Mauro Manassi

Date and Place: 23 September 1983, Desenzano del Garda, BS (Italy)

Nationality: Ital

Italian

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(2019 - present) University of Aberdeen, UK

Lecturer (~Assistant Professor) at School of Psychology, Aberdeen

Research Theme "Perception and Attention"

(2015 - 2019) University of California, Berkeley, USA

Postdoctoral Researcher (Laboratory for Perception and Action, Prof. David Whitney)

 ${\bf (2009 - 2014)} \qquad \qquad {\bf Ecole \ Polytechnique \ F\'ed\'erale \ de \ Lausanne, \ CH}$

PhD in Neuroscience (Laboratory of Psychophysics, Prof. Michael Herzog)

(2002 - 2008) University of Padua, IT

Master Degree in Clinical Psychology (Summa Cum Laude)

Bachelor Degree in Psychology of Personality and Interpersonal Relationships

Teaching:

(2019 - present) Lecturer in the following courses at University of Aberdeen:

Current Topics in Psychological Studies (PS4040): Methodology B (PS3522):

Biological Psychology (PS3014); Cognitive Neuroscience (PS3524); Introduction and Methods to Analysis in Psychology (PS5014);

Course Coordinator: MSc Methods and Analysis in Psychology (PS5529)

(2016 - 2021) Guest Lecturer at:

Padua University (Virtual Exchange in Psychology; 2021)

UC Berkeley (Perception class 126; 2015-2019) UC San Francisco (Neuroscience class; 2017)

California State University, East Bay (Philosophy class; 2017)

Perception Science Internship (2016-2019): Organizer and teacher in a High School students program on neuroscience, visual perception, computer programming, statisti-

cal analysis and scientific writing/presentation skills (4 weeks duration)

Science Outreach Program (2015-2019): Presentations and demos on vision and perception science for local schools in socially and economically disadvantages areas

(2009 - present) Supervisor of over 40 undergraduates and research assistants.

Current PhD student: Fiammetta Marini

Publications:

Research interests: crowding, spatial vision, priming, serial dependence, dyslexia, medical image perception

- 21. Pilz K., Äijälä J., & Manassi M. (2020). Selective age-related changes in orientation perception. *Journal of Vision* 20 (13), 1-12. https://doi.org/10.1167/jov.20.13.13 ISSN 1534-7362.
- 20. Doerig A., Schmittwilken L., Sayim B., **Manassi M.**, & Herzog M.H. (2020). Capsule networks as recurrent models of grouping and segmentation. *PLoS Computational Biology* 16(7):e1008017. https://doi.org/10.1371/journal.pcbi.1008017 ISSN 1553-7358.
- 19. Xia, Y., **Manassi, M.**, Nakayama, K., Zipser K. & Whitney D. (2020). Visual crowding in driving. *Journal of Vision* 20 (6), 1-17. https://doi.org/10.1167/jov.20.6.1 ISSN 1534-7362.
- 18. Manassi, M., Kristjansson A. & Whitney D. (2019). Serial dependence in a simulated clinical visual search task. *Scientific Reports* 9 (1), 1-10. https://doi.org/10.1038/s41598-019-56315-z ISSN 2045-2322.



- 17. Doerig, A., Schmittwilken, L., **Manassi, M.**, & Herzog, M. H. (2019). Towards Global Recurrent Models of Visual Processing: Capsule Networks. *Conference on Cognitive Computational Neuroscience*, Submission ID, 1066.
- 16. Liberman*, A., Manassi*, M., & Whitney D. (2018). (*equal contribution) Serial dependence promotes the stability of perceived emotional expression depending on face similarity. *Attention, Perception, and Psychophysics* 80(6) p 1461-1473. https://doi.org/10.3758/s13414-018-1533-8 ISSN 1943-393X.
- 15. Manassi, M., Liberman, A., Kosovicheva A., Zhang K., & Whitney D. (2018). Serial dependence in position occurs at the time of perception. *Psychonomic Bulletin and Review* (2018) 25(6) p 2245-2253. https://doi.org/10.3758/s13423-018-1454-5 ISSN 1531-5320.
- 14. **Manassi, M.**, & Whitney D. (2018). Multi-level crowding and the paradox of object recognition in clutter. *Current Biology*, 28(3), p 127-133. https://doi.org/10.1016/j.cub.2017.12.051 ISSN 0960-9822.
- 13. Manassi, M., Liberman, A., Chaney W., & Whitney D. (2017). The perceived stability of scenes: serial dependence in ensemble representations. *Scientific Reports*, 7(1), 1971. https://doi.org/10.1038/s41598-017-02201-5 ISSN 2045-2322
- 12. Francis, G., **Manassi, M.**, & Herzog M.H., V. (2017). Neural dynamics of grouping and segmentation explain properties of visual crowding. *Psychological Review*, 124(4), p 483-504. https://psycnet.apa.org/doi/10.1037/rev0000070 ISSN 1939-1471.
- 11. Herzog, M.H., Sayim, B., **Manassi, M.**, & Chicherov, V. (2016). What crowds in crowding? *Journal of Vision*, 16(11):25, 1-4. Introduction to special issue Crowding: new vistas. https://doi.org/10.1167/16.11.25 ISSN 1534-7362.
- 10. Manassi, M., Lonchampt, S., Clarke, A., & Herzog, M.H. (2016). What crowding can tell us about object representations. *Journal of Vision*, 16(3):35, p 1-13. https://doi.org/10.1167/16.3.35 ISSN 1534-7362.
- 9. Doron, A., Manassi, M., Herzog, M.H., & Ahissar, M. (2015). Intact crowding and temporal masking in dyslexia. *Journal of Vision*, 15(14):13, p 1-17. https://doi.org/10.1167/15.14.13 ISSN 1534-7362.
- 8. Pavan, A., Gall, M., **Manassi, M.**, & Greenlee, M. (2015). No priming for global motion in crowding. *Journal of Vision*, 15(9):25, p 1-24. https://doi.org/10.1167/15.9.25 ISSN 1534-7362.
- 7. **Manassi, M.**, Hermens, F., Francis, G., & Herzog, M.H. (2015). Release of crowding by pattern completion. *Journal of Vision*, 15(8):16, p 1-15. https://doi.org/10.1167/15.8.16 ISSN 1534-7362.
- 6. Herzog, M.H., Sayim, B., Chicherov, V., & Manassi, M. (2015). Crowding, grouping, and object recognition: A matter of appearance. *Journal of Vision*, 15(6):5, p 1-18. https://doi.org/10.1167/15.6.5 ISSN 1534-7362.
- 5. Herzog, M.H., & Manassi, M. (2015). Uncorking the bottleneck of crowding: a fresh look at object recognition. Current Opinion in Behavioral Sciences, 1: p 86-93. https://doi.org/10.1016/j.cobeha.2014.10.006 ISSN 2352-1554.
- 4. Sayim, B., Manassi, M., & Herzog, M.H. (2014). How color, regularity, and good Gestalt determine backward masking. *Journal of Vision*, 14(7), 8: p 1-11. https://doi.org/10.1167/14.7.8 ISSN 1534-7362.
- 3. **Manassi M.**, Sayim B, & Herzog M.H. (2013). When crowding of crowding leads to uncrowding. *Journal of Vision*, 13(13), p 1-10. https://doi.org/10.1167/13.13.10 ISSN 1534-7362.
- 2. **Manassi M.**, Sayim B., & Herzog M.H. (2012). Grouping, pooling, and when bigger is better in visual crowding. *Journal of Vision*, 12(10), p 1-14. https://doi.org/10.1167/12.10.13 ISSN 1534-7362.
- 1. Pavan A., Campana G., Guerreschi M., Manassi M., & Casco C. (2009). Separate motion-detecting mechanisms for first- and second-order patterns revealed by rapid forms of visual motion priming and motion aftereffect. *Journal of Vision*, 9(11):27, p 1-16. https://doi.org/10.1167/9.11.27 ISSN 1534-7362.

Scientific Talks:

Conferences:

- 10. Manassi M., Zhang, K, Whitney D. (2019). Dissociating perceptual serial dependence from working memory. 42nd European Conference on Visual Perception (Leuven, BE). SESSION CHAIR
- 9. Manassi M., Whitney D. (2018). The illusion of perceptual stability through serial dependence. 41st European Conference on Visual Perception (Trieste, IT).
- 8. Manassi M., Kristjansson A., Whitney D. (2017). Serial dependence in visual search. 40th European Conference on Visual Perception (Berlin, DE).
- 7. Manassi M., Kristjansson A., Whitney D. (2017). Serial dependence determines object classification in visual search. Vision Sciences Society Meeting (St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).

- 6. Manassi M., Liberman, A., Chaney, W., Whitney D. (2016). Serial dependence in context: the role of summary statistics. 38th European Conference on Visual Perception (Barcelona, ESP).
- 5. Manassi M., Clarke A., Herzog M.H. (2015). Uncorking the bottleneck of crowding. Vision Science Society Meeting (St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 4. Manassi M., Clarke A., Chicherov V., Herzog M.H. (2014). Crowding, Grouping, Timing. Vision Science Society Meeting (St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 3. Manassi M., Herzog M.H. (2013). Crowding and grouping: how much time is needed to process good Gestalt? 36th European Conference on Visual Perception (Bremen, DE).
- 2. Manassi M., Sayim B., Herzog M.H. (2013). Crowding of crowding leads to uncrowding. Vision Sciences Society Meeting (Naples, FL, USA; Vision Science Society Annual Meeting).
- 1. Manassi M., Herzog M.H. (2012). When crowding of crowding leads to uncrowding. 35rd European Conference on Visual Perception (Alghero, IT).

Invited Talks:

- 11. Manassi M. (2021). The Multi-level Paradox of Visual Crowding. University of Padua (IT).
- 10. Manassi M. (2021). What is serially-dependent perception good for? University of Fribourg (CH).
- 9. Manassi M. (2020). Two sides of serial dependence. Ecole Polytechnique Fédérale de Lausanne (CH).
- 8. Manassi M. (2020). Adaptive and maladaptive serial dependencies in visual perception. Virtual Vision Brunch (Stanford, USA).
- 7. Manassi M. (2020). Beneficial and detrimental serial dependencies in visual perception. Online colloquium at LMU (Munich, DE).
- 6. Manassi M. (2019). The Paradox of Crowding. 2nd International Workshop on Visual Crowding (Murten, CH).
- 5. Manassi M. (2018). Two Sides of the Same Coin: Beneficial and Harmful Serial Dependence in Visual Perception (Bilkent University, Turkey).
- 4. Manassi M. (2017). Beneficial and Harmful Serial Dependence in Visual Perception (Edge Hill University, UK).
- 3. Manassi M. (2016). Serial dependence in complex environments. Cognitive Neuro Colloquia in Berkeley (USA).
- 2. Manassi M. (2015). Putting serial dependence in context. Perception Seminar in Aberdeen (UK).
- 1. Manassi M. (2013). Crowding, Grouping and Object Recognition. 1st International Workshop on Visual Crowding (Murten, CH).

Funding Experience:

- Carnegie Research Incentive Grant RG15781 (2020).
- NIH R01 grant 1R01CA236793-01, in collaboration with prof. David Whitney, Berkeley (2019).
- "Early Postdoc. Mobility" fellowship from Swiss National Science Foundation P2ELP3-158876 (2015-2016).

Administrative Experience:

- Active member of Ethics Committee.
- School Seminar organizer.
- Data Protection Champion of School of Psychology.

Professional affiliations and memberships:

- Active member of Experimental Psychology Society (EPS, 2020-2022).
- Faculty Board Member of Brain & Mind Doctoral Program at Padua University (2021-present).
- Committee member in "Current Trends in Psychology conference", Novi Sad, Serbia (2021)
- Vision Sciences Society (2011-2019).

Miscellaneous:

- Special Issue organization on "Crowding: New Vistas" in Journal of Vision (2015).
- Nominated for the Brain Mind Institude Best Thesis Prize (2014).
- Workshop organization on "Crowding and object recognition", Jongny, CH (2013).

Journal reviewer: Attention, Perception, and Psychophysics; Behaviour Research Methods; Brain Sciences; British Journal of Psychology; Cerebral Cortex; Cognition; Cognitive Psychology; Cognition and Emotion; Cortex; Experimental Brain Research; Frontiers in Psychology; Frontiers in Neuroscience; i-Perception; Journal of Experimental Psychology: General; Journal of Neurophysiology; Journal of Vision; Perception; Plos One; Psychological Science; Royal Society Open Sciences; Scientific Reports, Vision Research.

Conference reviewer: Conference on Cognitive Computational Neuroscience (CCN); European Conference on Visual Perception (ECVP).

Grant reviewer: Marsden Fund Proposal (New Zealand), Icelandic Research Funds (Iceland), BSRRC (UK Research and Innovation), FWF Austrian Science Fund (Austria), Estonian Research Council (Estonia).

Languages:

Computer Knowledge/Experimental Techniques:

• Italian: Native

• English: Full proficiency

• French: Working proficiency

- Coding languages: Matlab, Python, Javascript, HTML, CSS
- Online data collecting: Mechanical Turk, Qualtrics, PsychoPy
- MS-Office, LaTeX, Adobe Illustrator, Photoshop, R
- Research experience with TMS and tDCS

Personal Interests:

- Director of Academic and Networking activities at http://italiansociety.berkeley.edu/
- Actor and Director for improvisational theatre.

Conference Proceedings:

- 27. Marini F., Pilz K., Manassi M. (2021) Age and visual environment determine orientation perception. (March 26, 2021 Virtual Meeting of Scottish Vision Society, UK).
- 26. Manassi M. (2020) Illusion of visual stability through active perceptual serial dependence. (July 2, 2020 Virtual Meeting of Experimental Psychology Society).
- 25. Ghirardo C., Manassi M., Canas Bajo T., Prinzmetal B., Whitney D. (2020) Simulated tumor recognition in mammograms is biased by serial dependence. (May 17-22, 2020 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting). https://doi.org/10.1167/jov.20.11.1202
- 24. Canas Bajo T., Manassi M., Whitney D. (2019). Individual Differences in Holistic Processing of Mooney Faces. (May 17-22, 2019 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 23. Manassi M., Whitney D. (2019) Change blindness from serial dependence (May 17-22, 2019 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 22. Manassi M., Prinzmetal B., Amano A., Whitney D. (2018). Serial dependence fluctuates at alpha rhythms. (May 18-23, 2018 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 21. Murai Y., Manassi M., Prinzmetal B., Amano A., Whitney D. (2018). Serial dependence fluctuates at alpha rhythms. (May 18-23, 2018 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 20. Manassi M., Murai Y., Whitney D. (2018). Serial Dependence on a Large Scale. (May 18-23, 2018 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 19. Whitney D., Chaney W., Fischer J., Liberman A., Manassi M., Xia Y. (2016). The Continuity Field (CF): a mechanism for perceptual stability via dependence. 38th Europen Conference on Visual Perception (August 28th-1st September 2017 in Barcelona, ESP).
- 18. Kiyonaga A., Manassi M., D'Esposito M., Whitney D. (2016). Context transitions modulate perceptual serial dependence. (May 13-18, 2016 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 17. Francis G., Manassi M., Herzog M.H. (2016). Cortical Dynamics of Perceptual Grouping and Segmentation: Crowding. (May 13-18, 2016 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 16. Manassi M., Liberman A., Chaney W., Whitney D. (2016). The serial dependence of perception in crowds. (May 13-18, 2016 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 15. Manassi M., Herzog M.H. (2015). Crowding and Shape Representations. 37th European Conference on Visual Perception (August 23-27, 2015 in Liverpool, UK)
- 14. Manassi M., Clarke A., Herzog M.H. (2015). Uncorking the bottleneck of crowding. Vision Science Society Meeting (May 15-20, 2015 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).

- 13. Herzog M.H., Manassi M., Hermens F., Francis G., (2015). Crowding, Patterns, and Recurrent Processing. Vision Science Society Meeting (May 15-20, 2015 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 12. Manassi M., Clarke A., Chicherov V., Herzog M.H. (2014). Crowding, grouping, timing. Vision Science Society Meeting (May 16-21, 2014 in St. Pete Beach, FL, USA; Vision Science Society Annual Meeting).
- 11. Manassi M., Herzog M.H. (2013). Crowding and grouping: how much time is needed to process good Gestalt? 36th European Conference on Visual Perception (August 25-29, 2013 in Bremen, DE), Perception, 42, p229.
- 10. Manassi M., Sayim B., Herzog M.H. (2013). Crowding of crowding leads to uncrowding. Vision Sciences Society Meeting (May 10-15, 2013 in Naples, FL, USA; Vision Science Society Annual Meeting).
- 9. Manassi M., Herzog M.H. (2012). When crowding of crowding leads to uncrowding. 35rd European Conference on Visual Perception (September 1-5, 2012 in Alghero, IT).
- 8. Manassi M., Hermens F., Francis G., Herzog M.H. (2012). When the picture is complete, crowding disappears, and grouping rules. Vision Sciences Society Meeting (May 11-16, 2012 in Naples, FL, USA; Vision Science Society Annual Meeting).
- 7. Manassi M., Sayim B., Herzog M.H. (2011). How grouping determines crowding. 12th Congress of the Swiss Psychological Society (11-13 September, 2011 in Fribourg, CH).
- 6. Manassi M., Sayim B., Herzog M.H. (2011). Grouping trumps pooling and centroids in crowding. 34th European Conference on Visual Perception (Toulouse, FR).
- 5. Manassi M., Sayim B., Herzog M.H. (2011). When bigger is better. Vision Sciences Society Meeting (May 6-11, 2011 in Naples, FL, USA; Vision Science Society Annual Meeting).
- 4. Manassi M., Sayim B., Herzog M.H. (2010). In contextual modulation, bigger is not better for low luminance stimuli. 33rd European Conference on Visual Perception (Lausanne, CH).
- 3. Sayim B., Manassi M., Herzog M.H. (2010). How good Gestalt counteracts clutter in contextual modulation. 33rd European Conference on Visual Perception (Lausanne, CH).
- 2. Manassi M., Sayim B., Herzog M.H. (2010). Gestalt determines contextual modulation. Lemanic Neuroscience Annual Meeting (October 29, 2010 in Geneva, CH).
- 1. Manassi M., Pavan A., Campana G., Guerreschi M., Casco C. (2009). Separate motion-detecting mechanisms for first- and second-order patterns revealed by rapid forms of visual motion priming and motion aftereffect. 32nd European Conference on Visual Perception (Regensburg, DE).