

DAVID KELLEN

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PERSONAL

Birth date: December 26th, 1984

Birthplace: Lisbon

Nationality: Portuguese

Marital Status: Single

EMPLOYMENT

University of Basel

September 2014 — Present Day

Assistant (non-tenure track) at the Cognitive and Decision Science Group (Prof. Dr. Rui Mata)

Albert-Ludwigs-Universität Freiburg

May 2011 — August 2014

Post-Doctoral Researcher at the Department of Social Psychology and Methodology (Prof. Dr. Karl Christoph Klauer)

EDUCATION

Albert-Ludwigs-Universität Freiburg

September 2009 — April 2011

Doctoral Degree in Psychology (Summa Cum Laude) under the supervision of Prof. Dr. Karl Christoph Klauer

University of Lisbon

September 2003 — October 2008

Bachelor in Psychology
Master in Psychology (Social Cognition)

AWARDS

R. Duncan Luce Outstanding Paper Award

July 2012

Society for Mathematical Psychology

Klauer, K. C., & Kellen, D. (2011). The flexibility of models of recognition memory: An analysis by the minimum-description length principle. *Journal of Mathematical Psychology*, 55, 430-450.

TEACHING

University of Basel

Psychology and Law

Summer Semester 2015/2016

Cognitive Modeling

Summer Semester 2015/2016

Fundamentals of Human Memory

Fall Semester 2015/2016

Research Project

Fall+Summer Semester 2014/2015

Negotiation

Summer Semester 2014/2015

Albert-Ludwigs-Universität Freiburg

Social Psychology

Summer Semester 2013/2014

Social Psychology

Fall Semester 2012/2013

THESIS EVALUATION AND/OR SUPERVISION

Doctoral Thesis

Dora Matzke (University of Amsterdam; Supervisor: E.J. Wagenmakers)

December 2014

Master Thesis

Jan Vogt (Albert-Ludwigs-Universität Freiburg)

July 2013

Bachelor Thesis

Markus Steiner (University of Basel)

December 2015

Yannis Krüger (Albert-Ludwigs-Universität Freiburg)

July 2014

Julie Linzer (Albert-Ludwigs-Universität Freiburg)

July 2014

Felicitas Flade (Albert-Ludwigs-Universität Freiburg)

July 2013

ORGANIZED WORKSHOPS AND SYMPOSIA

Symposium: Advances in Mathematical Psychology

September 2015

Tagung der Fachgruppe Methoden & Evaluation der Deutschen Gesellschaft für Psychologie (Jena)

Symposium: Cognitive Models of Memory and Decision Making

April 2015

Tagung experimentell arbeitender Psychologen (Hildesheim)

Symposium: Cognitive Models of Memory and Decision Making

April 2015

Tagung experimentell arbeitender Psychologen (Giessen)

Workshop: Data analysis and modeling methods using R

November 2012

Mannheim University

Workshop: Introduction to R

August 2012

Universität Zürich

Workshop: Introduction to R

October 2011

Mannheim University

MEMBERSHIPS

Society for Mathematical Psychology

Society for Judgment and Decision Making

AD-HOC REVIEWING

Research Funding Institutions

Economic & Social Research Council (UK)

Israel Science Foundation

Journals

British Journal of Mathematical and Statistical Psychology

Cognition

Consciousness and Cognition

Cognitive Psychology

Experimental Psychology

Frontiers in Cognitive Science

Journal of Experimental Psychology: General

Journal of Experimental Psychology: Learning, Memory, and Cognition

Journal of Memory and Language

Psychological Review

Psychological Science

Psychonomic Bulletin & Review

PUBLICATIONS

In Preparation

3. Singmann, H., Ragni, M., & **Kellen, D.** (in preparation). *Evaluating Theories of Reasoning I: Syllogistic Reasoning with Classical Quantifiers.*
2. Josef, A., **Kellen, D.**, Pachur, T., Hertwig, R., & Mata, R. (in preparation). *Adult age differences in memory-based decision making.*
1. Pachur, T. & **Kellen, D.** *Modeling Gain-Loss Asymmetries in Cumulative Prospect Theory.*

Submitted or Under Revision

5. **Kellen, D.**, Erdfelder, E., Malmberg, K., Dube, C., & Criss, A. (submitted). *The Ignored Alternative: An Application of Luce's Low-threshold Model to Recognition Memory.*
4. **Kellen, D.** & Klauer, K. C. (submitted). *Elementary Signal Detection and Threshold Theory.* The Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience. [**invited submission**]
3. **Kellen, D.**, Singmann, H., Batchelder, W. H. (submitted). *A Note on "Quantum-Like" Order Effects in Human Judgments.*
2. **Kellen, D.**, Pachur, T., & Hertwig, R. *Variants and invariants between description-based and experience-based decision making*
1. **Kellen, D.**, Singmann, H., Klauer, K. C., & Flade, F. (submitted). *The Impact of Criterion Noise in Signal Detection Theory: An Evaluation Across Recognition Memory Tasks.*

Published

23. **Kellen, D.** & Singmann, H. (in press). Evaluating ROC residuals in signal-detection models of recognition memory. *Psychonomic Bulletin & Review.*
22. **Kellen, D.** & Klauer, K. C. (2015). Continuous and discrete-state modeling of confidence-rating ROCs: A critical test with minimal assumptions. *Psychological Review*, *122*, 542-557.
21. Klauer, K. C. & **Kellen, D.** (2015). *The Flexibility of Models of Recognition Memory: The Case of Confidence Ratings.* *Journal of Mathematical Psychology*, *66*, 8-25.
20. Klauer, K. C., Singmann, H., & **Kellen, D.** (2015). Parametric order constraints in Multinomial Processing Tree models: An extension of Knapp & Batchelder (2004). *Journal of Mathematical Psychology*, *64*, 1-5.
19. **Kellen, D.**, Singmann, H., Vogt, J., & Klauer, K. C. (2015). Further Evidence for Discrete-State Mediation in Recognition Memory. *Experimental Psychology*, *62*, 40-53.
18. **Kellen, D.**, & Klauer, K. C. (2014). Discrete State and Continuous Models of Recognition Memory: Testing Core Properties under Minimal Assumptions. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *40*, 1795-1804.
17. Castela, M., **Kellen, D.**, Erdfelder, E., & Hilbig, B. E. (2014). The impact of subjective recognition experiences on recognition heuristic use: A multinomial processing tree approach. *Psychonomic Bulletin & Review*, *21*, 1131-1138.
16. **Kellen, D.**, Singmann, H., & Klauer, K. C. (2014). Modeling Source Memory Overdistribution. *Journal of Memory and Language*, *76*, 216-236.

15. Singmann, H. & **Kellen, D.** (2014). Concerns with the SDT Approach to Causal Conditional Reasoning: A Comment on Trippas, Handley, Verde, Roser, McNair, and Evans (in press). *Frontiers in Psychology, 5*, 402.
14. Singmann, H., Klauer, K. C., & **Kellen, D.** (2014). Claims of Intuitive Logic Revisited: New Data and a Bayesian Mixed-Model Comparison. *PLOS ONE, 9*, e94223.
13. Dittrich, K., **Kellen, D.**, & Stahl, C. (2014). Analyzing distributional properties of interference effects across modalities: Chances and challenges. *Psychological Research, 78*, 387-399.
12. Bröder, A., **Kellen, D.**, Schtz, J., & Rohrmeier, C. (2013). Validating a Two-High-Threshold Measurement Model for Confidence Rating Data in Recognition. *Memory, 20*, 916-944.
11. Pachur, T., & **Kellen, D.** (2013). Modeling Gain-Loss Asymmetries in Risky Choice: The Critical Role of Probability Weighting. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), Proceedings of the 35th Annual Conference of the Cognitive Science Society. Austin, TX: Cognitive Science Society.
10. Singmann, H., **Kellen, D.**, & Klauer, K. C. (2013). Investigating the Other-Race Effect of Germans towards Turks and Arabs using Multinomial Processing Tree Models. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), Proceedings of the 35th Annual Conference of the Cognitive Science Society. Austin, TX: Cognitive Science Society.
9. **Kellen, D.**, Klauer, K. C., & Singmann, H. (2013). On the Measurement of Criterion Noise in Signal Detection Theory: Reply to Benjamin (2013). *Psychological Review, 120*, 727-730.
8. **Kellen, D.**, Klauer, K. C., & Bröder, A. (2013). Recognition Memory Models and Binary-Response ROCs: A Comparison by Minimum Description Length. *Psychonomic Bulletin & Review, 20*, 693-719.
7. Singmann, H., & **Kellen, D.** (2013). MPTinR: Analysis of Multinomial Processing Tree models with R. *Behavior Research Methods, 45*, 560-575.
6. **Kellen, D.**, Klauer, K. C., & Singmann, H. (2012). On the measurement of criterion noise in Signal Detection Theory: The case of recognition memory. *Psychological Review, 119*, 457-479.
5. Klauer, K. C., & **Kellen, D.** (2012). The Law of Categorical Judgment (Corrected) extended: A note on Rosner and Kochanski (2009). *Psychological Review, 119*, 216-220.
4. Klauer, K. C., & **Kellen, D.** (2011). The flexibility of models of recognition memory: An analysis by the minimum-description length principle. *Journal of Mathematical Psychology, 55*, 430-450.
3. **Kellen, D.**, & Klauer, K. C. (2011). Evaluating models of recognition memory using first- and second-choice responses. *Journal of Mathematical Psychology, 55*, 251-266.
2. Klauer, K. C., & **Kellen, D.** (2011). Assessing the belief bias effect with ROCs: Reply to Dube, Rotello, and Heit (2010). *Psychological Review, 118*, 164-173.
1. Klauer, K. C., & **Kellen, D.** (2010). Toward a complete decision model of item and source recognition: A discrete-state approach. *Psychonomic Bulletin & Review, 17*, 465-478.

GRANTS

Evaluating Continuous, Discrete and Hybrid Models of Recognition Memory. *Grant under review at the Swiss National Science Foundation (CH 240,000).*

INVITED TALKS

6. *Evaluating Recognition Memory Models: A Critical Review.* September 23th, 2015. Cognitive Psychology Group, University of Zürich.
5. *Discrete-State and Continuous Models of Recognition Memory: Testing Critical Properties.* May 23th, 2015. 27th Annual Convention of Association for Psychological Science.
4. *Variants and invariants between description-based and experience-based choices under risk.* May 15th, 2014. Center for Adaptive Rationality, Max Planck Institute for Human Development, Berlin.
3. *Introduction to categorical data analysis and MPT modeling.* October 16th, 2013. New Frameworks of Rationality Workshop. FRIAS Institute, University of Freiburg.
2. *Recognition memory modeling: From confidence ratings to item rankings, and back.* June, 21st, 2012. Economic Psychology Group, Universitt Basel
1. *Recognition memory modeling: Beyond ROCs.* September 29th, 2011. Cognitive and Differential Psychology Group, Mannheim University.

CONFERENCE ABSTRACTS AND PRESENTATIONS

16. **Kellen, D.** & Klauer, K. C. (2015). Signal detection and threshold modeling of confidence-rating ROCs: A critical test. Paper presented at the *48th Annual Meeting of the Society for Mathematical Psychology*, Newport Beach, USA.
15. **Kellen, D.** & Klauer, K. C. (2015). Signal detection and threshold modeling of confidence-rating ROCs: A critical test. Paper presented at the *Tagung experimentell arbeitender Psychologen 2015*, Hildesheim, Germany.
14. **Kellen, D.** & Pachur (2014). Hierarchical-Bayesian Modeling of Description and Experience-Based Decisions: A Cumulative Prospect Theory Account. Paper presented at the *Annual Conference of the Society for Judgment and Decision Making*, Long Beach, USA.
13. **Kellen, D.** & Klauer, K. C. (2014). Discrete State and Continuous Models of Recognition Memory: Testing Core Properties under Minimal Assumptions. Paper presented at the *European Mathematical Psychology Group Meeting*, Tübingen, Germany.
12. **Kellen, D.**, & Klauer, K. C. (2014). Recognition Memory Models and Confidence-Rating ROCs: A Comparison by Normalized Maximum Likelihood. Poster presented at the *47th Annual Meeting of the Society for Mathematical Psychology*, Quebec City, Canada.
11. **Kellen, D.** & Klauer, K. C. (2014). New tests for comparing continuous and discrete-state assumptions in recognition-memory modeling. Paper presented at the *Tagung experimentell arbeitender Psychologen 2014*, Giessen, Germany.
10. Ragni, M., Singmann, H., **Kellen, D.**, Khemlani, S., Steinlein, E.-M., & Klauer, K. C. (2014). A Meta Analysis of Syllogistic Reasoning using Multinomial Processing Tree Models. Paper presented at the *Tagung experimentell arbeitender Psychologen 2014*, Giessen, Germany.
9. **Kellen, D.**, Klauer, K. C., & Bröder, A. (2013). The flexibility of models of recognition memory: An analysis by the minimum-description length principle. Paper presented at the *46th Annual Meeting of the Society for Mathematical Psychology*, Potsdam, Germany.

8. Castela, M., **Kellen, D.**, Erdfelder, E., & Hilbig, B. E. (2013). The impact of subjective recognition experiences on recognition heuristic use: A multinomial processing tree approach. Poster presented at the *46th Annual Meeting of the Society for Mathematical Psychology*, Potsdam, Germany.
7. Linzer, J., **Kellen, D.**, Singmann, H., & Klauer, K. C. (2013). Modeling Overdistribution in Source Memory: Memory versus Guessing-Based Accounts. Poster presented at the *46th Annual Meeting of the Society for Mathematical Psychology*, Potsdam, Germany.
6. **Kellen, D.**, Klauer, K. C., & Singmann, H. (2013). Measuring Criterion Noise in Signal Detection Theory: The Case of Recognition Memory. Paper presented at the *Tagung experimentell arbeitender Psychologen 2013*, Vienna, Austria, March, 2013.
5. **Kellen, D.** & Singmann, H. (2013) MPTinR: Multinomial Processing Tree Models in R. Paper to be presented at the *International Workshop on Psychometric Computing*, Zürich, Switzerland.
4. **Kellen, D.**, Klauer, K. C., & Brder, A. (2012). Recognition Memory Models and Binary-Response ROCs: A Comparison by Minimum Description Length. Poster presented at the *Annual Meeting of the Psychonomic Society*, Minneapolis, Minnesota.
3. **Kellen, D.**, & Klauer, K. C. (2012). The flexibility of models of recognition memory: An analysis by the minimum-description length principle. Paper presented at the *Tagung experimentell arbeitender Psychologen*, Mannheim, Germany.
2. **Kellen, D.**, Klauer, K. C., & Singmann, H. (2011). Beyond ROCs: Fitting and extending recognition memory models with multiple-alternative, multiple-response tasks. Paper presented at the *44th Annual Meeting of the Society for Mathematical Psychology*, Boston, Massachusetts.
1. Singmann, H., **Kellen, D.**, Hölzenbein, F., & Klauer, K. C. (2011). MPTinR: An (almost) complete R package for analyzing MPTs. Poster presented at the 44th Annual Meeting of the Society for Mathematical Psychology, Boston, Massachusetts.