Tobias Gerstenberg

January 2021

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Professional experience and affiliations

Sep 2018 - present	**Assistant Professor in Cognitive Psychology** PI of the Causality in Cognition Lab (CICL)	Stanford, USA
Apr 2014 - Jul 2018	**Postdoctoral Associate** PI: Prof. Joshua Tenenbaum	MIT, USA
Apr 2013 - Apr 2014	**Postdoctoral Fellow** PI: Prof. Joshua Tenenbaum	MIT, USA

Education

Aug 2009 - Feb 2013	**PhD Candidate** Supervisors: Dr. David Lagnado & Prof. Nick Chater	University College London, England
Oct 2008 - Aug 2009	**Course Attendance** Psychology, Computer Science, Philosophy and Theology	Humboldt University, Berlin, Germany
Sep 2007 - Sep 2008	**MSc Cognitive and Decision Sciences** Supervisor: Dr. David Lagnado	University College London, England
Sep 2005 - July 2007	**Vordiplom (eqvl. BSc)**	Humboldt University, Berlin, Germany
Sep 1995 - July 2004	**Abitur (eqvl. A-levels)**	Scheffel Gymnasium, Bad Säckingen, Germany

Awards & Scholarships

Sep 2020	Stanford Human-Centered Artifical Intelligence (HAI) seed grant: "The Science and Engineering of Explanations (SEE)" ($75,000)
Jun 2019	Stanford Hellman Faculty Scholar Award: "Multi-modal inference through mental simulation" ($39,960)
May 2019	Stanford Human-Centered Artifical Intelligence (HAI) seed grant: "Multi-modal inference in brains, minds, and machines" ($75,000)
2015 - 2016	Templeton Foundation: "The Experience Project: Computational models of the intuitive theory of transformative experiences" ($90,000; co-PI)
Apr 2013 - 2014	MIT Intelligence Initiative PostDoc Scholarship
May 2004 - Dec 2012	e-fellows.net Scholarship
Sep 2009 - Sep 2012	AXA PhD Scholarship (€120,000)

Apr 2012	PPG Conference Best Presentation Award, London, England
	Award for best oral presentation at the annual conference of UCL's postgraduate peer group
Mar 2011	UCL Sully Scholarship (£1,466), London, England
	Award for best PhD upgrade talk in the Department of Cognitive, Perceptual, and Brain Sciences, 2010
Jan 2011	UCL Bogue Scholarship (£3,450), London, England
	Grant to cover 3-month lab visits to Stanford and MIT
Oct 2010	KogWis, Berlin, Germany
	Conference travel grant
Feb 2006 - Sep 2009	Scholar of the German National Academic Foundation
July 2009	Max Planck Institute Berlin, Germany
	2 nd prize in poster competition of the Summer Institute on Bounded Rationality
Nov 2008	University College London, England
	Best performing student of the academic year for the MSc in Cognitive and Decision Sciences
July 2006	Humboldt University, Berlin, Germany
	Winner of the competition for the first psychological experiment

Publications

Note: * indicates joint first authorship.

Submitted papers

1. **Gerstenberg**, **T.**, N. D. Goodman, D. A. Lagnado, and J. B. Tenenbaum (submitted). A counterfactual simulation model of causal judgment. preprint on OSF at `https://psyarxiv.com/7zj94/`.

2. Langenhoff, A. F., A. Wiegmann, J. Y. Halpern, J. B. Tenenbaum, and **T. Gerstenberg** (submitted). Predicting responsibility judgments from dispositional inferences and causal attributions.

3. Smith, K. A., J. B. Hamrick, A. N. Sanborn, P. W. Battaglia, **T. Gerstenberg**, T. D. Ullman, and J. B. Tenenbaum (submitted). Probabilistic models of physical reasoning.

4. Sosa, F. A., T. D. Ullman, J. B. Tenenbaum, S. J. Gershman, and **T. Gerstenberg** (submitted). Moral dynamics: Grounding moral judgment in intuitive physics and intuitive psychology.

5. **Gerstenberg**, **T.** and S. Stephan (2020). A counterfactual simulation model of causation by omission. *PsyArXiv*.

6. Kirfel, L., T. F. Icard, and **T. Gerstenberg** (2020a). Inference from explanation. *PsyArXiv*.

In press

7. Kominsky, J. F., **T. Gerstenberg**, M. Pelz, M. Sheskin, H. Singmann, L. Schulz, and F. Keil (in press). The trajectory of counterfactual simulation in development. *Developmental Psychology*.

Journal articles

8. Grinfeld, G., D. Lagnado, **T. Gerstenberg**, J. F. Woodward, and M. Usher (2020). Causal Responsibility and Robust Causation. *Frontiers in Psychology* **11**, 1069.

9. Niemi, L., J. Hartshorne, **T. Gerstenberg**, M. Stanley, and L. Young (2020). Moral Values Reveal the Causality Implicit in Verb Meaning. en. *Cognitive Science* **44**(6).

10. **Gerstenberg**, **T.** and T. F. Icard (2019). Expectations affect physical causation judgments. *Journal of Experimental Psychology: General* **149**(3), 599–607.

11. Morris, A., J. Phillips, **T. Gerstenberg**, and F. Cushman (2019). Quantitative causal selection patterns in token causation. *PLoS ONE* **14**(8), e0219704.

12. Bramley, N. R., **T. Gerstenberg**, R. Mayrhofer, and D. A. Lagnado (2018). Time in causal structure learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition* **44**(12), 1880–1910.

13. Bramley, N. R., **T. Gerstenberg**, J. B. Tenenbaum, and T. M. Gureckis (2018). Intuitive experimentation in the physical world. *Cognitive Psychology* **105**, 9–38.

14. **Gerstenberg**, **T.**, T. D. Ullman, J. Nagel, M. Kleiman-Weiner, D. A. Lagnado, and J. B. Tenenbaum (2018). Lucky or clever? From expectations to responsibility judgments. *Cognition* **177**, 122–141.

15. Koskuba, K., **T. Gerstenberg**, H. Gordon, D. A. Lagnado, and A. Schlottmann (2018). What's fair? How children assign reward to members of teams with differing causal structures. *Cognition* **177**, 234–248.

16. **Gerstenberg**, **T.**, M. F. Peterson, N. D. Goodman, D. A. Lagnado, and J. B. Tenenbaum (2017). Eye-Tracking causality. *Psychological Science* **28**(12), 1731–1744.

17. Gershman*, S. J., T. Gerstenberg*, C. L. Baker, and F. Cushman (2016). Plans, habits, and theory of mind. *PLoS ONE* **11**(9), e0162246.

18. Alicke, M. D., D. R. Mandel, D. Hilton, **T. Gerstenberg**, and D. A. Lagnado (2015). Causal conceptions in social explanation and moral evaluation: A historical tour. *Perspectives on Psychological Science* **10**(6), 790–812.

19. Kominsky, J. F., J. Phillips, **T. Gerstenberg**, D. A. Lagnado, and J. Knobe (2015). Causal superseding. *Cognition* **137**, 196–209.

20. Lagnado, D. A., **T. Gerstenberg**, and R. Zultan (2013). Causal responsibility and counterfactuals. *Cognitive Science* **47**, 1036–1073.

21. **Gerstenberg**, **T.** and D. A. Lagnado (2012). When contributions make a difference: Explaining order effects in responsibility attributions. *Psychonomic Bulletin & Review* **19**(4), 729–736.

22. Zultan, R., **T. Gerstenberg**, and D. A. Lagnado (2012). Finding fault: Counterfactuals and causality in group attributions. *Cognition* **125**(3), 429–440.

23. **Gerstenberg**, **T.** and D. A. Lagnado (2010). Spreading the blame: The allocation of responsibility amongst multiple agents. *Cognition* **115**(1), 166–171.

24. Meder, B., **T. Gerstenberg**, Y. Hagmayer, and M. R. Waldmann (2010). Observing and Intervening: Rational and Heuristic Models of Causal Decision Making. *Open Psychology Journal* **3**, 119–135.

Peer-reviewed conference proceedings articles

25. Beller*, A., E. Bennett*, and **T. Gerstenberg** (2020). The language of causation. In: *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.

26. Bridgers, S., C. Yang, **T. Gerstenberg**, and H. Gweon (2020). Whom will Granny thank? Thinking about what could have been informs children's inferences about relative helpfulness. In: *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.

27. Kirfel, L., T. F. Icard, and **T. Gerstenberg** (2020b). Learning from explanations. In: *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.

28. Kominsky, J. F., **T. Gerstenberg**, M. Pelz, H. Singmann, M. Sheskin, and F. Keil (2019). The trajectory of counterfactual simulation in development. In: *Proceedings of the 41st Annual Conference of the Cognitive Science Society*. Ed. by A. Goel, C. Seifert, and C. Freksa. Montreal, QB: Cognitive Science Society, pp.2044–2050.

29. Yildirim, I., B. Saeed, G. Bennett-Pierre, **T. Gerstenberg**, J. B. Tenenbaum, and H. Gweon (2019). Explaining intuitive difficulty judgments by modeling physical effort and risk. *Proceedings of the 41st Annual Conference of the Cognitive Science Society*.

30. Gates, M. A., T. L. Veuthey, M. H. Tessler, K. A. Smith, **T. Gerstenberg**, L. Bayet, and J. B. Tenenbaum (2018). Tiptoeing around it: Inference from absence in potentially offensive speech. In: *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.

31. **Gerstenberg**, **T.**, M. H. Siegel, and J. B. Tenenbaum (2018). What happened? Reconstructing the past from vision and sound. In: *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.

32. Bramley, N. R., R. Mayrhofer, **T. Gerstenberg**, and D. A. Lagnado (2017). Causal learning from interventions and dynamics in continuous time. In: *Proceedings of the 39th Annual Conference of the Cognitive Science Society*.

33. **Gerstenberg**, **T.**, L. Zhou, K. A. Smith, and J. B. Tenenbaum (2017). Faulty towers: A hypothetical simulation model of physical support. In: *Proceedings of the 39th Annual Conference of the Cognitive Science Society*.

34. Stephan, S., P. Willemsen, and **T. Gerstenberg** (2017). Marbles in Inaction: Counterfactual Simulation and Causation by Omission. In: *Proceedings of the 39th Annual Conference of the Cognitive Science Society*.

35. Yildirim, I., **T. Gerstenberg**, B. Saeed, M. Toussant, and J. B. Tenenbaum (2017). Physical problem solving: Joint planning with symbolic, geometric, and dynamic constraints. In: *Proceedings of the 39th Annual Conference of the Cognitive Science Society*.

36. Bramley, N., **T. Gerstenberg**, and J. B. Tenenbaum (2016). Natural science: Active learning in dynamic physical microworlds. In: *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Ed. by A. Papafragou, D. Grodner, D. Mirman, and J. C. Trueswell. Austin, TX: Cognitive Science Society, pp.2567–2572.

37. **Gerstenberg**, **T.** and J. B. Tenenbaum (2016). Understanding "almost": Empirical and computational studies of near misses. In: *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Ed. by A. Papafragou, D. Grodner, D. Mirman, and J. C. Trueswell. Austin, TX: Cognitive Science Society, pp.2777–2782.

38. Niemi, L., J. Hartshorne, **T. Gerstenberg**, and L. Young (2016). Implicit measurement of motivated causal attribution. In: *Proceedings of the 38th Annual Conference of the Cognitive Science Society*. Ed. by A. Papafragou, D. Grodner, D. Mirman, and J. C. Trueswell. Austin, TX: Cognitive Science Society, pp.1745–1750.

39. Allen, K., J. Jara-Ettinger, **T. Gerstenberg**, M. Kleiman-Weiner, and J. B. Tenenbaum (2015). Go fishing! Responsibility judgments when cooperation breaks down. In: *Proceedings of the 37th Annual Conference of the Cognitive Science Society*. Ed. by D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, J. Matlock T., C. D., and P. P. Maglio. Austin, TX: Cognitive Science Society, pp.84–89.

40. **Gerstenberg**, **T.**, N. D. Goodman, D. A. Lagnado, and J. B. Tenenbaum (2015). How, whether, why: Causal judgments as counterfactual contrasts. In: *Proceedings of the 37th Annual Conference of the Cognitive Science Society*. Ed. by D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, J. Matlock T., C. D., and P. P. Maglio. Austin, TX: Cognitive Science Society, pp.782–787.

41. **Gerstenberg**, **T.**, J. Y. Halpern, and J. B. Tenenbaum (2015). Responsibility judgments in voting scenarios. In: *Proceedings of the 37th Annual Conference of the Cognitive Science Society*. Ed. by D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, J. Matlock T., C. D., and P. P. Maglio. Austin, TX: Cognitive Science Society, pp.788–793.

42. Kleiman-Weiner, M., **T. Gerstenberg**, S. Levine, and J. B. Tenenbaum (2015). Inference of intention and permissibility in moral decision making. In: *Proceedings of the 37th Annual Conference of the Cognitive Science Society*. Ed. by D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, J. Matlock T., C. D., and P. P. Maglio. Austin, TX: Cognitive Science Society, pp.1123–1128.

43. Bramley, N., **T. Gerstenberg**, and D. A. Lagnado (2014). The order of things: Inferring causal structure from temporal patterns. In: *Proceedings of the 36th Annual Conference of the Cognitive*

Science Society. Ed. by P. Bello, M. Guarini, M. McShane, and B. Scassellati. Austin, TX: Cognitive Science Society, pp.236–241.

44. **Gerstenberg**, **T.**, N. D. Goodman, D. A. Lagnado, and J. B. Tenenbaum (2014). From counterfactual simulation to causal judgment. In: *Proceedings of the 36th Annual Conference of the Cognitive Science Society*. Ed. by P. Bello, M. Guarini, M. McShane, and B. Scassellati. Austin, TX: Cognitive Science Society, pp.523–528.

45. **Gerstenberg**, **T.**, T. D. Ullman, M. Kleiman-Weiner, D. A. Lagnado, and J. B. Tenenbaum (2014). Wins above replacement: Responsibility attributions as counterfactual replacements. In: *Proceedings of the 36th Annual Conference of the Cognitive Science Society*. Ed. by P. Bello, M. Guarini, M. McShane, and B. Scassellati. Austin, TX: Cognitive Science Society, pp.2263–2268.

46. Kominsky, J. F., J. Phillips, J. Knobe, **T. Gerstenberg**, and D. A. Lagnado (2014). Causal supersession. In: *Proceedings of the 36th Annual Conference of the Cognitive Science Society*. Ed. by P. Bello, M. Guarini, M. McShane, and B. Scassellati. Austin, TX: Cognitive Science Society, pp.761–766.

47. **Gerstenberg**, **T.**, C. Bechlivanidis, and D. A. Lagnado (2013). Back on track: Backtracking in counterfactual reasoning. In: *Proceedings of the 35th Annual Conference of the Cognitive Science Society*. Ed. by M. Knauff, M. Pauen, N. Sebanz, and I. Wachsmuth. Austin, TX: Cognitive Science Society, pp.2386–2391.

48. **Gerstenberg**, **T.** and N. D. Goodman (2012). Ping Pong in Church: Productive use of concepts in human probabilistic inference. In: *Proceedings of the 34th Annual Conference of the Cognitive Science Society*. Ed. by N. Miyake, D. Peebles, and R. P. Cooper. Austin, TX: Cognitive Science Society, pp.1590–1595.

49. **Gerstenberg**, **T.**, N. D. Goodman, D. A. Lagnado, and J. B. Tenenbaum (2012). Noisy Newtons: Unifying process and dependency accounts of causal attribution. In: *Proceedings of the 34th Annual Conference of the Cognitive Science Society*. Ed. by N. Miyake, D. Peebles, and R. P. Cooper. Austin, TX: Cognitive Science Society, pp.378–383.

50. McCoy, J., T. Ullman, A. Stuhlmüller, **T. Gerstenberg**, and J. B. Tenenbaum (2012). Why blame Bob? Probabilistic generative models, counterfactual reasoning, and blame attribution. In: *Proceedings of the 34th Annual Conference of the Cognitive Science Society*. Ed. by N. Miyake, D. Peebles, and R. P. Cooper. Austin, TX: Cognitive Science Society, pp.1996–2001.

51. **Gerstenberg**, **T.**, A. Ejova, and D. A. Lagnado (2011). Blame the skilled. In: *Proceedings of the 33rd Annual Conference of the Cognitive Science Society*. Ed. by C. Carlson, C. Hölscher, and T. Shipley. Austin, TX: Cognitive Science Society, pp.720–725.

52. **Gerstenberg**, **T.**, D. A. Lagnado, M. Speekenbrink, and C. Cheung (2011). Rational order effects in responsibility attributions. In: *Proceedings of the 33rd Annual Conference of the Cognitive Science Society.* Ed. by C. Carlson, C. Hölscher, and T. Shipley. Austin, TX: Cognitive Science Society, pp.1715–1720.

53. Schächtele, S., **T. Gerstenberg**, and D. A. Lagnado (2011). Beyond outcomes: The influence of intentions and deception. In: *Proceedings of the 33rd Annual Conference of the Cognitive Science Society*. Ed. by L. Carlson, C. Hölscher, and T. Shipley. Austin, TX: Cognitive Science Society, pp.1860–1865.

54. **Gerstenberg**, **T.**, D. A. Lagnado, and Y. Kareev (2010). The dice are cast: The role of intended versus actual contributions in responsibility attribution. In: *Proceedings of the 32nd Annual Conference of the Cognitive Science Society*. Ed. by S. Ohlsson and R. Catrambone. Austin, TX: Cognitive Science Society, pp.1697–1702.

Book chapters

55. Bramley, N. R., **T. Gerstenberg**, R. Mayrhofer, and D. A. Lagnado (2019). "Intervening in time". In: *Time and Causality Across the Sciences*. Ed. by S. Kleinberg. Cambridge University Press, pp.86–115.

56. **Gerstenberg**, **T.** and J. B. Tenenbaum (2017). "Intuitive Theories". In: *Oxford Handbook of Causal Reasoning*. Ed. by M. Waldmannn. Oxford University Press, pp.515–548.

57. Lagnado, D. A. and **T. Gerstenberg** (2017). "Causation in legal and moral reasoning". In: *Oxford Handbook of Causal Reasoning*. Ed. by M. Waldmann. Oxford University Press, pp.565–602.

58. Goodman, N. D., J. B. Tenenbaum, and **T. Gerstenberg** (2015). "Concepts in a probabilistic language of thought". In: *The Conceptual Mind: New Directions in the Study of Concepts*. Ed. by E. Margolis and S. Lawrence. MIT Press, pp.623–653.

59. Lagnado, D. A. and **T. Gerstenberg** (2015). "A difference-making framework for intuitive judgments of responsibility". In: *Oxford Studies in Agency and Responsibility*. Ed. by D. Shoemaker. Vol. 3. Oxford University Press, pp.213–241.

60. **Gerstenberg**, **T.** and D. A. Lagnado (2014). "Attributing responsibility: Actual and counterfactual worlds". In: *Oxford Studies in Experimental Philosophy*. Ed. by J. Knobe, T. Lombrozo, and S. Nichols. Vol. 1. Oxford University Press, pp.91–130.

ArXiv

61. Morris, A., J. Phillips, T. Icard, J. Knobe, **T. Gerstenberg**, and F. Cushman (2018). Judgments of actual causation approximate the effectiveness of interventions. *PsyArXiv*.

PhD thesis & MSc thesis

62. **Gerstenberg**, **T.** (2013). Making a difference: Responsibility, causality, and counterfactuals. *Unpublished PhD thesis*.

63. **Gerstenberg**, **T.** (2009). The allocation of responsibility amongst multiple causes. *Unpublished MSc thesis*.

Press & Multimedia

2020   Talk recording – Remote presentation in Symbolic Systems seminar series at Stanford.

2018   Quantifying How We Intuit the Physical World – Medium blog post about the *Intuitive experimentation in the physical world* paper.

What happened? Reconstructing the past from vision and sound – Flash presentation at the Center for Brains, Minds & Machines.

2017   How we determine blame – Article on MIT News covering our *Eye-tracking causality* paper.

Wo das essen nicht kalt wird – Article in Deutsche Universitätszeitung (DUZ) on what working at MIT is like.

2016   Eye-tracking causality – Flash presentation at the Center for Brains, Minds & Machines.

2015   A counterfactual simulation model of causal judgment – Recording of invited talk at the Society for Psychology and Philosophy Conference.

2012   Are you responsible for the outcome of the election? – Blog entry written by Tania Lombrozo which covers the "When contributions make a difference: Explaining order effects in responsibility attributions" paper.

2010   AXA Talent Day – Video created in the context of a talent day organized by AXA in Paris.

Who is to blame when groups succeed or fail? – Blog entry written by Art Markman in *Psychology Today* summarizing the "Spreading the blame: The allocation of responsibility amongst multiple agents" paper.

Conferences & Workshops

July 2020   Cognitive Science Conference (42nd), Toronto, Canada (virtual)
Poster: Whom will Granny thank? Thinking about what could have been informs children's inferences about relative helpfulness. (presented by Sophie Bridgers).
Poster: The language of causation (presented by Aaron Beller).
Poster: Learning from explanations (presented by Lara Kirfel).

Apr 2020   ICLR Eighth International Conference on Learning Representations, Virtual Conference, Formerly Addis Ababa, Ethiopia
Invited talk in Workshop on Causal Learning for Decision Making: *"Understanding 'why': The role of causality in Cognition".*

Sep 2019   Psychology and Economics of Causal Reasoning Conference, London, UK
Invited Talk: *"Understanding 'why': From Counterfactual Simulations to Explanations".*

July 2019   Cognitive Science Conference (41st), Montreal, Canada
Talk: *Explaining intuitive difficulty judgments by modeling physical effort and risk (presented by Ilker Yildirim).*
Poster: *The trajectory of counterfactual simulation in development (presented by Jonathan Kominsky).*

July 2019   Society for Philosophy and Psychology (SPP), San Diego, California, USA
Poster: *What happened? Reconstructing the past through vision and sound.*

Mar 2019   AAAI symposium: Beyond curve fitting – Causation, counterfactuals, and imagination-based AI, Stanford, USA
Invited Talk: *Understanding "why" – Causation, Counterfactuals, and Imagination.*

Oct 2018   Mental Simulation Workshop, UC Merced, USA
Invited Talk: *What happened? Reconstructing the past from vision and sound.*

July 2018   Cognitive Science Conference (40th), Madison, Wisconsin, USA
Talk: *What happened? Reconstructing the past from vision and sound.*
Poster: *Tiptoeing around it: Inference from absence in potentially offensive speech (presented by Monica Gates).*
Poster: *Moral dynamics (presented by Felix Sosa).*

July 2018   Society for Philosophy and Psychology (SPP), Ann Arbor, Michigan, USA
Talk: *Judgments of actual causation approximate the effectiveness of interventions (**William James Prize for best contributed paper by a graduate student**, presented by Adam Morris)*

Jan 2018   Causal pluralism: a multi-disciplinary investigation of causality in philosophy and the sciences, Cambridge, USA
Invited Talk: *A counterfactual simulation model of causal judgment.*

July 2017   Cognitive Science Conference (39th), London, UK
Talk: *Faulty Towers: A hypothetical simulation model of physical support.*
Talk: *Causal learning from interventions and dynamics in continuous time (presented by Neil Bramley).*
Talk: *Marbles in inaction: Counterfactual simulation and causation by omission (presented by Simon Stephan).*
Poster: *Physical problem solving: Joint planning with symbolic, geometric, and dynamic constraints.*
Poster: *Eye movement-based probabilistic models for physical scene understanding (presented by Eghbal Hosseini).*

July 2017   Morality, Language, and Thought Workshop, Paris, France
Talk: *A counterfactual simulation model of causal judgment.*

June 2017   Society for Philosophy and Psychology (SPP), Baltimore, USA
Talk: *A counterfactual simulation model of causation by omission.*

June 2017   Time and causality in the sciences, Hoboken, USA
Talk: *A counterfactual simulation model of causal judgment.*

May 2017   Brains, Minds, and Machines Workshop, San Juan, Puerto Rico
Talk: *Understanding why: From counterfactual simulations to responsibility judgments.*

Nov 2016   Society for Judgment and Decision Making, Boston, USA
Talk: *Lucky or clever? From changed expectations to responsibility judgments.*

Aug 2016   Cognitive Science Conference (38th), Philadelphia, USA
Talk in workshop: *The role of space, time, and causality in evaluating counterfactual closeness.*
Talk: *Understanding "almost": Empirical and computational studies of near misses.*
Talk: *Natural science: Active learning in dynamic physical microworlds (presented by Neil Bramley).*
Talk: *Implicit measurement of motivated causal attribution (presented by Laura Niemi).*

Aug 2016   International Conference on Thinking, Providence, USA
Organized symposium: *Holding others responsible.*
Talk in contributed symposium: *From changed expectations to attributions of responsibility.*

June 2016   Society for Philosophy and Psychology (SPP), Austin, USA
Talk in invited symposium: *A counterfactual simulation model of causal judgments.*

Nov 2015   Society for Judgment and Decision Making (SJDM), Chicago, USA
Poster: *A counterfactual simulation model of causal judgments.*

Nov 2015   Psychonomics, Chicago, USA
Poster: *Inference of Intention and Permissibility in Moral Judgment (presented by Max Kleiman-Weiner). Nominated for best student poster award.*

July 2015   Multidisciplinary University Research Initiative (MURI) meeting, Lake Arrowhead, USA
Talk: *A counterfactual simulation model of causal judgments.*

July 2015 Cognitive Science Conference (37th), Pasadena, USA
Talk in workshop: *A counterfactual simulation model of causal judgments.*
Talk: *How, whether, why: Causal judgments as counterfactual contrasts.*
Talk: *Responsibility judgments in voting scenarios.*
Talk: *Inference of intention and permissibility in moral decision making (presented by Max Kleiman-Weiner).*
Poster: *Go fishing! Responsibility judgments when cooperation breaks down (presented by Kelsey Allen).*

Jan 2015 Ranch Metaphysics Workshop, Arizona, USA
Invited Talk: *Intuitive theories.*

Aug 2014 Modality Workshop Yale, New Haven, USA
Invited Talk: *From counterfactual simulation to causal judgment.*

July 2014 Cognitive Science Conference (36th), Quebec City, Canada
Talk: *From counterfactual simulation to causal judgment.*
Poster: *Responsibility attributions as counterfactual replacements.*
Talk: *The order of things (co-author).*
Talk: *Causal supersession (co-author).*

June 2014 Society for Philosophy and Psychology, Vancouver, Canada
Talk: *From counterfactual simulation to causal judgment.*

Nov 2013 Roundtable on Causal Overdetermination, Urbana-Champaign, USA
Invited Talk: *Causal responsibility and counterfactuals.*

Nov 2013 New Orleans Workshop on Agency and Responsibility, USA
Talk (joint with David Lagnado): *A difference-making framework for intuitive judgments of responsibility.*

Aug 2013 SPUDM conference (24th), Barcelona, Spain
Talk in symposium: *How intentions and deception influence responsibility attributions in groups.*
Talk in symposium: *A counterfactual model of responsibility attributions in groups.*

Aug 2013 Cognitive Science Conference (35th), Berlin, Germany
Poster: *Back on track – Backtracking in counterfactual reasoning.*

July 2013 London Reasoning Workshop, London, UK
Talk: *Back on track – Backtracking in counterfactual reasoning.*

June 2013 PostDocs Share Their Science Event, Boston, USA
Poster: *General principles of causal attribution.*

June 2013 Society of Philosophy and Psychology Conference, Providence, USA

Aug 2012 Cognitive Science Conference (34th), Sapporo, Japan
Talk: *Noisy Netwons: Unifying process and dependency accounts of causal attribution.*
Poster: *Ping Pong in Church: Productive use of concepts in human probabilistic inference.*
Poster: *Why blame Bob? Probabilistic generative models for counterfactual reasoning and blame attribution (presented by John McCoy and Tomer Ullman).*

July 2012 International Conference on Thinking, University College London, UK
Invited talk in symposium: *Finding fault: Causality and Counterfactuals in Group Attributions.*
Talk: *Noisy Netwons: Unifying process and dependency accounts of causal attribution.*

May 2012   'Towards Consilience' Workshop, London Business School, UK

May 2012   'Personal and Shared Intentions' Workshop, MPI Berlin, Germany
Invited talk: How intentions and deception influence attributions of responsibility in groups.

Apr 2012   Postgraduate Peer Group Conference, Cumberland Lodge, UK
Talk: Noisy Newtons - People's intuitive understanding of physics explains their causal attributions; 1st prize in the oral presentation competition.

Apr 2012   Tagung experimentell arbeitender Psychologen (TEAP), Mannheim, Germany
Talk: Noisy Newtons: Unifying process and dependency accounts of causal attribution.

Jan 2012   CEU Conference on Cognitive Development, Budapest, Hungary
Invited talk in symposium: Noisy Newtons: People's intuitive understanding of physics explains their cause and prevention judgments.

Sep 2011   Experimental Philosophy Workshop, Sheffield, England

Aug 2011   SPUDM conference (23rd), Kingston, England
Talk: On perceived criticality and expected effort.
Talk: Rational order effects in responsibility attributions.

July 2011   Cognitive Science Conference (33rd), Boston, USA
Talk: Rational order effects in responsibility attributions.
Poster: Beyond outcomes: The influence of intentions and deception.
Poster: Blame the skilled.

July 2011   European Association of Social Psychology Conference, Stockholm, Sweden
Talk in symposium: Rational order effects in responsibility attributions.

Mar 2011   International Conference on Behavioral Decision Making, Israel
Poster: Responsibility Attributions in Teams; 2nd prize in the conference poster competition (presented by Ro'i Zultan).

Oct 2010   KogWis, Potsdam, Germany
Poster: The Allocation of Responsibility amongst Multiple Agents.

Sep 2010   Actual Causation Workshop, Konstanz, Germany

Aug 2010   Cognitive Science Conference (32nd), Portland, Oregon
Poster: The Dice are Cast: The Influence of Intended versus Actual Contributions on Responsibility Attribution.

Aug 2010   Mathematical Psychology Conference, Portland, Oregon

June 2010   AXA Talent Day, Paris, France
Poster: The Dice are Cast: The Influence of Intended versus Actual Contributions on Responsibility Attribution.

May 2010   Cognitive Science and Machine Learning Summer School, Sardinia, Italy

Apr 2010   EPS/SEPEX Joint Conference, Granada, Spain
Talk: The Dice are Cast.

Aug 2009   SPUDM Conference (22nd), Rovereto, Italy
Poster: Allocation of Responsibility amongst Multiple Agents.

July 2009   Summer Institute, Max Planck Institute Berlin, Germany
Poster: Allocation of Responsibility amongst Multiple Agents; 2nd prize in the poster competition.

June 2009   MICRAC Workshop, Toulouse, France
            Talk: *Allocation of Responsibility amongst Multiple Agents*.

July 2008   PsyPag Conference, Manchester, England
            Talk: *Presentation of MSc thesis (honorable mention)*.

Invited Presentations

2020	Computational Cognitive Science Colloquium	TU Darmstadt, Germany
	Decision Making and Economic Psychology Seminar	Ben-Gurion University, Israel
	Developmental Brownbag	UC San Diego, USA
	Computational Approaches to Social Cognition Talk Series	Harvard University, USA
	Symbolic Systems Forum (talk recording)	Stanford University, USA
	Computational Cognitive Science Group (Prof. Neil Bramley)	Edinburgh University, UK
2019	Robotics Lunch	Stanford University, USA
	Seminar on History and Philosophy of Science	California Institute of Technology, USA
	Cognition & Language seminar	Stanford University, USA
	Mind, Brain, Computation, and Technology seminar	Stanford University, USA
2018	FriSem (Cognitive & Neuroscience seminar)	Stanford, USA
	MIT Brain and Cognitive Sciences Retreat	Newport, USA
	Visual Attention Lab	Brigham & Women's Hospital, USA
	Northeastern Cognition Area Speaker Series	Northeastern University, USA
	The Imagination and Modal Cognition Lab (Prof. Felipe De Brigard)	Duke University, USA
2017	Cognitive Lunch	Yale, USA
	Computational Social Cognition boot camp	Harvard, USA
	ConCats seminar series	NYU, USA
	Language Learning Lab (Prof. Joshua Hartshorne)	Boston College, USA
	Psychology Department Colloquium	Berkeley, USA
	Psychology Department Colloquium	Stanford University, USA
	Cushman & Greene lab meeting	Harvard University, USA
	Behavioral Science Seminar	The University of Chicago Booth School of Business, USA
2016	Computational Cognitive Neuroscience Lab (Prof. Sam Gershman)	Harvard University, USA
	Applied Statistics Workshop	Harvard University, USA
	Program for Evolutionary Dynamics	Harvard University, USA

	Center for Adaptive Rationality	Max Planck Institute Berlin, Germany
	Language and Cognition seminar series	Harvard University, USA
	Cognition seminar series	Brown University, USA
2015	Crockett lab (Prof. Molly Crockett)	Oxford University, UK
	London Judgment and Decision Making Seminar	University College London, UK
	Office of Naval Research	Washington, DC, USA
2014	Boston Moral Reasoning Group	Boston University, USA
	Social Lunch	Harvard University, Cambridge, USA
	Adaptive Behavior and Cognition Research Group (Prof. Gerd Gigerenzer)	Max Planck Institute, Berlin, Germany
	Computation and Cognition Lab (Prof. Noah Goodman)	Stanford University, USA
	Lab meeting (Prof. Joshua Knobe)	Yale University, USA
2013	Moral Cognition Lab (Prof. Joshua Greene)	Harvard University, USA
	Morality Lab (Prof. Liane Young)	Boston College, USA
	Sloman Lab (Prof. Steven Sloman)	Brown University, USA
	Early Childhood Cognition Lab (Prof. Laura Schulz)	Massachusetts Institute of Technology, USA
	Computational Cognitive Science Lab (Prof. Josh Tenenbaum)	Massachusetts Institute of Technology, USA
2012	Invited Speakers Series	University of Leicester, England
	Special Seminar (Dr. Christopher Summerfield)	Oxford University, England
	Lab meeting (Dr. Ralf Mayrhofer)	University Göttingen, Germany
2011	Computational Cognitive Science Group (Prof. Josh Tenenbaum)	Massachusetts Institute of Technology, Boston, USA
	CogLunch of the Cognitive Science Department	Massachusetts Institute of Technology, Boston, USA
	Lab meeting (Prof. Noah Goodman)	Stanford University, Palo Alto, USA
2010	Research seminar series	Decision Technology, London, England
	London Judgement and Decision Making Group	University College London, England
	Strategic Interaction group seminar (Prof. Werner Güth)	Max Planck Institute for Economics, Jena, Germany
2009	Cognitive and Decision Sciences seminar (Prof. Michael Waldmann)	University Göttingen, Germany
	Philosophy of Mind seminar (Prof. Michael Pauen)	Humboldt University, Berlin, Germany

Teaching

2020 PSYCH 293: What makes a good explanation? Psychological and philosophical perspectives (co-taught with Prof. Thomas Icard) (Graduate seminar)

PSYCH 251: Experimental methods (co-taught with Prof. Michael Frank)

PSYCH 252: Statistical Methods for Behavioral and Social Sciences (Graduate statistics course)

PSYCH 187: Research Methods in Cognition and Development (co-taught with Prof. Hyo Gweon) (Advanced undergraduate seminar)

2019 Guest lecture in Symbolic Systems 1 on "Intuitive Theories".

PSYCH 291: Causal Cognition (Graduate seminar)

PSYCH 252: Statistical Methods for Behavioral and Social Sciences (Graduate statistics course)

2017 Tutorial on "Mental models as probabilistic programs" in class 9.66 (Computational Cognitive Science taught by Prof. Josh Tenenbaum).

Tutorial on "Mental models as probabilistic programs" at the Brains, Minds, and Machines summer school in Woods Hole. Teaching assistant for three student projects.

Tutorial on "Mental models as probabilistic programs" at the Brains, Minds, and Machines workshop in San Juan, Puerto Rico.

2016 Lecture on "Counterfactual simulation" in class 9.66 (Computational Cognitive Science taught by Prof. Josh Tenenbaum).

2015 Kaufman Teaching Certificate Program.

2012 UCL MSc lecture: Theoretical frameworks of responsibility attribution.

UCL 1st year undergraduate psychology lab class: Causal attribution.

2011 UCL 1st year undergraduate psychology lab class: Responsibility attribution.

2010 UCL teaching demonstratorship.

Mentorship

2020 Bryce Lynford: "Productive use of concepts in human probabilistic inference"

Liang Zhou: "A hypothetical simulation model of causal support"

Disha Dasgupta: "Resolving ambiguities in counterfactual reasoning"

Xi Jia (Laura) Zhou: "The development of multi-modal integration"

Tina Hua: "Eye-tacking motivated reasoning"

2019 Antonia Langenhoff (3 month visit): "Predicting responsibility judgments from dispositional inferences and causal attributions"

Lara Kirfel (3 month visit): "Learning from language: Inferences about norms and causal structure from explanations"

Ross Kempner (CSLI summer intern): "Does motivation influence causal judgments via biased counterfactual simulations?"

Alan Brown (Research assistant): "Eye-tracking causality: Reconstructing the past"

Jingren Wang (Summer intern): "Hypotheticals, counterfactuals, and causal judgments"

Outreach

2020   "Path to PhD" workshop at Stanford: Orientation program for underrepresented students

2018   "Path to PhD" workshop at Stanford: Orientation program for underrepresented students

University service

2020   Chairperson at thesis defense (Evan Strasnick, Computer Science)

Chairperson at thesis defense (Francesca Zaffora Blando, Philosophy)

Chairperson at thesis defense (Sebastian Schuster, Linguistics)

Chairperson at thesis defense (Reuben Cohn, Linguistics)

Reader of PhD thesis (Erin Bennett, Psychology)

Committee member in PhD thesis defense (Sophie Bridges, Psychology)

Committee member in PhD thesis defense (Andrew Kyle Lampinen, Psychology)

Committee member in qualifying project (Elisa Kreiss, Linguistics)

Reader on first year project (Effie Li, Psychology)

2019   Chairperson at thesis defense (Prerna Nadathur, Linguistics)

Reader on first year project (Andrew Nam, Psychology)

Reviews

Since	Journal / Conference / Grant	Reviews
Oct 2020	Social Psychological and Personality Science	|
Aug 2020	Nature Computational Science	|
May 2019	Journal of Experimental Psychology: General	|||
Apr 2019	Israel Science Foundation	|
Aug 2018	Trends in Cognitive Science	|
May 2018	Proceedings of the National Academy of Sciences	|
May 2018	KogWis	|||
Mar 2018	Grant referee for National Science Foundation (NSF) proposal	||
Feb 2018	Psychological Science	||
Mar 2017	Cognitive Psychology	|||
Mar 2017	Nature Human Behavior	|
Dec 2016	Grant referee for the European Research Council (ERC)	|
Sep 2016	Topics in Cognitive Science	|
Aug 2016	Perspectives on Psychological Science	|
Sep 2015	Social Psychology	|
July 2015	Learning and Motivation	|
May 2015	The Oxford Handbook of Causal Reasoning	|
Feb 2015	Society for Philosophy and Psychology Conference	||||| ||

Dec 2014	PLoS ONE	|
June 2014	Journal of Experimental Psychology: Learning, Memory & Cognition	⦀
Oct 2013	Scandinavian Journal of Psychology	|
Aug 2013	Thinking and Reasoning	|
Jan 2013	Journal of Cognitive Psychology	|
Jan 2013	Cognitive Science	卌 ⦀⦀
Nov 2012	Topoi – An International Review of Philosophy	|
Nov 2012	Journal of Experimental Social Psychology	|
Oct 2012	Oxford Studies of Experimental Philosophy	|
Feb 2012	Quaterly Journal of Experimental Psychology	|
Oct 2011	Psychonomic Bulletin and Review	⦀
June 2011	Cognition	卌 卌 ⦀⦀
Jan 2011	Cognitive Science Conference Proceedings	卌 卌 卌 卌 卌 卌 卌

Editorial positions

Since	Journal / Conference / Grant	Reviews
2019	Cognitive Science Conference Proceedings	卌 卌 |

Skills & Interests

Languages German (native), English (fluent), Spanish (basic), French (basic)

Software R, Python, Javascript, LaTeX

Interests Surfing, Beachvolleyball, Chess, Cycling, Yoga, Music, Piano, Guitar, Meditation