

Tal Boger

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Education

Ph.D., Psychological & Brain Sciences, Johns Hopkins University
Advisor: Chaz Firestone

2023 — present

BA, Statistics & Data Science, Yale University
with distinction

2019 — 2023

Publications (* equal contribution)

Journal Articles

Boger, T., & Firestone, C. (2025). Visual anagrams reveal high-level effects with ‘identical’ stimuli. *Current Biology*, 35(19), PR910-PR912.

Boger, T., & Firestone, C. (2025). The psychophysics of style. *Nature Human Behaviour*.

***Boger, T.**, *Yousif, S. R., McDougle, S. D., & Rutledge, R. B. (2025). Random behavior is stable across tasks and time. *Journal of Experimental Psychology: General*, 154(6), 1571-1582.

Boger, T., & Strickland, B. (2025). Object persistence explains event completion. *Cognition*, 259, 106110.

Boger, T., & Keil, F. C. (2025). Mechanistic complexity is fundamental: Evidence from judgments, attention, and memory. *Journal of Experimental Psychology: General*, 154(2), 596-606.

Boger, T., & Franconeri, S. L. (2024). Reading a graph is like reading a paragraph. *Journal of Experimental Psychology: General*, 153(7), 1699-1704.

Li, Y., Wang, Y.Q., **Boger, T.**, Smith, K., Gershman, S.J., & Ullman, T. (2023). An approximate representation of objects underlies physical reasoning. *Journal of Experimental Psychology: General*, 152(11), 3074-3086.

Boger, T., & Ullman, T. (2023). What is “where”: Physical reasoning informs object location. *Open Mind*, 7, 130-140.

*Hafri, A., ***Boger, T.**, & Firestone, C. (2022). Melting ice with your mind: Representational momentum for physical states. *Psychological Science*, 33(5), 725-735.

Refereed Conference Proceedings

Boger, T., Most, S.B., & Franconeri, S.L. (2021). Jurassic mark: Inattentional blindness for a datasaurus reveals that visualizations are explored, not seen. In *2021 IEEE Visualization Conference (VIS)* (pp. 71-75). (**Best Short Paper Award.**)

Boger, T., Ananthabhotla, I., & Paradiso, J. (2021). Manipulating causal uncertainty in sound objects. In *Proceedings of the 16th International Audio Mostly Conference* (pp. 9-15).

Conference Presentations

Boger, T., Firestone, C., & Liu, S. (2025). Who drew this? Children appreciate visual style differently than adults. Poster presented at the annual meeting of the *Cognitive Science Society*, 8/2/2025, San Francisco, CA.

Boger, T., & Firestone, C. (2025). Complexity is a unified cognitive kind. Talk given at the annual meeting of the *Society for Philosophy and Psychology*, 6/19/2025, Ithaca, NY.

Liu, S., Firestone, C., & **Boger, T.** (2025). Who drew this? Children appreciate visual style differently than adults. Poster presented at the annual meeting of the *Vision Sciences Society*, 5/20/2025, St. Pete Beach, FL.

Boger, T., Liu, S., & Firestone, C. (2025). Complexity is a cognitive universal: Evidence from cross-modal transfer. Poster presented at the annual meeting of the *Vision Sciences Society*, 5/17/2025, St. Pete Beach, FL.

Firestone, C., & **Boger, T.** (2025). Controlling for everything: Canonical size effects with identical stimuli. Talk given at the annual meeting of the *Vision Sciences Society*, 5/17/2025, St. Pete Beach, FL.

Boger, T., & Firestone, C. (2024). The psychophysics of style. Talk given at the annual meeting of the *Object Perception, Attention, and Memory Conference*, 11/21/2024, New York, NY. (**Best Talk Award.**)

Boger, T., & Firestone, C. (2024). The psychophysics of style. Talk given at the annual meeting of the *Society for Philosophy and Psychology*, 6/20/2024, West Lafayette, IN. (**William James Prize.**)

Boger, T., & Firestone, C. (2024). The psychophysics of style. Poster presented at the annual meeting of the *Vision Sciences Society*, 5/18/2024, St. Pete Beach, FL.

Franconeri, S. L., & **Boger, T.** (2024). When processing relationships, visual processing capacity is far less than four. Talk given at the annual meeting of the *Vision Sciences Society*, 5/18/2024, St. Pete Beach, FL.

Hafri, A., **Boger, T.**, & Firestone, C. (2022). Remembering the future: Representational momentum for physical states. Talk given at the annual meeting of the *(European) Society for Philosophy and Psychology*, 7/21/2022, Milan, Italy.

Boger, T., & Keil, F. C. (2022). Mechanism influences intuitive object complexity. Talk given at the annual meeting of the *(European) Society for Philosophy and Psychology*, 7/19/2022, Milan, Italy.

Boger, T., & Firestone, C. (2022). Automatic simulation of unseen physical events. Poster presented at the annual meeting of the *Vision Sciences Society*, 5/17/2022, St. Pete Beach, FL.

Boger, T., Most, S.B., & Franconeri, S.L. (2021). Jurassic mark: Inattentional blindness for a datasaurus reveals that visualizations are explored, not seen. Talk given at the annual (online) meeting of the *IEEE Visualization Conference (VIS)*, 10/26/2021.

Boger, T., Ananthabhotla, I., & Paradiso, J. (2021). Manipulating causal uncertainty in sound objects. Talk given at the annual (online) meeting of the *Audio Mostly Conference*, 9/1/2021.

Boger, T., & Firestone, C. (2021). Through the looking-glass: Visual sensitivity to chirality. Poster presented at the annual (online) meeting of the *Vision Sciences Society*, 5/25/2021.

Hafri, A., **Boger, T.**, & Firestone, C. (2021). Melting ice with your mind: Dynamic representation of physical states. Talk given at the annual (online) meeting of the *Vision Sciences Society*, 5/25/2021.

Boger, T., Hafri, A., & Firestone, C. (2020). Melting ice with your mind: Representational momentum in state-space. Talk given at the annual (online) meeting of the *Object Perception, Attention, and Memory Conference*, 11/19/2020.

Honors & Awards

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| 2025 | Robert S. Waldrop Jr. Investigator Award, <i>Johns Hopkins Psychological & Brain Sciences</i> |
| 2024 | Best Talk Award, <i>Object Perception, Attention, and Memory Conference</i> |
| 2024 | Professional Development Award, <i>Object Perception, Attention, and Memory Conference</i> |
| 2024 | William James Prize, <i>Society for Philosophy and Psychology</i> |
| 2023 | Graduate Research Fellowship Program (GRFP), <i>National Science Foundation</i> |
| 2022 | National Eye Institute Early Career Scientist Travel Grant, <i>Vision Sciences Society</i> |
| 2022 | Robert C. Bates Summer Fellowship, <i>Yale University</i> |
| 2022 | Bruce M. Babcock '62 Travel Fellowship, <i>Yale University</i> |
| 2022 | Saybrook College Richter Summer Fellowship, <i>Yale University</i> |
| 2022 | Saybrook College Research Fellowship, <i>Yale University</i> |
| 2021 | Best Short Paper Award, <i>IEEE Visualization Conference (VIS)</i> |
| 2021 | Saybrook College Richter Summer Fellowship, <i>Yale University</i> |
| 2021 | Saybrook College Research Fellowship, <i>Yale University</i> |

Invited Talks

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| 2025 | Cognitive Tools Lab (Fan lab), <i>Stanford University</i> |
| 2024 | Developing Minds Lab (Kibbe lab), <i>Boston University</i> |
| 2023 | Computational Cognitive Neuroscience Lab (Gershman lab), <i>Harvard University</i> |
| 2023 | Computation and Language Lab (Piantadosi lab), <i>UC Berkeley</i> |
| 2022 | Vision Sciences Lab (Konkle and Alvarez lab), <i>Harvard University</i> |
| 2021 | Machine Common Sense Meeting, <i>DARPA</i> |