www.bramleylab.ppls.ed.ac.uk/member/tianwei/ Last updated: Mar 2023

Tianwei Gong

Education

2020-present **PhD in Psychology**, School of Philosophy, Psychology and Language Sciences.

Supervisor: Dr. Neil R. Bramley University of Edinburgh, UK

2019–2020 MRes in Psychology, School of Philosophy, Psychology and Language Sciences.

Supervisor: Dr. Neil R. Bramley University of Edinburgh, UK

2014–2018 **BSc in Psychology**, Faculty of Psychology.

Beijing Normal University, China

Journal Articles

2023 **Gong, T.**, Gerstenberg, T., Mayrhofer, R., & Bramley, N. R. (2023). Active causal structure learning in continuous time. *Cognitive Psychology*, *140*(4), 101542. [Link]

Gong, T., Gao, X., & Jiang, T. (accepted). FAB: A "dummy's" program for self-paced forward and backward learning. *Behavior Research Methods*. [Link]

2021 **Gong, T.**, Young, G. A., & Shtulman, A. (2021). The development of cognitive reflection in China. *Cognitive Science.*, 45(4), e12966. [Link]

Gong, T., & Shtulman, A. (2021). The plausible impossible: Chinese adults hold graded notions of impossibility. *Journal of Cognition and Culture.*, 21(1-2), 76-93. [Link]

2020 Yu, S., Li, B., Zhang, M., **Gong, T.**, Li, X., Li, Z., ... & Chen, C. (2020). Automaticity in processing spatial-numerical associations: Evidence from a perceptual orientation judgment task of Arabic digits in frames. *PloS One*, *15*(2), e0229130. [Link]

2019 **Gong, T.***, Li, B.*, Teng, L., Zhou, Z., Gao, X., & Jiang, T. (2019). The association between number magnitude and space is dependent on notation: Evidence from an adaptive perceptual orientation task. *Journal of Numerical Cognition*, 5(1), 38-54. [Link]

2016 Zhang, M., Gao, X., Li, B., Yu, S., **Gong, T.**, Jiang, T., ... & Chen, Y. (2016). Spatial representation of ordinal information. *Frontiers in Psychology*, 7, 505. [Link]

Under review Gong, T., & Bramley, N. R. (under review). Evidence from the future.

Gong, T., & Bramley, N. R. (In revision). Continuous time causal structure induction with prevention and generation. *PsyArxiv*. [Link]

Gong, T., Li, J., Yeung, J. Y., & Zhang, X. (in revision). Academic pathways: Understand the relationship between academic performance and students' course selection and allocation.

Peer-reviewed Conference Proceedings Articles

- 2022 **Gong, T.** & Bramley, N. R. (2022). Intuitions and perceptual constraints on causal learning from dynamics. In *Proceedings of the 44th Annual Meeting of the Cognitive Science Society*. [Link]
- Gong, T. & Bramley, N. R. (2021). Learning preventative and generative causal structures from point events in continuous time. In Causal Inference & Machine Learning workshop at 35th Neural Information Processing Systems conference. [Link]
- 2020 **Gong, T.** & Bramley, N. R. (2020). What you didn't see: Prevention and generation in continuous time causal induction. In *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society. [Link]

Gong, T. & Shtulman, A. (2020). The plausible impossible: Graded notions of impossibility across cultures. In *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*. Austin, TX: Cognitive Science Society. [Link]

Under review Gong, T., Zhao, B., McIntosh, R. D., & Lucas, C. G. (2023). A rational model of spatial neglect.

Presentations

- Mar 2023 How people use temporal information to learn and reason about causal structure. Talk presented at Edinburgh Scientific Researchers Association, University of Edinburgh, Edinburgh, UK.
- Jul 2022 Intuitions and perceptual constraints on causal learning from dynamics. Poster presented at CogSci2022, Toronto, Canada.
- Jul 2022 Active causal structure learning in continuous time. Talk presented at Edinburgh Computational CogSci Workshop, Edinburgh, UK.
- Apr 2022 Active causal structure learning in continuous time. Talk presented at Computational Principles of Intelligence Lab, MPI for Biological Cybernetics, Tübingen, Germany, virtually.
- Dec 2021 Learning preventative and generative causal structures from point events in continuous time. Poster presented at NeurIPS2021 (WHY21 Workshop), virtually.
- Nov 2021 Active causal structure learning in continuous time. Talk presented at Human Cognitive Neuropsychology seminar, University of Edinburgh, Edinburgh, UK.
- Jul 2020 What you didn't see: Prevention and generation in continuous time causal induction. Poster presented at CogSci2020, virtually.
- Jul 2020 *The plausible impossible: Graded notions of impossibility across cultures.* Poster presented at CogSci2020, virtually.
- May 2018 Similarity-induced interference in sentence processing: the (missing) role of pragmatics. Poster presented at APS2018, San Francisco, USA.
- Feb 2017 The association between number magnitude and space is dependent on notation. Talk presented at Jing-Stevenson-Zhang research symposium, University of Michigan, Ann Arbor, USA.

Awards and Scholarships

- 2020–2023 School of PPLS PhD Scholarship, £17,668 stipend per year & tuition fees, University of Edinburgh, UK.
- 2020–2023 School of PPLS Research Support Grant, £1000-2000 per year, University of Edinburgh, UK.
 - 2018 Conference Travel Grant, \$200, Association for Psychological Science, USA.
 - 2018 Outstanding Undergraduate Student, ¥1,000, Beijing Municipal Education Commission, China.
- 2015–2017 Undergraduate Research Grants, ¥3,000, Beijing Normal University, China.
- 2014–2017 Academic Scholarship, ¥3,000-5,000 per year, Beijing Normal University, China.

Research Experiences

2018–2019 **Postbac Researcher**, Occidental College, USA (remotely).

Supervisor: Dr. Andrew Shtulman

Topics: cognitive reflection, magic thinking, cross-cultural cognition

2018–2019 **Postbac Researcher**, Queensland University of Technology, Australia (remotely).

Supervisor: Dr. Xuefei Gao

Topics: language processing, perceptual simulation, situation integration, psychological toolkit development

2016–2018 Undergraduate Research Assistant, Beijing Normal University, China.

Supervisor: Dr. Jian Li

Topics: data mining, psychometric, ecological measurement, game-based assessment

2015–2017 **Undergraduate Research Assistant**, Beijing Normal University, China.

Supervisor: Dr. Ting Jiang

Topics: numerical cognition, mental number line, automatic processing

Teaching

University of Edinburgh.

- 2022-2023 Teaching Assistant&Marker, Computational Cognitive Science, Year-3 undergraduate, School of Informatics.
- 2021-2023 Demonstrator&Marker, Univariate Statistics and Methodology using R, Master, School of Psychology.
- 2021-2022 Demonstrator&Marker, Data Analysis for Psychology in R, Year-1 undergraduate, School of Psychology.
- 2021-2022 Demonstrator&Marker, Psychology, Year-2 undergraduate, School of Psychology.
- 2020-2022 Teaching Assistant&Marker, Causal Cognition, Year-3 undergraduate, School of Psychology.
- 2020-2021 Marker, Introduction to Cognitive Science, Year-1 undergraduate, School of Informatics.

Reviews

- 2022- Journal of Experimental Psychology: Learning, Memory, and Cognition (1)
- 2021- Cognitive Science Conference Proceedings (5)

Skills

 $\begin{array}{ll} \mathsf{Modelling}/ & \mathsf{R,\ Python,\ MATLAB,\ SPSS,\ JASP,\ Jamovi,\ Stan} \\ \mathsf{Statistics} \end{array}$

Experimentation JavaScript, HTML, CSS, SQL, Psychtoolbox, Eye-link, Qualtrics, Mturk, Psiturk

Document Jupyter, Markdown, RMarkdown, LATEX

Preparation

Languages English (fluent), Chinese Mandarin (native), Japanese (basic)