

Pantelis Pipergias Analytis

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- RESEARCH FIELDS** Cognitive Science, Judgment and Decision Making, Computational Social Science, Behavioral Economics, Machine Learning.
- ACADEMIC POSITIONS** *Assistant Professor*, D-IAS & IMM, University of Southern Denmark, 2018-.
Postdoctoral Researcher, Information Science, Cornell University, Ithaca, 2016-2018.
Postdoctoral Fellow, MPI for Human Development, Berlin, 2015-2016.
Predoctoral Fellow, MPI for Human Development, Berlin, 2010-2015.
- EDUCATION** *PhD in Psychology*, Humboldt University, Berlin, 2015.
Masters in Cognitive Science, EHESS Paris, 2008-2009.
Masters in Law and Economics, University of Bologna, 2006-2007.
Diploma in Economics, University of Athens, 2001-2006.
- JOURNAL ARTICLES** Stojic, H., Olsson, H., and **Analytis, P.P.**, (2020), Linear vs. Lexicographic models of choice: A cue-weight perspective. *Journal of Experimental Psychology: Learning, Memory and Cognition*.
- Stojic, H., Schulz, E., **Analytis, P.P.**, and Speekenbrink, M., (2020), It's new, but is it good? How generalization and uncertainty guide the exploration of novel options. *Journal of Experimental Psychology: General*.
- Analytis, P.P.**, Wu, C., and Gelastopoulos, A., (2019), Make-or-break: chasing risky goals or settling for safe rewards? *Cognitive Science*.
- Analytis, P.P.**, Barkoczi, D., and Herzog S., (2018), Social learning strategies for matters of taste, *Nature Human Behavior*, 2, 415-424.
- Analytis, P.P.**, Kothiyal, A., and Katsikopoulos, K., (2014), Multi-attribute utility models as cognitive search engines, *Judgment and Decision Making*, 9 (5), 403-419.
- Moussaid, M., Kämmer, J., **Analytis, P.P.** and Neth, H., (2013), Social influence and the collective dynamics of opinion formation, *PLoS ONE* 8 (11): e78433.
- CONFERENCE PROCEEDINGS** **Analytis, P.P.**, Barkoczi, D., Lorenz-Spreen Philipp., and Herzog S., (2020), The structure of social influence in recommender systems, *ACM Proceedings of the Web Conference (WWW)*.
- Analytis, P.P.**, Stojic, H., Gelastopoulos, A., and Moussaid, M., (2017), Diversity of preferences can increase collective welfare in sequential exploration problems. *5th conference on Collective Intelligence*.
- Analytis, P.P.**, Wu, C., and Gelastopoulos, A., (2017), Make-or-break: chasing risky goals or settling for safe rewards? *Proceedings of the 39th Annual Conference of the Cognitive Science Society*.
- Analytis, P.P.**, Delfino, A., Kämmer, J., Moussaid, M., and Thorsten Joachims., (2017), Ranking with social cues: Integrating average review scores with popularity

information. *Proceedings of the 11th International Conference in Web and Social Media.*

Stojic, H., Olsson, H., and **Analytis, P.P.**, (2016), Explaining inter-individual variability in strategy selection: A cue-weight learning approach. *Proceedings of the 14th International Conference on Cognitive Modeling.*

Barkoczi, D., **Analytis, P.P.**, and Wu, C., (2016), Collective search in rugged landscapes: A cross-environment analysis., *Proceedings of the 38th Annual Conference of the Cognitive Science Society.*

Analytis, P.P., Barkoczi, D. and Herzog, M.S., (2015), You're special, but it doesn't matter if you're a greenhorn: Social recommender strategies for mere mortals. *Proceedings of the 37th Annual Conference of the Cognitive Science Society.*

Stojic H., **Analytis, P.P.** and Speekenbrink, M., (2015), Human behavior in contextual multi-armed bandit problems., *Proceedings of the 37th Annual Conference of the Cognitive Science Society.*

PIPELINE

He, L., **Analytis, P.P.**, and Bhatia, S., The wisdom of the "modelling" crowd in risky choice., R & R at *Management Science.*

Analytis, P.P., Gelastopoulos, A and Stojic H., Ranking based rich-get-richer processes., working paper., In preparation for *Advances in Applied Probability.*

Bhatia, S., Zhao, JW., He, L. and, **Analytis, P.P.**, Cognitive models of optimal sequential search with recall., under review at *Cognition.*

Analytis, P.P., Kauschik, K., Herzog, S., Bahrami, B., and Deroy, O., Are the opinions of professional critics more informative than those of amateurs., In preparation for *EPJ Data Science.*

COMMENTS

Analytis, P.P., Moussaid, M., Artinger, F., Kämmer, J. and Gigerenzer, G., (2014), "Big data" need an analysis of decision processes, *Behavioral and Brain Sciences*, 37, (1), 76-78.

WORKING PAPER

Analytis, P.P., Stojic, H. and Moussaid, M.,(2015), The collective dynamics of sequential search in markets for cultural products., Santa Fe Institute Working Paper.

THESES

Analytis, P.P., 2015, Psychological process models and aggregate behavior. Doctoral thesis in Psychology, Humboldt University, Berlin, Germany.

Analytis, P.P., 2009, Metacognitive uncertainty and study time allocation, Master's thesis in Cognitive Sciences, EHESS, Paris, France.

SELECTED WORK IN PROGRESS

A general framework for the study of rich-get-richer dynamics., with Alexandros Gelastopoulos and Hrvoje Stojic.

Crowdsourcing people's ratings to uncover the secrets of wine ageing., with Orestis Kopsacheilis, Karthik Kaushik, Bahador Bahrami and Ophelia Deroy.

Learning to pursue risky goals., with Wojciech Zajkowski and Charley Wu.

When should you do the opposite from what your advisers say?, with Daniel Barkoczi.

A tutorial on the bias-variance decomposition for zero-one loss functions., with Stefan Herzog.

Personalized strategy selection in collaborative filtering., with Thorsten Joachims.

Does people's tendency to explore generalize across tasks?, with Farid Anvari, Davide Marchiori, Stephen Billinger

INVITED TALKS

2020: SODAS, University of Copenhagen; Centre for Humans and Machines , Max Planck Institute for Human Development (online); Cognition, Values and Behavior research group, Ludwig Maximilians University, Munich (online).

2019: Summer School on Social Cognition, Aigina, Greece; Department of Management, Aarhus University; Colloquium of Social Economic and Decision Psychology, University of Basel; School of Decision Sciences Colloquium, University of Konstanz; Character lab, University of Pennsylvania (Philadelphia); Robotics lab, National Polytechnical School of Athens.

2018: Blinkist Labs (Berlin); Interactive Minds Center, University of Aarhus (Denmark); Danish Institute of Advanced Studies, University of South Denmark; Psychology dpt., University of Pennsylvania (Philadelphia), Cognition, Brain, & Behavior Group, Syracuse University (US); Cognitive Science dpt., Indiana University (Bloomington); Human-Technology Interaction Group, Technical University of Eindhoven; DTU Compute, Technical University of Denmark (Copenhagen).

2017: Adaptive Rationality Group, MPIB (Berlin); Skrutz SA (Athens); ConCats talk series, Dpt. of Psychology, NYU (New York); Artificial Intelligence Seminar, Cornell University (Ithaca).

2016: Berlin Behavioral Economics Seminar, WZB, (Berlin); Technion University (Haifa); Artificial Intelligence Seminar, Cornell University (Ithaca).

2015: Dpt. of Economics, University of Nottingham, (UK); Institute of Analytical Sociology, Linköping University, Norrköping, (Sweden); Computational and Cognitive Neuroscience Lab, Harvard University, (Boston).

2014: Dpt. of Behavioral Science, Hokkaido University, Sapporo. (Japan).

CONFERENCE TALKS

The structure of social influence in recommender networks. The Web conference, 2020, Taipei, (held online).

The structure of social influence in recommender networks. INSIA Sunbelt Conference 2020, Paris, (held online).

Make-or-break: chasing risky goals or settling for safe rewards. 13th Nordic Behavioral & Experimental Economics Conference, 2018, Odense, Denmark.

It's new but is it good? How generalization and uncertainty guide the exploration of novel options, 7th Midwest Cognitive Science Conference, 2018, Bloomington, US.

Social learning strategies for matters of taste, INFORMS Annual Meeting, 2017, Houston, US.

Make-or-break: Chasing risky goals or settling for safe rewards?, 39th Annual Conference of the Cognitive Science Society, 2017, London, UK.

Diversity of preferences can increase collective welfare in sequential exploration problems 5th Collective Intelligence Conference, 2017, New York, US.

Explaining inter-individual variability in strategy selection: A cue weight learning approach, International Conference in Cognitive Modeling, 2016, College Park, Pennsylvania, US.

You're special, but it doesn't matter if you're a greenhorn: Social recommender strategies for mere mortals., 37th Annual Conference of the Cognitive Science Society, 2015, Pasadena, Los Angeles, US.

Human behavior in contextual multi-armed bandit problems, Annual meeting of the Mathematical Psychology Society, 2015, Newport, Los Angeles, US.

Multi-attribute utility models as cognitive search engines, Annual meeting of the Mathematical Psychology Society, 2015, Newport, Los Angeles, US.

The choice-experience feedback loop: Choosing and judging with small and biased

samples, 1st conference of the Herbert Simon Society, 2013, New York, US.

Cognitive inductive models and the co-evolution of signaling, *New Developments in Signaling and Game Theory*, 2012, Monte Verita, Switzerland.

Metacognitive uncertainty and learning decisions. SPUDM, 2011, Kingston upon Thames, England.

TEACHING

Network Analysis, Spring 2021, Data Science Master's, University of Southern Denmark, Odense.

Learning and Decision Making, Summer 2021, EADM Summer School on Learning and Decision Making, secured funding and co-develop the curriculum.

Algorithms we Live by, Spring 2020, Data Science Master's, University of Southern Denmark, Odense.

Models of Social influence, Summer 2019, Aegina Summer School on Social Cognition.

Experimentation, Exploration and Creativity, Spring 2019, Marketing and Management Science dpt., University of Southern Denmark, Odense.

Algorithms we Live by, Spring 2018, Information Science dpt., Cornell University, Ithaca, Syllabus available at <https://courses.cit.cornell.edu/info4940/>

Models of Judgment and Decision Making, July 2015, International Max Planck Research School on Adaptive Behavior in a Fundamentally Uncertain World (Uncertainty school), Jena.

RESEARCH VISITS

Department of Psychological and Brain Sciences, Indiana University, Bloomington, May 2018, hosted by Jerome Busemeyer.

Skroutz S.A, Athens, April 2017, invited and hosted by the search team.

Dpt. of Industrial Engineering and Management, Technion University, Haifa, March - April 2016, hosted by Ido Erev.

Computational Cognitive Neuroscience Lab, Harvard University, Boston, November - December 2015, hosted by Samuel Gershman.

Dpt. of Cognitive, Perceptual and Brain Sciences, University College London, London, June 2015, hosted by Maarten Speekenbrink.

Dpt. of Economics and Business, Universitat Pompeu Fabra, Barcelona, July - August 2014, hosted by Gaël Le Mens and Hrvoje Stojic.

Dpt. of Computer Science, Tokyo Institute of Technology, Tokyo, October 2013 - April 2014, hosted by Masashi Sugiyama.

Dpt. of Psychology, Barnard College, New York, June 2009 - October 2010, hosted by Lisa Son and Rajiv Sethi.

WORKSHOPS AND SUMMER SCHOOLS

Workshop on *Deep, fast and shallow learning in humans and machines*, 2018, Bloomington, US.

Summer school on *Computational and Mathematical Modeling of Cognition*, 2016, Tobbiaco, Italy.

Machine Learning Summer School (MLSS), 2016, University of Cadiz, Spain.

2nd *Computational Creativity* Workshop, University of Antwerp, 2016, Belgium.

5th - 7th Annual Graduate Workshop of the *Uncertainty School*, Max Planck Institute for Economics, 2011-3, Jena, Germany.

17th Annual Graduate Workshop in *Computational Social Science Modeling and Complexity*, 2011, Santa Fe, New Mexico, US.

18th Summer School in *Economic Theory*, 2007, Economic Aspects of Communication and Information, Jerusalem, Israel.

ACADEMIC SERVICE

Conference organization: EADM Summer School on Learning and Decision Mak-

ing, July 20201, University Pompeu Fabra, Barcelona.
 1st and 2nd Athens meetings of Behavioral and Experimental Social Sciences (ABEESS), 8th-9th May, 2016, (Main organizer), University of Athens, Greece.
 Summer Institute on Bounded Rationality - Decision Making in the Wild. 3rd - 10th July 2012. (Main organizer), Max Planck Institute for Human Development, Berlin, Germany.
Lab leadership: ABEESS Lab, 2016 - , University of Athens, co-founder (alongside with Andreas Papandreou and Vasileios Vlasseros).
Multimedia: *Talking about decisions* - Series of 30' interviews with leading decision sciences scholars produced at the Max Planck Institute for Human Development.
Interviewees: Tom Wallsten, Reid Hastie, Jerome Busemeyer, Laura Martignon, Robin Hogarth, John McNamara.
Mentoring: *Postdoctoral researchers* — Daniel Barkoczi (2019-), Alexandros Gelastopoulos (2019-), *Master's students* — Karthik Kaushik (TUM, jointly with Bahador Bahrami and Ophelia Deroy), Thorhildur Jensdottir (DTU, jointly with Sune Lehmann), Ahmad Dawud (jointly with Daniel Barkoczi and Charley M. Wu), Heng Kuang (Cornell, Master's project), Siyuan Yin (Cornell, Master's project), Zhihan Wang (Cornell, Master's project), Tony Fan (Cornell, Master's project), Caroline Chang (Cornell, Undergraduate honors project), Mara Ziemann (MPI Berlin and TU Berlin, Master's thesis), Alexia Delfino (MPI Berlin and Sant'Anna school of Advanced Studies, Master's thesis), Tor Nielsen (MPI Berlin, Research visit), Barbara Schiltenwolf (MPI Berlin, Conference organisation), Zhong Yilu (MPI Berlin, Research visit).
Reviewing: National Science Foundation (1), Poland National Science Centre (1), Management Science (2), Organization Science (3), PLOS One (1), Topics in Cognitive Sciences (1), Cognitive Research (1), Annual Meeting of the Cognitive Science Society (13), ICML (6), NIPS (10), Journal of Behavioral Decision Making (1).

GRANTS & AWARDS

Funding from the European Association for Decision Making for organizing the EADM 2020 Summer School (€6000).
 William Estes Young Stars Travel Award for attending the workshop on Deep, fast and shallow learning in humans and machines, 2018.
 Max Wertheimer grant for research visit at the Minerva Center for Cognitive Processes and Human Performance, 2016, Technion University (\$1600).
 Best paper honorable mention award, ICCM, 2016.
 Max Planck Society, 2014-2016, Postdoctoral fellowship (€25000).
 Max Planck Society, 2010-2014, Doctoral fellowship (€50000).
 European Union, 2007, Scholarship for studies at the University of Haifa (€5000).
 Greek National Scholarship Foundation, 2005, Erasmus in France (€2500).
 Greek National Scholarship Foundation, 2001, University entry exams (€1500).

CONSULTING

Skroutz, Athens, (\approx 200 employees), Algorithmic design and online experimentation.
Blinkist, Berlin, (\approx 150 employees), Recommender systems and content evaluation.

ART & FILMS

Nails: <https://vimeo.com/64528900>
Kacanagiz: <https://vimeo.com/109057231>
Farsa village: <https://youtu.be/yPTus-dM0RQ>
Tragata: <https://studiogenua.de/11-tragata.html>

CODING SKILLS

Languages: Javascript, Netlogo, Python, R, SQL
Mark up languages: Html, LATEX, Markdown
Statistical packages: Matlab, SPSS, Stata

Applications: Aquamacs, Git, MS Office, Premiere, Photoshop.
Operating systems: OS X, Windows, Unix/Linux.

OTHER

Reader, Blinkist, Berlin, 2016.
Intern, OECD, Paris, 2006.
Cadet Officer, Greek Marine Forces, Greece, 2003 - 2005.

LANGUAGES

Greek (native), English (fluent), German (fluent), Spanish (fluent), French (fluent), Italian (lost fluency), Danish (intermediate), Japanese (elementary), Portuguese (elementary).

REFEREES

1. Konstantinos Katsikopoulos, Southampton Business School, University of Southampton, University Road, Southampton, SO17 1BJ, UK, e-mail: k.katsikopoulos@soton.ac.uk
2. Thorsten Joachims, Cornell University, Gates Hall, Departments of Computer and Information Science, Ithaca, USA, Phone: +16072555593, e-mail: tj@cs.cornell.edu
3. Thorbjørn Knudsen, Danish Institute of Advanced Study, University of Southern Denmark, Campusvej 55, Odense, Denmark, Phone : +45 65503148, e-mail: tok@sod.dias.sdu.dk
4. Mehdi Moussaïd, Center for Adaptive Rationality (ARC), Max Planck Institute for Human Development, Lentzealle 94,14195, Berlin Germany, Phone : +49 30 82406-415, e-mail: moussaïd@mpib-berlin.mpg.de
5. Stefan Herzog, Center for Adaptive Rationality (ARC), Max Planck Institute for Human Development, Lentzealle 94,14195, Berlin Germany, Phone : +49 30 82406-406, e-mail: herzog@mpib-berlin.mpg.de
6. Maarten Speekenbrink, Cognitive, Perceptual and Brain Sciences, University College London, 26 Bedford Way, London, WC1H 0AP, England, m.speekenbrink@ucl.ac.uk
7. Gael Le Mens, Department of Economics and Business, Universitat Pompeu Fabra, Ramon Trias Fargas, 25-27, 08005, Barcelona, Spain, Phone: +34935422717, e-mail: gael.le-mens@upf.edu