

<https://sedaakbiyik.github.io/>

450 Jane Stanford Way, Stanford University
Stanford, CA, 94305

Academic Positions

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| Apr 2025 – present | Postdoctoral Fellow, Stanford University Vision and Perception Neuroscience Lab Advisor: Prof. Kalanit Grill-Spector |
| Sep 2024 – Mar 2025 | Postdoctoral Fellow, Harvard University Advisor: Prof. Alfonso Caramazza |

Education

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| 2018 – Sep 2024 | Ph.D. in Psychology, Harvard University Cognition, Brain, and Behavior Program Advisor: Prof. Alfonso Caramazza |
| 2016 – 2018 | M.Sc. in Cognitive Psychology, Koc University, Istanbul, Turkey Co-Advisors: Prof. Fuat Balci, Prof. Tilbe Goksun |
| 2013 – 2016 | B.A. in Psychology, Bogazici University, Istanbul, Turkey magna cum laude (4-year degree, completed in 3 years) |

Awards and Honors

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| 2024 | Seeing and Action Workshop Award for Best Submission , University of Coimbra |
| Fall 2022 | Student Recognition of Teaching , Graduate School of Arts and Sciences Office of Academic Programs, Harvard University |
| 2022 | Woodcock Institute Award for the Advancement of Neurocognitive Research (\$15k), Texas Woman's University |
| 2021 - 2022 | Certificate of Distinction in Teaching , Harvard University |
| 2021 | Restricted Funds Large Grant Award , Harvard University (\$5k) |
| 2020 | European Workshop in Cognitive Neuropsychology Award for Best Submission |
| 2019 | Restricted Funds Travel Award , Harvard University |
| 2018 | Stimson Fund Research Grant , Harvard University |
| 2018 | Academic Excellence Award , Graduate School of Social Sciences and Humanities, Koc University, Turkey |
| 2017 - 2018 | Graduate Scholarship , Scientific and Technological Research Council of Turkey, 2210 National Scholarship Programme for MSc Students |
| 2016 | Outstanding Student Fellowship , Graduate School of Social Sciences and Humanities (GSSSH), Koç University, Turkey |
| 2016 | Dean's High Honor List , Bogazici University, Turkey |

Journal Publications

*indicates authorship with supervised student, † indicates equal contribution

1. **Karakose-Akbiyik** †, Liu, S. †, Caramazza, A., Sotero, F.D., Buxbaum, L., & Wong, A. (under review). Dissociation between physical reasoning and tool use in individuals with left hemisphere brain damage. [\[preprint\]](#)
2. Liu, S., **Karakose-Akbiyik, S.**, Outa, J., Kim, M.J. (2025). How physical information is used to make sense of the psychological world. *Nature Reviews Psychology*, 1-15. [\[link\]](#)
3. **Karakose-Akbiyik, S.**, Schubert, T., & Caramazza, A. (2024). Preserved recognition of basic visual features despite lack of awareness of shape: evidence from a case of neglect. *Cortex*, 176. [\[link\]](#)
4. **Karakose-Akbiyik, S.**, Sussman, O.*, Wurm, M. F., & Caramazza, A. (2024). The role of agentive and physical forces in the neural representation of motion events. *Journal of Neuroscience*, 44(2). [\[link\]](#)
5. **Karakose-Akbiyik, S.**, Caramazza, A., & Wurm, M. F. (2023). A shared neural code for the physics of actions and object events. *Nature Communications*, 14(1), 3316. [\[link\]](#)
6. Akyurek, A. F., Paik, S., Kocyigit, M. Y., **Akbiyik, S.**, Runyun, S. L., & Wijaya, D. (2022). On measuring social biases in prompt-based multi-task learning. *Findings of fNAACL 2022*. [\[link\]](#)
7. **Akbiyik, S.**, Goksun, T., & Balci, F. (2022). Elucidating the common basis for task-dependent differential manifestations of category advantage: a decision theoretic approach. *Cognitive Science*, 46(1), e13078. [\[link\]](#)
8. Goksun, T., Ozer, D., **Akbiyik, S.** (2021). Gesture in the Aging Brain In A. Morgenstern & S. Goldin-Meadow (Eds.), *Gesture in language: Development across the lifespan* (pp. 269–293). De Gruyter Mouton; American Psychological Association.
9. **Akbiyik, S.**, Gökşun, T., & Balci, F. (2020). Cathodal tDCS stimulation of left anterior temporal lobe eliminates cross-category color discrimination response time advantage. *Behavioural Brain Research*, 391(112682). [\[link\]](#)
10. **Akbiyik, S.**, Karaduman, A., Goksun, T., & Chatterjee, A. (2018). The relationship between gesture use and macrolinguistic discourse abilities in people with focal brain injury. *Neuropsychologia*, 117, 440-453. [\[link\]](#)
11. Turkakin, E., **Akbiyik, S.**, Akyol, B., Gurdere, C., & Balci, F. (2018). Differential bilateral primary motor cortex tDCS fails to modulate choice bias and readiness in perceptual decision making. *Frontiers in Neuroscience*, 12(410). [\[link\]](#)

Manuscripts in Preparation

* indicates equal contribution

1. **Karakose-Akbiyik** & Caramazza (in prep.). Spatial organization of neural responses to agentive and physical movement is reflected in intrinsic functional connectivity.
2. **Karakose-Akbiyik***, Sotero, D. F., & Caramazza, A. (in prep). It's a mouse with... something: A stimulus-centered failure of object and face recognition after brain damage.

Selected Conference Presentations

- Karakose-Akbiyik[†], S.,** Sotero, F.D.[†], & Caramazza, A. (2025). *It's a mouse with... something: A stimulus-centered failure of object and face recognition after brain damage*. Poster presented at the 3rd annual meeting of the Seeing and Action Workshop, University of Coimbra, Portugal.
- Karakose-Akbiyik[†], Liu, S.[†],** Caramazza, A., Sotero, F.D., Buxbaum, L., & Wong, A. (2025). *Dissociation between physical reasoning and tool use in individuals with left hemisphere brain damage*. Poster presented at the 3rd annual meeting of the Seeing and Action Workshop, University of Coimbra, Portugal.
- Karakose-Akbiyik, S. & Caramazza, A.** (2024). *Spatial organization of neural responses to agentive and physical movement is reflected in intrinsic functional connectivity*. Talk presented at the 2nd annual meeting of the Seeing and Action Workshop, University of Coimbra, Portugal.
- Karakose-Akbiyik, S., Sussman, O., Wurm, M.F. & Caramazza, A.** (2023). *The role of agentive and physical forces in the neural representation of motion events*. Talk presented at the 23rd annual meeting of the Vision Sciences Society. St. Pete Beach, FL.
- Karakose-Akbiyik, S., Sussman, O., Wurm, M. & Caramazza, A.** (2023). *Neural representation of motion events: the role of agentive and physical forces*. Poster presented at Workshop on Concepts, Actions, and Objects: Functional and Neural Perspectives at Center for Mind/Brain Sciences, University of Trento, Italy.
- Akbiyik, S., Caramazza, A., & Wurm, M.F.** (2021). *Shared and distinct neural representations of human actions and object events*. Talk presented at the 39th annual meeting of the European Workshop on Cognitive Neuropsychology, Bressanone, Italy.
- Akbiyik, S., Caramazza, A., & Wurm, M.F.** (2021). *Shared and distinct neural representations of animate actions and inanimate events*. Poster presented at the 21st annual meeting of the Vision Sciences Society. St. Pete Beach, FL.
- Akbiyik, S., Schubert, T., & Caramazza, A.** (2020). *Preserved recognition of simple visual features in stimulus-based neglect*. Talk presented at the 20th annual meeting of the Vision Sciences Society. St. Pete Beach, FL.
- Akbiyik, S., Schubert, T., & Caramazza, A.** (2020). *Preserved recognition of simple visual features in a patient with hemispatial neglect*. Poster presented at the 38th annual meeting of the European Workshop on Cognitive Neuropsychology, Bressanone, Italy.
- Akbiyik, S., Runyun, Ş.L., Genç, E., Göksun, A., & Balci, F.** (2019). *Colored by language? The role of latent decision processes and left anterior temporal cortex in categorical color perception*. Poster presented at the Annual Cognitive Neuroscience Society Meeting, San Francisco, USA.
- Akbiyik, S., Karaduman, A., Göksun, T., & Chatterjee, A.** (2017). *The relationship between gesture use and macrolinguistic abilities in narratives*. Poster presented at Language as a Form of Action Conference, Rome, Italy.
- Akbiyik, S., Göksun, T., & Balci, F.** (2017). *Decision processes in categorical color perception*. Poster presented at the National Experimental-Cognitive Psychology Symposium, Turkey.

Invited Talks

2024

Cognition and Action Lab, Moss Rehabilitation and Research Institute.
Laboratory of Brain and Cognition, National Institute of Mental Health.
Causality in Cognition Lab, Stanford University.

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| 2023 | Vision and Perception Neuroscience Lab, Stanford University. Computational Cognitive Neuroscience Lab, Johns Hopkins University. Cognitive and Neural Computation Lab, Yale University. |
| 2022 | Cognitive Psychology Seminar, Mercyhurst University. Cognition, Brain and Behavior Research Seminar, Harvard University. |
| 2021 | Language and Cognition (LangCog) Talk Series, Harvard University. Laboratory for Developmental Studies, Spelke Lab, Harvard University. Language and Cognition Workshop, Harvard University. Language and Cognition Lab, Koc University. |
| 2020 | Psychology Departmental Seminar, MEF University. Language and Cognition Talk Series, Harvard University. |

Teaching

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| Spring 2023 | PSY 1406: Biological and Artificial Visual Systems: How Humans and Machines Represent the Visual World Teaching Fellow Course instructors: Prof. Talia Konkle & Prof. George Alvarez |
| Fall 2022 | PSY 1: Introduction to Psychology Teaching Fellow Course instructor: Prof. Jason Mitchell |
| Spring 2022 | PSY 1901: Methods of Behavioral Research Head Teaching Fellow Course instructor: Dr. Leslie Rith-Najarian |
| Spring 2021 | PSY 1900: Statistics in Psychology Head Teaching Fellow Course instructor: Dr. Thomas Rusch |
| Fall 2020 | PSY 1900: Statistics in Psychology Teaching Fellow Course instructor: Dr. Patrick Mair |
| Fall 2020 | PSY 1304: Cognitive Neuropsychology Teaching Fellow Course instructor: Prof. Alfonso Caramazza |
| Spring 2018 | PSYC 445: Cognitive Development Teaching Fellow Course instructor: Prof. Tilbe Goksun |
| Fall 2017 | PSYC 205: Learning and Cognition Teaching Fellow Course instructor: Prof. Sami Gulgoz |
| Spring 2017 | PSYC 100: Introduction to Psychology Teaching Fellow Course instructor: Assoc. Prof. Nazli Baydar |
| Fall 2016 | PSYC 410: Psychology of Testing and Measurement Teaching Fellow Course instructor: Dr. Ayse Altan Atalay |

Research Experience

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| 2018 – 2024 | Graduate Research Assistant, Cognitive Neuropsychology Lab Harvard University, Cambridge, MA, USA Supervisor: Prof. Alfonso Caramazza |
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- 2017 – 2018 **Graduate Research Assistant, Timing and Decision-Making Lab
Koc University, Istanbul, Turkey**
Supervisor: Prof. Fuat Balci
- 2016 – 2018 **Graduate Research Assistant, Language and Cognition Lab
Koc University, Istanbul, Turkey**
Supervisor: Prof. Tilbe Goksun
- 2016 – 2018 **Graduate Research Assistant, Language and Communication
Development Lab
Koc University, Istanbul, Turkey**
Project title: Influence of socioeconomic and immigration status on the
cognitive origins of cultural learning
PIs: Prof. Aylin Küntay and Prof. Ulf Liszkowski
- 2015 – 2016 **Undergraduate Research Assistant, Psychobiology Lab
Bogazici University, Istanbul, Turkey**
Supervisor: Prof. Resit Canbeyli
- 2015 – 2016 **Undergraduate Research Assistant, Cognitive Processes Lab
Bogazici University, Istanbul, Turkey**
Supervisor: Prof. Aysecan Boduroglu

Service to Profession

- Fall 2025 – present **Organizer, Vision Brunch, Stanford University**
A weekly interdisciplinary seminar series that brings together vision
researchers from across Stanford and beyond.
- Fall 2023 – Spring 2024 **Graduate Student Representative, Psychology-Kempner Institute
Tenure Track Faculty Search, Harvard University**
Acted as a liaison between graduate students and the search committee
for a Tenure Track position at the intersection of Artificial and Natural
Intelligence, coordinated grad-student interactions with job candidates.
- Spring 2022 – Fall 2023 **Multi-mentor Committee Member, Harvard University**
Participated in efforts to establish a multi-mentor system in the
Psychology Department for improved support via diverse mentorship.
- Spring 2023 – Fall 2023 **Mentor in Prospective PhD & RA Event in Psychology (PPREP),
Harvard University**
- Summer 2023 **Lab Mentor for Becoming a Brain Scientist Summer Course, Mind
Brain Behavior Interfaculty Initiative, Harvard University**
- Fall 2022 – Spring 2023 **Academic Mentor, Pioneering Volunteers**
A non-profit based in Turkey for fostering positive social change by
empowering individuals with international experience.
- Fall 2020 – Spring 2023 **Co-President, Harvard Women in Psychology**
A graduate student led organization to encourage inclusion and diversity
in psychology, and to provide support, resources, and community for
group members.
- Fall 2021 **Conference Co-Chair, Trends in Psychology Summit**
Served as one of two primary organizers of a virtual conference

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| | highlighting the work of women and underrepresented genders in Psychology. The event, organized by trainees, attracted over 1,400 registrants from dozens of countries. |
| Fall 2021 – Spring 2022 | Graduate Student Steering Committee, Mind Brain Behavior Interfaculty Initiative , Harvard University |
| 2021 - Present | Peer Mentor for Psychology Peer Mentorship Coalition , Harvard Psychology Department |
| Fall 2021 | Mentor for Graduate Applicants , Harvard Women in Psychology Mentorship Program |
| Fall 2020 | Panelist in Ph.D. Orientation Event , Harvard Psychology Department |
| Spring 2021, Fall 2021 | Mentor in Prospective PhD & RA Event in Psychology (PPREP) , Harvard University |
| Spring 2020 | Panelist in Navigating Grad School Admissions , Department of Psychology, Koc University |
| 2019 – 2020 | Newsletter Coordinator , Harvard Women in Psychology |

Professional Experience

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| Fall 2022 – Present | Resident Tutor in Dunster House , Harvard University Serving as a full-time residential academic advisor for undergraduates in Dunster House, assisting in course selection, fellowship applications, and career decisions. |
| Fall 2014 – Summer 2017 | Freelance Proofreader and Translator , Kure Press, Istanbul, TR Published works: Revonsuo, A. (2016). <i>Consciousness: the science of subjectivity</i> (S. Degirmenci, Trans., S. Akbiyik proofreader). Istanbul: Kure Press. Heil, J. (2013). <i>Philosophy of mind: a contemporary introduction</i> (S. Akbiyik , Trans.). Istanbul: Kure Press. Blackmore, S. J. (2009). <i>Conversations on consciousness</i> (S. Akbiyik , Trans.). Istanbul: Kure Press. |

Mentoring

Sydney Haux (Undergraduate research assistant, Stanford University, 2025-present)
 Shuchen Liu, Harvard University (graduate mentee, 2024 - present)
 Residential academic mentor for undergraduates in Dunster House, Harvard University (2022 - 2025)
 Megan Joel (Undergraduate research assistant, Harvard University, Fall 2023)
 Janice Chen (High school summer research assistant, Harvard University, Summer 2023)
 Feyzanur Atakul (Izmir Katip Celebi University graduate mentee, Fall 2022- Spring 2023)
 Mervener Ayyildiz (Bogazici University graduate mentee, Fall 2022- Spring 2023)
 Oliver Sussman (Harvard undergraduate and senior thesis student, Spring 2021 – Spring 2022)
 Tomas Guerrero-Jaramillo (Undergraduate research assistant, Harvard University, Fall 2019)
 Andy Chen (Summer research assistant, Harvard University, Summer 2019)

Ertugrul Akkaya (Summer research assistant, Koc University, Summer 2018)

Ezgi Oztelcan (Summer research assistant, Koc University, Summer 2017)

Ad Hoc Reviewing

Journal of Experimental Psychology, Human Brain Mapping, Journal of Cognitive Neuroscience, Journal of Neuroscience, Cerebral Cortex, Nature Human Behaviour, PNAS, Cambridge Elements, Imaging Neuroscience.

Skills

Programming languages: Python, MATLAB, R, Bash

Neuroimaging software: FSL, Freesurfer, Connectome Workbench, BrainVoyager, SPM

Neuromodulation: transcranial magnetic stimulation, transcranial direct current stimulation

Languages: Turkish (Native), English (Fluent), German (Advanced; DSD II/ B2-C1)