

SAMUEL KARL SCHINDLER

Curriculum Vitae

last updated: 23/01/2017

Nationality: German

Year of birth: 1980

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AoS: Philosophy of science, in particular: theory-choice and criteria of theory assessment, rationality, theory-ladenness of observation and experiment, explanation, prediction, discovery, realism, natural kinds, thought experiments.

Meta-philosophy: the use of history in philosophy of science, the use of intuitions in philosophy.

AoC: history of science, epistemology, ethics, philosophy of cognitive science and the mind.

CURRENT POSITIONS AND AFFILIATIONS

- since 2011 Associate Professor of Philosophy of Science, Centre for Science Studies, Department of Mathematics, Aarhus University, **Denmark** (tenured since 2012)
- since 2011 Member of the Research Unit for Epistemology, Metaphysics, and Philosophy of Cognition, Department of Philosophy, Aarhus University
- 2016-19 Principal Investigator of the DFF-Sapere Aude research group “Intuitions in Science and Philosophy” (4 years)

PREVIOUS POSITIONS

- 2011 Emmy-Noether research group leader (equivalent to ‘Junior Professor’), *Zukunftskolleg* and Department of Philosophy, University of Konstanz, **Germany**
- 2009-11 Research fellow at the interdisciplinary *Zukunftskolleg*, University of Konstanz, Germany
 - Associated with the Department of Philosophy
- 2010 Visiting fellow, Center of Philosophy of Science, University of Pittsburgh, **USA**
- 2009 Lecturer (temporary), Department of Philosophy, University of Birmingham, **England**
- 2008 Research fellow, Department of Philosophy, University of Stockholm, **Sweden**

EDUCATION

- 2005-08 Ph.D. in Philosophy, University of Leeds, **England**; received 08/09/2008;
 - “The Imaginary Entities that make Science” [Proposal of a non-realist account of explanation]
 - Supervisor: Prof. Steven French. External examiner: Prof. Hasok Chang.
- 2004-05 M.A. in History and Philosophy of Science, University of Leeds, ‘with distinction’
- 2000-04 B.Sc. in Cognitive Science, University of Osnabrück, **Germany** and McGill University, Montreal, **Canada** (2003-04); predicate ‘very good’

INSTITUTIONAL RESPONSIBILITIES

- Elected member of the Executive Committee of the *Zukunftskolleg*, University of Konstanz (for a period of 2 ½ years, starting in 2011)
 - Tasks involved the administration of an annual budget of 4.8 million EUR, selection of co-funding applications, and strategic planning
- Chair of the library committee, Department of Physics and Astronomy, AU (since 2013)
- Organizer of the AU *Centre for Science Studies* colloquium series (2012-2014)

GRANTS

- DFF (Danish Council for Independent Research) *Sapere Aude Starting Grant* (~ 945,000 EUR)
 - Project title: “Intuitions in Science and Philosophy” (start in Jan 216)
 - Funding for 4 years, incl. salaries for two postdocs and one PhD student
 - Selected as one of 20 from 233 applications from all academic disciplines

- DFG (German Research Foundation) *Emmy-Noether research grant* for “outstanding young researchers” (~ 800,000 EUR)
 - Project title: “Towards a New Epistemology of Science” (start in May 2011)
 - Funding for 5 years incl. salaries for PI and three PhD students
 - Grant received and started in May 2011, but aborted after four months due to acceptance of tenured professorship at Aarhus University
- Successful application for a *Zukunftskolleg* Senior Fellowship award for Prof. Giora Hon (paid salary for eight months)
- *Zukunftskolleg* co-funding grants for two workshops: “Theoretical Virtues in Theory Choice” (9,750 EUR) and “Philosophy of Scientific Experimentation” (8,100 EUR)
- Research network grant by the *Danish Research Council for Independent Research* for the ‘Research Network in Philosophy of Science’, with Hanne Andersen and Peter Sandøe (ca. 135,000 EUR)

SCHOLARSHIPS AND FELLOWSHIPS

- Postdoctoral fellowship (1 year), funded by a project led by B. van Fraassen and I. Peschard; selected first among more than 50 candidates (2011; declined due to job offer from Aarhus University)
- First on waiting list for a postdoc, Center for Philosophy of Science, Univ. of Pittsburgh, 2010
- Guest researcher scholarship (6 months), *Swedish Institute*, 2008
- Doctoral stipend, *German Academic Exchange Service (DAAD)*, 2007

ORGANIZATION OF ACADEMIC MEETINGS

- Organizer of the workshop “Explanation and Understanding”, May 2016, Aarhus University
- Member of the organizing committee of *Causality in the Sciences of the Mind and the Brain*, June 2016, Aarhus University
- Co-organizer of the Biennial Meeting of the *Society for Science in Practice (SPSP)*, 2015, Aarhus
- Symposium organizer: „The Scientific Method Revisited”, PSA 2014 meeting in Chicago (other participants: N. Cartwright, E. Sober, C. Glymour, and I. Votsis)
- Steering committee member of the *Research Network in the Philosophy of Science* (2013-7), funded by the *Danish Research Council for Independent Research*
- Founding member (alongside A. Franklin, J. Norton, D. Mayo, M. Weber, W. Parker, S. Perovic) of the workshop series *Philosophy of Scientific Experiment (PSX)*, 2010
- Organizer in charge for two workshops: *PSX2* (2010) and *Theoretical Virtues in Theory-Choice* (2011) at the *Zukunftskolleg* and the Department of Philosophy, University of Konstanz

PROGRAMME COMMITTEE MEMBER

- 9th meeting of the *European Society for Analytic Philosophy*, Munich, Aug 21-28, 2017
- *PSX: Philosophy of Scientific Experimentation* (all workshops to date (5))
- *Causality in the Sciences of the Mind and the Brain*, June 2016, Aarhus University
- Workshop on Explanation and Understanding, May 2016, Aarhus University
- Theoretical Virtues in Theory Choice, July 2012, University of Konstanz
- 1st conference of the *East European Philosophy of Science Network*, June 24 2016
- 4th conference of the *European Philosophy of Science Association*, 2013, Helsinki, Finland

MEMBERSHIP OF ACADEMIC SOCIETIES

European Philosophy of Science Association, British Society for the Philosophy of Science, Philosophy of Science Association

REFEREEING

- Journals: *The British Journal for the Philosophy of Science**, *Philosophy of Science**, *Synthese**, *Studies in History and Philosophy of Science (A, B*, and C)*, *Journal for General Philosophy of Science*, *Erkenntnis*, *European Journal for the Philosophy of Science*, *International Studies in Philosophy of Science*, *Theoria (Spain)*, *The Journal of Philosophical Research*, *The Journal of the International Society*

for the *History of Philosophy of Science (HOPOS)*, *Philosophical Perspectives*, *Spontaneous Generations*, *Journal of the Philosophy of History*. [*=at least 5 review tasks]

- Other: *The Leverhulme Trust (UK)*, *Springer's Boston Studies in the Philosophy and History of Science*

MONOGRAPHS

- (i) *The Virtues of Science*, currently under review
- (ii) *The Imaginary Entities that Make Science*, PhD thesis, Leeds University, 2008; available at the British Library

RESEARCH ARTICLES IN PEER-REVIEWED JOURNALS (ALL SINGLE-AUTHORED)

- (1) 'Theoretical Fertility McMullin-style', *European Journal for the Philosophy of Science*, forthcoming
- (2) 'Scientific discovery: that-what's and what-that's', *Ergo*, 2015, Volume 2, No. 6, 123-148.
- (3) 'Explanatory fictions—for real?', *Synthese*, May 2014, Volume 191(8), pp 1741-55
- (4) 'A matter of Kuhnian theory-choice? The GSW model and the neutral current', *Perspectives on Science*, 2014, 22(4), pp. 491–522.
- (5) 'Novelty, Coherence, and Mendeleev's periodic table', *Studies in History and Philosophy of Science*, Vol. 45, March 2014, p. 62-69.
- (6) 'The Kuhnian mode of HPS', *Synthese*, Dec. 2013, Vol. 190 (18), pp 4137-4154
- (7) 'Mechanistic explanation: asymmetry lost', V. Karakostas and D. Dieks (eds.) (2013), *Recent Progress in Philosophy of Science: Perspectives and Foundational Problems*, *The Third European Philosophy of Science Association Proceedings*, Dordrecht: Springer.
- (8) 'Theory-laden experimentation', *Studies in History and Philosophy of Science*, vol. 44, issue 1, March 2013, pp. 89–101
- (9) 'Bogen and Woodward's data/phenomena distinction and forms of theory-ladenness', *Synthese*, Volume 182(1), 2011, pp. 39-55.
- (10) 'Model, Theory, and Evidence in the Discovery of the DNA Structure', *The British Journal for the Philosophy of Science*, Dec. 2008, vol. 59(4), pp. 619-658.
- (11) 'Use-Novel Predictions and Mendeleev's Periodic Table', *Studies in History and Philosophy of Science*, 2008, volume 39(2), pp. 265-269
- (12) 'Rehabilitating Theory: Refusal of the "bottom-up" Construction of Scientific Phenomena', *Studies in the History and the Philosophy of Science*, volume 38(1), March 2007, pp. 160-184

Papers currently under review

- "A coherentist conception of ad hoc hypotheses"
- "Kuhnian theory choice, virtue convergence, and base rates"

COMMISSIONED PUBLICATIONS (ALL SINGLE-AUTHORED)

- (13) 'A theory of everything. Review of Richard Dawid: *String Theory and the Scientific Method*', *Philosophy of Science*, Volume 83, Number 3, July 2016, pp. 453–458
- (14) 'Observation and theory-ladenness', in B. Kaldis (ed.), (2013), *Encyclopaedia for Philosophy and the Social Sciences*, Los Angeles: SAGE publishing.
- (15) 'History and Philosophy of Science: coherent programme at last?' Review of Seymour Mauskopf and Tad Schmaltz (eds.): *Integrating history and philosophy of science: Problems and prospects*. *Boston Studies in the Philosophy of Science*, vol. 263", *Metascience*, July 2013, Vol. 22(2), pp 457-60
- (16) 'Invariance, Mechanisms, and Epidemiology', commentary on R. Campaner: 'Causality and Explanation: Issues from Epidemiology', in: *Explanation, Prediction, and Confirmation. New Trends and Old Ones Reconsidered*, edited by S. Hartmann, M. Weber, W.J. Gonzalez, D. Dieks, T. Uebel, 2010, Berlin: Springer
- (17) 'Conceptions of Causality' (book review of *Thinking about Causes: From Greek Philosophy to Modern Physics*, Peter K. Machamer, G. Wolters (eds.), University of Pittsburgh Press, 2007, *Metascience*, vol. 18(2), p. 301

PRESENTATIONS AT PEER-REVIEWED CONFERENCES

- 2016 • 'Historical Case Studies as model organisms', *Biennial Meeting of the Philosophy of Science Association (PSA)*, Atlanta, Nov

- ‘Why Novel Success’, *The History of Science and Contemporary Realism*, IUPUI, Indianapolis, Feb 19-20
- 2015 • ‘Theoretical fertility, McMullin-style’, *Biannual meeting of the European Philosophy of Science Association (EPSA)*, University of Duesseldorf, Nov.
 - ‘Ad hoc: what does it mean? A historico-philosophical analysis’, *Testing Philosophical Theories Against the History of Science*, *Oulu Centre for Theoretical and Philosophical Studies of History*, University of Oulu, Finland, Sept.
- 2014 • ‘On the necessity of a scientific method’, contribution to a symposium on the Scientific Method Revisited incl. Nancy Cartwright, Elliott Sober, Clark Glymour, and Ioannis Votsis, organised at the *Biennial Meeting of the Philosophy of Science Association (PSA)*, Chicago, Nov.
 - ‘Base Rates and Realism’, *The New Thinking about Scientific Realism*, Cape Town, 5-9 August
 - ‘Scientific Discovery: that-what’s and what-that’s’, &HPS5: *Fifth Conference in Integrated History and Philosophy of Science*, University of Vienna, 26-28 June 2014
- 2013 • Kuhnian theory choice and the base rate fallacy, *Annual meeting of the British Society for the Philosophy of Science*, Exeter
- 2012 • ‘Facing Giere’s challenges to the History and Philosophy of Science’ &HPS4: *Fourth Conference in Integrated History and Philosophy of Science*, University of Athens, Greece, 15-18 March
 - ‘From Novelty to Coherence’, *The British Society for the Philosophy of Science Annual Conference*, 7-8 July
 - ‘Explanatory fictions: for real?’, *Biennial Meeting of the Philosophy of Science Association (PSA)* in San Diego, Nov. (cancelled)
- 2011 • ‘Mechanistic Explanations: Asymmetry lost’, *Biannual meeting of the European Philosophy of Science Association*, University of Athens, October
 - ‘On the relationship of History and Philosophy of Science’, *Workshop on Interdisciplinarity*, University of Aarhus, August
 - ‘Conceptual lacunae in Bokulich’s account of explanatory fictions’,
 - *The British Society for the Philosophy of Science Annual Conference*, University of Brighton, 7-8 July
 - *CaEitS2011: Causality and Explanation in the Sciences*, University of Gent, 19-21 September.
 - ‘Against novel predictions, for virtuous theories’, *Novel Predictions Conference*, Department of Philosophy, Heinrich-Heine University of Düsseldorf, February 25-26.
- 2010 • ‘The conundrum of data reliability’ *Philosophy of Scientific Experimentation: A Challenge to Philosophy of Science*, Center for Philosophy of Science, University of Pittsburgh, USA, 15-16 October
 - ‘Philosophy meets history in the discovery of weak neutral currents’, &HPS3: *Third Conference in Integrated History and Philosophy of Science*, Indiana University, Bloomington, USA, September 23-26
 - ‘How good a guide is the replicability of data to their reliability’, *British Society for Philosophy of Science Annual Conference*, Dublin, Ireland, 8th- 9th July
- 2009 • ‘The epistemic value of Dalton’s Atomic Theory’
 - *2009 Summer Workshop of the International Society for Philosophy of Chemistry*, Chemical Heritage Foundation, Philadelphia, USA, 13-15 August
 - &HPS2: *Second Conference in Integrated History and Philosophy of Science*, University of Notre Dame, USA, 12-15 March
- 2008 • ‘Photo#51, the CCV theory, and the Discovery of the DNA Structure’, *History of Science Society meeting*, Pittsburgh, USA, 6-9 November
 - ‘Refusing the bottom-up construction of scientific phenomena’, *Data-Phenomena-Theories conference*, University of Heidelberg, Germany, 11-13 September
 - ‘What is an experimental error?’, Hertz’s cathode ray experiments reconsidered, *Annual Conference of the British Society of Philosophy of Science*, University of St. Andrews, 9-11 July
 - ‘Some methodological reflections on the History and Philosophy of Science’, *Leeds/UCL/Durham Joint HPS Workshop*, UCL London, 20 June
- 2007 • Invited panelist at &HPS1: *First Conference in Integrated History and Philosophy of Science*, Center for Philosophy of Science, University of Pittsburgh, USA, 11-13 October

- ‘The ignorance of Evidence as a facilitator of theory-change’ & roundtable discussion with Steven French and Hasok Chang on ‘Should we stop teaching Thomas S. Kuhn?’, Changing Conceptions of Scientific Change, *Leeds/UCL Joint HPS Workshop*, Leeds, 22 June
- 2006 • ‘Bottom-up Corrections and the Phenomenologically-driven View’, *10th Annual Oxford Philosophy Graduate Conference*, University of Oxford, 11-12 November
- ‘Imaginary-Constitutives. The Ontology of Scientific Models’, *Biennial Meeting of the Philosophy of Science Association (PSA)*, Vancouver, Canada, 2-5 November
- ‘Rehabilitating Theory: Refusal of the “bottom-up” Construction of Scientific Phenomena’, *Annual meeting of the British Society for the Philosophy of Science*, Southampton, 6-7 July

PRESENTATIONS AT WORKSHOPS (INVITED)

- 2016 • ‘Testability and Prediction’, Bergen Philosophy of Science Workshop, June 13
- ‘Testability and Prediction’, Methodologies in Science, University of Copenhagen, June 10
- 2013 • ‘Theoretical virtues and truth’, Department of Philosophy, University of Belgrade, March

INVITED LECTURES

- 2015 • Ad hoc-ness: a historico-philosophical analysis, Stevin Centre for the History of Science and Humanities & Department of Philosophy, Faculty of Humanities, VU Amsterdam, 15th May 2015. Commentaries by Kelvin McQueen and Henk de Regt (VU Amsterdam)
- 2014 • Scientific Discovery: that-what’s and what-that’s, Department of Philosophy, University of Durham, UK, 20th March.
- 2013 • Scientific Discovery: that-what’s and what-that’s, Department of Philosophy, University of Leiden, Nov.
- A matter of Kuhnian theory-choice? The GWS model and the neutral current, Department for the History and Philosophy of Science, University of Utrecht, Nov.
- 2011 • ‘Theory and evidence in the discovery of weak neutral currents’, Wissenschaftstheorie-und Wissenschaftsgeschichte, University of Berne, Switzerland, March
- 2009 • ‘The epistemic role of theories in data reliability judgements’, Department of Philosophy, University of Konstanz, Germany, October
- ‘Discerning a physical signal from background noise’, Department of Philosophy, University of Bielefeld, Germany, March
- ‘Discerning a physical signal from background noise’, Interdisciplinary Centre for Science and Technology Studies (IZWT), Bergische Universität Wuppertal, Germany, February
- 2008 • ‘Model, theory, and evidence in the discovery of the DNA structure’, Department of Philosophy, University of Birmingham, UK

INVITED COMMENTARIES

- R. Dawid: ‘Understanding, String Dualities Empirical Equivalence’, Explanation and Understanding workshop, Aarhus University, 2016
- U. Krohs: “Convenience Experimentation”, Systems Biology Workshop, Aarhus University, 2011
- M. Massimi, "Carving nature at its joints: Boyd on Kantian Kinds. Between realism and constructivism", Monday Monthly Meetings, Department of Philosophy, University of Konstanz, 2010
- R. Campaner’s “On causal explanation in the health sciences”, European Science Foundation Research Networking Program, Workshop: Explanation, Confirmation, and Prediction in Biology and Medicine, University of Konstanz, 2009

PUBLIC LECTURES

- “Star light bending and the eclipse measurements: re-assessed”, Astronomical Observatory, 2013
- “Why Philosophy of Science?”, Physics Colloquium, Department of Physics and Astronomy, Aarhus University, 2010
- “Scientific Knowledge through the lens of History and Philosophy of Science”, Open Day, *Zukunftskolleg*, University of Konstanz, 2012

TEACHING

- Extensive experience with teaching both philosophy and science students (physics, chemistry, biology, geology, engineering, computer science)
- Undergraduate and graduate courses in Philosophy of Science since 2004 (all self-designed and taught in full charge, if not otherwise specified)
 - *Graduate courses*: Epistemology of experiment (2010); Natural Kinds (2011); Advanced Topics in Philosophy of Science (2012); HPS seminar (jointly w/ M. Weber, 2011), Methodology in HPS (2014; jointly w/ H. Kragh, 2013)
 - *Undergraduate courses* (50 - 200 students per class): Philosophy of Science, Philosophy of Psychology, Philosophy of Science for Physicists (annually since 2011), Philosophy of Biology (annually since 2012), Minds and Computers (since 2014)
- Other graduate courses: 2 hour lecture on Scientific Misconduct to engineering PhD students (2014&15)
- Other undergraduate courses: Introduction to Philosophy, Ethics, History of Philosophy, Philosophy of Mind

GRADUATE ADVISING

Chair of dissertation committee for Sara Kier Praëm “The Role of Intuitions in Philosophical Methodology”, 2015 (Committee consisting of Asbjørn Steglich-Peterson, Otavio Bueno, and Nikolaj Nottelmann)

STUDENT SUPERVISION

- Karen Kiil Brøcker: Intuitions in Linguistics (PhD project, 2016-2019)
- George G. Economou: Trust as means for group belief justification (MSc thesis, 2015-16)
- Jacob Mønsted Nielsen: On the reduction of classical genetics to molecular genetics and the concept of the gene (BSc thesis, 2016)
- Mathias Jørgensen: the Einstein-Podolsky-Rosen paradox (MSc project, 2015)
- Jeppe D. Christiansen: The measurement problem and quantum mechanics (MSc physics student colloquium presentation, 2015)
- Sarah W. Krog: Underdetermination and patterns in data (MSc physics student colloquium presentation, 2013)

LANGUAGES

German (native), English (fluent), Danish (proficient), Latin (basic), French (rudimentary)

REFEREES

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