# Alberto Acerbi

### **Assistant Professor**

University of Trento, Via Verdi 26, 38122 Trento, Italy

☐ alberto.acerbi@unitn.it ☐ acerbialberto.com ☐ Updated: Feb. 22, 2025

**Current position** 

Department of Sociology and Social Research, University of Trento (Italy)

Assistant professor 2022-current

**Previous positions** 

Centre for Culture and Evolution, Division of Psychology, Brunel University London (UK)

Lecturer 2019-2023

School of Innovation Science, Eindhoven University of Technology (The Netherlands)

Researcher 2015-2019

Department of Archaeology and Anthropology, Bristol University (UK)

Newton Research Fellow 2013-2104

Centre for the study of cultural evolution, Stockholm University (Sweden) & Università di Bologna (Italy)

Post-doctoral researcher 2008-2012

Max Planck Institute for Evolutionary Anthropology, Leipzig (Germany)

Post-doctoral researcher 2007-2008

Institute of Cognitive Sciences and Technologies, CNR, Roma (Italy)

Research assistant 2004-2007

**Education** 

PhD, Anthropology, Università di Siena (Italy)

2007

MA, Philosophy (cum laude), Università di Siena (Italy)

2002

#### **Publications**

#### **BOOKS**

- 1. Acerbi A (2025), Tecnopanico, Bologna: Il Mulino (in Italian).
- 2. **Acerbi A**, Mesoudi A, Smolla M (2022), *Individual-based models of cultural evolution*. *A step-by-step guide using R*, New York: Routledge. Online free version available at: https://acerbialberto.com/IBM-cultevo
- 3. **Acerbi A** (2020), *Cultural Evolution in the Digital Age*, Oxford: Oxford University Press. Arabic translation (2021), Arab Scientific Publishers, Inc.

### **PREPRINTS**

1. Fischer K, Acerbi A (2025), Digital Media, available at: https://osf.io/preprints/psyarxiv/6zhcy/

# JOURNAL ARTICLES

- 1. **Acerbi A**, De Courson B (2025), Weak individual preferences stabilize culture, *Proceedings of the National Academy of Sciences USA*, 122 (8), e2412380122
- 2. Bonacchi C, Krzyzanska M, **Acerbi A** (2025), Positive sentiment and expertise predict the diffusion of archaeological content on social media, *Scientific Reports*, 15, 2031
- 3. Altay S, **Acerbi A** (2024), People Believe Misinformation Is a Threat Because They Assume Others Are Gullible, *New Media and Society*, 26, 11, 6440-6461
- 4. Brinkmann L, Baumann F, Bonnefon J-F, Derex M, Müller TF, Nussberger A-M, Czaplicka A, **Acerbi A**, Griffiths TL, Henrich J, Leibo JZ, McElreath R, Oudeyer P-Y, Stray J, Rahwan I (2023), Machine Culture, *Nature Human Behaviour*, 7, 11
- 5. **Acerbi A**, Stubbersfield JM (2023), Large language models show human-like content biases in transmission chain experiments, *Proceedings of the National Academy of Sciences USA*, 120 (44), e2313790120
- 6. Youngblood M, Stubbersfield JM, Morin O, Glassman R, Acerbi A (2023), Cultural transmission bias in the spread of voter fraud conspiracy theories on Twitter during the 2020 US election, *Humanities and Social Sciences Communications*, 10, 573
- 7. **Acerbi A**, Sacco PL (2023), Self-interest, prosociality, and the moral cognition of markets: A comparative analysis of The Theory of Moral Sentiments and The Wealth of Nations, *Rationality and Society*, 35, 4
- 8. **Acerbi A**, Burns J, Cabuk U, Kryczka J, Trapp B, Valletta JJ, Mesoudi A (2023), Sentiment analysis of the Twitter in response to Netflix's *Our Planet* documentary, *Conservation Biology*, e14060
- 9. Altay S, Berriche M, **Acerbi A** (2023), Misinformation on Misinformation: Conceptual and Methodological Challenges, *Social Media* + *Society*, 9, 1
- 10. **Acerbi A**, Snyder WD, Tennie C (2022), The method of exclusion (still) cannot identify specific mechanisms of cultural inheritance, *Scientific Reports*, 12, 21680
- 11. **Acerbi A**, Sacco PL (2022), The self-control vs. self-indulgence dilemma: A culturomic analysis of 20th century trends, *Journal of Behavioral and Experimental Economics*, 101, 101946

- 12. **Acerbi A** (2022), From storytelling to Facebook. Content biases when retelling or sharing a story, *Human Nature*, 33, 2
- 13. **Acerbi A\***, Altay S\*, Mercier H (2022), Research note: Fighting misinformation or fighting for information?, *Harvard Kennedy School Misinformation Review*, 3, 1 (\*equal contribution)
- 14. **Acerbi A**, Charbonneau M, Miton H, Scott-Phillips T (2021), Culture without copying or selection, *Evolutionary Human Sciences*, 3, e50
- 15. Manvir S, **Acerbi A**, Caldwell C, Danchin E, Isabel G, Molleman L, Scott-Phillips T, Tamariz M, van den Berg P, van Leeuwen E, Derex M (2021), Beyond social learning, *Philosophical Transactions of the Royal Society B*, 376, 20200050
- 16. Morin O, Jacquet P, Vaesen K, **Acerbi A** (2021), Social information use and social information waste, *Philosophical Transactions of the Royal Society B*, 376, 20200052
- 17. Jansson F, Aguilar E, **Acerbi A**, Enquist M (2021), Modelling Cultural Systems and Selective Filters, *Philosophical Transactions of the Royal Society B*, 376, 20200045
- 18. **Acerbi A\***, Kerhoas D\*, Webber A, McCabe G, Mittermeier R, Schwitzer C (2020), The impact of the "World's 25 Most Endangered Primates" list on scientific publications and media. *Journal for Nature Conservation*, 54, 125794 (\*equal contribution)
- 19. Brand CO, **Acerbi A**, Mesoudi A (2019), Cultural evolution of emotional expression in 50 years of song lyrics, *Evolutionary Human Sciences*, 1, e11
- 20. Morin O, Sobchuk O, **Acerbi A** (2019), Why people die in novels: Testing the Ordeal Simulation Hypothesis, *Palgrave Communications*, 5, 2
  - Italian translation (2023), in: *La narrazione come incontro* (Ciotti F, Morabito C, Eds.) Firenze: Firenze University Press: 59-80.
- 21. **Acerbi A** (2019), Cognitive attraction and online misinformation, *Palgrave Communications*, 5, 15
- 22. Morgan TJH, **Acerbi A**, van Leeuwen EJC (2019), Copy-the-majority of instances or individuals? Two approaches to the majority and their consequences for conformist decision-making, *PLoS ONE*, 14(1), e0210748
- 23. **Acerbi A**, Tehrani J (2018), Did Einstein really say that? Testing content versus context in the cultural selection of quotations, *Journal of Cognition and Culture*, 18 (3-4), 293-311
- 24. Ruck D, Bentley RA, **Acerbi A**, Garnett P, Hruschka DJ (2017), Role of Neutral evolution in word turnover during centuries of English word popularity, *Advances in Complex Systems*, 20 (6-7), 1750012
- 25. **Acerbi A**, Kendal J, Tehrani J (2017), Cultural complexity and demography: the case of folktales, *Evolution and Human Behaviour*, 38 (4), 474-480
- 26. Morin O\*, **Acerbi A\*** (2017), Birth of the cool. A two-centuries decline in emotional expression in Anglophone fiction, *Cognition and Emotion*, 31 (8), 1663-1675 (\*equal contribution)
- 27. **Acerbi A** (2016), A cultural evolution approach to digital media, *Frontiers in Human Neuro-science*, 10, 636

- 28. **Acerbi A\***, van Leeuwen EJC\*, Haun DBM, Tennie C (2016), Conformity cannot be identified based on population-level signatures, *Scientific Reports*, 6, 36068 (\*equal contribution)
- 29. van Leeuwen EJC, **Acerbi A**, Kendal RL, Tennie C, Haun DBM (2016), A re-appreciation of "conformity", *Animal Behaviour*, 122, e5-e10
- 30. **Acerbi A**, Tennie C, Mesoudi A (2016), Social learning solves the problem of narrow-peaked search landscapes: experimental evidence in humans, *Royal Society Open Science*, 3(9): 160215
- 31. **Acerbi A**, Tennie C (2016), The role of redundant information in cultural transmission and cultural stabilization, *Journal of Comparative Psychology*, 130(1): 62-70
- 32. Pugliese F, **Acerbi A**, Marocco D (2015), Emergence of Leadership in a Group of Autonomous Robots, *PLoS ONE*, 10(9): e0137234
- 33. **Acerbi A**, Mesoudi A (2015), If we are all cultural Darwinians what's the fuss about? Clarifying recent disagreements in the field of cultural evolution, *Biology & Philosophy*, 30(4): 481-503
- 34. Ghirlanda S, **Acerbi A**, Herzog H (2014), Dog movie stars and dog breed popularity: A case study in media influence on choice, *PLoS ONE*, 9(9): e106565
- 35. **Acerbi A**, Bentley RA (2014), Biases in cultural transmission shape the turnover of popular traits, *Evolution and Human Behaviour*, 35(3): 228-236
- 36. Bentley RA, **Acerbi A**, Ormerod P, Lampos V (2014), Books Average Previous Decade of Economic Misery, *PLoS ONE*, 9(1): e83147
- 37. Ghirlanda S, **Acerbi A**, Herzog H, Serpell JA (2013), Fashion vs. Function in Cultural Evolution: The case of Dog Breed Popularity, *PLoS ONE*, 8(9): e74770
- 38. **Acerbi A**, Lampos V, Garnett P, Bentley RA (2013), The expression of emotions in 20th century books, *PLoS ONE*, 8(3): e59030
- 39. **Acerbi A**, Ghirlanda S, Enquist M (2012), Old and Young Individuals' Role in Cultural Change, *Journal of Artificial Societies and Social Simulations*, 15(4): 1
- 40. Acerbi A, Ghirlanda S, Enquist M (2012), The logic of fashion cycles, PLoS ONE, 7(3): e32541
- 41. **Acerbi A**, Jacquet P, Tennie C (2012), Behavioral constraints and the evolution of faithful social learning, *Current Zoology*, 58(2): 307-318
- 42. **Acerbi A**, Tennie C, Nunn CL (2011), Modeling imitation and emulation in constrained search spaces, *Learning & Behavior*, 39(2): 104-114
- 43. **Acerbi A**, Nunn CL (2011), Predation and the phasing of sleep: an evolutionary individual-based model, *Animal Behaviour*, 81(4): 801-811
- 44. **Acerbi A**, Enquist M, Ghirlanda S (2009), Cultural evolution and individual development of openness and conservatism, *Proceedings of the National Academy of Sciences USA*, 106(45): 18931-18935
- 45. **Acerbi A**, McNamara P, Nunn CL (2008), To Sleep or not to Sleep: The Ecology of Sleep in Artificial Organisms, *BMC Ecology*, 8(10): 1-12
- 46. **Acerbi A**, Parisi D (2006), Cultural Transmission Between and Within Generations, *Journal of Artificial Societies and Social Simulations*, 9(1): 1

# BOOK CHAPTERS / CONFERENCE PROCEEDINGS

- 1. **Acerbi A** (2023), Digital Culture, in: *The Oxford Handbook of Cultural Evolution* (Tehrani J et al., Eds), Oxford, Oxford University Press, C41S1-C41S10
- 2. Pianzola F, **Acerbi A**, Rebora S (2020), Cultural Accumulation and Improvement in Online Fan Fiction, in: *Proceedings of the Workshop on Computational Humanities Research* (Karsdorp F et al., Eds.), CEUR: 2-11
- 3. **Acerbi A**, Ghirlanda S, Enquist M (2014), Regulatory traits: cultural influences on cultural evolution, in: *Evolution, Complexity, and Artificial Life* (Cagnoni S et al., Eds.), Berlin, Springer: 135-147
- 4. **Acerbi A**, Lampos V, Bentley RA (2013), Robustness of emotions extraction from 20th century English books, in: *IEEE BigData 2013 Proceedings*: 1-8
- 5. **Acerbi A**, Ghirlanda S, Enquist M (2012), Regulatory Traits in Cultural Evolution, in: *Proceedings of the Italian Workshop on Artificial Life and Evolutionary Computation* (Cagnoni S et al., Eds.), University of Parma: 1-9
- 6. Pugliese S, **Acerbi A**, Miglino O, Marocco D (2012), Emergence of Leadership in a Group of Autonomous Robots, in: Proceedings of the Post-Graduate Conference on Robotics and Development of Cognition: 36-39
- 7. **Acerbi A**, Marocco D (2009), Orienting learning by exploiting sociality: an evolutionary robotics simulation, in: *IJCNN 2009 Conference Proceedings, Piscataway*, NJ, IEEE Press: 20-27
- 8. Marocco D, **Acerbi A** (2007), Adaptation and Social Facilitation in a Population of Autonomous Robots, in: *Proceedings of the Seventh International Conference on Epigenetic Robotics* (Berthouze L et al., Eds.), Lund, Lund University Cognitive Science Series: 85-91
- 9. Cecconi F, Zappacosta S, Marocco D, **Acerbi A** (2007), Social and individual learning in a microeconomic framework, in: *Proceedings of the Econophysics Colloquium and Beyond*, University of Ancona
- 10. **Acerbi A,** Marocco D, Nolfi S (2007), Social Facilitation on the Development of Foraging Behaviors in a Population of Autonomous Robots, in: *Advances in Artificial Life. Proceedings of ECAL 2007* (Almeida e Costa F et al., Eds.), Berlin, Springer: 625-634
- 11. **Acerbi A**, Parisi D (2007), The Evolution of Pain, in: *Advances in Artificial Life. Proceedings of ECAL 2007* (Almeida e Costa F et al., Eds.), Berlin, Springer: 816-824
- 12. **Acerbi A**, Nolfi S (2007), Social Learning and Cultural Evolution in Embodied and Situated Agents, in: *Proceedings of the First IEEE Symposium on Artificial Life* (Abbass HA et al., Eds.), Piscataway, NJ, IEEE Press: 333-340

### **OTHERS**

- 1. **Acerbi A** (2021), Review of Joseph Henrich, The Weirdest People in the World, *Evolutionary Studies in Imaginative Culture*, 5 (1): 91-96
- 2. **Acerbi A**, Brand C (2020), Why are pop songs getting sadder than they used to be?, *aeon*, available at: https://aeon.co/ideas/why-are-pop-songs-getting-sadder-than-they-used-to-be

- 3. **Acerbi A\***, van Leeuwen EJC\*, Haun DBM, Tennie C (2018), Sigmoidal acquisition curves do not necessarily indicate conformity. Reply to Smaldino et al. (2018), *Scientific Reports*, 8, 14016 (\*equal contribution)
- 4. **Acerbi A**, Sacco PL (2018), Folk-economic beliefs as "evidential fiction": Putting the economic public discourse back on track (Commentary on Boyer & Petersen), *Behavioral and Brain Sciences*, 41, e159
- 5. **Acerbi A** (2017), Review of Tim Lewens, Cultural Evolution: Conceptual Challenges, *Philosophy of Science*, 84(1)
- 6. **Acerbi A** (2013), The History of Our Emotions in Millions of Books, *Huffington Post* (USA Edition), available at: https://www.huffpost.com/entry/human-emotion-books-history\_b\_ 3084869
- 7. Ghirlanda S, **Acerbi A**, Enquist M, Nakamaru M (2010), The Sometimes Evitable Route to Conservatism and Persuasiveness. A Replay to Xue and Costopoulus, *Current Anthropology*, 51(2): 271-272
- 8. **Acerbi A**, Marocco D, Vogt P (2008), Social Learning in Embodied Agents, special double issue of *Connection Science*, 20(2-3)

# Recent/forthcoming conference presentations, invited talks and workshops

Exploring long-term cultural dynamics through text mining: trends, challenges, and future directions, Department of Anthropology, Durham University, UK, February 26, 2025 (invited)

The social media debate: Do social media really represent a threat to our society?, sSmposium at the 20th Annual Conference of the Italian Association for Cognitive Sciences, Roma, Italy, September 20, 2024 (organiser)

Misinformed on misinformation, International Scientific Workshop on Challenges of Sustainable Education, School of Innovation, University of Trento, Italy, June 11, 2024 (invited)

Social influence and misinformation online, EU Digital Citizenship Working Group, March 27, 2024 (invited)

Large language models show human-like content biases in transmission chain experiments, Computational Humanities seminar, King's College, London, UK, March, 20, 2024 (invited)

Large language models show human-like content biases in transmission chain experiments, Cultural Data Analytics Conference 2023, Tallinn, Estonia, December, 14-16, 2023

Misinformed on misinformation, Computational Political Psychology Network seminar, July 11, 2023 (invited)

Disinformati sulla disinformazione, Department of Social, Political and Cognitive Sciences, University of Siena, Italy, April 28, 2023 (invited)

# **Recent Teaching**

University of Trento, module co-leader - Costruire un disegno di analisi dei fenomeni sociali (BSc Sociology) - from 2024 to *current* 

University of Trento, team taught module - Current issues in digital media and politics (MSc Data science) - from 2024 to *current* 

University of Trento, team taught module - Foundations of Social and Psychological Science (MSc Data science) - from 2023 to 2024

University of Trento, module leader - Cultural analytics (MSc Sociology and Social Research) - from 2023 to *current* 

COSMOS 2023 (The Computational Summer school on Modeling Social and collective behavior), Konstanz, instructor - 2023

Brunel University London, module co-leader - Psychology of social media (BSc Psychology) - from 2021 to 2023

Brunel University London, module leader - Statistics (BSc Psychology) - from 2020 to 2023

Brunel University London, team taught modules - Evolutionary perspective on culture, Special topics in culture and evolution, Cross-cultural and evolutionary research methods (MSc Culture and Evolution) - from 2020 to 2023

# Supervision

From 2024: external PhD advisor: Jeremy Perez, Université de Bordeaux, "Cultural evolution in populations of large language models".

From 2023: Postdoc supervisor: Kyle Fischer, "Changing the perspective on social media interventions: improving engagement with true news".

From 2023: external PhD advisor: Pietro Nickl, Max Planck School of Cognition, Berlin, "The Social dynamics of cultural evolution online".

From 2020: five MSc projects and ten BSc projects at Brunel University London

two MRes projects (co-supervision) at the University of Bristol (2014-2015)

# **Advisory board Member**

GOLEM (Graphs and Ontologies for Literary Evolution Models) ERC project (2023-2027)

# Editorial board member

Culture and Evolution (AKJournals)

#### PhD Panels Member

Filippo Andrei: Unveiling The Shadows: A Cognitive Approach To Understanding Social Influence Strategies For Establishing Social Order In Darknet Markets, Università degli Studi di Trento - 2024

Francesco Lomonaco: Raising Teenagers' Awareness of Social Media Threats: A Theoretical and Empirical Study, Università degli Studi di Milano-Bicocca - 2023

Niels Lettinga: Environmental adversity and prosocial preferences, and a new methodology to increase the external validity of economic games, Ecole Normale Supérieure, Paris - 2021

Bradley Peter Walker: Evidence that Cultural Transmission Biases Differentially Influence Human Communication, The University of Western Australia - 2021

Jose Segovia Martin: Social and cognitive constraints on the evolution of culturally transmitted variants: Models, experiments and theory, Universitat Autonoma de Barcelona - 2020

Simon Carrignon: Content-Dependent Biases in Social Learning Strategies: a multiscale approach, Universitat Pompeu Fabra, Barcelona - 2019

### Grants and awards

Leverhulme Trust (2025, co-I): 295,318.77 GBP ("Weaponised Pasts: The Evolution of Heritage-based Hostility on Social Media")

John Templeton Foundation (2022):  $\sim$  186,000 EUR ("Changing the perspective on social media interventions: improving engagement with true news")

BRIEF award (2020):  $\sim$  9,000 GBP ("From storytelling to Facebook. Does the medium of transmission change which content is successful?")

Newton International Fellowship (2013-2014):  $\sim$  187,000 GBP ("Cultural Evolution Online. New models for a new era")

Wenner-Gren foundation (2010-2012):  $\sim$  30,000 EUR

# Reviewer

Books: Berghahn Books, Cambridge University Press, MIT Press.

**Grant applications:** NWO Talent Programme - VICI scheme, Cultural Evolution Society Transformation Fund, National Science Foundation (NSF), EHBEA 2014 Student Research Grant Competition, Swedish Research Council (Individual Grant Application), Knut and Alice Wallenberg Foundation (Wallenberg Academy Fellows).

Journals: Acta Biotheoretica, Animal Behaviour, Advances in Complex Systems, Behaviour & Information Technology, Behavior Research Methods, Biology & Philosophy, Biology Letters, Cognitive Science, Cognitive Systems Research, Cognition, Connection Science, Current Zoology, Evolution and Human Behavior, Evolutionary Anthropology, Evolutionary Human Sciences, Evolution Medicine and Public Health, Frontiers in Ecology and the Environment, Frontiers in Psychology, Humanities and Social Sciences Communications, IEEE Autonomous Mental Development, Interaction Studies, Journal of Evolutionary Psychology, Journal of Artificial Societies and Social Simulations, Journal of Cognition and Culture, Journal of Cultural Analytics, Journal of Experimental Psychology: General, Journal of General Philosophy of Science, Journal of Quantitative Description: Digital Media, Journal of Theoretical Biology, Learning & Behavior, Mathematical Anthropology and Cultural Theory, Nature, Nature Human Behaviour, Nature Communications, New Media & Society, npj Complexity, Noridcom Review, Perspective on Psychological Science, Philosophy of Science, PLoS ONE, PNAS, PNAS Nexus, Polis, Proceedings of the Royal Society B, Royal Society Interface, SAGE Open, Scientific Reports, SN Social Sciences, Synthese, The British Journal for the Philosophy of Science, Trends in Ecology and Evolution.

Conferences: CHR2024, CHR2023, CHR2022, CHR2021, CHR2020, Applications in Cultural Evolution: Arts, Languages, Technologies 2018, ISBE 2016, ECSI 2014, ECAL 2013, EPOS V, WIVACE 2012, WIVACE 2008, SAB 2008, WIVACE 2007, ECAL 2007, EEG 2007, SAB 2006, WIVA III.