

# Pablo León-Villagra

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21, Lakeside Apartments  
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United Kingdom

## Education

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| 2015–2020 | <b>Ph.D. University of Edinburgh</b><br>Thesis Title: Representational Principles of Function Generalization<br>Supervisor: Prof. Dr. Christopher Lucas  |
| 2012–2015 | <b>M.Sc. Cognitive Science, University of Osnabrück</b><br>Thesis Title: Causal Reasoning and the Markov Assumption in a Physical Microworld<br>Thesis Grade: 1.0 (A), Overall Grade: 1.0 (Distinction)<br>Supervisors: Prof. Dr. Frank Jäkel, Prof. Dr. David Lagnado |
| 2010–2011 | <b>New Bulgarian University</b><br>Semester abroad   |
| 2008–2013 | <b>B.Sc. Cognitive Science, University of Osnabrück</b><br>Thesis Title: Categorization in Chess<br>Thesis Grade: 1.0 (A), Overall Grade: 1.2 (Distinction)<br>Supervisor: Prof. Dr. Frank Jäkel   |

## Academic & Research Experience

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| 2020–today | <b>Research Fellow, University of Warwick, UK</b><br>Project: Searching for the approximation method used to perform rational inference by individual and groups.  |
| 2019–2020  | <b>Visiting Ph.D. student in Daphna Buchsbaum’s Computational Cognitive Development Lab, University of Toronto, Canada</b><br>Six-month visit during which I ran developmental studies in categorization.  |
| 2019       | <b>Participant at the Diverse Intelligences Summer Institute, University of St. Andrews, UK.</b><br>A month-long summer institute hosting lectures and projects regarding issues of computational, social and comparative cognition.                                 |
| 2018–2019  | <b>Tutor for Informatics Research Review, University of Edinburgh, UK</b><br>Tutoring informatics master students in writing a research review and structuring their research projects.  |
| 2016–2019  | <b>TA, Tutor, Demonstrator &amp; Marker for Introduction to Cognitive Science, University of Edinburgh, UK</b>   |
| 2018–2019  | <b>TA, Tutor &amp; Marker for Computational Cognitive Science, University of Edinburgh, UK</b><br>Developing materials for the tutorials in R. Tutoring and marking an undergraduate-level class in computational modeling.  |
| 2016–2019  | <b>TA, Tutor, Demonstrator &amp; Marker for Introduction to Cognitive Science, University of Edinburgh, UK</b><br>Developing materials for course exercises, labs and assignments in Python. Tutoring and demonstrating an introductory course in Cognitive Science. |
| 2017       | <b>Internship at the Alan Turing Institute, London, UK</b><br>During the three-month internship I developed and implemented a prototype app to allow citizen engagement through interactive explanations.  |
| 2014       | <b>Research Assistant in Frank Jäkel’s Cognitive Modeling Group, University of Osnabrück, Germany</b><br>Developing, programming, running and analyzing human categorization experiments.  |
| 2014       | <b>Research Internship at Dave Lagnado’s Causal Cognition Lab, University College London, UK</b><br>Three-month visit during which I developed experimental designs and researched causal cognition.   |
| 2013–2014  | <b>Tutor for Multivariate Statistics, University of Osnabrück, Germany</b><br>Tutoring psychology master students in multivariate statistics. Supervision of theoretical and SPSS exercises.   |

## Publications

- Pablo León-Villagrà, Kay Otsubo, et al. “Uncovering Category Representations with Linked MCMC with people”. In: *Proceedings of the 42nd Annual Conference of the Cognitive Science Society* (2020).
- Pablo León-Villagrà, Verena S. Klar, et al. “Exploring the Representation of Linear Functions”. In: *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (2019).
- Pablo León-Villagrà and Christopher G Lucas. “Generalizing Functions in Sparse Domains”. In: *Proceedings of the 41st Annual Conference of the Cognitive Science Society* (2019).

- Pablo León-Villagrà, Sarwar Islam, et al. “You Guessed it! Reflecting on Preconceptions and Exploring Data without Statistics”. In: *Proceedings of the 2nd European Data and Computational Journalism Conference*. University College Dublin. 2018, p. 11.
- Pablo León-Villagrà, Irina Preda, and Christopher G Lucas. “Data Availability and Function Extrapolation”. In: *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (2018).
- Alexander Matthews et al. “GPflow: A Gaussian Process Library using TensorFlow”. In: *The Journal of Machine Learning Research* 18.1 (2017), pp. 1299–1304.
- Pablo León-Villagrà and Frank Jäkel. “Categorization and Abstract Similarity in Chess”. In: *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (2013).

## Presentations

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| 2019 | <b>Talk: Dubrovnik, Croatia</b><br>Title: Generalizing Functions in Sparse Domains<br>XI. Dubrovnik Conference on Cognitive Science   |
| 2018 | <b>Talk: Darmstadt, Germany</b><br>Title: Data Availability and Function Extrapolation<br>14th Biannual conference of the German Society for Cognitive Science<br>Best Presentation Award               |
| 2017 | <b>Poster Presentation: London, UK</b><br>Title: Identifying Causal Direction in the Two-Variable Case<br>39th Annual Cognitive Science Conference  |
| 2017 | <b>Talk: Osnabrück, Germany</b><br>Title: Human-like Function Learning and Transfer<br>Colloquium of the Institute of Cognitive Science   |
| 2016 | <b>Poster Presentation: Windsor, UK</b><br>Title: Human-Like Function Learning and Transfer<br>Workshop: Human-Like Computing Machine Intelligence Workshop   |
| 2015 | <b>Talk: Kunsthaus Muerz, Austria</b><br>Title: Kausales Denken - Bayesianische Modelle im Dialog mit der Wiener’schen Denkpsychologie<br>Symposium: Oswald Wiener: Selbstbeobachtung - Denkpsychologie |
| 2015 | <b>Poster Presentation: Möhnesee-Günne, Germany</b><br>Title: Categorization in Chess<br>Interdisciplinary College, Möhnesee-Günne  |

## Scholarships

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| 2015–2018 | <b>Ph.D. Scholarship</b><br>School of Informatics, Institute for Language, Cognition and Computation |
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## Software

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|  | Actionscript, JavaScript, MATLAB, Node, Python, R, Scala, SQL, SPSS, TEX |
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## Languages

|         |               |
|---------|---------------|
| German  | Mother tongue |
| Spanish | Mother tongue |
| English | Fluent        |

## References

**Christopher G Lucas**, Lecturer University of Edinburgh: [c.lucas@ed.ac.uk](mailto:c.lucas@ed.ac.uk)

**Daphna Buchsbaum**, Professor: Brown University: [daphna@brown.edu](mailto:daphna@brown.edu)

**David Lagnado**, Professor: University College London [d.lagnado@ucl.ac.uk](mailto:d.lagnado@ucl.ac.uk)

**Frank Jäkel**, Professor TU Darmstadt: [jaekel@psychologie.tu-darmstadt.de](mailto:jaekel@psychologie.tu-darmstadt.de)