

Bonan Zhao

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EDUCATION

- PhD, Psychology**, *University of Edinburgh*, Edinburgh, Scotland, UK Expected 2023
Project topic: A computational account of human causal generalization
Advisors: Neil R. Bramley (Psychology), Christopher G. Lucas (Informatics)
- MSc, Logic (Cum Laude)**, *University of Amsterdam*, Amsterdam, The Netherlands Aug 2017
- BA, Philosophy**, *Tsinghua University*, Beijing, China July 2015

EXPERIENCE

- Open Research Facilitator**, *University of Edinburgh*, Edinburgh 2021-2022
- Data Scientist**, *Screen 6* (Amsterdam startup), Amsterdam 2017-2019

PUBLICATIONS

Working papers

1. **B. Zhao**, N. R. Bramley, and C. G. Lucas. Powering up causal generalization: A model of human conceptual bootstrapping with adaptor grammars. *To appear in Proceedings of the 44th Annual Meeting of the Cognitive Science Society*, 2022
2. Z. Xia*, **B. Zhao***, T Quillien, and C. G. Lucas. Dissecting causal asymmetries in inductive generalization. *To appear in Proceedings of the 44th Annual Meeting of the Cognitive Science Society*, 2022
3. N. Marchant, **B. Zhao**, N. R. Bramley, D. Morales, and S. E. Chaigneau. Categorizing perceived causal events. *To appear in Proceedings of the 44th Annual Meeting of the Cognitive Science Society*, 2022

Peer-reviewed articles

4. **B. Zhao**, C. G. Lucas, and N. R. Bramley. How do people generalize causal relations over objects? A non-parametric Bayesian account. *Computational Brain & Behavior*, 5:22–44, 2022
5. **B. Zhao**, C. G. Lucas, and N. R. Bramley. Building object-based causal programs for human-like generalization. In *Causal Inference & Machine Learning Workshop*. NeurIPS, 2021
6. S. Valentin, **B. Zhao**, C. Jiang, C. G. Lucas, and N. R. Bramley. Symbolic and sub-symbolic systems in people and machines. In *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society*. Cognitive Science Society, 2021
7. **B. Zhao** and N. R. Bramley. Order effects in one-shot causal generalization. In *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*. Cognitive Science Society, 2020
8. **B. Zhao**, I. van de Pol, M. Raijmakers, and J. Szymanik. Predicting cognitive difficulty of the deductive mastermind game with dynamic epistemic logic models. In *Proceedings of the 40th Annual Meeting of the Cognitive Science Society*. Cognitive Science Society, 2018
9. V. Capraro, J. Sippel, **B. Zhao**, L. Hornischer, M. Savary, Z. Terzopoulou, P. Faucher, and S. F. Griffioen. People making deontological judgments in the trapdoor dilemma are perceived to be more prosocial in economic games than they actually are. *PLOS One*, 2018
10. Z. Terzopoulou, A. Solaki, and **B. Zhao**. Logic of closeness revision: Challenging relations in social networks. In *Proceedings of the ESSLLI 2016 Student Session*. 28th European Summer School in Logic, Language & Information, 2016

Posters

11. **B. Zhao**, C. G. Lucas, and N. R. Bramley. Building object-based causal programs for human-like generalization. Poster presented at Causal Inference & Machine Learning Workshop, NeurIPS, 2021
12. **B. Zhao** and N. R. Bramley. Order effects in one-shot causal generalization. Poster presented at the 42nd Annual Meeting of the Cognitive Science Society, 2020
13. **B. Zhao**, I. van de Pol, M. Raijmakers, and J. Szymanik. Predicting cognitive difficulty of the deductive mastermind game with dynamic epistemic logic models. Poster presented at the 40th Annual Meeting of the Cognitive Science Society, Madison, WI, USA, 2018
14. Z. Terzopoulou, A. Solaki, and **B. Zhao**. Logic of closeness revision and opinion-closeness revision. Poster presented at the 12th Conference on Logic and the Foundations of Game and Decision Theory (LOFT), Maastricht, The Netherlands, 2016

Organized workshop

15. S. Valentin, **B. Zhao**, C. Jiang, C. G. Lucas, and N. R. Bramley. Symbolic and sub-symbolic systems in people and machines. Workshop at the 43rd Annual Meeting of the Cognitive Science Society, 2021

INVITED TALKS

Computational Cognitive Science Lab , University of Melbourne, virtual	May 2022
Logic and Interactive Rationality , University of Amsterdam, virtual	Mar 2022
London Judgment and Decision Making Seminar , London, UK	Mar 2022
Causality in Cognition Lab , Stanford University, virtual	Feb 2022
Computational Principles of Intelligence Lab , MPI Tübingen, virtual	July 2021
DTU Compute , Technical University of Denmark, Copenhagen, Denmark	Oct 2017
Donders Institute for Brain, Cognition and Behaviour , Nijmegen, The Netherlands	May 2017
Cool Logic , Institute for Logic, Language and Computation, Amsterdam, The Netherlands	Apr 2016

CONFERENCE & WORKSHOP PRESENTATIONS

Reasoning Workshop , Edinburgh Laboratory for Integrated Artificial Intelligence	June 2022
Causal Inference & Machine Learning: Why now? , workshop at NeurIPS, virtual	Dec 2021
Symbolic and sub-symbolic systems in people and machines , workshop at CogSci 2021, virtual	July 2021
International Conference of Thinking (ICT 2020) , virtual	June 2021
Annual Meeting of the Cognitive Science Society (CogSci 2020) , virtual	Aug 2020
Annual Meeting of the Cognitive Science Society (CogSci 2018) , Madison, US	July 2018
North American Summer School on Logic, Language, and Information (NASSLLI) , Rutgers, US	July 2016
Logic and the Foundations of Game and Decision Theory (LOFT 2016) , Maastricht, The Netherlands	July 2016
LABEX CIMI Pluridisciplinary Workshop on Game Theory , Toulouse, France	Nov 2015

AWARDS & SCHOLARSHIPS

Research Support Grants , support research travel and payment of participants, <i>University of Edinburgh</i>	2021,2022
Postgraduate Research Award , international rate tuition fee and stipend, <i>University of Edinburgh</i>	2019-2022
Springer Best Paper Award , <i>28th European Summer School in Logic, Language and Information</i>	2016
Amsterdam Excellence Scholarship , <i>University of Amsterdam</i>	2015-2017
National Merit Scholarship , <i>Ministry of Education, PRC</i>	2015
Dean's Award , <i>Tsinghua University</i>	2014

TEACHING

Tutor , <i>University of Edinburgh</i> , Edinburgh	2020-2022
<ul style="list-style-type: none">• Causal Cognition• Univariate Statistics and Methodology using R• Logic 1	
Mentor , <i>HackYourFuture</i> , free refugee coding school (Amsterdam-based initiative)	2018-2019
<ul style="list-style-type: none">• Lead lecturer for course modules Git, CLI, and Database• TA for course modules JavaScript and React.js	

SERVICE

Reviewer

- CogSci 2022, 2021, 2020
- Journal of Experimental Psychology: Applied

Organizer , EdinCoCoSci lab meetings, <i>University of Edinburgh</i>	2019-2022
Organizer , Logic Tea seminar series, <i>Institute for Logic, Language and Computation</i>	2016-2017

MENTORING

Zeyu Xia	MSc thesis project, School of Informatics, University of Edinburgh	2021
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SKILLS

Computer skills	Python, R, Flask, Hugo, Jekyll, JavaScript/HTML/CSS, SQL, L ^A T _E X, Git, CLI
Languages	Mandarin Chinese (native), English (fluent), Japanese, Dutch