

EDUCATION

Ph.D. Psychological and Brain Sciences

Advised by Chaz Firestone

Johns Hopkins

2019–2022(expected)

- Thesis: “Cognitive consequences of visual complexity” (in-progress)

M.A. Psychological and Brain Sciences

Advised by Chaz Firestone

Johns Hopkins

2017–2019

M.S. Cognitive Neuroscience

Advised by Jin-yan Wang

Chinese Academy of Sciences

2013–2016

- Thesis: “Investigation of Pain-related attentional bias and its regulations”

LL.B International Politics

Nanjing University

2009–2013

PUBLICATIONS

- **Sun, Z.**, Firestone, C. (in press). Speaking and seeing: How verbal “description length” encodes visual complexity. *Journal of Experimental Psychology: General*.
- **Sun, Z.**, Firestone, C. (2021). Curious objects: How visual complexity guides attention and engagement. *Cognitive Science*, 45(4), e12933.
- **Sun, Z.**, Firestone, C. (2020). Optimism and pessimism in the predictive brain. *Trends in Cognitive Sciences*, 24, 683-685.
- **Sun, Z.**, Firestone, C. (2020). The dark room problem. *Trends in Cognitive Sciences*, 24, 346-348.
- Fan, L., Sun, Y. B., **Sun, Z.K.**, Wang, N., Luo, F., Yu, F., Wang, J. Y. (2018). Modulation of auditory sensory memory by chronic clinical pain and acute experimental pain: a mismatch negativity study. *Scientific Reports*, 8(1), 1-13.
- **Sun, Z.K.**, Wang, J.-Y. and Luo, F. (2016). Experimental Pain Induces Attentional Bias That Is Modified by Enhanced Motivation: An Eye Tracking Study. *European Journal of Pain*, 20(8), 1266-1277.

Manuscripts in preparation

- **Sun, Z.**, Firestone, C.. The simple and the beautiful: An aesthetic preference for medially complex stimuli.
- **Sun, Z.**, Firestone, C.. The evolution of complexity in visual memory.
- **Sun, Z.**, Yu, Q. Not too simple, not too complex: The Goldilocks principle drives visual attention and memory.
- **Sun, Z.**, Firestone, C.. Cognitive consequences of visual complexity.

PRESENTATIONS

- Sun, Z., Han, S., & Firestone, C. (May 2021). The evolution of complexity in visual memory. **Talk** given at the 21th annual meeting of the Vision Sciences Society, Online
- Sun, Z., & Firestone, C. (June 2020). The simple and the beautiful: An aesthetic preference for medially complex stimuli. **Poster** given at the 20th annual meeting of the Vision Sciences Society, Online
- Halberda, J., Yu, Q., Sun, Z., & Firestone, C. (June 2020). Not too simple, not too complex: The Goldilocks principle drives discrimination and search. **Poster** presented at the 20th Annual Meeting of the Vision Sciences Society, Online
- Sun, Z., & Firestone, C. (November 2019). Speaking about seeing: How verbal descriptions encode visual complexity. **Talk** given at the 27th annual meeting of Object Perception, Attention, Memory (OPAM), Montreal, Canada.
— Award of Best Talk
- Sun, Z., & Firestone, C. (November 2019). Speaking about seeing: How verbal descriptions encode visual complexity. **Poster** presented at the 19th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.
— Travel Award
- Sun, Z., & Firestone, C. (May 2018). Curious objects: Preattentive processing of object complexity. **Talk** given at the 18th annual meeting of the Vision Sciences Society, St. Pete Beach, FL.

HONORS AND AWARDS

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| • Collaborative Research Award in 2021 | 2021 |
| — Award to students who initiate cross-lab collaborative projects, Johns Hopkins | |
| • The Mary Ainsworth Award | 2021 |
| — Annual award to an outstanding female student, Johns Hopkins | |
| • The Robert S. Waldrop Junior Investigator's Award | 2019 |
| — Annual award to a graduate student who has demonstrated exceptional scholarly progress in pre-dissertation graduate research, Johns Hopkins | |
| • Best Talk Award | 2019 |
| — Talk given at the annual meeting of Object Perception, Attention, and Memory, Montreal | |
| • VSS Student Travel Award | 2019 |
| • Collaborative Research Award in 2018 | 2018 |
| • Graduate Student Award | 2015; 2016 |
| — Chinese Academy of Sciences | |

TEACHING

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| • Real World Human Data (TA)
<i>Johns Hopkins University</i> | Spring 2020 |
| • Methods in Experimental Psychology (TA)
<i>Johns Hopkins University</i> | Fall 2019 |
| • Introduction to Cognitive Psychology (TA)
<i>Johns Hopkins University</i> | Spring 2019 |
| • Introduction to Social Psychology (TA)
<i>Johns Hopkins University</i> | Fall 2018 |

SKILLS

- **Programming**
Python, JavaScript, Matlab, R
- **Analysis**
behavioral data, eye tracking data, fMRI data

TRAINING

- **Summer School:**
Neuromatch Academy - Computational Neuroscience
(Interactive track)

SERVICE

Early Career Colloquium Selection Committee

Student organizer

Johns Hopkins

fall 2020

Summer Internship Program

Mentor, Vision Group

Johns Hopkins

Summer 2019

– Project: Shape bias and complexity bias

– Mentee: Subin Han, Cognitive Science Department, JHU

Department Colloquium Committee

Student organizer

Johns Hopkins

fall 2019