

# Jonathan Birch

Department of Philosophy, Logic and Scientific Method,  
London School of Economics and Political Science,  
Houghton Street, London, WC2A 2AE, UK.

[j.birch2@lse.ac.uk](mailto:j.birch2@lse.ac.uk)

June 2021

Personal website: <http://personal.lse.ac.uk/birchj1/>

Project website: <https://www.lse.ac.uk/cpnss/research/ASENT>

Google Scholar profile: <https://scholar.google.com/citations?user=uUFuYvYAAAAJ&hl=en&oi=ao>

PhilPapers profile: <https://philpeople.org/profiles/jonathan-birch>

## Academic positions

2018-present Associate Professor at the London School of Economics and Political Science.  
2014-2018 Assistant Professor at the London School of Economics and Political Science.  
2012-2014 Junior Research Fellow at Christ's College, University of Cambridge.

## Education

2009-13 PhD in Philosophy of Science, University of Cambridge.  
Dissertation title: *Kin Selection: A Philosophical Analysis*.  
Awarded 26 July 2013. No corrections.  
2008-9 MPhil in History & Philosophy of Science, University of Cambridge.  
Awarded 18 July 2009. Distinction in all components.  
2005-8 BA (Hons) in Natural Sciences, University of Cambridge.  
Awarded 26 June 2008. First class in all tripos parts.

## Books

2017 *The Philosophy of Social Evolution*. Oxford: Oxford University Press.

## Journal articles (singly authored unless otherwise stated)

In press The search for invertebrate consciousness. *Noûs*.  
2021 The cultural evolution of cultural evolution. *Philosophical Transactions of the Royal Society of London B: Biological Sciences* 376(1828):20200051. [co-authored with Cecilia Heyes.]  
2021 The skilful origins of human normative cognition. *Analyse & Kritik* 43(1):191-201. [published as a target article with 4 commentaries and my responses.]  
2021 Toolmaking and the evolution of normative cognition. *Biology & Philosophy* 36:4.  
2020 Global workspace theory and animal consciousness. *Philosophical Topics* 48(1).  
2020 Unlimited associative learning and the origins of consciousness: A primer and some predictions. *Biology and Philosophy* 35:56. [co-authored with Simona Ginsburg and Eva Jablonka] [published as a target article with 9 commentaries and our responses].  
2020 Dimensions of animal consciousness. *Trends in Cognitive Sciences* 24(10): 789-801. [co-authored with Alexandra K. Schnell, Nicola S. Clayton].  
2020 Kin selection, group selection, and the varieties of population structure. *British Journal for the Philosophy of Science* 71(1):259-286.  
2019 Joint know-how. *Philosophical Studies* 176:3329-3352.  
2019 Inclusive fitness as a criterion for improvement. *Studies in History and Philosophy of Biological and Biomedical Sciences* 76:101186  
2019 Are kin and group selection rivals or friends? *Current Biology* 29(11):R433-R438.  
2019 Altruistic deception. *Studies in History and Philosophy of Biological and Biomedical Sciences* 74:27-33.

- 2018 Animal cognition and human values. *Philosophy of Science* 85:1026-1037.
- 2017 Animal sentience and the precautionary principle. *Animal Sentience* 2:16(1).  
[published as a target article with 20 commentaries and my responses.]
- 2017 The inclusive fitness controversy: finding a way forward. *Royal Society Open Science* 4:170355.
- 2016 Hamilton's two conceptions of social fitness. *Philosophy of Science* 83:848-860.
- 2016 Natural selection and the maximization of fitness. *Biological Reviews* 91(3):712-727.
- 2015 Kin selection and its critics. *BioScience*. 65(1): 22-32 [co-authored with Samir Okasha]. "Editor's choice", January 2015.
- 2014 Gene mobility and the concept of relatedness. *Biology and Philosophy* 29(4): 445-476.
- 2014 Queller's separation condition explained and defended. *American Naturalist*. 184(4): 531-540 [co-authored with James A. R. Marshall].
- 2014 Propositional content in signalling systems. *Philosophical Studies* 171(3): 493-512.
- 2014 Hamilton's rule and its discontents. *British Journal for the Philosophy of Science*. 65(2): 381-411. "Editor's choice", June 2014.
- 2013 On the 'simulation argument' and selective scepticism. *Erkenntnis* 78(1): 95-107.
- 2012 Collective action in the fraternal transitions. *Biology and Philosophy* 27(3): 363-80.
- 2012 The negative view of natural selection. *Studies in History and Philosophy of Biological and Biomedical Sciences* 43(2): 569-73.
- 2012 Robust processes and teleological language. *European Journal for Philosophy of Science* 3(3): 299-312.
- 2009 Irretrievably confused? Innateness in explanatory context. *Studies in History and Philosophy of Biological and Biomedical Sciences* 40(4): 296-301.

#### **Book chapters**

- 2018 Fitness maximization. In R. Joyce (ed.), *The Routledge Handbook of Evolution and Philosophy*. London: Routledge, pp. 49-63.

#### **Commentaries, introductions, book reviews and review essays**

- 2021 Neural organoids and the precautionary principle. *American Journal of Bioethics* 21(1):56-58. [co-authored with Heather Browning.]
- 2020 The meaning of biological signals (Introduction to a special issue on Content in Signalling Systems). *Studies in History and Philosophy of Biological and Biomedical Sciences* 84:101348.
- 2020 Zones of precaution (Commentary on Mikhalevich and Powell, 'Minds without spines'). *Animal Sentience* 5(29): 28
- 2020 The evolutionary roots of belief (Review essay on Fuentes: Why We Believe). *Current Biology* 30(17): R971-R973
- 2020 The place of animals in Kantian ethics (Review essay on Korsgaard: Fellow Creatures). *Biology and Philosophy* 35: 8.
- 2020 In search of the origins of consciousness (Review essay on Ginsburg and Jablonka: The Evolution of the Sensitive Soul). *Acta Biotheoretica* 68: 287-294.
- 2019 Review essay on Okasha: Agents and Goals in Evolution. *Mind* 128(512): 1408-1416.
- 2019 From the 'coding metaphor' to a theory of representation (Commentary on Brette, 'Is coding a relevant metaphor for the brain?'), *Behavioral and Brain Sciences* 42: e220. [co-authored with Joulia Smortchkova].
- 2018 Degrees of sentience? (Commentary on Sneddon et al., 'Fish sentience denial: muddying the waters'). *Animal Sentience* 21(11).
- 2018 The difference between the scope of a norm and its apparent source (Commentary on Stanford, 'The difference between ice cream and Nazis: Moral externalization and the evolution of human cooperation'). *Behavioral and Brain Sciences* 41: E97.
- 2017 Dividing the Pleistocene pie (Review of Baumard: The Origins of Fairness). *BioScience* 67(2): 180-182.
- 2017 Review of Tomasello: A Natural History of Human Morality. *BJPS Review of Books* 2017.

- 2014 How cooperation became the norm (Review essay on Sterelny, Joyce, Calcott and Fraser (eds): *Cooperation and Its Evolution*). *Biology and Philosophy* 29(3): 433-44.
- 2014 Has Grafen formalized Darwin? (Commentary on Grafen, 'The Formal Darwinism project in outline'). *Biology and Philosophy* 29(2): 175-80.
- 2013 Review of Okasha and Binmore (eds): *Evolution and Rationality*. *British Journal for the Philosophy of Science* 64(3): 669-673.
- 2013 Explaining the human syndrome (Review of Sterelny: *The Evolved Apprentice*). *Metascience* 22(2): 347-350.
- 2012 Social revolution (Review essay on Bourke: *Principles of Social Evolution*). *Biology and Philosophy* 27(4): 571-81.

### Research grants and prizes

- 2020-24 ERC Starting Grant on Foundations of Animal Sentience (ASENT) (€1.5m over five years).
- 2015-18 Philip Leverhulme Prize from the Leverhulme Trust (£100,000 over three years).

### Visiting fellowships

- 2018 Visiting Fellowship at the Australian National University, August 2018.
- 2016 Visiting Fellowship at UC Irvine, March-April 2016.
- 2015 Visiting Fellowship at the Australian National University, July-August 2015.

### Notable blogs, media and other public philosophy (written by me unless otherwise stated)

- 2021 Which animals should be considered sentient in the eyes of the law? *The Guardian*.
- 2021 How does it feel to be a bee? The quest to understand animal sentience. *Horizon Magazine*. [feature on my ASENT project by Gareth Willmer.]
- 2021 Humans, animals and pandemics: what needs to change? *LSE Festival* [a video and blog post.]
- 2020-21 Science and policy in extremis, parts 1 and 2. *LSE COVID-19 blog*.
- 2020 G. E. Moore's hands vs radical scepticism. *LSE Philosophy blog* [teaching resource]
- 2020 The mind-body problem. *LSE Philosophy blog*. [teaching resource]
- 2019 A new study asks if animals like bees or crabs have sentience. *Forbes*. [feature on my ASENT project by Elizabeth Fernandez]
- 2019 Naturally social. [feature on my social evolution work by the LSE Comms division.]
- 2019 A conversation [with David Sloan Wilson] about the equivalence of theories of social evolution. *This View of Life blog*.
- 2019 How do we know how to act together? *LSE Philosophy blog*.
- 2019 Five reasons to vote in a safe seat. *LSE British Politics & Policy blog*.
- 2018 Why lobsters should have legal protection. *LSE Research Highlights*. [feature on my animal sentience work by the LSE Comms division.]
- 2017 Crabs and lobsters deserve protection from being cooked alive. *Aeon*. Syndicated in *The Week*.
- 2017 The philosophy of social evolution [a series of 5 posts summarising the book]. *Brains Blog*.
- 2014-present Host of five public events a year for the Forum for Philosophy, recorded and released as podcasts (35 so far).

### Research talks (sorted chronologically, titles standardized to match associated papers)

List's "many worlds" theory of consciousness. *Freedom and Reason: A Workshop in Honour of Christian List (online conference)*, June 2021.

Animal sentience (with Andrew Crump and Heather Browning). *Harvard Cell Learning Group (online seminar)*, June 2021.

The place of animals in Kantian ethics. *Animal Law Academy (online conference)*, June 2021.

Toolmaking and the evolution of normative cognition. *Normative Animals (online conference)*, June 2021; *BioAnth Seminar, Leverhulme Centre for Human Evolutionary Studies*, October 2018; *Celebration of Kim*

*Sterelny's Laureate Project, Australian National University, August 2018; Descent of Moral Sentiment, University of Utrecht, February 2017.*

Pandemics and the precautionary principle. *COVID-19 Philosophy Week (online conference), April 2021. Philosophy Colloquium (online), University of Salzburg, March 2021.*

Science and policy in extremis: the UK's initial response to COVID-19. *LSE Choice Group (online seminar), November 2020.*

Dimensions of animal consciousness. *Queen Mary, University of London, October 2020. PSA 2018, Seattle, November 2018. Varieties of Mind, Cambridge, June 2018.*

Animal sentience and the precautionary principle. *RSPCA Training Seminar (online), August 2020. RSPCA AWERBs Forum, December 2019. RSPCA Workshop on Animal Sentience, May 2019. The Other Minds Problem, UQAM, Montreal, June 2018. Oriel College Philosophy Society, May 2018. LSE Cumberland Lodge Retreat, November 2017.*

The search for invertebrate consciousness. *CamPoS Seminar, University of Cambridge, February 2020. London Mind Group, January 2020. PhilInBioMed Seminar, University of Bordeaux, January 2020. ISHPSSB 2019, Oslo, July 2019.*

The evolution of subjectivity. *Philosophy Colloquium, Leibniz Universität Hannover, May 2019. L'Animalité Workshop, University of Nantes, October 2018. ESPP, Rijeka, September 2018. Evolutionary Transitions in Individuality Workshop, Lund University, September 2018. Animal Sentience Workshop, Australian National University, August 2018. Animal sentience: confused, unknowable, redundant? British Society for the Philosophy of Science, Oxford, July 2018.*

The inclusive fitness controversy: finding a way forward [work from *The Philosophy of Social Evolution*]. *HPS Seminar, University of Pittsburgh, April 2018. Workshop on The Philosophy of Social Evolution, LSE, February 2018. Workshop on the evolution of social behaviour, University of Gröningen, January 2018. Cooperation from Cells to Humans, University of Cambridge, May 2016.*

Time and relatedness in microbes and humans [work from *The Philosophy of Social Evolution*]. *HPSM Seminar, Washington University in St Louis, May 2018. Lunchtime Seminar, Institute for Soft-Matter Physics and Complex Systems, University of Edinburgh, February 2016. Inheritance and Cooperation Workshop, University of Oxford, June 2015. Invited talk, University of Bristol, June 2015.*

Animal cognition and human values. *British Society for the Philosophy of Science, Edinburgh, July 2017. HPS Departmental Seminar, University of Cambridge, February 2017. Philosophy of Science Association, Atlanta, November 2016.*

Cultural relatedness and the evolution of altruism [work from *The Philosophy of Social Evolution*]. *European Society for Philosophy and Psychology, St Andrews, August 2016. Human Evolutionary Ecology Group, UCL, July 2016. Philosophy of Biology in the UK, Bristol, June 2016.*

Joint know-how. *British Society for the Philosophy of Science, Cardiff, July 2016. Contemporary Debates in Philosophy of Science, University of Edinburgh, February 2016. Leeds HPS Seminar, January 2016. LSE Popper Seminar, November 2015.*

Kin selection, group selection and cultural change [work from *The Philosophy of Social Evolution*]. *LPS Colloquium, UC Irvine, April 2016. Philosophy Colloquium, University of Utah, March 2016. BPS Ordinary Meeting, London, October 2015. Philosophy of Biology at Dolphin Beach, August 2015. CamPoS Seminar, University of Cambridge, May 2014.*

On the evolution of normative cognition [precursor to "Toolmaking and the origin of normative cognition"]. *Thursday Seminar, Australian National University, July 2015. Serious Metaphysics Group, University of*

Cambridge, May 2014. Invited talk, London School of Economics and Political Science, January 2014. Invited talk, University of Notre Dame, January 2014.

Tribes and tribal instincts: a critique. *Theoretical Archaeology Group, Manchester, December 2014.*

The trait-relativity of inclusive fitness. *Philosophy of Science Association, Chicago, November 2014.*

On the ‘simulation argument’ and selective scepticism. *Philosophy and Politics of AI Workshop, London School of Economics and Political Science, June 2014.*

Gene mobility and the concept of relatedness. *Invited talk, Carnegie Mellon University, January 2014. International Society for the History, Philosophy and Social Studies of Biology, University of Montpellier, July 2013. British Society for the Philosophy of Science, University of Exeter, July 2013. Invited talk, London School of Economics and Political Science, February 2013. CamPoS Seminar, University of Cambridge, November 2012.*

Propositional content in signalling systems. *Consortium for the History and Philosophy of Biology, Duke University, June 2013. Evolution, Intentionality and Information, University of Bristol, May 2013. Invited talk, University of Cambridge, March 2013.*

Two ways of mathematizing evolution. *Mathematizing the Sciences, University of East Anglia, May 2013.*

Hamilton’s rule, payoff additivity and the phenotypic gambit. *Workshop on Foundations of Social Evolution, University of Bristol, April 2013.*

Natural selection and the maximization of fitness. *HPS Departmental Seminar, University of Cambridge, February 2013.*

Between groups and individuals: life-history theory and the evolution of specialization. *British Society for the Philosophy of Science, University of Stirling, July 2012. Consortium for the History and Philosophy of Biology, University of Toronto, May 2012.*

Hamilton’s rule and its discontents. *Philosophy of Biology in the UK, All Souls College, Oxford, April 2012. Serious Metaphysics Group, University of Cambridge, November 2011.*

Collective action in the fraternal transitions. *International Society for the History, Philosophy and Social Studies of Biology, University of Utah, July 2011. Evolution, Cooperation and Rationality II, University of Bristol, June 2011. Consortium for the History and Philosophy of Biology, University of Paris 1: Panthéon-Sorbonne, June 2011.*

Is the concept of life response-dependent? *14<sup>th</sup> Congress on Logic, Methodology and Philosophy of Science, University of Nancy, July 2011. British Society for the Philosophy of Science, University of Sussex, July 2011.*

### **Courses taught**

*At the LSE:*

First year undergraduate course:

- PH103: *The Big Questions: An Introduction to Philosophy* (2017-18, 2018-19, 2019-20, 2020-21).

Masters (and also upper undergraduate) courses:

- PH227/PH427: *Genes, Brains and Society* (2014-15, 2016-17, 2017-18, 2018-19)
- PH228/PH428: *Emotion, Cognition and Behaviour: Science and Policy* (2014-15)
- PH213/PH404: *Scientific Revolutions: Philosophical and Historical Issues* (2014-15)

*At the University of Cambridge:*

- Second-year undergraduate course on *Philosophy of Biology* (2013-14).
- Third-year undergraduate course on *Metaphysics of Science* (2012-13 and 2013-14).

#### **Administration**

2018-present	Doctoral Programme Director, LSE Philosophy.
2019-present	Member of the Research Development Panel, LSE.
2019-present	Member of the Academic Nominations Committee, LSE (renewed for second term).

#### **Professional service**

2020-present	Associate Editor, <i>British Journal for the Philosophy of Science</i> .
2014-present	Fellow of the Forum for Philosophy (in this capacity, organizer of five public events per year at the LSE).
2017-2020	Trustee (Committee Member) of the British Society for the Philosophy of Science.
2015-2017	Treasurer of the British Society for the Philosophy of Science.

Referee for *Mind*, *Noûs*, *Australasian Journal of Philosophy*, *Philosophical Studies*, *Analysis*, *Philosopher's Imprint*, *British Journal for the Philosophy of Science*, *Philosophy of Science*, *Synthese*, *Behavioral and Brain Sciences*, *Biology and Philosophy*, *Mind and Language*, *Utilitas*, *International Studies in the Philosophy of Science*, *Review of Philosophy and Psychology*, *American Philosophical Quarterly*, *Philosophical Topics*, *Journal of the American Philosophical Association*, *Theoria*, *Topoi*, *Biological Reviews*, *Trends in Ecology and Evolution*, *Philosophical Transactions of the Royal Society B*, *Evolution*, *BMC Biology*, *Journal of Theoretical Biology*, *Current Opinion in Insect Science*, *Journal of the Royal Society Interface*, *Journal of Bioeconomics*, *Evolution Letters*, *Disputatio*, *Studies in History and Philosophy of Biological and Biomedical Sciences*, *Studies in History and Philosophy of Science*, *History and Philosophy of the Life Sciences*, *Topoi*, *Social Theory and Practice*, *Social Epistemology*, *Journal of Consciousness Studies*, *Frontiers in Behavioral Neuroscience*.