness and Imageability Ratings.
20th edition of Psycholinguistics in Flanders (PiF), May 29-31, 2023 – Ghent, Belgium. Poster presentation.

Petilli, M.A., Rodio, F., Gatti D., Rinaldi, L., & Marelli, M.
Predicting False Memories with Convolutional Neural Networks: The Effect of Visual Similarity in a DRM Paradigm with Pictorial Stimuli.
18th Conference of the Italian Association of Cognitive Science (AISC), December 15-17, 2022 – Rovereto, Trento, Italy. Oral presentation.

Petilli, M.A. & Marelli, M.
Imageability and Concreteness Ratings in Blind People: The Role of Direct Experience in Perceptual Judgments.
30th Conference of the Italian Association of Psychology (AIP) – All Sections, September 27-30, 2021 – Padua, Italy. Oral presentation.

Petilli, M.A. & Marelli, M.
Visual Intuitions in Blind People: The Role of Direct Experience in Perceptual Judgments.
European Workshop on Cognitive Neuropsychology (EWCN), January 24-28, 2022 – Online Conference. Oral presentation.

Petilli, M.A., Günther, F., & Marelli, M.
Objective Visual Frequency Norms: What 15 Years of Images Uploaded on Flickr.com Tell Us About Lexical Processing.
27th Conference of the Italian Association of Psychology (AIP) – Experimental Section, September 8-10, 2021 – Lecce, Italy. Oral presentation.

Petilli, M.A., Marini, F., & Daini, R.
Proactive Attentional Mechanisms in Visual Search.
Rovereto Attention Workshop (RAW) 2019, October 24-26, 2019 – Rovereto, Italy. Poster presentation.

Petilli, M.A., Ciapparelli, M., Günther, F., Vergallito, A., & Marelli, M.
Does Understanding Words Require Visual Simulation? Study of Lexical Priming with Data-Driven Computational Models.
25th Conference of the Italian Association of Psychology (AIP) – Experimental Section, September 18-20, 2019 – Milan, Italy. Oral presentation.

Petilli, M.A., Günther, F., Vergallito, A., Ciapparelli, M., & Marelli, M.
Does Word Processing Involve Perceptual Simulations? An Experiment with Semantic Priming and Vision-Based Distributional Models.
European Workshop on Cognitive Neuropsychology (EWCN), January 21-25, 2019 – Bressanone, Italy. Oral presentation.

Petilli, M.A., Trisolini, D.,Daini, R.
Sustained-Paced Finger Tapping: A New Approach to Measuring Sustained Attention.
27th Conference of the Italian Association for Research and Intervention in Learning Psychopathology (AIRIPA), September 28-29, 2018 – Arezzo, Italy. Oral presentation.

Petilli, M.A., Marini, F., Daini, R.
Proactive Control Mechanisms for Distractor Expectation in Visual Search.
European Conference on Visual Perception (ECVP), August 26-30, 2018 – Trieste, Italy. Poster presentation.

Petilli, M.A., Marini, F., Daini, R.
Distractor Expectation Modulates Proactive Control Mechanisms in Visual Search.
1st Joint Congress SEPEX, SEPNECA, AIP, July 3-6, 2018 – Madrid, Spain. Oral presentation.

Petilli, M.A., Marini, F., Daini, R.
Distractor Expectation Modulates Proactive Control in Visual Search.
Society for Neuroscience (SfN), November 12-16, 2016 – San Diego, California, USA. Poster presentation.

Petilli, M.A., Marini, F., & Daini, R.
Proactive Control Processes in Serial and Parallel Visual Search Tasks.
22nd Conference of the Italian Association of Psychology (AIP) – Experimental Section, September 20-22, 2016 – Rome, Italy. Oral presentation.

Petilli, M.A., Marini, F., Daini, R.
Proactive Attentional Mechanisms in Visual Search.
Rovereto Attention Workshop (RAW), November 5-8, 2015 – Rovereto, Italy. Poster presentation.

Petilli, M.A., Saibene, F., Rabuffetti, M., Baglio, F., Nemni, R., Daini, R.
Spatial and Temporal Indicators of Neuropsychological Disorders in Drawing.
33rd European Workshop on Cognitive Neuropsychology (EWCN), January 25-30, 2015 – Bressanone, Italy. Poster presentation.

ONLINE RESOURCES AND OPEN SCIENCE OUTPUTS

WEBSITES

ViSpa (Vision Spaces Website)
Description: Web interface for exploring similarity relations and downloading estimates of visual similarity among individual images and prototype-based visual representations for nearly 8,000 concepts.
Link: https://vectorswebtool.eu.pythonanywhere.com
Related article: https://doi.org/10.1037/rev0000392

SOFTWARE

FMG (False Memory Generator)
Description: Software for the automatic generation of DRM lists for the study of false memories. Originally developed in MATLAB, it is also available as a standalone version with a user-friendly graphical interface.
Availability: OSF
Licence: CC BY 4.0
Link: https://osf.io/gsrfu/
Related article: https://doi.org/10.3758/s13428-024-02425-0

FLICKR PHOTOS EXPLORER
Description: Software for quickly exploring and downloading image datasets grouped by tag from Flickr.com through the Flickr.photos.search API. It is designed to support the construction of image datasets for training visual models or building visual vector spaces. Developed in MATLAB, it is also available as a standalone version with a graphical interface.
Availability: OSF
Licence: CC BY 4.0
Link: https://osf.io/2zfs3/

T-RCF (Tablet-Based Rey Figure Copy Task)
Description: MATLAB application for the automated analysis of drawings from the Rey Figure Copy task acquired with a graphics tablet. The software extracts visuospatial, procedural, and motor performance indicators.
Availability: OSF
Licence: CC BY 4.0
Link: https://osf.io/rt4hp/
Related article: https://www.nature.com/articles/s41598-021-94247-9

VISPA CALCULATOR
Description: Standalone software with an intuitive graphical interface for converting individual images or batches of images into visual vector representations extracted from CNN-based visual models trained for object recognition. The software automatically computes similarity among uploaded images or among prototype-based representations of the objects depicted in them.
Availability: Beta version available on OSF
Link: https://osf.io/vze67/?view_only=006193bfc862427f80f1d0dc8c929160

LEXICAL NORMS

AMI – AFFECTIVE MEASURES FOR ITALIAN
Description: Valence, arousal, and dominance ratings for 13,495 Italian content words, including nouns, adjectives, and verbs. These norms provide affective variables for investigating lexical processing, semantic representation, and affective meaning.
Availability: OSF
Link: https://osf.io/afe26/

PERCEPTUAL MODALITY NORMS
Description: Perceptual strength estimates for the five senses for 1,121 Italian words. These norms can be used as control or target variables to investigate the role of perceptual experience associated with word referents and have been shown to predict human behaviour in lexical tasks such as lexical decision and picture naming.
Availability: OSF
Licence: CC BY 4.0
Link: https://osf.io/zdg59/
Related article: https://doi.org/10.3758/s13428-019-01337-8

FLICKR FREQUENCY NORMS
Description: Word frequency norms derived from an extralinguistic corpus, based on words used as image tags on Flickr.com. These norms provide a hybrid measure of linguistic and visual experience, capturing aspects of language use that are not represented in standard frequency measures.
Availability: OSF
Licence: CC BY 4.0
Link: https://osf.io/2zfs3/
Related article: https://doi.org/10.3758/s13428-022-02031-y

EDITORIAL ACTIVITIES AND OTHER PROFESSIONAL SERVICE

Review Editor: Perception Science Section of Frontiers in Psychology and Frontiers in Neuroscience

Ad Hoc Reviewer for Behavior Research Methods, Scientific Reports, Journal of Memory and Language, The Quarterly Journal of Experimental Psychology, Journal of Experimental Psychology: Learning, Memory, and Cognition, Cognitive Systems Research, Journal of Cognitive Psychology

Memberships (current and past):

- Italian Association of Psychology (AIP)
- European Society for Cognitive Psychology (ESCOP)
- Society for Neuroscience (SfN)
- Italian Association of Cognitive Science (AISC)