Dr Stephen Francis Mann

✉ | stephenfmann@gmail.com
🖥 | stephenfmann.com
⌂ | stephenfmann

EDUCATION

FEB 2016 -DEC 2020	**Doctor of Philosophy**
	AWARDED DECEMBER 2020
	Philosophy
	Australian National University (ANU)
SEPT 2013 -JAN 2016	**Doctor of Philosophy**
	CANDIDACY WITHDRAWN TO ATTEND ANU
	Philosophy
	King's College London (KCL)
SEPT 2006 -JUNE 2010	**Master in Science**
	FIRST CLASS HONOURS
	Mathematics and Philosophy
	University of Bristol, UK

Areas of specialisation: Philosophy of biology, Computational modelling, Philosophy of science.
Areas of competence: Cultural evolution, Ethics of artificial intelligence, Philosophy of cognitive science.

CURRENT POSITIONS

APRIL 2024 - PRESENT

Postdoctoral Researcher
Dept. of Linguistic and Cultural Evolution, Max Planck Institute for Evolutionary Anthropology

Developing agent-based models of language evolution to understand linguistic diversity in Oceania.

PREVIOUS ACADEMIC EMPLOYMENT

DECEMBER 2022 - MARCH 2024

Juan de la Cierva Postdoctoral Fellow
LOGOS Group, Universitat de Barcelona

Investigating the relationship between *teleosemantics*, a theory of representation, and *communication theory*, a mathematical and engineering approach to signalling systems.

AUGUST 2021 - JUNE 2022

Postdoctoral Researcher
Surrey Morphology Group, University of Surrey

Developed an agent-based computational model of language evolution using the Python and R programming languages.

FEB 2020 - MARCH 2020

Research Assistant
Centre of Excellence for the Dynamics of Language (ANU)

Developing an agent-based computational model of the dynamics of cultural change in the songs of humpback whales. Unfortunately, due to the COVID-19 pandemic I left Australia earlier than planned. Funding rules meant this position was cut short.

PEER-REVIEWED PUBLICATIONS

Mann, S. F. (2023) OPEN ACCESS
The relevance of communication theory for theories of representation. *Philosophy and the Mind Sciences*, 4, 32.

Turner, C. R., **Mann, S. F.**, Spike, M., Magrath, R. D., and Sterelny, K. (2023). Joint evolution of traits for social learning *Behavioral Ecology and Sociobiology*, 77, 47.

Mann, S. F. and Pain, R. (2022) OPEN ACCESS
Teleosemantics and the free energy principle
Biology & Philosophy, 37, 34.

Mann, S. F., Pain, R., and Kirchhoff, M. (2022) OPEN ACCESS
Free energy: a user's guide. Introduction to the Topical Collection 'The Free Energy Principle: From Biology to Cognition'
Biology & Philosophy, 37, 33.

Mann, S. F. and Pain, R. (2022) OPEN ACCESS
Teleosemantics and the hard problem of content
Philosophical Psychology, 35(1), 22-46.

Roberts, S., ... **Mann, S. F.**, ... (2020)
CHIELD: The Causal Hypotheses in Evolutionary Linguistics Database. *Journal of Language Evolution* 5(2), 101-120.

Mann, S. F. (2020)
Consequences of a functional account of information
Review of Philosophy and Psychology 11(3), 669-687.

Mann S. F. (2018)
Attribution of information in animal interaction
Biological Theory 13(3), 164-179.

BOOK REVIEWS

Mann S. F. and Pfeifer, J. (2018). Review of *Studying Animal Languages Without Translation: An Insight from Ants* by Zhanna Reznikova. *Quarterly Review of Biology*, 93(1), 38.

CONFERENCE PROCEEDINGS

Round, E. R., **Mann S. F.**, Beniamine, S., Lindsay-Smith, E., Esher, L., & Spike, M. (2022). Cognition and the stability of evolving complex morphology: An agent-based model. *Proceedings of the Joint Conference on Language Evolution (JCoLE)*, 635–642.

OTHER WRITING

Mann, S. F. and Gregory, D. (2024) OPEN ACCESS
Might text-davinci-003 have inner speech? *Think*, 23(67), 31-38.

Mann, S. F. (2023) Major Transitions: A Record of Reorganization of Individuality in the Colonial Organisms of Earth. *Life Beyond Us*, ed. Julie Nováková, Lucas K. Law, and Susan Forest. European Astrobiology Institute.

Mann, S. F., Pain, R., and Kirchhoff, M. (2022) OPEN ACCESS
'Life hates surprises': can an ambitious theory unify biology, neuroscience and psychology? *The Conversation*.

TEACHING

MARCH 2020 - APRIL 2020

Philosophy of Cognitive Science (3rd year)
Guest Lecturer (ANU)

JULY 2019 - JAN 2020

The Moral and Political Philosophy
of Artificial Intelligence (3rd year)
Co-convenor (ANU)

JULY 2017 - NOV 2017

Biology, Society and Ethics (3rd year)
Tutor/Guest Lecturer (ANU)

JULY 2017 - NOV 2017

Philosophy of Biology (2nd year)
Tutor/Guest Lecturer (ANU)

SEPT 2014 - JAN 2015

Philosophy of Science (2nd year)
Intermediate Logic (2nd year)
Elementary Logic (1st year)
Tutor (KCL)

SERVICES TO THE PROFESSION

Ad hoc reviewing
Philosophy of Science, Biology & Philosophy, Biological Theory, Ergo, Synthese, Theoria, Philosophy and the Mind Sciences, European Journal for Philosophy of Science, Phenomenology and the Cognitive Sciences, AVANT, Philosophies

Guest editing

2021 *Biology & Philosophy*
-22 Topical Collection
The Free Energy Principle: From Biology to Cognition
(with Ross Pain and Michael Kirchhoff)

Public outreach

2019 *HMI Interviews*
Conducted a series of filmed interviews with members of the Humanising Machine Intelligence project.
Sample: YouTube playlist

2019 *Radio appearance*
MAR Guest on *Talk the Talk* linguistics radio show (Perth, Australia) and podcast (global), speaking on animal communication and human language.

Conference organisation

2016 *ANU Philosophy Graduate Conference*
NOV Lead Organiser
Duties included liaising with accommodation and conference facilities management, communicating with attendees, and chairing presentations.

2016 *Australasian Postgraduate Philosophy Conference*
SEPT Co-organiser
Duties included communicating with attendees, chairing sessions, and coordinating small social events.

SELECTED PRESENTATIONS

MAR 2024 INVITED	**The relevance of communication theory for theories of representation** *Centre for Cognitive Science (COGS)* University of Sussex Brighton, UK (talk given online)
MAR 2023 INVITED	**Degrees of proper function** *Empirical Philosophy Workshop* Universität Bielefeld Bielefeld, Germany
MAR 2023 PEER REVIEW	**Categorical variables and the strength of selection** *Predicting Evolution: The Price Equation and Its Applications* Universität Hannover Hanover, Germany
SEPT 2022 INVITED	**The relevance of communication theory for theories of representation** *Representation in Cognitive Science* Universitat de Barcelona Barcelona, Spain
NOV 2019 PEER REVIEW	**The mechanics of representation: teleosemantics meets the free energy principle (with Ross Pain)** *Mental Representations in a Mechanical World* Ruhr-Universität Bochum Bochum, Germany
SEPT 2018 PEER REVIEW	**Studying language change with evolutionary methods** *Evolving Minds* Charles Darwin University Darwin, Australia
JUNE 2018 INVITED	**Communication and selection** *Department of Linguistic and Cultural Evolution* Max Planck Institute for the Science of Human History Jena, Germany
FEB 2018 PEER REVIEW	**Unitrackers in artificial and natural cognition** *Naturally Evolving Minds* University of Wollongong Wollongong, Australia

FUNDING

FEB 2016 -AUG 2019	**Australian Government Research Training Program (RTP) Scholarship**
FEB 2016 -AUG 2019	**Australian Research Council Laureate Fellowship Grant FL130100141**

PROFESSIONAL EXPERIENCE

SEPT 2010 - MARCH 2013

Weaveability Limited
Developer

Software Company based near Manchester, UK specialising in SAP eCommerce and Netweaver Solutions. Gained fluency with **Python**, **GitHub**, **HTML and JavaScript**, and website deployment with **Hugo** and **Google Cloud** services.