

Jutta Schickore – Publications

1. Books

(Forthcoming 2024) *Controlled Experiments*, monograph to appear in the *Cambridge Element* series (Cambridge University Press)

(2017) *About Method. Experimenters, Snake Venom, and the History of Writing Scientifically*. Chicago: The University of Chicago Press. Shortlisted for the BSHS Pickstone Prize 2018.

Reviewed in: *Dynamis* (2019), *HOPOS* (2019), *N.T.M.* (2019), *H-Soz-Kult* (2019), *Journal of the History of Biology* (2018), *Isis* (2018), *Berichte zur Wissenschaftsgeschichte* (2018), *History of the Human Sciences* (2018), *American Historical Review* (2018), *Times Higher Education* (2017), *Choice* (2017), *Metascience* (2017).

(2007) *The Microscope and the Eye: A History of Reflections, 1740-1870*. Chicago: The University of Chicago Press. Awarded the Paul Bunge Prize.

Reviewed in: *American Historical Review* (2009); *Bulletin for the History of Medicine* (2009), *Historical Studies in the Natural Sciences* (2009); H-net online (2009); *Journal of the American Medical Association* (2008); *British Journal for the History of Science* (2008); *N. T. M. Zeitschrift für Geschichte der Naturwissenschaften, Technik und Medizin* (2008); *Journal of the History of Medicine and Allied Sciences* (2008), *Isis* (2008), *Bildwelten des Wissens* (2008).

(1996) *Ansichtssachen. Von der wissenschaftlichen Beobachtung, von ihrer Rolle in der Naturwissenschaft und von den Schwierigkeiten, diese zu bestimmen*, PhD-Thesis, University of Hamburg.

2. Articles in refereed publications

(2023) Peculiar Blue Spots: Evidence and Causes around 1800, *Transactions of the American Philosophical Society* 112, 31-55.

(2023) Dare explanations (Wagerklärungen): Hypothetical Thinking in Late 18th-and Early 19th-Century German Philosophy of Science, *HOPOS*, 13, 387-412, <https://doi.org/10.1086/726182>

(2022) Schickore, Jutta, "Scientific Discovery", *The Stanford Encyclopedia of Philosophy* (Winter 2022 Edition), Edward N. Zalta & Uri Nodelman (eds.), URL = <https://plato.stanford.edu/archives/win2022/entries/scientific-discovery/>. (Originally published in the Spring 2014 Edition, URL = <http://plato.stanford.edu/archives/spr2014/entries/scientific-discovery/>)

(2022) Parasites, Pepsin, Pus, and Postulates: Jakob Henle's essay on miasma, contagium, and miasmatic-contagious diseases in its original contexts, *Bulletin for the History of Medicine* 96, 612-638.

(2021) Methodological ideas in past experimental inquiry: rigor checks around 1800, *Intellectual History Review*, DOI: 10.1080/17496977.2021.1974225

(2021) The Place and Significance of Comparative Trials in German Agricultural Writings Around 1800, *Annals of Science*, 78, 484-503, DOI: 10.1080/00033790.2021.1958008

(2020) Mess in Science and Wicked Problems, *Perspectives on Science* 28, 482-504.

(2020) Obsolete, Extraneous, or Pertinent? Philosophy of Science and Historical Studies in the Physical (Natural) Sciences, *Historical Studies in the Natural Sciences* 50, 17-24.

- (2019) The Structure and Function of Experimental Control in the Life Sciences, *Philosophy of Science* 86, 1-16.
- (2019) (Schickore & Hangel, N.) ‘It might be this, it should be that...’ Uncertainty and doubt in day-to-day research practice. *European Journal for Philosophy of Science* 9, 1-21.
- (2018) Explication Work for the Sciences, *Journal of the Philosophy of History* 12, 191-212.
- (2018) Larry Laudan’s Typology for Historical Methodology and the Historical and Experimental Turns in Philosophy of Science, *HOPOS* 8, 87-107.
- (2017) (Hangel, N. and Schickore) Scientists’ Conceptions of Good Research Practice, *Perspectives on Science* 25, 766-791.
- (2017 [2006]) Misperception, Illusion, and Epistemological Optimism: Vision studies in early nineteenth-century Britain and Germany, *British Journal for the History of Science* 39: 383-405. Reprinted in the 50th anniversary issue of the *British Journal for the History of Science* “Celebrating 50 Volumes”. (Past editors’ favorite papers published during their time in office.)
- (2016) “Exploratory Experimentation” as a Probe into the Relation between Historiography and Philosophy of Science, *Studies in History and Philosophy of Science* 55, 20-26.
- (2014) (Tsou A., Schickore J., Sugimoto C.): Examining the File Drawer. *Journal of Scholarly Publishing* 27, 253–267.
- (2014) "Scientific Discovery", *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition), Edward N. Zalta (ed.), URL = <http://plato.stanford.edu/archives/spr2014/entries/scientific-discovery/>
- (2013) (Schickore & K. Çoko) The Uses of Multiple Means of Determination, *International Studies in Philosophy of Science* 27, 293–311.
- (2013) Vom Nutzen der Historie für die Wissenschaftsphilosophie, *Berichte zur Wissenschaftsgeschichte* 36, 83-95.
- (2012) ‘A través de miles de errores alcanzamos la verdad’ ¿Pero Cómo? Sobre el papel epistémico del error en la práctica científica, in Estany, A., Camps, V., and Izquierdo, M. (eds) *Error y conocimiento: la gestión de la ignorancia* Granada: Comares, 295-324. [Translation of Schickore (2005), Through Thousands of Errors we Reach the Truth]
- (2012) (Schickore & T. Arabatzis) Introduction: Ways of Integrating History and Philosophy of Science, *Perspectives on Science* 20, 395-408.
- (2012) What Does History Matter to Philosophy of Science? The concept of replication and the methodology of experiments, *Journal of the Philosophy of History* 5, 513-532.
- (2011) More Thoughts on HPS: Another 20 years on, *Perspectives on Science* 19, 453-481.
- (2011) The Significance of Re-Doing Experiments: A Contribution to Historically Informed Methodology, *Erkenntnis*. 75 (3):325-347.
- (2010) Trying Again and Again: Multiple repetitions in early modern reports of experiments on snake bites, *Early Science and Medicine* 15, 567-617.
- (2009) Test Objects for Microscopes, *History of Science* 47, 117-145.
- (2009) Studying Justificatory Practice: An attempt to integrate history and philosophy of science, *International Studies in the Philosophy of Science* 23, 85-107.
- (2008) Doing Science, Writing Science, *Philosophy of Science* 75, 323-343.

- (2006) Misperception, Illusion, and Epistemological Optimism: Vision studies in early nineteenth-century Britain and Germany, *British Journal for the History of Science* 39, 383-405.
- (2003) The ‘Philosophical Grasp of the Appearances’ and Experimental Microscopy: Johannes Müller’s microscopical research, 1824-1832, *Studies in History and Philosophy of Biology and Biomedical Sciences* 34, 569-592.
- (2003) The Contexts of Scientific Justification. Some reflections on the relationship between epistemological contextualism and philosophy of science, in: F. Stadler (ed.), The Vienna Circle and Logical Empiricism, IVC Yearbook 10/2002, Dordrecht: Kluwer, 265-280.
- (2002) (Ab)Using the Past for Present Purposes: Exposing Contextual and Trans-Contextual Features of Error, *Perspectives on Science* 10, 433-456.
- (2001) (C. Hoffmann & Schickore) Secondary Matters: On Disturbances, Contamination, and Waste as Objects of Research. Introduction, *Perspectives on Science* 9, 123-125.
- (2001) Ever-Present Impediments: Exploring Instruments and Methods in Microscopy, *Perspectives on Science* 9, 126-146.
- (2001) The Task of Explaining Sight. Hermann von Helmholtz’s Writings on Vision as a Test Case For Models of Science Popularization, *Science in Context* 14, 397-417.
- (2000) Locating Rods and Cones. Microscopic Investigations of the Retina in Mid-Nineteenth-Century Berlin and Würzburg, *Science in Context* 13, 137-152.
- (1999) Das Auge des Leibs und seine technische Externalisierung. Ernst Wilhelm Brückes Untersuchungen über das Sehen, 1841-1847 *Technikgeschichte* 66, 337-348.
- (1999) ‘Worauf die Strahlen der sichtbaren Gegenstände wirken’ - Mikroskopische Anatomie der Retina 1834-1841, *Medizinhistorisches Journal* 34, 139-157.
- (1999) Sehen, Sichtbarkeit und empirische Forschung, *Journal for General Philosophy of Science* 30, 273-287.
- (1997) Theoriebeladenheit der Beobachtung: Neubesichtigung eines alten Problems, *Philosophia naturalis*, 34, 249-264.

3. Edited works

- (Forthcoming) Collected volume (with William Newman) *New Perspectives on Experimentation: Analysis and Synthesis*. Cham: Springer.
- (2024) Collected volume (with William Newman) *Elusive Phenomena, Unwieldy Things: Historical Perspectives on Experimental Control*. Cham: Springer (Open Access [Elusive Phenomena, Unwieldy Things: Historical Perspectives on Experimental Control | SpringerLink](#)).
- (2012) Guest editor (with Theodore Arabatzis) of a special issue on “Integrated History and Philosophy of Science”, *Perspectives on Science* 20 (4).
- (2009) Collected volume (with G. Hon & F. Steinle) *Going Amiss in Experimental Practice*. In the series: *Boston Studies in the Philosophy of Science*. Dordrecht: Springer.
- (2008) U. Feest, G. Hon, H-J. Rheinberger, J. Schickore, F. Steinle, (eds.): *Generating Experimental Knowledge* (conference proceedings). Max Planck Institute Preprint.
- (2006) Collected volume (with F. Steinle) *Revisiting Discovery and Justification: The Context Distinction in Historical and Philosophical Perspective*. Dordrecht: Springer.

- (2001) Guest Editor (with C. Hoffmann) of a special issue on “Secondary Matters: On Disturbances, Contamination, and Waste as Objects of Research”, *Perspectives on Science* 9.
- (2001) Collected volume (with G. Dürbeck et al.) *Wahrnehmung der Natur – Natur der Wahrnehmung. Sehen und Sichtbarkeit um 1800*, Dresden and Amsterdam: Verlag der Kunst.

4. Book chapters

- (Forthcoming) Analysis and Induction as Methods of Empirical Inquiry. In Newman & Schickore (eds.) *New Perspectives on Experimentation: Analysis and Synthesis*. Cham: Springer.
- (2024) Practices, Strategies, and Methodologies of Experimental Control in Historical Perspective, in Schickore and Newman (eds.) *Elusive Phenomena, Unwieldy Things: Historical Perspectives on Experimental Control*. Cham: Springer.
- (2021) Is “Failing Well” a Sign of Scientific Virtue? in Stapleford and Ratti (eds.) *Science, Technology, and Virtues*, Oxford: Oxford University Press, 178-199.
- (2021) Vertrackte Probeobjekte, in M. Fliescher, F. Göppelsroder, and D. Mersch (eds.) *Sichtbarmachung und Sichtbarkeit*. Zürich: Diaphanes.
- (2018) ‘...as Many and as Diverse Methods as Possible Ought to Be Employed...’ – Methodological Reflections in the *General Cytology* in Historical Perspective, in Laubichler, M. Matlin, K. Maienschein J. (eds.), *Visions of Cell Biology*, Chicago: University of Chicago Press.
- (2017) Geschichte und Philosophie der Wissenschaften, in: Sommer, M., Müller-Wille, S., Reinhardt, C. (ed.s) *Handbuch Wissenschaftsgeschichte*, Stuttgart: Metzler, 20-32.
- (2012) Scientists’ Methods Accounts: S. Weir Mitchell’s Research on the Venom of Poisonous Snakes, in Schmaltz, T & Mauskopf, S. (eds.) *Integrating History and Philosophy of Science: Problems and Prospects*. Dordrecht: Springer, 141-161.
- (2009) Error as Historiographical Challenge: The Infamous Globule Hypothesis, in Hon, G., J. Schickore & F. Steinle (eds.), *Going Amiss in Experimental Practice*. In the series: *Boston Studies in the Philosophy of Science*. Dordrecht: Springer, 27-45.
- (2009) (with G. Hon and F. Steinle) Introduction, in Hon, G., J. Schickore & F. Steinle (eds.), *Going Amiss in Experimental Practice*. In the series: *Boston Studies in the Philosophy of Science*. Dordrecht: Springer, 1-10.
- (2009) (with G. Hon and F. Steinle) Epilogue, in Hon, G., J. Schickore & F. Steinle (eds.), *Going Amiss in Experimental Practice*. In the series: *Boston Studies in the Philosophy of Science*. Dordrecht: Springer, 273-277.
- (2007) ‘The Most Signal and Illustrious Instance of the Use of the Microscope’ – Benjamin Martin on the Insect Eye. In D. Generali & M. Ratcliff (eds.) *From Makers to Users. Microscopes, Markets, and Scientific Practices in the Seventeenth and Eighteenth Centuries*, Firenze: Olschki, 271-288.
- (2006) A Forerunner? – Perhaps, But not to the Context Distinction. William Whewell’s Germano-Cantabrigian History of the Fundamental Ideas, in J. Schickore & F. Steinle (eds.): *Revisiting Discovery and Justification: Historical and Philosophical Perspectives on the Context Distinction*. Dordrecht: Springer, 57-77.
- (2006) (with F. Steinle) Introduction, in J. Schickore & F. Steinle (eds.): *Revisiting Discovery and Justification: Historical and Philosophical Perspectives on the Context Distinction*. Dordrecht: Springer, vii-xix.

- (2003) The Contexts of Scientific Justification. Some Reflections on the Relationship between Epistemological Contextualism and Philosophy of Science, in: F. Stadler (ed.), *The Vienna Circle and Logical Empiricism*, IVC Yearbook 10/2002, Dordrecht: Kluwer, 265-280.
- (2002) Fixierung mikroskopischer Beobachtungen: Zeichnung, Dauerpräparat, Mikrofotografie, in: *Ordnungen der Sichtbarkeit. Fotografie in Wissenschaft, Technologie und Kunst*, P. Geimer (ed.), Frankfurt: Suhrkamp, 285-310.
- (2001) Eröffnung der Augen – Auge und Sehen in der mikroskopischen Anatomie, in: G. Dürbeck et al. (eds.), *Wahrnehmung der Natur – Natur der Wahrnehmung. Sehen und Sichtbarkeit um 1800*, Dresden and Amsterdam: Verlag der Kunst, 165-177.
- (2001) Einleitung, in: G. Dürbeck et al. (eds.), *Wahrnehmung der Natur – Natur der Wahrnehmung. Sehen und Sichtbarkeit um 1800*, Dresden and Amsterdam: Verlag der Kunst, 7-16.

5. Other articles

- (2011) Diatom, *Festschrift für Hans-Jörg Rheinberger*.
- (2009) The History of Methodological Thought on Experimentation, *Max Planck Institute Preprint* 386, 7-16.
- (2008) Konjunktur des Fehlers, invited contribution for a special issue on errors and mistakes of *Erwägen, Wissen, Ethik* 19, 355-361.
- (2008) Scholars' Jobs and Tool Making, *Centaurus* 50, 43-45 (invited contribution for the 50th anniversary issue).
- (2003) Cheese-Mites and Other Delicacies: The introduction of organic test objects into microscopy, *Endeavour*, 27, 134-138.

6. Book reviews and dictionary entries

- (2021) Thinking about scientific thinking: Henry M. Cowles: The scientific method. An evolution of thinking from Darwin to Dewey. Cambridge, Mass.: Harvard University Press, 2020, *Metascience* 30.
- (2013) (with K. Çoko) Robustness, Solidity, and Multiple Determinations: Léna Soler, Emiliano Trizio, Thomas Nickles, and William C. Wimsatt, eds. Characterizing the Robustness of Science. Boston: Springer, 2012. *Metascience* 22, 681-683.
- (2013) Instrument, scientific, *Encyclopedia of Systems Biology*, Springer.
- (2013) Experiment, *Encyclopedia of Systems Biology*, Springer.
- (2012) A Tenth of a Second: A History, by Jimena Canales. *American Historical Review* 117, 825-826.
- (2012) Worldviews: An Introduction to the History and Philosophy of Science. 2nd. Edition. By Richard DeWitt. *Aestimatio* 8.
- (2011) N.R. Hanson: Observation, Discovery and Scientific Change. By Matthew D. Lund. Foreword by Hasok Chang. *Isis* 102, 593-594.
- (2011) The Quest for the Invisible: Microscopy in the Enlightenment, by Marc Ratcliff, *History and Philosophy of the Life Sciences*, 269-271
- (2011) Mikroskop, *Enzyklopädie der Neuzeit*, Stuttgart: J. B. Metzler.

- (2011) Mechanisms and Modernity. Hermann von Helmholtz's mechanism: The loss of certainty, by Gregor Schiemann, *Metascience* 20, 369-372.
- (2010): Six Stories from the End of Representation. Images in Painting, Photography, Astronomy, Microscopy, Particle Physics, and Quantum Mechanics, 1980-2000 by James Elkins, *Visual Resources* 26, 207-210.
- (2009) Thedor Schwann, "Mikroskopische Untersuchungen über die Übereinstimmung in der Struktur und dem Wachstume der Thiere und Pflanzen", *Kindlers Literatur Lexikon*.
- (2009) Robert Hooke, "Micrographia", *Kindlers Literatur Lexikon*.
- (2009) Johannes Müller und die Pathologische Anatomie. Eine kommentierte Edition der Vorlesungsmitschrift von Jakob Henle (1830) by Ildikó Gágyor, *Isis* 100, 922.
- (2008) Making Scientific Instruments in the Industrial Revolution by Allison Morrison-Low, in *Victorian Studies* 50, 485-487.
- (2008) Müller's Lab: The Story of Jakob Henle, Theodor Schwann, Emil du Bois-Reymond, Hermann von Helmholtz, Rudolf Virchow, Robert Remak, Ernst Haeckel, and Their Brilliant, Tormented Advisor by Laura Otis, *Isis* 99, 205-206.
- (2008) Michael Polanyi, Scientist and Philosopher by W. T. Scott & M. Moleski, *British Journal for the History of Science* 41, 152-54.
- (2007) Happy Accidents: Serendipity in Modern Medical Breakthroughs by Morton A. Meyers, *Nature Medicine* 13, 1013.
- (2005) Augenspiegel, Ophthalmoskop, *Pschyrembel Wörterbuch Medizingeschichte*, Berlin: de Gruyter.
- (2004) Comte, Auguste, in: *Lexikon bedeutender Naturwissenschaftler*, Heidelberg: Spektrum Akademischer Verlag.
- (2003) Microscope, *Oxford Companion to the History of Modern Science*, New York: Macmillan.
- (2001) Koelliker, Rudolf Albert von, *The Encyclopaedia of Life Sciences*, London: Macmillan.
- (2001) Moleschott, Jacob, *The Encyclopaedia of Life Sciences*, London: Macmillan.
- (2000) Membranes. Metaphors of Invasion in Nineteenth-Century Literature, Science, and Politics by Laura Otis, *Isis* 91, 603.