**CURRICULUM VITAE – updated 11/11/24**

**Yoni Pertzov**

**1. Personal Details**

Country of birth: Israel

Contact: Private 050-215-7005, e-mail: yoni.pertzov@mail.huji.ac.il

Lab website: www.pertzov.com

**2. Higher Education**

2000-2004: B.Sc., Communication Systems Engineering. *Magna cum laude*, Ben-Gurion University, Israel.

2004-2006: M.Sc., Computation and Information Processing in the Brain (Direct PhD track), Hebrew University.

2006-2010: Ph.D., Computation and Information Processing in the Brain (Direct PhD track), Supervisors: Prof. E. Zohary and Prof. G. Avidan. #1, 3-9 *[Items number 1 and 3 to 9 in the List of Publications resulted from this research*.*]*

2010-2013: Post-Doctoral fellow, Institute of Cognitive Science, University College London. Hosting lab: Prof. Masud Husain, Cognitive Neurology Lab. #10-17

**3. Appointments at the Hebrew University**

2013 July -2021 Jan: Senior lecturer, Department of Psychology, Faculty of Social Science.

2019 Sept -present: Tenure in the Department of Psychology, Faculty of Social Science.

2021 Jan-present: Associate Professor, Department of Psychology, Faculty of Social Science.

**4. Additional functions at the Hebrew University**

2014-2019: Head of the departmental ethics committee.

2017-present: Member of the department & faculty scholarship committee.

2020-present: Member of the organizing committee of the Jerusalem Brain Community (JBC).

2020-present: Head of the Shturman fellowship committee.

2022-present: Member of the departmental doctoral committee.

2022-present: Member of the departmental development committee.

**5. Service in other Academic and Research Institutions**

Panel member in the Israel Science Foundation (ISF) x 3 times.

Head of a committee in the Israel Science Foundation (ISF).

**6a. Academic awards:**

2010: Elsevier/Vision Research Travel Award for excellence in Vision Research.

2010: Golda Meir Fellow, Hebrew University.

2011: Guarantors of Brain award UK.

2014: Alon fellowship for outstanding young researchers, Israeli academy of science.

2014: Cermak Award for best presentation in the field of memory, International Neuropsychological Society (INS).

**6b. Other Academic Activity**

2010-present: Ad hoc reviewer for: [Aging, Neuropsychology, and Co](https://publons.com/journal/6986/aging-neuropsychology-and-cognition)gnition; Attention, Perception & Psychophysics; Brain; Cerebral Cortex; Journal of Philosophical Transactions B; The Journal of Neuroscience; Journal of Vision; Journal of Experimental Psychology HPP; Journal of Experimental Psychology LMC; Journal of Experimental Psychology General ; Quarterly Journal of Experimental Psychology; Journal of Neurophysiology; Neuropsychologia; Nature Human Behavior; Memory; Perception; Psychopharmacology; [Psychonomic Bulletin & Review](https://publons.com/journal/22459/psychonomic-bulletin-review). United States – Israel Binational Science Foundation (BSF). Israel Science Foundation (ISF). German-Israeli Foundation for Scientific Research and Development (GIF).

2013 Visiting Fellowship for Teaching Neuroethics. University of Pennsylvania.

2016-2021: Reviewer for the Israeli National Institute for Testing and Evaluation.

2018-2021: Member of the organizing committee of the Conference of the Israeli Society for Cognitive Psychology (ISCoP).

**Professional memberships**

2010-2017 Vision Sciences Society (VSS).

2013-2016 Israeli Society of Neuroscience (ISFN).

2014-present Jerusalem Brain Community (JBC)

2015-present Israeli Society of Cognitive Psychology (ISCoP).

2007-2011 Society of Neuroscience (SFN)

2010 Organization for Human Brain Mapping (OHBM).

2011- 2013 American Psychological Association (APA).

2013 British Neuroscience Association (BNA).

**6c Social impact/service**

2014 Contributed to “Lama” exhibition.

2015 Steering committee of “science night” at the Hebrew U.

2018 Article in TheMarker (Hebrew) <https://www.themarker.com/law/2018-04-04/ty-article/0000017f-db24-d856-a37f-ffe4ab240000>

2018 Interview in ErevHadash (Hebrew) <https://www.youtube.com/watch?v=8-sNMIbxB0o&t=759s>

2023 Invited talk at the Society of the Israeli Polygraph Examiners. Ramat Gan, Israel. Title Eye movements as a tool for revealing concealed memories and deception.

2023 Invited visit to Nagoya’s Police Polygraph department. Nagoya, Japan.

**7. Research Grants**

**2014-2019:** Israel Science Foundation (ISF) Research Grant, “Remembering what was where, from neural mechanisms to clinical implications”. Single PI: Pertzov, 1,000,000 NIS 5 years. Publications # 18 20-24 26 27 32 33

**2014-2019:** Israel Science Foundation (ISF) Equipment Grant, “Remembering what was where, from neural mechanisms to clinical implications”. Single PI: Pertzov, 360,000 NIS (matched by NIS 360,000 from the Hebrew University).

**2017:**  German-Israeli Foundation (GIF) young Research Grant. “Accessing concealed memory traces of personally familiar faces via eye movements”. Single PI: Pertzov. 20,000 Euro. Publications # 25

**2017-2018:** ElMindA Ltd Service Agreement, “Diagnosing traumatic brain injury using eye movements”. Single PI: Pertzov. 60,000 NIS.

**2017-2018:** The National Institute for Psychobiology in Israel (NIPI) Research Grant, “Quantification and modulation of atypical gaze scanning of complex social scenes in individuals with anxiety disorder and autism symptoms”. PI with Dr Salomon Israel (HUJI), 25,000 $ a year, 25,000 $ to Pertzov.

**2017-2018:** China-Israel cooperative scientific research grant, “Cognitive and Neural Underpinnings of Retaining Bindings in Working Memory”. Collaborate Investigator. PI is Prof Deouell (HUJI), 507,000 NIS to Israeli side (both researchers).

**2018-2020**: JOY Ventures Academic Grant: Eye to eye: Identification and remediation of social-communication deficits using eye movements”. 80,000$ for two years. Co-investigator with Dr Salomon Israel and Prof Hill Aviezer. Publications # 45 54

**2018-2020**: MAGNETON Incentive program by the Israel Innovation Authority “Combining eye movements and EEG to predict treatment success in major depressive disorder”. 346,000 NIS per year to Pertzov’s lab. Co-investigator with Elminda Ltd and Sheba Hospital.

**2020-2025:** Israel Science Foundation (ISF) Research Grant, “The Missing Component of the Active Vision Loop: The Observer Factor”. Single PI: Pertzov, 1,250,000 NIS 5 years. Publications # 31 37 38 42 46 54 58

**2022-2023:** Prime Minister Office. “Develop a tool for assessment of deception. Asses the sensitivity and validity of this tool”. 140,000 NIS. Principal Investigator.

**2023-2024:** Prime Minister Office. “Assessment of personality using web-based eye tracking” 89,000 NIS. Principal Investigator. 120,000 NIS. Principal Investigator. The project is currently frozen.

**8. Teaching at the Hebrew University**

a) Supervision of Master’s and Doctoral degree students:

Master’s degree students:

2014 - 2016 Dana Krill, #26 35 Master in clinical neuropsychology, *cum laude*.

 "Forgetting of faces across seconds"

2014 - 2016 Haggar Cohen-Dallal, Master in clinical neuropsychology, *cum laude*.

“What Effects the Rate of Forgetting from Visual Short-Term Memory”

2014 - 2016 Hila Shwartz, Master in clinical neuropsychology.

“Binding in working memory in individuals with ADHD”

2015 – 2017 Zviki Meir, Master in clinical neuropsychology.

“Eye movements and determining what was where”

2015 – 2017 Nitzan Guy, Master in cognitive studies, *summa cum laude*.

“Functional connectivity and binding in visual memory”

2017 – 2021 Noa Rahamim Elyakim, Master in clinical neuropsychology.

“Language and Maintaining Visual Information”

2020 – 2022 Ohad Marcus, Master in experimental psychology.

“Gaze deployment towards distractions in complex dynamic tasks”

2022 – 2024 Yarden Meyer, Master in cognitive sciences.

“The truthiness effect and eye movements”

2022 – 2024 Liat Rafaeli, Master in cognitive sciences.

“Distractibility and ADHD symptoms”

2023 – present Nave Deri, Master in experimental neuropsychology.

“Concealed information tests in virtual reality”

2024 – present Shira Avital, Master in cognitive sciences.

“Individual differences in eye movements and interpretation of ambiguous social interactions”

2024 – present Liat Hershkovitz, Master in experimental neuropsychology.

“Implications of gaze distractibility in individuals with ADHD”

Doctoral degree students:

2016 - to 2022, Haggar Cohen, #27 48 51 PhD in clinical neuropsychology.

“What Effects the Rate of Forgetting from Visual Short-Term Memory?”

 Joseph Trink scholarship.

2016 - to 2023, Oryah Lancry, # 25 30 37 42 50 direct PhD program in clinical neuropsychology.

“The Missing Component of the Active Vision Loop: the Role of Memory”. President scholarship.

 Received the Post Doc Rotshield’s and VATAT fellowships, currently a post-doc at Harvard Medical School

2017 – to 2023, Tal Nahari, # 28 46 PhD candidate, PhD program in cognitive sciences. “Exploring the world and our mind”.

 President & Azrieli scholarship. Shlomiuk Award for outstanding Ph.D. Research.

Received a Post Doc fellowship from the Hebrew U and currently a post-doc at UCL

2017 – to 2023, Nitzan Guy, # 31 37 54 58 PhD candidate, PhD program in cognitive sciences.

“Looking through other people’s eyes: Exploring the reasons and consequences of individuals’ unique gaze behavior”.

 JBC scholarship

 Currently a post-doc in Tel Aviv University

2019 - to 2023, Ine van der Cruyssen, # 59 60 Joint PhD candidate with University of Amsterdam. Co-supervisors - Bruno Verschuere; Gershon Ben Shakhar “Reading the criminal mind Exploring novel methods of memory detection”

 President & Mandel scholarships.

2020 - to 2024, Sera Wiechert, # 57 61 Joint PhD candidate with University of Amsterdam. Co-supervisors - Bruno Verschuere; Gershon Ben Shakhar

 “How fallible are memories? Investigating memory phenomena: comparing meta-analysis and replication effect sizes”

 Declined HUJI’s President Scholarship

Currently a post-doc at [Max Planck Institute for the Study of Crime, Security and Law in Freiburg](https://csl.mpg.de/en)

2023 - to present, Zoe Salzer, PhD in experimental psychology.

 “Individual differences in eye movements and narrative understanding”

 “Atid Baivrit” scholarship

2023 - to present, Hodaya Malka, PhD in clinical neuropsychology. Co-supervisor – Hillel Aviezer

 “Gaze of individuals with ADHD and emotion perception”

b) Post-doctoral Fellows and Visitors:

2018 - 2019, Asael Sklar, #62 Post-doctoral Fellow. Now faculty in Reichman University.

2018 - 2020, Nathalie klein Selle, #38 55 Post-doctoral Fellow. Now faculty in Bar Ilan University.

2024 - Present, Liat Israeli-Ran, Post-doctoral Fellow.

c) Courses Taught by Candidate

*BA level:*

“Introduction to statistical thinking”.

“Lab research experience”.

“Introduction to psychological science: Attention and eye movements”.

*MA and PhD level:*

“Selected topics in cognitive science: Applied perspective”.

“Neuroethics” (open to all students, many students from law school and philosophy).

“Seminar on Visual Working Memory”.

“Seminar on Eye Movements and Higher Level Cognition”.

**B. LIST OF PUBLICATIONS**

**Candidate's name: Yoni Pertzov**

**Last updated: 10. 11.24**

**Total citations 2364**; i10-index 40; h-index 22 (source: Google Scholar)

IF – 2 Years Impact Factor according to ISI

JIFP – Journal Impact Factor Percentile (within its category, based on ISI)

JCIP- Journal Citation Index Percentile (within its category, based on ISI)

SJRP - Journal Percentile according to SJR (within its category)

GSC – Google Scholar Citations

PI- Principal Investigator  S- Student  C-Co-researcher

**B1 DOCTORAL DISSERTATION**

1. **Pertzov, Y.** (2010). # 3 4 6 8 “Active vision: The role of eye movements in the perception of visual stimuli” Doctoral dissertation. Supervisors: Professors Ehud Zohary and Galia Avidan. Degree awarded on November 2010, Publications #3,4,6 & 8 in the article list resulted from the dissertation.

**B2 BOOKS:** N/A**; BOOKS EDITED:** N/A; **CHAPTERS IN COLLECTIONS**:

1. Gammer M **PI**, **Pertzov Y PI**. (2018) Detecting Concealed Knowledge From Ocular Responses. Book: *Detecting Concealed Information and Deception: Verbal, Behavioral, and Biological Methods* (pp. 169-186). [GSC: 5]**.**

**B5 ARTICLES:**

1. **Pertzov Y S**, Avidan G **C**, Zohary E **PI**. (2009) Accumulation of visual information across multiple fixations. Journal of Vision 9(10) 1-12.

[IF= 3.02, JIFP 88% OPHTHALMOLOGY; JCIP= 75%; SJRP= 88%; GSC= 100]

1. **Pertzov Y S**, Zohary E **C**, Avidan G **PI**. (2009) Implicitly perceived objects attract gaze during later free viewing. Journal of Vision 9(6) 1-12.

[IF= 3.02, JIFP 88%% OPHTHALMOLOGY; JCIP= 75%; SJRP= 88%; GSC= 9]

1. McKyton A **S**, **Pertzov Y S**, & Zohary E **PI**. (2009) Pattern matching is assessed in retinotopic coordinates. Journal of Vision 9(13) 1-10.

[IF= 3.02, JIFP 88% OPHTHALMOLOGY; JCIP= 75%; SJRP= 88%; GSC= 11]

1. **Pertzov Y S**, Zohary E **C**, Avidan G **PI**. (2010) Rapid formation of spatiotopic representations as revealed by inhibition of return. Journal Of Neuroscience 30(26) 8882-8887.

[IF= 7.18, JIFP 93% NEUROSCIENCES; JCIP= 92%; SJRP= 94%; GSC= 62]

1. Gabay S **S**, **Pertzov Y S**, Henik A **PI**. (2011) Orienting of Attention, Pupil Size and the norepinephrine System. Attention Perception & Psychophysics 73:123–129.

[IF= 2.04, JIFP 59% PSYCHOLOGY; JCIP= 43%; SJRP= 91%; GSC= 155]

1. **Pertzov Y PI,** Avidan G **C**, Zohary E **PI**. (2011) Multiple reference frames for saccadic planning in the human parietal cortex. Journal Of Neuroscience 31(3) 1059-1069.

[IF= 7.12, JIFP 92% NEUROSCIENCES; JCIP= 92%; SJRP= 94%; GSC= 68]

1. Porat Y **PI**, **Pertzov Y C**, & Zohary E **PI**. (2011) Viewed actions are mapped in retinotopic coordinates in the human visual pathways. Journal of Vision 11(12) 1-22.

[IF= 3.38, JIFP 88% OPHTHALMOLOGY; JCIP= 89%; SJRP= 75%; GSC= 4]

1. **Pertzov Y PI**, Dong MY **S**, Peich MC **S**, Husain M **PI**. (2012) Forgetting what was where: the fragility of object-location binding. PLoS ONE 7(10) 1-12.

[IF= 3.73, JIFP 88% MULTIDISCIPLINARY SCIENCES; JCIP= 75%; SJRP= 88%; GSC= 148]

1. **Pertzov Y PI**, Bays PM **C**, Joseph S **S**, Husain M **PI**. (2013) Rapid forgetting prevented by retrospective attention cues*.* Journal of Experimental Psychology: Human Perception and Psychophysics. 39(5) 1224-1231

[IF= 3.11, JIFP 81% PSYCHOLOGY, EXPERIMENTAL; JCIP= 69%; SJRP= 94%; GSC= 300]

1. **Pertzov Y PI**, Miller TD **C**, Gorgoraptis N **C**, Schott JM **C**, Butler C **C**, Husain M **PI**. (2013). Binding deficits in memory following medial temporal lobe damage in patients with voltage-gated potassium channel complex antibody-associated limbic encephalitis. Brain 136(8) 2472-2485.

[IF= 10.23, JIFP 978% CLINICAL NEUROLOGY; JCIP= 98%; SJRP= 98%; GSC= 186]

1. Gabay S **PI** & **Pertzov Y PI (equal contribution)**, Noga Cohen **C**, Avidan G **C**, Henik A **PI**. (2013). Remapping of the Environment Without Corollary Discharges: Evidence From Scene Based IOR. Journal of Vision 13(8) 1-10.

[IF= 2.73, JIFP 80% OPHTHALMOLOGY; JCIP= 75%; SJRP= 91%; GSC= 4]

1. **Pertzov Y PI**, Husain M **PI**. (2014). The privileged role of location in visual working memory. Attention Perception & Psychophysics 76 (7), 1914-1924.

[IF= 2.15, JIFP 62% PSYCHOLOGY; JCIP= 43%; SJRP= 91%; GSC= 134]

1. Pearson B **PI**, Raskevicius J **S**, Bays PM **C** , **Pertzov Y C**, Husain M **PI**. (2014). Working memory retrieval as a decision process. Journal of Vision 14(2), 1–15.

[IF= 2.73, JIFP 80% OPHTHALMOLOGY; JCIP= 75%; SJRP= 91%; GSC= 71]

1. **Pertzov Y PI**, Haider M **S**, Liang Y **S**, Husain M **PI**. (2015) Effects of healthy ageing on precision and binding in visual working memory. Psychology and Aging 30 (1), 26-35.

[IF= 2.73, JIFP 83% GERONTOLOGY; JCIP= 88%; SJRP= 96%; GSC= 121]

1. Shakespeare T **S**, Yong K **S**, **Pertzov Y C,** Nicholas J, Crutch S **PI**. (2015) Reduced modulation of scan-paths in response to task demands in Posterior Cortical Atrophy. Neuropsychologia 68, 190-200.

[IF= 2.99, JIFP 68% BEHAVIORAL SCIENCES; JCIP= 66%; SJRP= 95%; GSC= 23]

1. Makovski T **PI**, **Pertzov Y PI** (2015) [Attention and memory protection: Interactions between retrospective attention cueing and interference.](http://www.ncbi.nlm.nih.gov/pubmed/25980784) Q J Exp Psychol 68 (9), 1735-1743.

[IF= 2.13, JIFP 56% PSYCHOLOGY; JCIP= 68%; SJRP= 89%; GSC= 76]

1. Seidel Malkinson T **S**, **Pertzov Y C**, Zohary E **PI**. (2016) Turning Symbolic: The representation of motion direction in working memory. Frontiers in Psychology 7:165.

[IF= 2.32, JIFP 75% PSYCHOLOGY; JCIP= 69%; SJRP= 74%; GSC= 3]

1. Liang Y **PI** & **Pertzov Y (equal contribution) PI**, Nicholas JN **S**, Henley S **c**, Crutch S **PI**, Woodward F **C**, Leung K **C**, Fox NC **C**, Husain M **PI**. (2016) Visual short-term memory binding deficit in familial Alzheimer's disease. Cortex 78, 150-164.

[IF= 4.28, JIFP 93% BEHAVIORAL SCIENCES; JCIP= 88%; SJRP= 94%; GSC= 108]

1. **Pertzov Y PI,** Manohar S **C**, Husain M **PI**. (2017) Rapid Forgetting Results From Competition Over Time Between Items in Visual Working Memory. Journal of Experimental Psychology: Learning, Memory, and Cognition  *43*(4), 528-536.

[IF= 2.32, JIFP 62% PSYCHOLOGY, EXPERIMENTAL; JCIP= 70%; SJRP= 84%; GSC= 116]

1. Liang Y **PI**, **Pertzov Y PI**, Nicholas JN **C**, Henley S **C**, Crutch S **C**, Woodward F **C**, Leung K **C**, Husain M **PI**. (2017) Short-term memory binding deficits in Alzheimer's disease Reply to Parra's commentary. Cortex 88, 201-204.

[IF= 4.91, JIFP 91% BEHAVIORAL SCIENCES; JCIP= 70%; SJRP= 94%; GSC= 8]

1. Manohar S **PI**, **Pertzov Y PI** (equal contribution), Husain M **PI**. (2017) [Short-term memory for spatial, sequential and duration information](https://www.researchgate.net/publication/317510146_Short-term_memory_for_spatial_sequential_and_duration_information?_iepl%5BviewId%5D=LPRzG7WhP7dSGd0VfxX0D9bE&_iepl%5BprofilePublicationItemVariant%5D=default&_iepl%5Bcontexts%5D%5B0%5D=prfpi&_iepl%5BtargetEntityId%5D=PB%3A317510146&_iepl%5BinteractionType%5D=publicationTitle). Current Opinion in Behavioral Sciences 17, 20-26.

[IF= 3.42, JIFP 86% PSYCHOLOGY, EXPERIMENTAL; JCIP= 38%; SJRP= 94%; GSC= 33]

1. Koyluoglu O **PI**, **Pertzov Y PI**, Manohar S **PI**, Husain M **PI**, Fiete I **PI**. (2017) Fundamental bound on the persistence and capacity of short-term memory stored as graded persistent activity. eLife 2017;6:e22225 1-29.

[IF= 7.62, JIFP 96% BIOLOGY; JCIP= 97%; SJRP= 97%; GSC= 24]

1. Lancry-Dayan, O **S**., Nahari T **S**, Ben-shakhar G **PI**., **Pertzov Y PI.** (2018) Do you know him? Gaze dynamics towards familiar faces on a concealed information test. Journal of Applied Research in Memory and Cognition 7 2 291-302.

[IF= 2.42, JIFP 65% PSYCHOLOGY, EXPERIMENTAL; JCIP= 56%; SJRP= 88%; GSC= 27]

1. Krill D **S**, Avidan G **C**, **Pertzov Y PI**. (2018) Rapid forgetting of faces. Frontiers in Psychology. 9, 1-18.

[IF= 2.13, JIFP 71% PSYCHOLOGY, EXPERIMENTAL; JCIP= 73%; SJRP= 81%; GSC= 11]

1. Cohen-Dallal H **S**, Isaac Fradkin **S**, **Pertzov Y PI**. (2018) [Are stronger memories forgotten more slowly? No evidence that memory strength influences the rate of forgetting](https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0200292). PLoS ONE. 13 (7) 1-18.

[IF= 2.78, JIFP 66% MULTIDISCIPLINARY SCIENCES; JCIP= 81%; SJRP= 96%; GSC= 15]

1. Nahari T **S**, Lancry-Dayan O **S**, Ben-shakhar G **PI**, **Pertzov Y PI**. (2019) Detecting concealed familiarity using eye movements: the role of task demands. Cognitive Research: Principles and Implications 4 (1), 10.

[IF= 3.7, JIFP 82% PSYCHOLOGY, EXPERIMENTAL; JCIP= 52%; SJRP= 70%; GSC= 13]

1. de Best PB **S**, Raz N **S**, Guy N **S**, Ben-Hur T **PI**, Dumoulin SO **PI**, **Pertzov Y PI**, Levin N **PI**. (2019) The role of population receptive fields' size in complex visual dysfunctions: A posterior cortical atrophy model. JAMA Neurology 76 (11), 1391-1396.

[IF= 13.61, JIFP 98% CLINICAL NEUROLOGY; JCIP= 99%; SJRP= 98%; GSC= 7]

1. Lancry-Dayan **S**, O., Kupershmit G **S**, **Pertzov Y PI**. (2019) Been There, Seen That, Done That: Modification of Visual Exploration across Repeated Exposures. Journal of Vision 19 (12), 2-2.

[IF= 2.15, JIFP 56% OPHTHALMOLOGY; JCIP= 75%; SJRP= 75%; GSC= 9]

1. Guy N **S**, Azulay H **S**, Kardosh R **S**, Weiss Y **S**, Hassin RR **PI**, Israel S **PI**, **Pertzov Y PI**. (2019) A novel perceptual trait: gaze predilection for faces during visual exploration. Scientific Reports.  9 (1), 1-12.

[IF= 4.0, JIFP 77% MULTIDISCIPLINARY; JCIP= 87%; SJRP= 95%; GSC= 27]

1. Sadeh T **PI**, **Pertzov Y PI**. (2020) Scale invariant characteristics of forgetting: towards a unifying account of hippocampal forgetting across short and long timescales. Journal of Cognitive Neuroscience. 32 (3), 386-402.

[IF= 3.23, JIFP 69% NEUROSCIENCES; JCIP= 63%; SJRP= 85%; GSC= 17]

1. Pavisic I **S**, Suarez-Gonzalez A, **Pertzov Y PI**. (2020) Translating visual short-term memory binding tasks to clinical practice: From theory to practice. Frontiers in Neurology. 11, 458.

[IF= 4.0, JIFP 66% CLINICAL NEUROLOGY; JCIP= 58%; SJRP= 76%; GSC= 19]

1. Yitzhak N **S**, **Pertzov Y C**, Guy N **S**, Aviezer H **PI**. (2020) Many Ways to See Your Feelings: Individual Differences in Fixation Distribution and Facial Emotion Recognition. Emotion. 22 (5), 844

[IF= 4.33, JIFP 86% PSYCHOLOGY, EXPERIMENTAL; JCIP= 83%; SJRP= 94%; GSC= 20]

1. **Pertzov Y PI**, Krill D **S**, Weiss N **S**, Lesinger K **S**, Avidan G **PI**. (2020) Rapid forgetting of faces in congenital prosopagnosia. Cortex [ISI: 2019 IF 4.0, 4/53 Behavioural Sciences, JIFP 93% ; SJR: 31/378 Neurology (clinical), JIFP 92%].
2. Goldstein A **S**, Rivlin I **S**, Goldstein A **S**, **Pertzov Y C**, Hassin RR **PI**. (2020) Predictions from masked motion with and without obstacles. PLoS ONE. 15 (11), e0239839

[IF= 3.24, JIFP 65% MULTIDISCIPLINARY; JCIP= 78%; SJRP= 92%; GSC= 4]

1. Guy N **S**, Lancry-Dayan O **S**, **Pertzov Y PI.** (2020) Not all fixations are created equal: The benefits of using ex-Gaussian modeling of fixation durations. Journal of Vision. [IF= 2.15, JIFP 56% OPHTHALMOLOGY; JCIP= 63%; SJRP= 79%; GSC= 9]
2. Klein Selle N **S**, Gamer M **C**, **Pertzov Y PI.** (2021) [Gaze-pattern similarity at encoding may interfere with future memory](https://www.nature.com/articles/s41598-021-87258-z). Scientific Reports. 11 (1), 7697.

[IF= 5.0, JIFP 77% MULTIDISCIPLINARY; JCIP= 86%; SJRP= 93%; GSC= 1]

1. Pavisic I **C**, **Pertzov Y C**, Nicholas J **C**, O’Connor A **C**, Lu K **C**, Yong K **C**, Husain M **PI**, Fox N **PI**, Crutch SJ **PI** (2021) [Eye-tracking indices of impaired encoding of visual short-term memory in familial Alzheimer’s disease](https://www.nature.com/articles/s41598-021-88001-4) Scientific Reports. 11 (1), 8696

[IF= 5.0, JIFP 77% MULTIDISCIPLINARY; JCIP= 86%; SJRP= 93%; GSC= 16]

1. Yitzhak, N **S**, **Pertzov, Y PI**, Aviezer H **PI**. (2021) [The elusive link between eye‐movement patterns and facial expression recognition](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=S9Nq4KkAAAAJ&sortby=pubdate&citation_for_view=S9Nq4KkAAAAJ:d4tt_xEv1X8C) Social and Personality Psychology Compass. 15 (7), e12621 [IF= 3.8, JIFP 57% PSYCHOLOGY, EXPERIMENTAL; JCIP= 60%; SJRP= 91%; GSC= 7]
2. Van der Cruyssen **S**, I, Regnath **C**, F, Ben-Shakhar, G **PI**, **Pertzov, Y PI**, Verschuere, B **PI**. (2021) Is a Picture Worth a Thousand Words? Congruency Between Encoding and Testing Improves Detection of Concealed Memories. Journal of Applied Research in Memory and Cognition. 10 (4), 667-676

[IF= 4.6, JIFP 85% PSYCHOLOGY, EXPERIMENTAL; JCIP= 72%; SJRP= 83%; GSC= 4]

1. \* Lancry-Dayan, O **S**, Gamer M **C**, **Pertzov Y PI.** (2021) Search for the unknown: guidance of visual search in the absence of an active template. Psychological Science.

[IF= 10.17, JIFP 94% PSYCHOLOGY, EXPERIMENTAL; JCIP= 94%; SJRP= 96%; GSC= 2]

1. Pavisic IM **C**, Nicholas JM **C**, **Pertzov Y C**, O'Connor A **C**, Liang Y **S**, Collins JD **C**, Lu K **C**, Weston P **C**, Ryan NS **C**, Husain M **PI**, Fox NC **PI**, Crutch SJ **PI** (2021) [Visual short-term memory impairments in presymptomatic familial Alzheimer’s disease: A longitudinal observational study](https://www.researchsquare.com/article/rs-67640/latest.pdf). Neuropsychologia. 162, 108028

[IF= 3.06, JIFP 64% PSYCHOLOGY, EXPERIMENTAL; JCIP= 70%; SJRP= 87%; GSC= 6]

1. Lu K **C**, Nicholas JM **C**, **Pertzov Y C**, Grogan J **C**, Husain M **C**, Pavisic IM **C**, ... & Crutch SJ **PI**. (2021). Dissociable effects of APOE ε4 and β-amyloid pathology on visual working memory. Nature Aging.

[IF= N\A, JIFP N\A% GERIATRICS & GERONTOLOGY; JCIP= 99%; SJRP= 99%; GSC=16]

1. Azulay H **S**, Guy N **S**, Shalev I **S**, **Pertzov Y PI**, Israel S **PI**. (2021). Social evaluation under stress: Does acute stress affect social attributions and eye gaze? Comprehensive Psychoneuroendocrinolog. 8, 100093

[IF= 4.69, JIFP 64% NEUROSCIENCES; JCIP= 78%; SJRP= 83%; GSC= 3]

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1. \* Lancry-Dayan O **S**, Ben-Shakhar G **PI**, **Pertzov Y PI** (2022) [The promise of eye-tracking in the detection of concealed memories](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=S9Nq4KkAAAAJ&sortby=pubdate&citation_for_view=S9Nq4KkAAAAJ:cSdaV2aYdYsC) Trends in Cognitive Sciences. Volume 27 13-16

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[IF= 2.0, JIFP 36% OPHTHALMOLOGY; JCIP= 63%; SJRP= 78%; GSC= 1]

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1. Guy N **S**, Azulay H **S**, **Pertzov Y PI,** Israel S **PI**. (2023) [Attenuation of visual exploration following stress.](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=S9Nq4KkAAAAJ&sortby=pubdate&citation_for_view=S9Nq4KkAAAAJ:a2necdfpwlEC) Psychophysiology e14330

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1. Wiechert S **S**, Loewy L **C**, Wessel I **C**, Fawcett JM **C**, Ben-Shakhar G **PI**, **Pertzov Y PI**, Verschuere B**PI**. (2023) [Suppression-induced forgetting: a pre-registered replication of the think/no-think paradigm](https://scholar.google.com/scholar?oi=bibs&cluster=3712433474106982570&btnI=1&hl=en) Memory 1-14

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1. Van der Cruyssen I **S**, Ben-Shakhar G **PI**, N Guy **S**, **Pertzov Y PI**, Verschuere B **PI**. (2023) [The validation of online webcam-based eye-tracking: The replication of the cascade effect, the novelty preference, and the visual world paradigm](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=S9Nq4KkAAAAJ&sortby=pubdate&citation_for_view=S9Nq4KkAAAAJ:kO05sadLmrgC) Behavior Research Methods 1-14

[IF= 5.4, JIFP 96% PSYCHOLOGY, EXPERIMENTAL; JCIP= 96%; SJRP= 98%; GSC= 1

1. Van der Cruyssen I **S**, Ben-Shakhar G, **Pertzov Y PI**, Verschuere B (2023) Detecting concealed familiarity using eye movements: The effect of leakage of mock crime details to innocents Journal of Applied Research in Memory and Cognition.

[IF= 4.2, JIFP 92% PSYCHOLOGY, EXPERIMENTAL; JCIP= 83%; SJRP= 83%; GSC= 3]

1. Wiechert S **S**, Ben-Shakhar G **PI**, **Pertzov Y PI**, Verschuere B. (2024) The effect of negative valence on false memory formation in the DRM paradigm: A preregistered meta-analysis and preregistered replication Journal of Experimental Psychology: General

[IF= 4.1, JIFP 87% PSYCHOLOGY, EXPERIMENTAL; JCIP= 87%; SJRP= 95%; GSC= 3]

1. Guy N **S**, Sklar AY, Amiaz R, Golan Y, Livny A, **Pertzov Y PI** (2024) [Individuals vary in their overt attention preference for positive images consistently across time and stimulus types](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=S9Nq4KkAAAAJ&sortby=pubdate&citation_for_view=S9Nq4KkAAAAJ:pRWBApOjXDcC) Scientific Reports.  14 (1), 872.

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1. Wiechert S **S**, Leistra P, Ben-Shakhar G **PI**, **Pertzov Y PI**, Verschuere B. (2024) [Open science practices in the false memory literature](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=S9Nq4KkAAAAJ&sortby=pubdate&citation_for_view=S9Nq4KkAAAAJ:adHtZc2wMuEC) Memory 32 (8) 115-1127

[IF= 2.4, JIFP 47% ART AND HUMANITIES; JCIP= 32%; SJRP= 82%]

1. Sorek Y **S**, Nahari T, **Pertzov Y PI** (2024) Artistic Expertise and Free Viewing of Modern Art Art & Perception

[IF= 1.1, VISUAL ARTS AND PERFORMING ARTS; JCIP= 98%; SJRP= 94%]

1. Nahari T **S**, Eldar E **PI**, **Pertzov Y PI**. (Accepted) Fixations durations on familiar items are longer due to attenuation of exploration. Cognitive Research: Principles and Implications

[IF= 3.7, JIFP 82% PSYCHOLOGY, EXPERIMENTAL; JCIP= 52%; SJRP= 70%]

**6 CONFERENCES (Competitive and invited oral presentations; last 6 years)**

1. **Pertzov Y.** (2017). *Attraction and repulsion of gaze to personally familiar faces. S*ymposium at the International Convention of Psychological Science (ICPS). Vienna, Austria.
2. **Pertzov Y.** (2017). *Detecting concealed memory via eye movements.* Talk at the 20th European Conference on Eye Movements (ECEM). Wuppertal, Germany.
3. **Pertzov Y.** Guy N. (2018*). What can the eyes tell us about the observer’s traits and mental state?.* Symposium talk at the Israeli Society for Cognitive Science. Akko, Israel.
4. **Pertzov Y.** (2018*). Individual Variability in Visual Exploration of Faces Explained by Personality Traits.* Talk at the International Meeting of the Psychonomics Society. Amsterdam, The Netherlands.
5. **Pertzov Y.** (2018*).* *Extending the “active vision loop”: The role of memory.* Talk at the Dynamic Organism: from Molecules to Cognition – HUJI-UCL joint meeting
6. **Pertzov Y.** (2019*). Visual short-term memory binding deficit in Pre-symptomatic Alzheimer's disease.* Symposium talk at the Israeli Society for Cognitive Science. Akko, Israel.
7. **Pertzov Y.** (2019). *Detecting concealed familiarity using eye movements: the role of task demands. S*ymposium at the International Convention of Psychological Science (ICPS). Paris, France.
8. **Pertzov Y.** (2019). *What determines where we look: The individual differences approach.* Talk at the 21st European Conference on Eye Movements (ECEM). Alicante, Spain.
9. **Pertzov Y.** (2022). [How visual memory influences visual exploration](https://scholar.google.com/citations?view_op=view_citation&hl=en&user=S9Nq4KkAAAAJ&sortby=pubdate&citation_for_view=S9Nq4KkAAAAJ:S2WlVNSe3u4C). Talk at the Virtual Conference of the Society of Vision Sciences (VSS). Florida, US.
10. **Pertzov Y.** (2022). Eye movements and memory detection*.* Talk at the 22nd European Conference on Eye Movements (ECEM). Leicester, UK.
11. **Pertzov Y.** (2022). Searching without a template*.* Talk at the 22nd European Conference on Eye Movements (ECEM). Leicester, UK.
12. **Pertzov Y.** (2023). E*ye movements as a tool for revealing concealed memories and deception.* Invited talk at the Society of the Israeli Polygraph Examiners. Ramat Gan, Israel.
13. **Pertzov Y.** (2023). *New Methods in concealed memories and deception.* Talk at the Society for Applied Research in Memory and Cognition. Nagoya, Japan.
14. **Pertzov Y.** (2024). *Unraveling Gaze Dynamics Towards Familiar Items: Implications and Insights*. 46th European Conference on Visual Perception (ECVP). Aberdeen, United Kingdom (Cancelled due to Iron Swords war)
15. **Pertzov Y.** (2024). *Familiarity guided gaze behavior.* Talk at the Israel Vision Sciences Society (IVSS). Tel Aviv, Israel.

***7 Invited presentations at colloquiums (*last 6 years)**

2017: Psychology Department, Open University, Raanana.

2017: Psychology Department, Ben Gurion University, Beer Sheva.

2017: Sagol Center for Hyperbaric Medicine & Research. Assaf Harofeh Medical Center. Rishon Lezion.

2017: Psychology Department, The Open University, Raanana.

2017: Edmond and Lily Safra Center for Brain Sciences (ELSC), Hebrew University, Jerusalem.

2018: Psychology Department, University of Würzburg, Würzburg.

2018:  [Sagol Department of Neurobiology](http://neuroscience.haifa.ac.il/index.php/en/%22%20%5Ct%20%22_blank). University of Haifa, Haifa.

2019: The Jerusalem Bain Community. The Hebrew University

2019: School of Optometry and Vision Science. Bar Ilan University

2020: Psychology Department, Ben Gurion University, Beer Sheva.

2022: Psychology Department, The Open University, Raanana.

2023: Psychology Department, Tel Aviv University, Tel Aviv.

#### 2023: Current Topics in Perception and Cognition Seminar, Giessen University, Giessen Germany (performed on zoom duo to the war).

2024: Psychology Department, The Open University, Raanana.

**Supervised student’s posters and talks presented in conferences (last 6 years)**

* Cohen, H., Pertzov, Y. (2017) The independence of forgetting rate: a study of unilateral neglect patients and healthy adults. ***Talk*** *at The Forth Conference on Cognition Research of the Israeli Society for Cognitive Psychology (ISCoP). Akko, Israel.*
* Lancry, O., Nahari, T., Ben Shakhar, G. and Pertzov, Y. (2017). Detecting concealed memory of personally familiar faces via eye movements. *Poster presentation at the The forth Conference on Cognition Research of the Israeli Society for Cognitive Psychology (ISCoP). Akko, Israel.*
* Nahari, T., Pertzov, Y., Hassin, R. (2017). Imagery, scanning patterns, and Giraffes. *Talk at The Forth Conference on Cognition Research of the Israeli Society for Cognitive Psychology (ISCoP). Akko, Israel.*
* Shwartz, H., Pollak, Y., Pertzov, Y. (2017) Working Memory Precision in Adults with ADHD*. Poster presentation at the The Forth Conference on Cognition Research of the Israeli Society for Cognitive Psychology (ISCoP). Akko, Israel.*
* Guy, N., Pertzov, Y., (2017) Quantifying Traumatic Brain Injury impairments in scanning patterns of complex scenes. *Talk at the 20th European Conference on Eye Movements (ECEM). Wuppertal, Germany.*
* Kupershmidt, G., Lancry-Dayan, O., Pertzov, Y. (2018) The effect of long-term memory on scanning patterns of complex scenes, the effect of repeated displays. *Poster at the Fifth Conference on Cognition Research of the Israeli Society for Cognitive Psychology (ISCoP). Akko, Israel.*
* Nahari, T., Guy, N., Raz, N., Levin, N. Pertzov, Y. (2018). Fixation duration and recognition: the peculiar case of posterior cortical atrophy patients. *Poster at the*[*Object Perception, Attention, & Memory (OPAM)*](http://www.opam.net/)*conference. New Orleans, USA.*
* Guy, N., Pertzov, Y., (2019) A novel perceptual trait: gaze predilection for faces during visual exploration. *Poster at the 21st European Conference on Eye Movements (ECEM). Alicante, Spain*
* Lancry, O., Nahari, T., Ben Shakhar, G. and Pertzov, Y. (2019) Revealing concealed information via eye movements: the promise of the short term memory task *Talk at the 21st European Conference on Eye Movements (ECEM). Alicante, Spain.*
* Nahari, T., Lancry-Dayan O., Ben-Shakhar, G., and Pertzov., Y. (2020) Keep an eye on your belongings: gaze dynamics towards familiar and unfamiliar items*. Oral presentation at in Cognition Research of the Israeli Society for Cognitive Psychology (ISCoP). Akko, Israel.*
* Nahari, T., Pertzov,Y., Eldar, E. (2021) *The multifaceted nature of information gathering.* *Poster presentation at the Israeli Society for Cognitive Psychology (ISCoP). Akko, Isarel.*
* Nahari, T., Eldar, E., Pertzov,Y. (2022) Filling the gaps: attenuation of visual exploration due to stored memory representations. *Oral talk at the European conference of eye movements (ECEM). Leicester, England.*
* Nahari, T., Pertzov,Y., Eldar, E. (2022) External and internal information gathering in decision making. *Poster presentation at the Reinforcement learning and decision making conference (RLDM). Providence, USA.*
* Nahari, T. (2022) Neurobridges summer school on decision making. *Cluny, France.*
* Lancry, O., Ben Shakhar, G. and Pertzov, Y. (2023). Between Truth and Lies: The Complex Indices of Deceptive Behavior. *Poster presentation at the Conference on Cognition Research of the Israeli Society for Cognitive Psychology (ISCoP). Akko, Israel.*
* Guy N, Pertzov, Y. (2023). Visual exploration during conflictual situation. *Poster presentation at the Conference on Cognition Research of the Israeli Society for Cognitive Psychology (ISCoP). Akko, Israel.*
* Van der Cruyssen I, Ben Shakhar G, Pertzov, Y. (2023) *New insights into the concealed information test. Forthcoming talk at the Society for Applied Research in Memory and Cognition. Nagoya, Japan.*
* Nahari, T., Eldar, E., Pertzov,Y. (2023) Foraging for information – how encoding and retrieving affects gaze, from individual to collective decision making. *Rehovot, Israel.*
* Nahari, T,, Lancry-Dayan\* O., Ben-Shakhar, G., and Pertzov. (2023)  Can you control you gaze? The strong effect of familiarity on eye gaze behavior. *MindBrainBody symposium. Berlin, Germany*

**9 Patents**

2020 U.S. Patent Application No. 62/333,362, "ACCESSING CONCEALED MEMORY TRACES OF PERSONALLY FAMILIAR OBJECTS VIA GAZE POSITION MEASURMENTS". Co-inventor together with Prof Gershon Ben Shakhar.

2023 Provisional U.S. Patent Application No. 63/482,222, "A METHOD AND SYSTEM FOR ASSESING DISTRCTABILITY". Co-inventor together with Nitzan Guy and Ohad Markus (students in my lab).

SCIENTIFIC BIOGRAPHY

My research program centers on the intricate interplay between visual attention and memory. I delve into the fundamental aspects that govern our attentional allocation, the disparities among individuals in directing their focus, and the connections between this variability and individuals’ personal traits, emotional states and memories. These inquiries are rooted in a fundamental quest to unravel the mysteries of human perception and recollection in different environmental contexts. Furthermore, I employ diverse research settings, including computer screens, virtual reality simulations, and real-world scenarios, to investigate how individuals navigate their gaze within these environments.

My academic journey began with a B.Sc. in Communication Systems Engineering that equipped me with the foundational research skills I have been using, particularly in programming and computational approaches.

Driven by a profound interest in understanding the human mind, I continued my academic pursuit at the Hebrew University. Here, I embarked on a Ph.D. within the Center for Neural Computation, under the mentorship of Prof. E. Zohary and Prof. G. Avidan. My doctoral research delved into the representation of eye movements in the brain and the reciprocal relationship between gaze behavior and visual perception. Using multivoxel pattern analysis I showed that a specific region in the parietal cortex encodes the destination of eye movements in a head-based reference frame (# 8). Thus, while early visual cortex, as well as downstream oculomotor regions, represent objects and saccades with respect to the current gaze position (e.g. retinotopic manner), specific regions in the brain also represent information with respect to the head (# 6). These studies, as well as the other studies in my dissertation (# 1-3, 6-8) follow the “active vision” framework that keeps guiding our research. According to this framework eye-movements are integral part of vision and in order to understand vision, the primary sense in humans, one has to understand how visual perception interacts with the sensory organ – the eyes. My line of research advocates an amendment to this framework – the addition of the “observer factor” (ISF 2020-2025). Below I describe how my findings strongly argues for the necessity to add a component that mediates how the visual input influences gaze position. This component is warranted as similar visual input leads to different gaze behavior in different individuals.

Upon completing my Ph.D. in 2010, I embarked on a 3 years post-doctoral journey at the Institute of Cognitive Science at University College London, under the guidance of Prof. Masud Husain, a distinguished Cognitive Neurologist. This experience expanded my research horizons, allowing me to investigate visual memory and gaze behavior in unique populations, including individuals with Hemispatial Neglect and Familial Alzheimer's disease (# 17, 20, 22). I also dwelt further into the domain of visual working memory developing novel tasks for assessing the precision of memory (# 10, 14-16 21 23-24). In one notable paper (# 12) published in the Brain (IF ~15), I demonstrated that individuals with localized lesions in the hippocampus exhibited impaired short-term memory of object-location binding, challenging conventional distinctions between short and long-term memory in the context of the Hippocampus. In another highly cited paper (267 citations) I used working memory “precision” tasks, that taps the quality of the memory representation, to show that retrospective attention protects information from forgetting (# 11).

In 2013, I rejoined the Hebrew University as a Senior Lecturer in the Department of Psychology, and I established the Visual Cognition Lab. After six years I earned tenure and subsequently received a promotion to the position of Associate Professor.

In the lab, I've seamlessly merged the two cognitive domains I previously studied, exploring the intricate relationship between visual memory and gaze behavior. Notably, I conducted research revealing a fascinating phenomenon: individuals' gaze is drawn to familiar faces when explicitly instructed to search for them. This discovery challenges the foundations of existing theories in the field of visual search. Conventional theories propose that efficient search relies on comparing the visual input with an "active visual template" of the target, thus guiding the search toward areas in the visual input that closely match this template. However, these theories fail to align with our findings, as we observed that search and gaze were consistently directed toward familiar faces. Given that we encounter numerous faces throughout our lives, it becomes impractical to construct an active template for every familiar face, as the prevailing theories suggest. Our results suggest a innovative possibility: that gaze can directly engage with long-term memory to guide the process of visual search. This study was published in Psychological Science (#42; IF 10). In another set of studies we show that gaze is attracted towards familiar stimuli (faces and objects) even when not searching of a familiar stimulus (# 46), and this attraction flips after a second when encouraged to look for unfamiliar stimuli (#26). The two phases, of attraction to familiar and then unfamiliar is observed also when subjects try to control this behavior. Thus, gaze behavior could be used in applied situations, such as with criminal suspects, in which concealed memories should be detected. We recently published a review of this phenomenon and discussed its applied implications is Trends in Cognitive Neuroscience (IF 24) “The promise of eye-tracking in the detection of concealed memories” (# 42). The university also issued a patent on this method (No. 62/333).

The influence of memory and personal experiences on gaze behavior is just one of several factors that contribute to the diversity in individual gaze behavior. Investigating these individual differences in gaze behavior is central to my research. While previous studies have often concentrated on identifying the shared characteristics among observers, providing insights into how the "average" person observes the world, it's essential to acknowledge that individuals consistently manifest variations in their visual exploration of their surroundings. This variability is of paramount importance because it determines which information is processed by an individual's cognition, ultimately shaping their interpretation of the environment. In my current ISF grant (2020-2025) I laid the chart for studying this uncharted research territory. We have shown that participants vary in their basic oculomotor behavior (# 37), probably due to variability in their visual abilities. Interindividual variability does not end with basic features and memory. We show that subjects differ in gaze deployment to high level features, such as faces (# 31). Some people look more at faces, and some do it much less, regardless of the exact stimulus or testing time, with limited conscious access to these preferences (# 54). Together, these findings call for a modification of the “active vision” framework, one of the most influential theories of vision and eye movements. The same visual input does not lead to identical gaze behavior in different individuals, as suggested by the simple structure of the loop. Thus, an additional component is need, one that mediates between the visual input and gaze behavior and is specific to each individual. We call it the “observer factor” component that span from the observer’s visual abilities to her traits.

My future research aims to characterize this component, what types of gaze behavior vary consistently across individuals? What leads to this variability? What are the consequences of it?

One specific inquiry, relevant to the broader question, centers on whether individual variations in gaze behavior are linked to diverse interpretations of the same situation. While the limited research literature on this topic has explored how observers' characteristics may affect their gaze behavior, there is a noticeable absence of studies delving into how such variability impacts the observers' interpretations. I am particularly intrigued by the captivating cognitive phenomenon wherein individuals perceive and interpret identical situations differently. My hypothesis suggests that, to a certain extent, these differences may be elucidated by varying scanning patterns.

In our ongoing research, which follow the above hypothesis, participants immerse themselves in a virtual reality scenario where two Palestinians interact with two Israeli soldiers at a roadblock. Some participants report they believe that the soldiers will open fire, while others report that they will not. We observe that participants who focus more on the soldiers tend to believe that they will open fire by the end of the situation. It is important to note that this study is preliminary, and the direction of causality remains unclear. It is possible that individuals who experience more fear may direct their gaze more toward the soldiers and, conversely, it's also possible that gaze behavior influences their perceptions. Our future studies will unravel the directionality of causation by inducting specific interpretations and scanning behaviors. This example serves as just one instance of the intriguing and promising line of research that I plan to pursue. It is also an example of how I try to connect basic science insights to applied concerns that impact our society.

My work has been funded by several highly competitive grants, including the Israel Science Foundation (twice), the German-Israeli Foundation, and the JOY Ventures Academic Grant. These grants have facilitated our explorations of various facets of cognitive neuroscience, ranging from memory to eye movements, with practical applications for real-world challenges.

In conclusion, I have dedicated approximately two decades to the study of eye movements, commencing with neuroimaging and advancing into behavioral studies involving both neurotypical and special populations. My current research interest are in the intersection of memory and gaze behavior, as well as individual differences in eye movements. I firmly believe that there is much more to discover in these fields, from uncovering uncontrollable aspects of gaze behavior to unveiling the reasons behind varying interpretations of similar situations among individuals. The journey of exploration in cognitive science continues, and I remain committed to contributing to this ever-evolving scientific landscape.