

SIMON STEPHAN

PERSONAL DATA

DATE OF BIRTH: 31.01.1990, Kassel, Germany
WORK ADDRESS: Department of Psychology, University of Göttingen, Gosslerstr. 14,
37073 Göttingen, Germany
EMAIL: simon.stephan@psych.uni-goettingen.de
PHONE: +49 551 39 33762
WEB: <https://www.simonstephan.com>

WORK EXPERIENCE/ POSITIONS

2019 - POSTDOCTORAL ASSOCIATE, Department of Cognition and Decision Making, PI: Prof. Dr. Michael R. Waldmann, University of Göttingen

2015 – 2019 PHD STUDENT (PSYCHOLOGY) in the Program: “Behavior and Cognition”, University of Göttingen

since 2014 RESEARCH ASSISTANT, Department of Cognition and Decision Making, University of Göttingen

2010 – 2014 STUDENT RESEARCH ASSISTANT, Department of Psychology, University of Göttingen

EDUCATION

2015 – 2019 DOCTORATE DEGREE, Dr. rer. nat. (summa cum laude)
University of Göttingen, Program: Behavior and Cognition
Title: “Answering Causal Queries About Singular Cases – An Evaluation of a New Computational Model”, Supervisor: Prof. Dr. Michael R. Waldmann

2012 – 2014 MASTER OF SCIENCE IN PSYCHOLOGY (with distinction)
University of Göttingen

2009 – 2012 BACHELOR OF SCIENCE IN PSYCHOLOGY (with distinction)
University of Göttingen

2002 – 2009 ABITUR (EQVL. A-LEVELS)
Grotefend-Gymnasium Münden, Hann. Münden

AWARDS & SCHOLARSHIPS/GRANTS

- October 2017 DFG Grant, value: 212,768.00€ Project: “Answering causal queries about singular cases” (The official holder of this grant is Michael R. Waldmann)
- July 2017 Computational Modeling Prize in High-level Cognition Sponsored by the Cognitive Science Society for the best full paper submissions that involve

computational cognitive modeling.

- 2016 – 2018 Leibniz-ScienceCampus Grant, value: 9,552.80€ Project: “The relationship between causal and moral judgments”
- 2015 – 2017 Leibniz-ScienceCampus Grant, value: 7,272.40€ Project: “The role of intentions in children’s and adult’s causal ascriptions”
- 2011 – 2012 e-fellows.net Scholarship

PUBLICATIONS

An online version of the publication list including links to PDFs and other publication-related materials can be found at: <https://www.simonstephan.com/#publications>.

1. **Stephan, S.** (2023). Revisiting the narrow latent scope bias in explanatory reasoning. *Cognition*, 241, 105630.
2. **Stephan, S.**, Engelmann, N., & Waldmann, M. R. (2023). The perceived dilution of causal strength. *Cognitive Psychology*, 140, 101540.
3. **Stephan, S.**, & Waldmann, M. R. (2022). The interplay between covariation, temporal, and mechanism information in singular causation judgments. In A. Wiegmann, & P. Willemsen (Eds.), *Advances in Experimental Philosophy of Causation*. London, UK: Bloomsbury Press.
4. **Stephan, S.**, & Waldmann, M. R. (2022). The role of mechanism knowledge in singular causation judgments. *Cognition*, 218, 104924.
5. Skovgaard-Olsen, N., **Stephan, S.**, & Waldmann, M. R. (2021). Conditionals and the hierarchy of causal queries. *Journal of Experimental Psychology: General*, 150, 2472–2505.
6. Gerstenberg, T., & **Stephan, S.** (2021). A counterfactual simulation model of causation by omission. *Cognition*, 216, 104842.
7. **Stephan, S.**, Placì, S., & Waldmann, M. R. (2021). Evaluating general versus singular causal prevention. In T. Fitch, C. Lamm, H. Leder, & K. Tessmar (Eds.), *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
8. **Stephan, S.**, Tentori, K., Pighin, S. & Waldmann, M. R. (2021). Interpolating causal mechanisms: The paradox of knowing more. *Journal of Experimental Psychology: General*, 150(8), 1500-1527. <https://doi.org/10.1037/xge0001016>
9. **Stephan, S.**, & Waldmann, M. R. (2020). Causal scope and causal strength: The number of potential effects of a cause influences causal strength estimates. In S. Denison., M. Mack, Y. Xu, & B.C. Armstrong (Eds.), *Proceedings of the 42th Annual Conference of the Cognitive Science Society* (pp. 3426 - 3432). Austin, TX: Cognitive Science Society.
10. **Stephan, S.**, & Waldmann, M. R. (2020). On causal claims, contingencies, and inference: How causal terminology affects what we think about the strength of causal links. In S. Denison., M. Mack, Y. Xu, & B.C. Armstrong (Eds.), *Proceedings of the 42th Annual Conference of the Cognitive Science Society* (pp. 3419 - 3425). Austin, TX: Cognitive Science Society.

11. **Stephan, S.**, Mayrhofer, R., & Waldmann, M. R. (2020). Time and singular causation: A computational model. *Cognitive Science*, 44, e12871.
12. **Stephan, S.**, Mayrhofer, R., & Waldmann, M. R. (2018). Assessing singular causation: The role of causal latencies. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 1080-1085). Austin, TX: Cognitive Science Society.
13. **Stephan, S.**, & Waldmann, M. R. (2018). Preemption in singular causation judgments: A computational model. *Topics in Cognitive Science*, 10, 242–257.
14. **Stephan, S.**, & Waldmann, M. R. (2017). Preemption in Singular Causation Judgments: A Computational Model. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar (Eds.), *Proceedings of the 39th Annual Meeting of the Cognitive Science Society* (pp. 1126–1131). Austin, TX: Cognitive Science Society.
15. **Stephan, S.**, Willemsen, P., & Gerstenberg, T. (2017). Marbles in inaction: Counterfactual simulation and causation by omission. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar (Eds.), *Proceedings of the 39th Annual Meeting of the Cognitive Science Society*. (pp. 1132-1137). Austin, TX: Cognitive Science Society.
16. Nagel, J., & **Stephan, S.** (2016). Explanations in causal chains: Selecting distal causes requires exportable mechanisms. In A. Papafragou, D. Grodner, D. Mirman, & J.C. Trueswell (Eds.), *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (pp. 806-812). Austin, TX: Cognitive Science Society.
17. **Stephan, S.**, & Waldmann, M. R. (2016). Answering causal queries about singular cases. In A. Papafragou, D. Grodner, D. Mirman, & J.C. Trueswell (Eds.), *Proceedings of the 38th Annual Conference of the Cognitive Science Society* (pp. 2795-2801). Austin, TX: Cognitive Science Society.
18. Nagel, J., & **Stephan, S.** (2015). Mediators or alternative explanations: Transitivity in human-mediated causal chains. In D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), *Proceedings of the 37th Annual Meeting of the Cognitive Science Society* (pp. 1691-1696). Austin, TX: Cognitive Science Society.

Forthcoming

19. Placi, S., **Stephan, S.**, Waldmann, M. R., & Vallortigara, G. (under review). When Newton beats Euclid: intuitive physics underlies sensitivity to geometry. <https://doi.org/10.31234/osf.io/78syx>.
20. Nagel, J., **Stephan, S.**, & Waldmann, M. R. (under review). Understanding causal devices: Nomological machines guide causal understanding.

CONFERENCES

- July 2022 Cognitive Science Conference (44th), Toronto, Canada [virtual] **Poster:** “The Perceived Dilution of Causal Strength”
- July 2022 SPP & ESPP, Milan, Italy **Poster:** “The Perceived Dilution of Causal Strength”
- July 2021 Cognitive Science Conference (43rd), Vienna, Austria [virtual] **Poster:** “Evaluating General vs. Singular Causal Prevention.”
- September 2019 ESPP Conference (27th), Athens, Greek **Talk:** “The Role of Effect and Sample Size in Causal Induction.”
- September 2019 EuroCogSci 2019, Bochum, Germany **Poster:** “The Role of Effect and Sample Size in Causal Induction.”
- June 2019 19th Summer Institute on Bounded Rationality, Berlin, Germany **Poster:** “Answering Causal Queries about Singular Cases: An Evaluation of a New Computational Model”
- July 2018 Cognitive Science Conference (40th), Madison, USA **Talk:** “Assessing Singular Causation: The Role of Causal Latencies”
- May 2018 International Meeting of the Psychonomic Society, Amsterdam, NL **Poster:** “Answering Singular Causation Queries: The Role of Temporal and Mechanistic Information”
- February 2018 Annual Meeting (7th) of the DFG Priority Program “New Frameworks of Rationality”
- August 2017 European Society for Philosophy and Psychology (ESPP) Conference, Hertfordshire, UK **Talk:** “Answering causal queries about singular cases”
- July 2017 Cognitive Science Conference (39th), London, UK **Talk:** “Preemption in singular causation judgments: A computational model”
- July 2017 Cognitive Science Conference (39th), London, UK **Talk:** “Marbles in in-action: Counterfactual simulation and causation by omission”
- March 2017 Annual Meeting (6th) of the DFG Priority Program “New Frameworks of Rationality” **Talk:** “Answering causal queries about singular cases”
- August 2016 Cognitive Science Conference (38th), Philadelphia, USA **Talk:** “Answering causal queries about singular cases”
- August 2016 Cognitive Science Conference (38th), Philadelphia, USA **Poster:** “Explanations in causal chains: Selecting distal causes requires exportable mechanisms” (presented by Jonas Nagel)
- July 2015 Cognitive Science Conference (37th), Pasadena, USA **Poster:** “Mediators or alternative explanations: Transitivity in human-mediated causal chains” (presented by Jonas Nagel)

TEACHING EXPERIENCE

Tutorials/ Seminars

Winter 2022/23	SEMINAR ON THE PRINCIPLES OF LEARNING AND BEHAVIOR Part of the second year undergraduate psychology module "Allgemeine Psychologie II"
Winter 2021/22	SEMINAR IN "QUANTITATIVE METHODS I" Part of the first year undergraduate psychology statistics class
Winter 2020/21	SEMINAR IN "QUANTITATIVE METHODS I" Part of the first year undergraduate psychology statistics class
Winter 2019/20	SEMINAR IN "QUANTITATIVE METHODS I" Part of the first year undergraduate psychology statistics class
Winter 2016/17	SEMINAR IN "QUANTITATIVE METHODS I" Part of the first year undergraduate psychology statistics class
Winter 2015/16	SEMINAR IN "QUANTITATIVE METHODS I" Part of the first year undergraduate psychology statistics class
Winter 2014/15	SEMINAR IN "QUANTITATIVE METHODS I" Part of the first year undergraduate psychology statistics class
Summer 2022	SEMINAR IN "QUANTITATIVE METHODS II" Part of the first year undergraduate psychology statistics class
Summer 2021	SEMINAR IN "QUANTITATIVE METHODS II" Part of the first year undergraduate psychology statistics class
Summer 2020	SEMINAR IN "QUANTITATIVE METHODS II" Part of the first year undergraduate psychology statistics class
Summer 2019	SEMINAR IN "QUANTITATIVE METHODS II" Part of the first year undergraduate psychology statistics class
Summer 2017	SEMINAR IN "QUANTITATIVE METHODS II" Part of the first year undergraduate psychology statistics class
Summer 2016	SEMINAR IN "QUANTITATIVE METHODS II" Part of the first year undergraduate psychology statistics class
Summer 2015	SEMINAR IN "QUANTITATIVE METHODS II" Part of the first year undergraduate psychology statistics class

see: <https://quantigoettingen.github.io/quantigoettingen/>

Supervision

- Summer term 2023 SUPERVISION OF A BACHELOR THESIS
on the narrow latent scope bias in explanatory reasoning.
Student: Julia Larysch (julia.larysch@stud.uni-goettingen.de)
- Summer term 2022 SUPERVISION OF A BACHELOR THESIS
on how causal stability and personal risk-aversion affect decision making.
Student: Ana Maria Bierbach (anamaria.bierbach@stud.uni-goettingen.de)
- Summer term 2022 SUPERVISION OF A MASTER THESIS
on how causal stability affects individual and group-level decision making.
Student: Anja Sykulla (anja.sykulla@stud.uni-goettingen.de)
- Summer term 2021 SUPERVISION OF A BACHELOR THESIS
on how violations of the causal Markov assumption are influenced by knowledge about the underlying causal system and causal strength.
Student: Jule Tinke Ferchlandt (jule.ferchlandt@gmx.de)
- Summer term 2021 SUPERVISION OF A BACHELOR THESIS
on how violations of the causal Markov assumption are influenced by knowledge about the underlying causal system.
Student: Anna Kühne (anna.kue@web.de)
- Summer term 2021 SUPERVISION OF A BACHELOR THESIS
on how the dilution effect of causal strength is influenced by causal capacity manipulations.
Student: Pia Elisabeth Katharina Steinberg (pia.steinberg01@stud.uni-goettingen.de)
- Summer term 2021 SUPERVISION OF A BACHELOR THESIS
on how the dilution effect of causal strength is influenced by a cause's valence.
Student: Gerson Döscher (gerson.doescher@stud.uni-goettingen.de)
- Summer term 2021 (CO-) SUPERVISION OF A MASTER THESIS
on maintaining causes in feedback-loop structures.
Student: Mia Bensberg (mia.bensberg@stud.uni-goettingen.de)
- Summer term 2021 (CO-) SUPERVISION OF A MASTER THESIS
on maintaining causes in feedback-loop structures.
Student: Julia Schwerdt (julia.schwerdt@stud.uni-goettingen.de)

- Summer term 2020 (Co-) SUPERVISION OF A MASTER THESIS
on the difference between “triggering” and “maintaining”
causes.
Student: Emily Alice Preuß (emilyalice.preuss@stud.uni-goettingen.de)
- Summer term 2020 SUPERVISION OF A BACHELOR THESIS
on the interpolation of causal chains.
Student: Naïma Sita Walter (naimasita.walter@gmail.com)
- Winter term 2018/19 SUPERVISION OF A BACHELOR THESIS
on interpolation vs. lengthening of causal chains.
Student: Melis Akil (melis.izmir@yahoo.de)
- Summer term 2018 SUPERVISION OF A BACHELOR THESIS
on the role of category levels in general and singular cau-
sation judgments.
Student: Jannik Reddehase (jannik.reddehase@stud.uni-goettingen.de)
- Summer term 2018 SUPERVISION OF A BACHELOR THESIS
on the influence of statistical norms on causal selection.
Student: Jannis Blümer (jannis.bluemmer@gmail.com)
- Summer term 2017 SUPERVISION OF A BACHELOR THESIS
on preemption in singular causation judgments
Student: Julian Minke Wasmuth (konstantin.servwazi@web.de)
- Winter term 2016/17 SUPERVISION OF A BACHELOR THESIS
on causal reasoning about double prevention
Student: Jannik Baum (jannik.baum@gmx.net)

REVIEWS

- Cognitive Science Conference Proceedings: IIII IIII IIII II
- Cognition: IIII II
- Journal of Experimental Psychology – General: I
- Journal of Experimental Psychology: Learning, Memory, and Cognition I
- Journal of Experimental Social Psychology: III
- Memory & Cognition: I
- Philosophical Psychology: III
- Psychological Review (as co-reviewer): I
- Cognitive Psychology: I
- Cognitive Science: IIII
- Journal of Cognitive Psychology: IIII I

- Plos One: III
- Computational Brain & Behavior III

see: <https://www.webofscience.com/wos/author/record/AAA-7836-2022>

SKILLS

- Language: German (native), English (fluent), French (basic), Italian (basic)
- Software: R, HTML5, JavaScript, Animate, \LaTeX , Photoshop, Illustrator, Flash
- Interests: Philosophy, Politics, Literature, Music, Guitar, Blues Harp, Football, Badminton, Traveling

REFERENCES

Prof. Dr. Michael R. Waldmann,
Department of Cognitive and Decision Sciences,
Georg-Elias-Müller Institute of Psychology,
University of Göttingen,
E-Mail: michael.waldmann@bio.uni-goettingen.de

Prof. Dr. Tobias Gerstenberg,
Causality in Cognition Lab,
Stanford-University,
E-Mail: gerstenberg@stanford.edu

Prof. Dr. York Hagmayer,
Georg-Elias-Müller Institute of Psychology,
University of Göttingen,
E-Mail: york.hagmayer@bio.uni-goettingen.de