Mauro Manassi

Date and Place: 23 September 1983, Desenzano del Garda, BS (Italy)
Nationality: Italian
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Education and Current Employement:

(2019 - present)	**Lecturer (~Assistant Professor)** at School of Psychology Research Theme "Perception and Attention" University of Aberdeen, UK
(2015 - 2019)	**Postdoctoral Researcher** (Laboratory for Perception, Prof. David Whitney) University of California, Berkeley, USA
(2009 - 2014)	**PhD in Neuroscience** (Laboratory of Psychophysics, Prof. Michael Herzog) Ecole Polytechnique Fédérale de Lausanne, CH
(2002 - 2008)	**Master Degree in Clinical Psychology** (110/110 Summa Cum Laude) **Bachelor Degree in Psychology of Personality** (101/110) University of Padua, IT

Teaching/Supervising Experience:

(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) · 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)
(2009 - present)	**Supervisor** of over 40 undergraduates and research assistants. Current PhD student: Fiammetta Marini

Publications:

Research interests: visual crowding, serial dependence, medical image perception

24. **Manassi M.** & Whitney D. (2022). Illusion of visual stability through active perceptual serial dependence. *Science Advances.* 8(2), eabk2480. https://doi.org/10.1126/sciadv.abk2480 ISSN 2375-2548.

23. Bornet A., Choung O.H., Doerig A., Whitney D., Herzog M.H., **Manassi M.** (2021). Global and high-level effects in crowding cannot be predicted by either high-dimensional pooling or target cueing. *Journal of Vision* 21(12):10. https://doi.org/10.1167/jov.21.12.10 ISSN 1534-7362.

22. **Manassi M.**, Ghirardo C., Canas-Bajo T., Ren Z. & Whitney D. (2021). Serial dependence in the perceptual judgements of radiologists. *Cognitive Research: Principles and Implications* 6, 65. https://doi.org/10.1186/s41235-021-00331-z. ISSN 2365-7464.

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.

Awards:

- British Psychology Society Cognitive Psychology Section Award: Best Research Article of the Year (2022)
- Nominated for the Brain Mind Institude Best Thesis Prize (2014)

Scientific Talks:

Conferences:

12. Manassi M. (2021). Il paradosso del crowding visivo nel riconoscimento facciale. Congresso Associazione Italiana di Psicologia (Lecce, IT).

11. Manassi M., Zhang, K, Whitney D. (2019). Dissociating perceptual serial dependence from working memory. 42nd European Conference on Visual Perception (Leuven, BE). SESSION CHAIR

10. Manassi M., Whitney D. (2018). The illusion of perceptual stability through serial dependence. 41st European Conference on Visual Perception (Trieste, IT).

9. Manassi M., Kristjansson A., Whitney D. (2017). Serial dependence in visual search. 40th European Conference on Visual Perception (Berlin, DE).

8. 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).

7. 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).

6. 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).

5. 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).

4. 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).

3. 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).

2. Manassi M., Herzog M.H. (2012). When crowding of crowding leads to uncrowding. 35rd European Conference on Visual Perception (Alghero, IT).

1. 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).

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 (2021-2022).
- 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
- Member of Research Committee for recruitment in School of Psychology
- Social convenor of School of Psychology

Outreach Experience:

- **Philosophy Café**: Active member of a programme of discussion evenings which gives lecturers the opportunity to share their research. Talk title: How do we perceive a coherent visual world? (2022)
- **Media Interviews**: News on my research were reported by more than 100 international media outlets, with more than 25 interviews (United Kingdom, Italy, Mexico, US, France, Israel, Saudi Arabia, Spain, China, India, New Zealand, Japan, etc.).
- **Media Outreach**: I have created a novel visual illusion based on my research which has gone viral on the internet with more than 220'000 views (https://youtu.be/cLqVwvdOzuk).
- **Science Journalism**: I have written a popular science article on The Conversation with more than 237'000 views (Everything we see is a mash-up of the brains last 15 seconds of visual information).
- **Perception Science Internship**: Organizer and teacher in a High School students program on neuroscience, coding, statistical analysis and scientific writing/presentation skills (4 weeks duration; 2015-2019).
- **Science Outreach Program**: Presentations and demos on vision and perception science for local schools in socially and economically disadvantages areas (2015-2019).

Professional affiliations and memberships:

- Assocazione Italiana di Psicologia (AIP, 2021-present)
- Experimental Psychology Society (EPS, 2020-present)
- Vision Sciences Society (2011-present)
- Faculty Board Member of Brain & Mind Doctoral Program at Padua University (2021-present)
- Programme Committee member in "Current Trends in Psychology conference", Novi Sad, Serbia (2021)

Miscellaneous:

- Special Issue organization on "Crowding: New Vistas" in Journal of Vision (2015).
- Workshop organization on "Crowding and object recognition", Jongny, CH (2013).
- Journal Editor: *Special Issue "Selected Papers from the Scottish Vision Group Meeting 2022" on Vision:* https://www.mdpi.com/journal/vision/special_issues/SVG2022.
- 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).*
- 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 Medical Imaging; Journal of Neurophysiology; Journal of Vision; Multisensory Research; 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).*

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:

25. Marini F., Pilz K., Manassi M. (2021) Selective age-related changes in orientation perception gradually emerge across lifespan. 43th European Conference on Visual Perception (August 22-26 September 2021 online).

24. Marini F., Pilz K., Manassi M. (2021) Age and visual environment determine orientation perception. (March 26, 2021 Virtual Meeting of Scottish Vision Society, UK).

23. Manassi M. (2020) Illusion of visual stability through active perceptual serial dependence. (July 2, 2020 Virtual Meeting of Experimental Psychology Society).

22. 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

21. 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).

20. 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).

19. 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).

18. 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).

17. 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 European Conference on Visual Perception (August 28th-1st September 2017 in Barcelona, ESP).

16. 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).

15. 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).

14. 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).

13. Manassi M., Herzog M.H. (2015). Crowding and Shape Representations. 37th European Conference on Visual Perception (August 23-27, 2015 in Liverpool, UK)

12. 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).

11. 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).

10. 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).

9. 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.

8. 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).

7. 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).

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).