Kathryn M. Olesko

Program in Science, Technology & International Affairs & Department of History 514 Intercultural Center Georgetown University Washington, DC 20057-1032 USA

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DEGREES

1980 1978 1973	Cornell University, Ph.D., History Cornell University, M.A., History Cornell University, A.B. with Distinction in All Subjects, Physics and Mathematics
ACADEMIC APPOINTMENTS	
2019	Interim Undergraduate Coordinator, Program in Science, Technology, and International Affairs, School of Foreign Service, Georgetown University

2012	Member, Program in Science, Technology, & International Affairs, School of Foreign
	Service, Georgetown University
2010-12	Director, Master of Arts in German & European Studies Program, BMW Center for
	German & European Studies, School of Foreign Service, Georgetown University
2006-07	Director, Program in Science, Technology, & International Affairs, School of Foreign
	Service, Georgetown University
2004-06	Director, Master of Arts in German & European Studies Program, BMW Center for
	German & European Studies, School of Foreign Service, Georgetown University
2003-04	Interim Director, Master of Arts in German & European Studies, BMW Center for
	German & European Studies, School of Foreign Service, Georgetown University

1993-97	Director, Program in Science, Technology, & International Affairs, School of Foreign
	Service, Georgetown University
1995-	Joint Appointment in the Edmund A. Walsh School of Foreign Service
1989-	Associate Professor, Department of History, Georgetown University
1988	Visiting Assistant Professor, Department of History, Princeton University
1984-89	Adjunct Assistant Professor, Community & Family Medicine, Georgetown University
	School of Medicine
	771.1

Founding Co-Director, Center for the Environment, Georgetown College and School of

	School of Medicine
1983	Visiting Assistant Professor, Department of History, Cornell University
1981-89	Assistant Professor, Department of History, Georgetown University
1980-81	Assistant Professor, Department of Social Sciences, Clarkson University
1979	Lecturer Department of History Cornell University

Lecturer, Department of History, Cornell University

Foreign Service, Georgetown University

FELLOWSHIPS & GRANTS

1996-97

1991-93 National Endowment for the Humanities Grant (PI)

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1991-92	National Science Foundation Grant (PI)	
1991	National Endowment for the Humanities Summer Stipend (PI)	
1990	Exxon Foundation Educational Program Development Grant	
1987	National Science Foundation Conference Grant (PI)	
1987	Exxon Foundation Educational Program Development Grant	
1986-87	Cornell Society for the Humanities, Junior Fellow (declined)	
1984-85	National Endowment for the Humanities Grant (PI)	
1984-85	National Science Foundation Grant (PI)	
1984	National Endowment for the Humanities Travel to Collections Grant (PI)	
1982	Andrew Mellon Research Associate in History of Medicine	
1981	German Academic Exchange Service (DAAD) Goethe-Institute Language Fellowship	
	(PI)	
HOME INSTITUTION		
2000	Georgetown University School of Foreign Service Summer Grant	
1999	Georgetown University Senior Faculty Fellowship	
1999	Georgetown University Graduate School Competitive Grant-in-Aid	
1998	Georgetown University School of Foreign Service Research Grant	
1998	Georgetown University Summer Academic Grant	
1996-97	Georgetown University President's Interdisciplinary Initiative Grant	
	(Co-PI with Associate Dean Karin Ryding; established the Center for the Environment)	
1996	Georgetown University School of Foreign Service Research Grant	
1991	Georgetown University Summer Academic Grant	
1990	Georgetown University School of Foreign Service Research Grant	
1988	Georgetown University School of Foreign Service Research Grant	
1986	Georgetown University School of Foreign Service Curriculum Grant	
1984	Georgetown University Summer Academic Grant	
1980-81	Clarkson University Faculty Research Grant	
GRADUATE STUDY		
1979-80	Smithsonian Institution Fellow-in-Residence	
1977-78	American Association for University Women Fellowship	
1978	Josephine de Kármán Fellowship	
1977	Western Societies Program Travel Grant (Cornell)	
1976-77	Gertrude A. Gilmore Fellowship (Cornell)	
1973-76	National Science Foundation Graduate Fellow	
HONORS & AWARDS		
2019	Visiting Scholar, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin (Division II: Working Group on History of Bureaucratic Knowledge, short-term funded)	
2016	Georgetown College Dean's Award for Excellence in Teaching	
2016	Elected Follow of the American Physical Society: "For foundational contributions to the	

2019	Visiting Scholar, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin (Division II:
	Working Group on History of Bureaucratic Knowledge, short-term funded)
2016	Georgetown College Dean's Award for Excellence in Teaching
2016	Elected Fellow of the American Physical Society: "For foundational contributions to the
	history of physics pedagogy and prolific editorial work in service of the history of science"
2009-10	Dibner Distinguished Fellow in History of Science, Huntington Library, San Marino, California
2008	Visiting Scholar, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin (Division II, short term)

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1998	Elected Fellow of the American Association for the Advancement of Science: "For
	contributions to scholarship and teaching in the history of science and for leadership in
	AAAS and the History of Science Society"
1998	Visiting Scholar, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin (Division II,
	long-term funded)
1997	Constantine E. McGuire Award for Outstanding Service (GU School of Foreign Service)
1980	Messenger-Chalmers Dissertation Award (Cornell University)
1977	Phi Kappa Phi National Honor Society
1973	Pi Mu Epsilon National Mathematics Honor Society

EDITORIAL BOARDS

H-Sci-Med-Tech

Book Review Editor, History of Science, 2017-2019

Science & Education

Editorial Board, 2014-present

Osiris

Past Editor, 2009-2012 [Editor of volumes 17-27]

Editor, 2002-2008

Associate Editor, 1999-2001

Editorial Board, 1997-98

Isis

Associate Editor, 2002-2008

Editorial Board, ex officio, 2002-08

Reviews of Policy Research

Editorial Board, 2006-07

Nuncius: Journal of the Material and Visual History of Science (Italy)

International Advisory Board, 2005-13

Oxford Companion to the History of Modern Science

Editorial Board, 1997-2002

PUBLICATIONS

BOOKS

Physics as a Calling: Discipline and Practice in the Königsberg Seminar for Physics. (Ithaca and London: Cornell University Press, 1991). xviii + 488 pages.

Reviewed in:

American Historical Review 97 (October 1992): 1203-04 (R. Steven Turner)

Archives internationales d'histoire des sciences 44 (1994): 251-52 (Wolfgang Schröder)

British Journal for the History of Science 25 1992 478-79 (Ido Yavetz)

Choice 29.4 (December 1991): 291 (F. Potter)

European Journal of Physics 12.1 (1991): 55 (Peter Harman)

Gesnerus 49 (1992): 421-22 (Claus Kieler)

German History 11.2 (1993): 248 (Paul Weindling)

History of Education Quarterly 32 (Winter 1992): 557-59 (Lewis Pyenson)

Isis 84 (1993): 162-63 (David Cahan)

Journal of Modern History 69 (1997): 298-319 (Arleen Tuchman)

Lynchnos 59 (1994): 284-85 (Sven Widmalm)

Physis: Rivista Internazionale di Storia della Scienza 1993 (Ken Caneva)

Poetics Today 13.3 (1992): 560-61 (Dana Polen)

Olesko-Vita 4/22

Revue d'histoire des sciences 46 (1993): 310-11 (Olivier Darrigol) Science 254 (1991): 1529-30 (Jeffrey Johnson)

Nominated for:

Conference Group for Central European History Book Prize Charles Smith Award of the European History Section of the Southern Historical Association History of Education Society Outstanding Book Award History of Science Society Pfizer Award Society for Social Studies of Science Award

EDITED VOLUMES

Kohler, Robert E. and Kathryn M. Olesko, Guest Editors. *Clio Meets Science: The Challenges of History*. Edited by Kathryn M. Olesko. Vol. 27, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2012.

Fleming, James Rodger and Vladimir Jankovic, Guest Eds. *Klima*. Edited by Kathryn Olesko, Vol. 26, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2011.

Ash, Eric, Guest Ed. *Expertise: Practical Knowledge in the Early Modern State*. Edited by Kathryn Olesko. Vol. 25, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2010.

Harrison, Carol and Ann Johnson, Guest Eds. *National Identity: The Role of Science and Technology*. Edited by Kathryn Olesko. Vol. 24, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2009.

Gordin, Michael D., Karl Hall and Alexei Kojevnikov, Guest Eds. *Intelligentsia Science: The Russian Century*, 1860-1960. Edited by Kathryn Olesko. Vol. 23, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2008.

Eghihan, Gregg, Andreas Killen and Christine Leuenberger, Guest Eds. *The Self as Project: Politics and the Human Sciences in the Twentieth Century.* Edited by Kathryn Olesko. Vol. 22, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2007.

Krige, John and Kai-Henrik Barth, Guest Eds. *Global Power Knowledge: Science, Technology & International Affairs*. Edited by Kathryn Olesko. Vol. 21, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2006.

Sachse, Carola and Mark Walker, Guest Eds. *Politics and Science in Wartime: Comparative Perspectives on the Kaiser Wilhelm Institute*. Edited by Kathryn Olesko. Vol. 20, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2005.

Mitman, Gregg, Michelle Murphy, and Christopher Sellers, Guest Eds. *Landscapes of Exposure: Knowledge and Illness in Modern Environments*. Edited by Kathryn Olesko. Vol. 19, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2004.

Dierig, Sven, Jens Lachmund, and J. Andrew Mendelsohn, Guest Eds. *Science and the City*. Edited by Kathryn Olesko, Vol. 18, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2003.

Broman, Thomas, and Lynn K. Nyhart, Guest Eds. *Science and Civil Society*. Edited by Kathryn Olesko, Vol. 17, *Osiris*, 2nd ser. Chicago: University of Chicago Press, 2002.

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Olesko, Kathryn M., Guest Ed. *Science in Germany: The Intersection of Institutional and Intellectual Issues*. Edited by Arnold Thackray, Vol. 5, *Osiris*, 2nd ser. Philadelphia: History of Science Society, 1989.

ARTICLES

IN PREPARATION

"The Information Order of the Prussian Frontier: The *Indaganda* and Data Collection in the Polish Partitions," in *The History of Bureaucratic Knowledge*, ed. Christine von Oertzen & Sebastian Felten, inaugural issue of *Journal for the History of Knowledge* (2020). Due May 31, 2019.

"The Helmholtz Industry: An Essay Review," Perspectives on Science. Due June 30, 2019.

"Ludwik Fleck, Alfred Schütz, and the Social World: What They Could Mean for Us," *The Fabulous 1930s*, ed. Antonio Sanchez Martinez and Ana Simões. Due Oct. 15, 2019.

"Gustav Kirchhoff as a Student," (in preparation; includes transliteration and English translation of his doctoral dissertation on "Ueber die Bestimmung der Constanten von welcher die Intensität der inducirten Ströme abhängt," [Sept. 1847; earlier version was his response to the University of Königsberg prize question, posed by his mentor Franz Neumann, of 1846]).

IN PRESS

"Germany," in *The Cambridge History of Science*, Vol. 8, *Modern Science in National*, *Transnational*, *and Global Contexts*, ed. Hugh Richard Slotten, Ronald L. Numbers, and David N. Livingstone (Cambridge: Cambridge University Press).

PUBLISHED

"The Creation of Historical Effects," *Looking Back as We Move Forward: The Past, Present*, and Future of the History of Science (Pasadena, CA, 2019), 90-99.

"Coming to Terms with the Past: The Great Transition," Isis 108 (2017): 841-45.

"Myth: That Science Has Been Largely a Solitary Enterprise," *Newton's Apple and Other Myths About Science*, ed. Ronald L. Numbers and Kostas Kampourakis (Cambridge, Mass.: Harvard University Press, 2015), 202-9, 265-66.

Translated into Spanish, Korean, and Chinese.

"Science Education in the Historical Study of the Sciences," *International Handbook of Research in History, Philosophy and Science Teaching*, 3 vols., ed. Michael R. Matthews (Dordrecht: Springer, 2014), 3:1965-90.

"Physics and Metrology," *Oxford Handbook of the History of Physics*, ed. Jed Z. Buchwald and Robert Fox (Oxford: Oxford University Press, 2013), 698-718.

Olesko-Vita 6/22

- "Introduction: Clio Meets Science—The Challenges of History," *Osiris* 27 (2012): 1-16 (with Robert E. Kohler).
- "Geopolitics and Prussian Technical Education in the Late-Eighteenth Century," *Actes d' Història de la Ciència i de la Tèchnica* 2(2) (2009): 11-44.
- "Wissen: Universität und Forschung," Wettlauf um die Moderne: Die USA und Deutschland 1890 bis Heute, ed. Christof Mauch and Kiran Patel (Berlin: Pantheon, 2008), 393-423 (with Christoph Strupp). Also published as:
 - (1) "Wissen: Universität und Forschung," Wettlauf um die Moderne: Die USA und Deutschland 1890 bis Heute, Bundeszentrale für politische Bildung Schriftenreihe Bd. 715, ed. Christof Mauch and Kiran Patel (Bonn: Bundeszentrale für politische Bildung, 2008)
 - (2) "Education: Universities and Research," *The United States and Germany during the Twentieth Century: Competition and Convergence*, ed. Christof Mauch and Kiran Patel (Cambridge: Cambridge University Press, 2010), 211-26.
- "The World We Have Lost: History as Art," Isis 98 (2007): 760-68.
- "Aesthetic Precision," *Tensions and Convergences: Technological and Aesthetic Transformations of Society*, ed. Reinhard Heil, Andreas Kaminski, and Marcus Stippak (Bielefeld: transcript-Verlag/Piscataway, NJ: Transaction Publishers, 2006), 37-46.
- "Science Pedagogy as a Category of Historical Analysis: Past, Present, & Future," *Science & Education* 15 (2006): 863-80.
- "The Century of Science," *A Companion to Nineteenth-Century Europe*, ed. Stefan Berger (Oxford: Blackwell Publishers, 2005), 333-44.
- "Der Praktische Gauss: Präzisionsmessung für den Alltag," "Wie die Blitz anschlägt, hat sich die Räthsel gelöst": Carl Friedrich Gauss in Göttingen, ed. Elmar Mittler (Göttingen: Niedersächsische Staats- und Universitätsbibliothek, 2005), 236-58. Also published as:
 - (1) http://webdoc.sub.gwdg.de/ebook/e/2005/gausscd/html/Katalog.pdf
- "The Foundation of a Canon: Kohlrausch's *Practical Physics*," in *Pedagogy and the Practice of Science: Historical and Contemporary Perspectives*, ed. David Kaiser. (Boston: MIT Press, 2005), 323-56.
- "L' innovazione instituzionale," *Storia della scienza*, ed. Sandro Petruccioli, v. 8°: *La seconda rivoluzione scientifica*, ed. J. L. Heilbron et al. (Roma: Istituto della Enciclopedia Italiana, 2004), 334-343.
- "Il seminario di ricerca e la fisica teorica," *Storia della scienza*, ed. Sandro Petruccioli, v. 7º: *L' ottocento*, ed. Jed Buchwald et al. (Roma: Istituto della Enciclopedia Italiana, 2003), 315-26.
- "History and History of Science Redux," Osiris 17 (2002): i-iv.
- "Cuando los instrumentos se pierden de vista," in *Abriendo las Cajas Negras. Colección de instrumentos cientificos de la Universita tde València*, ed. José Ramón Bertomeu Sánchez and Antonio García Belmar (València: Universitat de València, 2002), 21-32. Also published as:

Olesko-Vita 7/22

(1) "When instruments disappear from view," in *Abriendo las Cajas Negras. Colección de instrumentos científicos de la Universitat de València*, ed. José Ramón Bertomeu Sánchez and Antonio García Belmar (València: València, 2002), 409-414.

- (2) "Quan els instruments es perden de vista," in *Obrient les caixes negres. Collecció d'instruments cientificos de la Universitat de València*, ed. José Ramón Bertomeu Sánchez and Antonio García Belmar (València: Universitat de València, 2002), 21-33.
- "The Politics of Fin-de-Siècle Physics Pedagogy in Europe," *History of Physics Newsletter: A Forum of the American Physical Society* VII, Nr. 3, Fall 1998, 9-10; published online at http://www.aps.org/units/fhp/olesko.cfm
- "Technology, Efficiency, & Gender in *Evangelium Vitae*," in *Choosing Life: A Dialogue on Evangelium Vitae*, ed. Kevin William Wildes, S.J. (Washington, DC: Georgetown University Press, 1997), 105-20.
- "Franz Ernst Neumann (1798-1895)," in *Die Großen Physiker*, 2 Bände, Band I: *Von Aristotle bis Kelvin*, ed. Karl von Meyenn (München: C. S. Beck, 1997), 384-95.
- "Precision, Tolerance, Consensus: Local Cultures in German and British Resistance Standards," *Archimedes* 1 (1996), 117-56.
- "Der Physiker als Lehrer: Zur hundertsten Wiederkehr des Todestages von Franz Neumann (1798-1895)," *Physikalische Blätter*, 51 (1995): 522-24. Also published as:
 - (1) "Der Physiker als Lehrer: Zur hundertsten Wiederkehr des Todestages von Franz Neumann (1798-1895)," in Franz Ernst Neumann (1798-1895): Physiker und Lehrer an der Universität Königsberg. Ausstellung zum 200. Geburtstag im Foyer des historischen Gebäudes der Bibliothek. 2. November bis 23. Dezember 1998. (Göttingen: Niedersächsische Staats- und Universitätsbibiothek, 1998).
- "Franz Neumann," in *Die Albertus-Universität zu Königsberg und ihre Professoren: Aus Anlass der Gründung der Albertus-Universität vor 450 Jahren [Jahrbuch der Albertus-Universität zu Königsberg*, 29 (1994)], ed. Dieter Rauschning and Donata v. Nerée (Berlin: Duncker & Humblot, 1995), 489-97.
- "The Meaning of Precision: The Exact Sensibility in Early Nineteenth Century Germany," in *The Values of Precision*, ed. M. Norton Wise (Princeton: Princeton University Press, 1995), 103-34.
- "The Images of Precision: Helmholtz and the Graphical Analysis of Data," in *The Values of Precision*, ed. M. Norton Wise (Princeton: Princeton University Press, 1995), 198-221 (with Frederic L. Holmes).
- "German Models, American Ways: The 'New Movement' Among American Physics Teachers, 1905-1909," in *German Influences on Education in the United States to 1917*, ed. Henry Geitz, Jürgen Heideking, & Jurgen Herbst (Cambridge: Cambridge University Press, 1995), 129-53.
- "Civic Culture & Calling in the Königsberg Period" in *Universalgenie Helmholtz: Rückblick nach 100 Jahren*, edited by Lorenz Krüger (Berlin: Akademie Verlag, 1994), 22-42.

Olesko-Vita 8/22

"Experiment, Quantification, and Discovery: Helmholtz's Early Physiological Experiments," in *Hermann von Helmholtz and the Foundations of Nineteenth-Century Science*, ed. David Cahan (Berkeley: University of California Press, 1993), 50-108 (with Frederic L. Holmes).

"Tacit Knowledge and School Formation," Osiris 8 (1993): 16-29.

"The Humboldtian Reforms, Economic Factors, and Discipline Shaping: The Case of the Königsberg Physics Seminar," in "Einsamkeit und Freiheit" Neu Besichtigt: Universitätsreformen und Disziplinenbildung in Preußen als Modell für Wissenschaftspolitik im Europa des 19. Jahrhunderts, ed. Gert Schubring (Stuttgart: Franz Steiner Verlag, 1991), 92-109.

"Physics Instruction in Prussian Secondary Schools before 1859," in *Science in Germany*, ed. K. M. Olesko, *Osiris* 5 (1989): 92-118.

"Introduction," in Science in Germany, ed. Kathryn M. Olesko, Osiris 5 (1989): 6-12.

"Michelson and the Reform of Physics Instruction at the Naval Academy in the 1870s," in *The Michelson Era in American Science*, 1870-1930, ed. S. Goldberg and R. Stuewer (New York: American Institute of Physics, 1988), 111-32.

"On Institutes, Investigations, and Scientific Training," in *The Investigative Enterprise:* Experimental Physiology in Nineteenth-Century Medicine, ed. W. Coleman and F. L. Holmes (Berkeley: Univ. of California Press, 1988), 295-332.

"The Pedagogical Imperative," in *British Society for the History of Science and the History of Science Society: Programs, Papers and Abstracts for the Joint Conference*, ed. R. N. Numbers and J. V. Pickstone (Madison, WI: Omnipress, 1988), 93-100.

"The Mental World of Physiklehrer: Subject and Method in History of Mentalities," *Recherches en didactique des mathématiques* 6, no. 2/3 (1985): 347-62.

"Jesuit Contributions to Physics," *Diccionario Histórico de la Compañía de Jesús*, Ed. Charles E. O'Neill, S.J., and Joaquín M. Domínguez, S.I. 4 vols. (Rome: Institutum Historicum S.I.; Madrid: Universidad Pontificia Comillas. 2001 (submitted 1983)).

ENCYCLOPEDIA ENTRIES

Göttinger Kostbarkeiten: Handschriften, Drucke und Einbände aus zehn Jahrhunderten,

Göttinger Bibliotheksschriften 35 (Göttingen: Niedersächsische Staats- und Universitätsbibliothek, 2006). Also published in digital format.

Die Farbe des Lichts (24-25)

Kunst als mathematische Wissenschaft (32-33)

Die Vermessung des Menschen (82-83)

Andreas Vesalius—Begründer modernen Anatomie (94-95)

Die Revolution der Himmelssphären (170-71)

Oxford Guide to the History of Physics and Astronomy, ed. J. L. Heilbron (New York: Oxford University Press, 2005).

Friedrich Wilhelm Bessel (28-29)

Error and the Personal Equation (107-108) Alexander von Humboldt (157-159) Humboldtian Science (159-162)

Oxford Companion to the History of Modern Science, ed. J. L. Heilbron et al., (New York:

Oxford University Press, 2003).

Art & Science (45-49)

Cameralism (120-21)

Disciplines (213-14)

Error & the Personal Equation (271-73)

Historiography of Science (366-70)

Alexander von Humboldt (383-84)

Humboldtian Science (384-87)

Institute (402-4)

Kaiser Wilhelm/Max Planck Gesellschaft (433-34)

Marxism (488-89)

Modernity & Postmodernity (540-41)

Nazi Science (568-70)

Precision & Accuracy (672-73)

Probability & Chance (677-78)

Schools (731-33)

Science & Daily Life (199-200)

Seminar (749)

Textbook (796-97)

University (812-15)

OCCASIONAL ARTICLES

"Eloge: L. Pearce Williams (1927-2015), Isis 108 (2017): 145-48.

"NSF Support for HST in High School Courses," History of Science Society Newsletter 16, no. 3 (July 1987): 1-2.

"Employment Trends in History of Science," Isis 72 (1981): 477-79.

BOOK REVIEWS

TITLED REVIEWS:

"Training for the Tripos," [Review of Andrew Warwick, Masters of Theory: Cambridge and the Rise of Mathematical Physics], American Scientist, 92 (2004): 276-79.

"Nobelists and Company," [Review of Elisabeth Crawford, *Nationalism and Internationalism in Science*, 1880-1939]. Science 256 (1992):1040-41.

"Republics of Science" [Review of *Solomon's House Revisited*, ed. Tore Frängsmyr]. *Science* 252 (1991): 976-78.

"The Civics of Science," [Review of *Teaching the History of Science*, ed. Michael Shortland and Andrew Warwick]. *Science* 248 (1990): 1242-43.

"Planck's Demon Caught between Good Science and Bad Politics," [Review of J. L. Heilbron, *Dilemmas of an Upright Man*], *Physics Today* (March 1988): 89-90.

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BOOK REVIEWS IN:

American Historical Review American Scientist Annals of Science Isis Physics Today Science Social Science History Technology & Culture The Review of Metaphysics

MAJOR WORKS-IN-PROGRESS

BOOKS:

Prussian Precision: Geopolitics and Measurement from Frederick the Great to the Great War

When we think of geopolitics and science or technology, Cold War nuclear weapons most often come to mind. But in an earlier era measurement itself was a contentious geopolitical issue, one that extended far beyond the now well-known eighteenth-century competition to measure longitude. *Prussian Precision* is about bureaucratically-managed state measurement projects—weights and measures, the calendar and time, infrastructure development, and mapping and meridian arcs—led by physicists, astronomers, the military, and technically-inclined officials from the Seven Years War to just after WWI. These projects bridged the period over which scientific and technical standards and practices for precision in measurement evolved, shaping them along the way. As state-sponsored projects they were vulnerable to geopolitical intrusions, especially from regions further east that Prussia sought to integrate or to tame: Silesia, the lands of the Polish Partitions, "Mitteleuropa," the Balkans, and Russia. Over this contentious space (whose significance in the history of Prussian science and technology has been overlooked), measurement became a political weapon in the hands of nations and empires, one that could unite, meliorate, and modernize—or divide and destroy. Even German generals seized upon the political nature of precision in measurement when they conveniently blamed the loss of the Great War on the imprecision of their maps. Prussian Precision explores this politics of precision in measurement over the long nineteenth century, exposing tensions still in evidence today: between on the one hand the centrifugal forces of nation-building, national identity, and national secrets, and on the other the globalization of standards of measurement that bind nations together.

Parallax: How Bessel Measured the Distance to the Stars from a Remote Outpost on the Baltic Sea

What you see depends upon your angle of viewing. *Parallax* is a crossover book that uses Friedrich Wilhelm Bessel's (1784-1846) measurement of stellar parallax in 1838 as a metaphor for understanding his life and work. To borrow from Edgar Allan Poe's "Eureka," which queried the cultural meaning of this discovery, this is a book for those who feel rather than those who think. It explores Bessel's engagement with science from the perspective of his personality, his ties to friends and family, and his immersion in the joys and sorrows of life. Bessel measured the immense distance to the stars, but throughout his life he also reckoned with the gap between living and thinking, between desire and duty, and between the real and the ideal. When we inquire into how far away the starts are, we are also exploring the distances that separate the spheres of our own lives.

Water in the Prussian Frontier

Scholarship on the Prussian East has argued that the Polish Partitions contributed to Prussia's downfall despite the economic advantages gained. Yet experiences on the frontier, especially in water management, fostered a rich technical culture. This culture stamped how Prussian civil engineers, who were also state civil servants, approached administrative, institutional, technical, and social issues as well as the natural world. The later rectification of the Rhine notwithstanding, hydraulic engineering projects were more numerous and extensive in the Prussian East than in the Prussian West. So although the administrative burden of the Polish Partitions may have contributed to Prussia's "downfall," the considerable technical knowledge and experience gained on the frontier, especially in hydrology, had long-lasting impact on how the state viewed the relationship between nature, technology, and society.

PRESENTATIONS, INCLUDING INVITED LECTURES AND CONFERENCE PAPERS

"How Prussian Precision Became Geopolitical," Lyne Starling Trimble Science Heritage Public Lecture, American Institute of Physics, College Park, Maryland, April 2020.

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"The Information Order of the Prussian Frontier: Data Collection in the Polish Partitions (part32)," Working Group on History of Bureaucratic Knowledge, Max Planck Institut für Wissenschaftsgeschichte, Berlin, Germany, 10-12 June 2019.

"The Creation of Historical Effects," Conference on "Looking Back as We Move Forward: The Past, Present, and Future of the History of Science," California Institute of Technology, Pasadena, CA, April 26-27, 2019.

"Ludwik Fleck, Alfred Schütz, and the Social World: What They Mean for Us," European Society for the History of Science/British Society for the History of Science Annual Meeting, London, 14-17 September 2018.

"The Information Order of the Prussian Frontier: Data Collection in the Polish Partitions (part 2)," Working Group on History of Bureaucratic Knowledge, Max Planck Institut für Wissenschaftsgeschichte, Berlin, Germany, 24-26 May 2018.

Commentary: "Education and its Audience: Crafting Pedagogy in Science, Technology, Mathematics, and Medicine," History of Science Society Annual Meeting, Toronto, ON, 9-12 November 2017.

"The Information Order of the Prussian Frontier: Data Collection and the Polish Partitions (part 1)," Conference on Beyond Data: Knowledge Production in Bureaucracies across Science, Commerce, and the State," German Historical Institute, Washington, DC, June 1-3, 2017.

"Copenhagen: The Ethical Dilemma," Theater Talkback, Perisphere Theater, Washington, DC, 4 December 2016.

"The Social Sciences as Science and Art," Discussion, Government Department, Georgetown University, Washington, DC, 13 October 2016.

"Education in Science Diplomacy: The Gateway Course," American Association for the Advancement of Science Conference on Science Diplomacy 2016, Washington, DC, 5 May 2016.

"From Quanta to Geopolitics," Invited Plenary Lecture, American Institute of Physics Early Career Conference for Historians of the Physical Sciences, Annapolis, MD, 7-10 April 2016.

"Biography and Geopolitics: Astronomy in the Prussian Frontier," History of Science Society Annual Meeting, San Francisco, CA, November 2015.

"Auditory Knowledge in the History of Science," Department of German, Georgetown University, 24-26 September 2015.

"How I Learned to Love the Bomb," Georgetown Admissions Ambassador Program Lecture, March and April 2015.

Commentary: "Critical Silk Road Seminar," Georgetown University, Washington, DC, 29 January 2015.

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"The Survival of Humanity: Is Exploration the Answer?" Mountain Vista Governor's School, Warrenton, VA, 21 May 2014.

"The Myth of Science as a Solitary Enterprise," Conference on Myths about Science in Science Education, Washington & Lee University, Lexington VA, 8-11 May 2014.

"Making Poland Prussian: Mapping the Polish Partitions," History of Science Society Annual Meeting, Boston, 21-24 November 2013.

"Discipline, Pedagogy, Practice: Rethinking the Historical Landscape," Workshop at the Max Planck Institute for History of Science, Berlin, 7 June 2013.

"Commentary: Science as Violence," Workshop on Cultures of Violence, Georgetown University, 22 February 2013.

"Jesuit Foot Soldiers of Science," Annual Casey McIlvane Lecture, Lauinger Library Associates, Georgetown University, 2 February 2012. Versions presented at:

- (1) Georgetown Association of Main Campus Retired Faculty, 15 November 2012.
- (2) Available at https://www.youtube.com/watch?v=y6FjjR4m2Dk

Commentary: "The Heidelberg *Kreis* at Mid-Century," History of Science Society Annual Meeting, Cincinnati, Ohio, 4-7 November 2011.

"Gauss: Master of the Heavens and the Earth?," Lichtenberg Kolleg, Universität Göttingen, 14 June 2011.

"Modernizing Easter: Astronomy, Foreign Affairs, and Confessional Conflict," History of Science Society Annual Meeting, Montreal, Canada, 4-7 November 2010.

Roundtable: *The United States and Germany in the Twentieth Century: Competition and Convergence*, German Studies Association Annual Meeting, Oakland, CA, 7-10 October 2010.

Commentary: "Science and Its Histories," Huntington Library, San Marino, CA, 24-25 September 2010.

"Water in the Prussian Frontier," Dibner Fellow Distinguished Lecture, The Huntington Library, San Marino, CA, 17 February 2010. Versions presented at:

- (1) University of California, Los Angeles, 8 March 2010
- (2) University of California, San Diego, 12 April 2010
- (3) University of Maryland, 9 September 2010
- (4) Rachel Carson Center, Ludwigs-Maximilians-Universität München, 16 June 2011

"Politics and Prussian Technical Education, 1740-1799," Invited Plenary Lecture, Catalan Society for the History of Science & Technology, Lleida, Spain, 13-16 November 2008.

"Public Works in Eighteenth-Century Prussia," Historisches Institut, Abteilung für Geschichte der Naturwissenschaften und Technik, Universität Stuttgart, 23 May 2008.

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"Daniel Kehlmann's *Die Vermessung der Welt*," Book Conversation, Goethe Institute, Washington, DC, 29 November 2007.

Commentary: "Science, Technology, & National Identity," Conference on Science, Technology, & National Identity, University of South Carolina, Columbia, SC, 22 September 2007.

"The Competing Modernities Project: Knowledge," (with Christoph Strupp) BMW Center for German & European Studies, Georgetown University, Washington, DC, 13 February 2006. Versions presented at:

(1) German Historical Institute, 16 February 2006.

"Science and Georgetown's Identity," Georgetown University Board of Governors, Washington, DC, 1 October 2005.

"Aesthetic Precision," Conference on Technisierung/Ästhetisierung: Technical and Aesthetic (Trans)Formations of Society, Darmstadt Technische Universität, Germany, 12-14 October 2005.

"Science and Education in Germany and America," German Historical Institute Conference on Competing Modernities, German Historical Institute, Washington, DC, 23-24 September 2005. Versions presented at:

(1) The American Academy, Berlin, 17-19 September 2004.

"The Forgotten Past: Other Cultures of Science and Technology in German History," University of Pennsylvania, 28 March 2005. Versions presented at:

(1) German Historical Institute, Washington, DC, 2 December 2004.

"Science & Technology in Daily Life," U.S. Department of Commerce, Washington, DC, 8 December 2004.

"Science & Technology in the Definition of Western Civilization," Provost's Series on Western Civilization, Georgetown University, 25 February 2004.

"'...for the welfare of the people and the state...': Public Works and Exactitude in Early Modern Germany," Yale University, 8 December 2003.

"The Legacy of Gregor Mendel: Nature's Regularities," Smithsonian Resident Associate Program, Embassy of the Czech Republic, Washington, DC, 4 December 2003.

Commentary: "Professionalization: Beyond the Public Sphere and toward Politics," History of Science Society Annual Meeting, Boston, 21 November 2003.

"Galileo: The Man, The Myth," Panel Discussion on Bertolt Brecht's *Life of Galileo*, Studio Theater (co-sponsored by the American Association for the Advancement of Science), Washington, DC, 9 November 2003.

"Aesthetic Precision," BMW Center for German & European Studies Faculty Seminar, Georgetown University, 2 December 2002.

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"Deceptions of Vision: Optical Illusions in German Society," History of Science Society Annual Meeting, Milwaukee, Wisconsin, 7-10 November 2002.

"Universal Standard Time: Beyond Technological Systems," Program in Science, Technology, & International Affairs Faculty Seminar, Georgetown University, 7 October 2002.

"Training Generations: The Foundations of Kohlrausch's Practical Physics," Conference on Training Scientists, Crafting Science: Putting Pedagogy on the Map of Science Studies, MIT, 19-20 September 2002.

"Vision and Culture in the Romantic Era: Helmholtz's Sources," National Library of Medicine of the National Institutes of Health, Bethesda, MD, 8 May 2002.

"The Social Function of Knowledge," Conference on Training Scientists, Crafting Science: Putting Pedagogy on the Map of Science Studies, MIT, 24-26 January 2002.

"The Measures of Reality: The Histories of Metrology," Centre de Recherches historiques et épistémologiques sur les sciences exactes les institutions scientifiques, Université Paris, 18 December 2001.

Commentary: "Student Culture and the Production of Theorists in Physics," History of Science Society Annual Meeting, Denver, Colorado, 9-11 November 2001.

Commentary: "Stabilizing Boundaries: Nature, Material Culture, and Political Identity in Germany," German Studies Association, Washington, DC, 4-6 October 2001.

Commentary: "Biology and the Crisis of Ethics in Imperial Germany," German Studies Association, Washington, DC, 4-6 October 2001.

"Reason for Profit: Post-Reunification Developments in German Science," University of Delaware, 25 September 2001.

"What is Reason in Everyday Life? Indigenous vs. Scientific Knowledge from a Phenomenologist's Perspective," Workshop on Science and Indigenous Knowledge, U.S. National Committee for the International Union of History & Philosophy of Science of the National Academy of Sciences, Honolulu, Hawaii, 26-27 May 2001.

"German Science in the 21st Century: Crises and Challenges", Center for the History of Recent Science, George Washington University, 27 April 2001.

"Aesthetic Precision: Particularity and Social Fact," Invited Plenary Lecture, History of Science Society Annual Meeting, Vancouver, British Columbia, 2-5 November 2000.

"Freedom-Community-Responsibility", Georgetown University Convocation Address, 27 August 2000.

Olesko-Vita 15/22

"Student Protest, Gutenberg, and 'Green Cards': Historical Roots of Germany's Present Crisis in Science," Center for German and European Studies Faculty Seminar, Georgetown University, 10 April 2000.

- "The Deceptions of Vision: Optical Illusions in German Society," Nineteenth Century Studies Association Conference, Arlington, VA, 23-25 March 2000. Versions presented at:
 - (1) Conference on "Romanticism and Visual Culture", St. Hugh's College, Oxford University, 10 June 2000.
- "Assimilating the Everyday: Ordinary Life and the Production of Scientific Personae," Conference on Scientific Personae, Max-Planck-Institut für Wissenschaftsgeschichte, Berlin, 4-6 June 1999.
- "Numberless Precision and Civil Society in Early Modern Germany" Max-Planck-Institut für Wissenschaftsgeschichte, Berlin, 13 October 1998.
- "The Politics of Fin-de-Siécle Physics Pedagogy in Europe," American Physical Society and American Association of Physics Teachers, Columbus, Ohio, 19 April 1998.
- "Commentary: Creating Cultures of Calculation: Academic Institutions and Pedagogical Practices in the History of Mathematics & Physics", Program in History of Science, Princeton University, Princeton, NJ, 30 August 1997.
- "What does 'Precise' Mean? Fine Grained Views of Reality without Numbers," Program in History of Science and Technology, University of Minnesota, Minneapolis, MN, 2 May 1997.
- "Precision and Accuracy in German Society," Center for the History & Philosophy of Science, University of Maryland, College Park, 21 November 1996. Versions presented at:
 - (1) Center for German and European Studies Faculty Seminar, Georgetown University, 16 September 1996.
- "Interpretation and Historical Explanation in *Wissenschaftsgeschichte*," History of Science Society Annual Meeting, Atlanta, Georgia, October 1996.
- "Precision, the Cadaster, and Property Rights in Pre-Imperial Germany," Joint Meeting of the British Society for the History of Science and the History of Science Society, Edinburgh, Scotland, July 1996.
- "Why Science Studies?," Georgetown University Alumni Club of West Palm Beach, 10 May 1996.
- "Technology, Efficiency, and Gender in *Evangelium Vitae*," Conference on *Evangelium Vitae*, Georgetown University, Washington, DC, 10-12 November 1995.

Commentary: "The Laboratory and the Classroom: Education Reform in England, Germany, and Sweden, Circa 1900," History of Science Society Annual Meeting, Minneapolis, MN, 26-29 October 1995.

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"Mathematical Physics and Quantitative Science at Königsberg: A Review of the Literature and Directions for Future Research," Conference on Mathematics and the Mathematical Sciences at Königsberg, Mathematisches Institut, Oberwolfach, Germany, 30 June-2 July 1995.

- "Rethinking Mathematical Physics at Königsberg: Mathematical Traditions and the Ethics of Research," Mathematisches Institut, Universität Mainz, 29 June 1995.
- "History and the Sciences *Redux*", Phi Alpha Theta Annual Meeting, Georgetown University, 8 April 1995.
- "The Meaning of Precision," Invited Lecture and Seminar at the University of Oklahoma, Norman, OK, 9-10 December 1994.
- "Teaching Disciplines & Shaping Identities: Reflections on the Origin of Modern Science," History of Science Society Annual Meeting, New Orleans, LA, 13-16 October 1994.
- "Franz Neumann and the Königsberg School of Mathematical Physics," 450-jährige Jubiläum der Albertus-Universität Königsberg, Kaliningrad (Königsberg), Russia, 26-30 September 1994.
- "The Global Future of Science and Technology," Key Global Issues Seminar, Institute for the Study of Diplomacy, Georgetown University, 25 April 1994.
- "History in Science, Technology, and International Affairs," Georgetown University, Program in Science, Technology, and International Affairs, March 25, 1994.
- "Technology and Measurement: Berlin's Experimental Culture before Hertz," Conference on Heinrich Hertz, University of South Carolina, 18-20 March 1994.
- "Experiment, Civic Culture, and Practice: Helmholtz's Early Career," Conference on Hermann von Helmholtz, Forschungsschwerpunkt Wissenschaftsgeschichte und Wissenschaftstheorie, Max Planck Gesellschaft, Tegernsee, Germany, 3-8 January 1994.
- "Resistance, Tolerance, & Consensus in Britain & Germany," History of Science Society, Annual Meeting, Santa Fe, New Mexico, 11-14 November 1993.
- "Learning Mathematical Physics at Cambridge and Königsberg," Conference on Science Education sponsored by The Achievement Project, Johns Hopkins University, 30 September-2 October 1993 [co-authored with Andrew Warwick].
- "Precision and Practice in German Resistance Measures: Some Comparative Considerations," Conference on Practical Electricians, High Science, and the Third Way, Dibner Institute for the History of Science and Technology, Massachusetts Institute of Technology, 16-18 April 1993.
- "The Culture of Precision in Science: Historical Perspectives," Georgetown University Medical School Bioethics Seminar, 10 November 1992.

Commentary: "Science and Power in Nineteenth Century Germany and France," Southern Historical Association Annual Meeting, Atlanta, GA, 4-7 November 1992.

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"A Classic Experiment as Cheshire Cat: Teaching Helmholtz's Nerve Experiments," Joint Meeting of the British Society for the History of Science and the History of Science Society, Toronto, Canada, 26-28 July 1992 (co-authored with Frederic L. Holmes).

- "The Exact Sensibility," Institut für Wissenschaftsgeschichte, Georg-August-Universität zu Göttingen, Göttingen, Germany, 16 June 1992. Versions presented at:
 - (1) History of Science Society Annual Meeting, Washington, DC, 27-30 December 1992.
- "The Culture of Precision in Nineteenth Century Germany," German Historical Institute, Washington, DC, 21 May 1992.
- "The Meaning of Precision: Precision's Early Sensibilities," Princeton University Workshop in the History of Science, Princeton, NJ, 8 February 1992. Versions presented at:
 - (1) Department of Science Studies, Cornell University, Ithaca, NY, 6 April 1992.
- "Experiment, Quantification, & Discovery: Helmholtz's Early Physiological Researches," Department of History of Science and Medicine, Johns Hopkins University, Baltimore, MD, 21 November 1991.
- "The Laboratory and the Workplace," Invited Plenary Lecture, Joint Meeting of the History of Science Society and the Society for the History of Technology, Madison, WI, 30 October-3 November 1991.
- "Tacit Knowledge and School Formation," History of Science Society Annual Meeting, Madison, WI, 30 October-3 November 1991.
- "The Meaning of Precision," Semiotic Society of America Annual Meeting, College Park, MD, 24-27 October 1991.
- "Industrial Demands and the Political Economy of Exact Experiment," Conference on Writing the History of Physics, St. John's College, Cambridge University, 3-5 April 1991.
- "Exact Experiment and the Formation of Schools of Physics at Berlin and Göttingen," Conference on Research Schools, Yale University, November 1990.
- "Helmholtz's Early Physiological Experiments," History of Science Society, Seattle, WA, 25-28 October 1990.
- "Experiment and Discovery in Helmholtz's Muscle and Nerve Investigations," Conference on Hermann von Helmholtz: Scientist and Philosopher, University of Chicago, 11-14 October 1990.
- "German Science Seminars and Teacher Training in America," Conference on German Influences on American Education, Madison, WI, 13-16 September 1990.
- "The Humboldtian Reforms and the Königsberg Physics Seminar," XVIII International Congress of History of Science, Hamburg-Munich, 1-9 August 1989.

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"Secondary School Physics Instruction in America, 1870-1930," History of Science Society, Cincinnati, OH, 27-30 December 1988.

"Toward a History of the Prussian Seminar System," Washington Area German History Seminar, Towson, MD, 29 October 1988.

"The Pedagogical Imperative," Combined British Society for History of Science & History of Science Society meeting, Manchester, England, July 1988 (submitted for proceedings but not delivered in person).

"German Seminars and the Natural Sciences," Conference on National Styles in Science, Dibner Institute for History of Science and Technology, Brandeis University, 1-3 June 1988.

"Environments and Strategies for Science Learning: A Historical Perspective," American Association for the Advancement of Science "Forum 87: Students and Science Learning," Crystal City, VA, November 1987.

"Teaching Physics in the 1870s: A Comparative Perspective on America and Germany," Conference on The Michelson Era in American Science, 1870-1930, Case Western Reserve University, October 1987. Versions presented at:

(1) Princeton University History of Science Seminar, March 1988.

"Physical Laboratory Instruction in Prussian Gymnasien and Realschulen: Sources of Teaching Measurement before 1860," History of Science Society, Pittsburgh, PA, October 1986. Versions presented at:

(1) Smithsonian Institution, May 1986.

"Teaching Measurement before Kohlrausch," American Physical Society and American Association of Physics Teachers, Atlanta, GA, January 1986.

"German Archival Research: Journeyman's Apprenticeship or Superfluous Supplement?" Washington Area History of Science Society, May 1985.

"The Mental World of *Physiklehrer*: An Adventure in Reading *Schulprogramme*," Forschungsschwerpunkt Wissenschaftsforschung, Universität Bielefeld, West Germany, November 1984.

Commentary: "Teaching History of Science in Undergraduate History Survey Course," American Historical Association, San Francisco, CA, December 1983. Versions presented at:

(1) Educational Testing Service Regional Meeting, Coral Gables, FL, March 1986.

Commentary: "Science and Society," German Studies Association, Madison, WI, October 1983.

"Mathematics and Languages in 19th c. Germany," VIII Symposium on History of Mathematics, National Museum of American History, September 1983.

"Galileo's Physics," Junior Science and Humanities Symposium, Washington, DC, 7 January 1983.

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"'Physiker' von Beruf: Institutional Reforms, Intellectual Changes, and Personal Expectations, 1830-1875," Conference on Wissenschaft als Beruf: The Context and Content of Academic Learning in Germany, 1780-1850, Princeton University, April 1982. Versions presented at:

(1) Washington Area German History Seminar, October 1982.

"Mechanics and the Center of German Physics, 1790-1840," American Physical Society, Washington, DC, April 1982. Versions presented at:

(1) Midwest Junto History of Science Society, St. Louis, MO, March 1979.

What's History in the History of Science?," Junior Science and Humanities Symposium, Washington, DC, 9 January 1982.

"Theoretical Physics on Trial," Committee on History and Philosophy of Science, University of Maryland, 26 October 1981.

"Reactions to the Königsberg School," Institut d'histoire et de sociopolitique des sciences, Université de Montreal, 3 February 1981.

"Teaching Physics at Königsberg, circa 1840," Department of History of Science, Johns Hopkins University, 10 April 1980. Versions presented at:

- (1) University of North Carolina-Greensboro, November 1979
- (2) Smithsonian Institution Nineteenth Century Seminar, 10 December 1979
- (3) Clarkson University, 16 December 1979
- (4) National Museum of American History, 16 January 1980
- (5) U.S. Naval Academy, January 1980
- (6) University of Nebraska-Lincoln, January 1980
- (7) Harvard University, 22 February 1980

"The Königsberg School of Physics: A Profile," History of Science Society, New York, 29 December 1979.

"The Politics and Pedagogy of Physics: The Königsberg Seminar and the Prussian Ministry of Education," Joint Atlantic Seminar in the History of the Physical Sciences, University of Pennsylvania, 7 April 1979.

"Franz Neumann and the Emergence of Theoretical Physics in Germany," History of Science Society, Madison, WI, 27-29 October 1978.

MEDIA

"DNA Discoveries, Now and Then," *The Washington Post*, Saturday, 22 December 2007, A16 (Letter to the Editor).

"Decoding Nostradamus," *Discovery Channel*, originally aired 9, 10, and 15 September 2007. (Documentary. Appeared with GU colleague David Collins)

"Gender and Science," Interview by Georgetown Forum (WMZQ), originally aired 4 June 2000; rebroadcast on National Public Radio, Voice of America, and other programs.

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PROFILES

Carrie Madren, "Kathryn Olesko Retraces History with a Modern Lens," American Association for the Advancement of Science Member Central, 3 December 2012, http://membercentral.aaas.org/blogs/member-spotlight/kathryn-olesko-retraces-history-modern-lens

Michal Meyer, "Workspace: Interview with Kathy Olesko," *History of Science Society Newsletter*, January 2004, 7.

NATIONAL & INTERNATIONAL REVIEW BOARDS AND PANELS

2017-2019	Reinventing Civil Defense Project, Stevens Institute of Technology, Advisory Board, Member
2015	Consortium for the History of Science, Technology, and Medicine (Philadelphia),
	Combined Fellowship Review Panel
2014	Consortium for the History of Science, Technology, and Medicine (Philadelphia),
	Postdoctoral Fellowship Review Panel
2013, 2018-19	NASA & Library of Congress Kluge Center Selection Committee for Astrobiology Chair
2012-2018	Smithsonian Institution, Dibner Library Resident Scholars Program Review Committee
2012	Chemical Heritage Foundation, Fellowship Review Panel
2010	Huntington Library, Dibner Fellows Review Panel
2010	Smithsonian Institution, Dibner Library Resident Scholars Program Review Committee
2000-03	International Union for the History and Philosophy of Science: U. S. National
	Committee, Member (National Academy of Sciences appointment)
1995-98	National Science Foundation, Science and Technology Studies Review Panel
1991-97	Harvard University Board of Overseers, Committee to Visit the Department of History of
	Science, Member
1995	National Endowment for the Humanities, Fellowship Review Panel [Division of
	Research Programs: Humanities, Science, & Technology]
1994	National Endowment for the Humanities, Grant Review Panel [Division of Education
	Programs: Leadership Opportunity in Science and Humanities Education]
1989	National Endowment for the Humanities, Grant Review Panel [Division of Research:
	Humanities, Science, & Technology: Guided Texts]
1989	National Academy of Sciences, National Research Council: Review Panel for NSF
	Graduate Fellowships, Behavioral and Social Sciences, Section C, Chair
1987	National Academy of Sciences, National Research Council: Review Panel for NSF
	Graduate Fellowships, Behavioral and Social Sciences, Section C, Chair
1984	National Academy of Sciences, National Research Council: Review Panel for NSF
	Graduate Fellowships, Behavioral and Social Sciences, Section C, Member

REFEREE OF PROGRAMS OR FELLOWSHIP APPLICATIONS FOR

National Science Foundation National Science Foundation Graduate Fellowships National Science Foundation Dissertation Fellowships National Endowment for the Humanities Olesko-Vita 21/22

National Air and Space Museum Guggenheim Fellowship National Air and Space Museum Verville Fellowship

American Council of Learned Societies

Social Science Research Council

Alexander von Humboldt Foundation

German Academic Exchange Service

Howard Foundation

American Association for the Advancement of Science Fellows

Fulbright-Hays Commission

University of Wisconsin Institute for Research in the Humanities

Institute for Advanced Study (Princeton) Woodrow Wilson Graduate Fellowships

MacArthur Foundation

and others

REFEREE OF MANUSCRIPTS FOR

Publishers:

Bedford/St. Martin's Science Berghahn Publishers

Cambridge University Press East Asian Science, Technology, and

Cornell University Press Harvard University Press

Houghton Mifflin

Johns Hopkins University Press

MIT Press

Princeton University Press Rutgers University Press

Springer Verlag

University of California Press University of Chicago Press

Journals:

American Historical Review American Journal of Physics

Annals of Science

Berichte zur Wissenschaftsgeschichte

British Journal for the History of

Centaurus

Historical Studies in the Natural

Sciences

History of Science

Isis

NTM—Zeitschrift für Geschichte der Wissenschaften, Technik und Medizin Notes & Records of the Royal Society of

London Osiris

Perspectives in Physics

Physics Today Science & Education Science in Context Social Studies of Science

PROFESSIONAL SOCIETIES & ORGANIZATIONS

History of Science Society. Member (1974-)

Committee on Advocacy (2016-2019)

Editor, Osiris, 1998-2008 (volumes 17 [2002]-27 [2012])

Past Editor, Osiris, 2009-2012 Associate Editor, Isis 1998-2008

Executive Council (Elected 2000-02; 1987-89)

American Association for the Advancement of Science Representative (1996-99)

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Committee on Publications (Member, 1992-97; Secretary, 1995; Chair, 1996; *Ex officio*, 1997)

Nominating Committee (Elected 2000; 1993)

Committee on Meetings and Programs (Member, 1990-93)

Local Arrangements Co-Chair, 1992 Annual Meeting, Washington, DC

Washington Representative (1989)

Committee on Research and the Profession (ex officio, 1989)

Committee on Education (ex officio, 1989; Chair, 1985-88; Member, 1982-88)

Ad hoc Committee on the Executive Secretary (1986)

Schumann Prize Committee (Chair, 1982; Member 1981)

Committee on Women (Acting Chair, 1982; Chair, 1981; Vice-Chair, 1980; Member, 1974-84).

Annual Employment Market Report (1975-80, 1984)

American Association for the Advancement of Science. Member (1987-), Fellow (Elected 1998)

Section L: History and Philosophy of Science

Chair (Chair-Elect, 1995-96; Chair, 1996-97; Council Member & Retiring Chair, 1997-98)

Electoral Nominating Committee (Elected 2007-10, 1988-91; Chair, 1991)

Member-at-Large (Elected 2001-05)

American Historical Association. Member (1979-)

Local Arrangements Committee (1982)

American Physical Society. Member (1982-88, 2014-), Fellow (Elected 2016)

Forum on the History of Physics Fellowship Committee (2017)

Division of the History of Physics

Nominating Committee (1985-86)

Liaison for Joint Atlantic Seminar (1984-86)

Associate Editor, Division Newsletter (1982-84)

British Society for the History of Science. Member (1990-)

Society for the History of Technology. Member (1993-)

European Society for the History of Science. Member (2018-)

Centaurus Committee to Evaluate Proposals for Special Issues (2019)

Nineteenth Century Studies Association. Member (2000-2002)

Committee on National Objectives (2000-02)

Conference Group on Central European History. Member (1982-88)

Committee on East German Archives (1982-88)

German Studies Association. Member (1983-88, 1993-2005)

RECENT SEMINARS, WORKSHOPS, WORKING GROUPS

- Working Group: History of Bureaucratic Knowledge, Max Planck Institut für Wissenschaftsgeschichte, Berlin. Member. (2017-19) https://www.mpiwg-berlin.mpg.de/research/projects/history-bureaucratic-knowledge
- Seminar: Consortium for History of Science, Technology, and Medicine (Philadelphia) History of Physical Sciences Working Group, Co-Convener/Moderator of monthly online digital seminar (with Joseph Martin of the University of Cambridge) (2015-19) https://www.chstm.org/content/physical-sciences