

Resources on biological visualisation in history, philosophy and social studies of biology

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Online Repositories

- The Embryo Project Encyclopaedia (excellent and well-curated resource on visualisations in biology): <http://embryo.asu.edu/>
- Bill Bechtel's Working Group on Diagrams in Science: <http://mechanism.ucsd.edu/WORGODS/publications.html>
- Darwin Online: <http://darwin-online.org.uk/>
- Online manuscripts of Linnaeus: http://linnean-online.org/linnaean_mss.html
- The Francis Crick Papers: <http://wellcomelibrary.org/using-the-library/subject-guides/genetics/makers-of-modern-genetics/digitised-archives/francis-crick/>
- History of the Marine Biological Laboratory (MBL): <http://history.archives.mbl.edu/>

Special Issues

- "Simulation, Visualisation and Scientific Understanding", *Perspectives on Science*
http://www.mitpressjournals.org/doi/abs/10.1162/POSC_e_00135#.VCyNOKhFHkc
- Sabine Brauckmann's works, particularly a special issue (no. 4, vol. 42) of *Studies in the History and Philosophy of Biological and Biomedical Sciences: Part C on the history and philosophy of embryo visualization*:
<http://www.sciencedirect.com/science/journal/13698486/42/4>

Books

- James McAllister "Beauty and Revolution in Science"
http://www.cornellpress.cornell.edu/book/?GCOI=80140100942700&fa=author&person_id=671
- Annamaria Carusi, Aud Sissel Hoel, Timothy Webmoor and Steve Woolgar (eds) *Visualisation in the Age of Computerisation* (2014) Routledge.
- Michael Lynch and Steve Woolgar, "Representation in Scientific Practice" (1990) <http://mitpress.mit.edu/books/representation-scientific-practice> and follow-up edited volume "Representation in Scientific Practice Revisited" (2014) <http://mitpress.mit.edu/books/representation-scientific-practice-revisited>

- Jeannette Edwards et al (2010) "Technologized images"
http://books.google.co.uk/books?id=KeDg77S28LwC&dq=joseph+dumit&source=gbs_navlinks_s
- Lorraine Daston, Peter Galison (2007) "Images of Objectivity"
http://books.google.co.uk/books?id=tkSmSAAACAAJ&dq=daston+galison+objectivity&hl=en&sa=X&ei=CvwnVND_DY7earClgUA&redir_esc=y
- Julia Voss (2010) "Darwin's Pictures: Views of Evolutionary Theory, 1837-1874"
<http://yalepress.yale.edu/yupbooks/book.asp?isbn=9780300141740>
- Theodore W. Pietsch "Trees of Life: A Visual History of Evolution"
<http://books.google.com.au/books?id=mmwcAwAAQBAJ&printsec=frontcover&dq=tree+life+visualization&hl=en&sa=X&ei=APckVMvCDoH3igLgmoHoCg&ved=0CCkQ6AEwAQ#v=onepage&q&f=false>
- Sturken, Marita & Lisa Cartwright (2001) *Practices of Looking: An Introduction to Visual Culture* (Oxford: Oxford University Press).
- Mark Pallen, "The Rough Guide to Evolution: [Lamarck, Darwin and the Tree of Life](#)"

Individual Papers

- Bruno Latour "Visualisation and Cognition: Drawing Things Together"
<http://sites.harvard.edu/fs/docs/icb.topic1270717.files/Visualization%20and%20Cognition.pdf>
- Laura Perini "Explanation in Two Dimensions: Diagrams and Biological Models," *Biology & Philosophy*, (2005) pp. 257-269.
- Laura Perini "The Truth in Pictures," *Philosophy of Science*, Vol. 72 (2005) pp. 262-285.
- James R. Griesemer and W.C. Wimsatt "Picturing Weismannism: A Case Study in Conceptual Evolution" in Michael Ruse, ed., *WHAT THE PHILOSOPHY OF BIOLOGY IS: ESSAYS DEDICATED TO DAVID HULL* (Kluwer, 1989), pp. 75-137.
- Michael Ruse "Are Pictures Really Necessary? The Case of Sewall Wright's 'Adaptive Landscapes', *PSA PROCEEDINGS* 1990 : 63-77.
- Cambrosio, Alberto, Daniel Jacobi, & Peter Keating (1993) "Ehrlich's 'Beautiful Pictures' and the Controversial Beginnings of Immunological Imagery," *Isis* 84(4): 662-99.
- Isabelle Charmantier. '[Carl Linnaeus and the Visual Representation of Nature](#)', *Historical Studies in the Natural Sciences* 41 (2011), 365-404.
- Ruse, Michael & Peter Taylor (eds) (1991) "Pictorial Representation in Biology," *Biology and Philosophy* 6(2): 125-294.
- Mark A. Ragan "[Trees and networks before and after Darwin](#)" (pdf)

Material Culture of Visualisation

- X-ray camera in Leeds, used in the 1930s by Astbury and Bell to produce the first X-ray photos of DNA:
http://www.leeds.ac.uk/heritage/Astbury/Astbury_X_ray_camera/index.html