

HPS&ST Note

September 2016

Introduction

This HPS&ST monthly note is sent direct to about 7,300 individuals who directly or indirectly have expressed an interest in the contribution of history and philosophy of science to theoretical, curricular and pedagogical issues in science teaching, and/or interests in the promotion of innovative and more engaging and effective teaching of the history and philosophy of science. The note is sent on to different international and national HPS lists and science teaching lists. In one form or another it has been published for 20+ years.

The note seeks to serve the diverse international community of HPS&ST scholars and teachers by disseminating information about events and publications that connect to concerns of the HPS&ST community.

Contributions to the note (publications, conferences etc.) are welcome and should be sent direct to the editor: Michael R. Matthews, UNSW, m.matthews@unsw.edu.au .

European Society for History of Science, 7th Conference, 22-24 September 2016, Prague

Tragic events are taking place in and around Europe and are shaking our democratic and cosmopolitan values: terrorist attacks in France, Belgium, Germany and beyond, suspension of human (and academic) rights in Turkey, failure of a policy for the asylum seekers escaping war, war in Ukraine, assassination by the Egyptian state intelligence of a Cambridge University (Italian) doctoral student, Brexit and other anti-UE movements, visa difficulties that limit the right of many East Asian colleagues to participate in our conferences. Certainly we all know people who have been seriously affected. The general outlook is not positive. Academic freedom and international cooperation are at risk.

As an international society aiming to foster cooperation between, and integration of, scholarly communities across Europe and beyond, the ESHS is deeply concerned by those threatening political developments. The ESHS feels therefore the need to publicly denounce political violence, authoritarianism, xenophobia and chauvinism while reaffirming its commitment to our basic, shared values of democracy, openness to the world, and European integration. We solemnly proclaim the need to preserve freedom of research and teaching, international cooperation and transcultural understanding.

Our Society is open to and reaches not only all the European countries (not just the EU) but also researchers from all over the world. Our best answer to the current dramatic situation is to make the Prague Conference another outstanding example of international cooperation and professional research.

There are 510 registered participants from 51 countries. The ‘medalists’ are Germany (55), China (52) and France (51).

Details at: <http://www.7eshs2016.cz/> and <http://eshs.ens.fr/>

The 28th Baltic Conference on the History of Science, May 18-20, 2017, Tartu, Estonia

Estonian Association of the History and Philosophy of Science cordially invites you to the 28th Baltic Conference on the History of Science (BCHS), which will take place from May 18 to 20, 2017 in Tartu, Estonia. The conference is dedicated to the 250th anniversary of Georg Friedrich Parrot (1767-1852). Parrot was the initiator of the reopening of the University of Tartu in 1802 and the first Rector. He is known as an organizer, educator and scientist who was among the very first to introduce the ideas of the Enlightenment into the Baltic region.

The Baltic conferences on the history of science share a long tradition, which stretches back to the year 1958 when the first conference took place in Riga. The following conferences were held in Estonia, Lithuania and Latvia. In 2014, the 26th BCHS took place in Helsinki, Finland.

The 28th BCHS focuses at ideas of the Enlightenment and on various sciences in late 18th and early 19th century on the western border of the Russian Empire. However, papers on more recent developments will be welcome as well.

The 28th BCHS covers a variety of topics, which divide into working sections:

- a) Enlightenment ideas in education in Europe;
- b) philosophical ideas concerning the Enlightenment;
- c) science and practice – utilitarianism and the Enlightenment;
- d) science communication and science policy.

Detailed information about the conference programme, registration, abstracts, accommodation and other matters will be published on the website of the Baltic Association for the History and Philosophy of Science www.bahps.org in due course.

Please send abstracts of 500 words maximum to tarmo.kiik@gmail.com by Feb. 28, 2017.

University of Copenhagen Professorial Appointment in HPS and Science Education

The University of Copenhagen has made one of the first appointments in the world of a professor with joint responsibility for teaching and research in both History and Philosophy of Science and Science Education. The Department of Science Education belongs to the Faculty of Science and contributes to the education of science students whether they aim for careers in science education, research in science, or science related jobs in the private or public sector. (See: [Department of Science Education, University of Copenhagen](#))

Denmark has a strong tradition for cultivating links between history and philosophy of science and science education, and between philosophy and higher education in general. Hence, all Danish university programs must contain a mandatory course in philosophy of science that serves to give students a broader perspective on their own discipline, its development, and its application. Further, most science courses at the high school level are required to address how the individual discipline relates to historical, cultural and

technological developments. In accordance with this tradition, the Department of Science Education not only offers courses in science and mathematics education, but also courses in history and philosophy of science for science students at the BSc, MSc and PhD level.

The Department expects to expand its activities in history and philosophy of science and has therefore hired Henrik Kragh Sørensen to act as chair of the research group in science studies and to create and maintain a lively, international research environment for the group's researchers as the group expands.

Henrik Kragh Sørensen comes from a position as Associate Professor at Aarhus University, where he, among other things, has developed and taught courses in philosophy of mathematics and philosophy of computer science for students in these programs. He has also developed and run courses in history of mathematics for future mathematics teachers, and he has participated in the development of courses in research practice and responsible conduct of research for graduate students in science.



Henrik's research has focused on transitions in mathematics during the 19th century, the internationalisation of Scandinavian mathematics, and the philosophical study of experimental practices in mathematics.

He has worked with the Ministry of Education and groups of high school teachers in supporting new developments of Danish secondary education, such as interdisciplinary student projects that combine mathematics with history. In collaboration with Kristian Danielsen, a high school teacher in mathematics and classic studies, he has created a series of new materials for use in teaching source-centred history of mathematics in upper-secondary mathematics education, which are being published by the Danish Association of Mathematics Teachers.

Stressing the close ties between history and philosophy of science, science education, and current research in the sciences, research in the group will especially focus on integrated history and philosophy of science, philosophy of science in practice, socially and educationally relevant philosophy and history of science, and similar recent developments in the fields of history and philosophy of science that stress the relevance of history and philosophy of science to the sciences and exhibit an empirical inclination to philosophical investigations.

The group will also work on developing new formats for teaching philosophy of science to science students and seeks a leading role in furthering international exchange of experiences with teaching history and philosophy of science to science students at the college and university level. As part of this initiative the Department will host an international repository for teaching material in philosophy of science (launch expected in September; details will follow in a later newsletter).

The Department hopes that the group will come to serve as a center for collaboration between historians and philosophers of science, science educators, and practicing scientists. Scholars interested in short or long term visits, for example during a sabbatical, are encouraged to contact Henrik Kragh Sørensen or members of the group.

Education Sessions at Philosophy of Science Association Conference, Atlanta, November 3-5.

Taking the History and Philosophy of Science to School

(Sponsored by the International History, Philosophy and Science Teaching)

Zoubeida R. Dagher, *History and Philosophy of Science and Science Education: A Symbiotic Relationship*

Michael Clough, *The Value of History and Philosophy of Science for Science Teacher Education*

Pierre Boulos, *Newton, Diagrammatic Reasoning, and Inquiry*

Philosophy of Science and the Context of Science Pedagogy: Historical and Systematic Lessons from the USA in the Past Hundred Years

(Sponsored by the International Society for the History of Philosophy of Science)

Alan Richardson, Organizer and Chair

Andrew Jewett, *Theorizing Science and Pedagogy in the Pre-Professional Era*

Eun Ah Lee & Matthew J. Brown, *Connecting Inquiry and Values in Science Education: An Approach based on John Dewey's Perspective*

Adam Shapiro, *Demarcation, Law, and the Schools: The Science/non-Science Boundary since the Dover Trial*

Opinion Page: Teaching Philosophy in Schools

The article linked below details the outcomes of teaching philosophy in Australian primary (elementary) and secondary schools. This is a relatively new initiative with encouraging results for student performance in other school subjects and specifically in the highly politicized National Assessment Programme for Literacy and Numeracy (NAPLAN).

<http://theconversation.com/want-to-improve-naplan-scores-teach-children-philosophy-64536>

An informative literature review of the field is provided in:

Sprod, T.: 2014, 'Philosophical Inquiry and Critical Thinking in Primary and Secondary Science Education'. In M.R. Matthews (ed.) *International Handbook of Research in History, Philosophy and Science Teaching*, Springer, Dordrecht, pp. 1531-1564.

Previous Opinion Pieces:

Gregory Radick, Leeds University, *How Mendel's legacy holds back the teaching of science* (June 2016).

Philip A. Sullivan, University of Toronto, *What is wrong with Mathematics Teaching in Ontario?* (July 2016)

Matthew Stanley, New York University, *Why Should Physicists Study History?*

Invitation to Submit

In order to make better educational use of the wide geographical and disciplinary reach of this HPS&ST Note, invitations are extended for readers to contribute opinion or position pieces or suggestions about any aspect of the past, present or future of HPS&ST studies.

Contributions can be sent direct to editor. Ideally they might be pieces that are already on the web, in which case a few paragraphs introduction, with link to web site can be sent, or else the pieces will be put on the web with a link given in the Note.

They will be archived in the OPINION folder at the Inter-Divisional Teaching Commission web site (<http://www.idtc-ihps.com/>).

The opinions do not, of course, represent any official position of the IDTC or the two divisions (DLMPS and DHST) it serves.

Vale: Harold Walter Kroto, 1939-2016

Harry Kroto was born on October 7, 1939 in Cambridgeshire, England and died on April 30, 2016 in East Sussex, England of complications due to amyotrophic lateral sclerosis, commonly called Lou Gehrig's disease. In 1996 he shared the Nobel Prize in Chemistry for his contributions to the discovery of a new form of the 60-carbon structure named 'buckminsterfullerene', now widely known as 'buckyballs'.

Dr Kroto was a former president of the Royal Society of Chemistry and he was knighted in 1996 for his many contributions to science and society. In 1985 Harry and his colleagues focused a strong laser on a thin layer of graphite and produced a soccer-ball-like structure consisting of 12 pentagons and 20 hexagons. Their work has resulted in a great deal of research in nanotechnology.



In addition to his many honors in chemistry, Harry was an active science educator and a secular humanist who spoke out against what he believed were the many negative aspects of

religion. His strong commitment to humanism included support of the British Humanist Association and in 2003 he was one of 22 Nobel Laureates who signed Humanist Manifesto III, that included the following central beliefs: empiricism, unguided evolutionary change, and ethical naturalism.

During his early school years Harry developed a keen interest in physical science and mathematics, later completing a BSc in chemistry (1961) and a PhD in molecular spectroscopy (1964) at the University of Sheffield. As a youngster he was fascinated with a Meccano set, similar to the Erector set in the U.S., that he credited with helping to develop his interests in science and mathematics. Following his PhD completion Harry continued his research in molecular spectroscopy at the National Research Council in Ottawa, Canada (1964-1966) and Bell Labs in the U.S. (1966-1967). Then in 1967 Dr. Kroto accepted an academic position at the University of Sussex where he taught and continued his research, becoming a full professor in 1975. During this time and continuing through 1985, Harry and his research colleagues showed that stable C₆₀ molecules can form from a condensing carbon vapor. His 1985 research paper “C₆₀ Buckminsterfullerene”, with colleagues Heath, O’Brien, Curl, and Smalley, eventually led to his 1996 Nobel Prize in Chemistry and many other honors. Following the discovery of C₆₀, Harry worked on its implications for chemistry and materials science.

In 2004 Dr. Kroto accepted a position in the Chemistry Department at Florida State University in Tallahassee to continue his research on carbon vapor and the properties of nano-structured systems and he continued science curriculum development that he had started in the 1990s. Vega Science Trust produced hundreds of programs for educational TV and in 2009 GEOSSET (Global Educational Outreach for Science, Engineering and Technology) was initiated to increase knowledge of science by the public. It was during his time in Tallahassee that Harry became involved in the local Freethinker Forum and the Center for Inquiry as Honorary President. His work there on behalf of science education and secular humanism reflected his strong commitment to Enlightenment ideals and one of his favorite quotes is by Albert Einstein: “I believe in Spinoza’s God who reveals himself in the orderly harmony of what exists, not in a God who concerns himself with the fates and actions of human beings.” Commenting on Kroto’s opposition to religion, Richard Dawkins said it was inspired by ...”his equally passionate love of science and his commitment to sharing his enthusiasm.”

On May 2, 2015, just before they left Tallahassee to return to England a dinner was held to honor and celebrate Harry and Margaret Kroto’s contributions to FSU, and the local community, including the Freethinker Forum and Center for Inquiry. At that dinner I asked them if a biography of Harry was planned and he said a different kind of biography would be available soon. What he meant can now be found at www.kroto.info, and it consists of a comprehensive set of information about Harry’s life and work, including: main contributions, autobiography, family, timeline, research strategy, teaching and education initiatives, lectures, Where I stand!, skepticism & humanism, and many other topics, including Harry’s Nobel acceptance speech. The Where I stand category should be of particular interest to persons interested in secular humanism and philosophy.

As an alternative to the standard book biography, www.kroto.info is a great internet resource for anyone interested Harry’s life. He was a wonderful example of a world-class scientist who understood the importance of teaching children about the wonders of science and helping adults see the value of using scientific habits of mind in dealing with life’s questions and problems.

Ronald Good

Obituaries for scholars in the HPS&ST field that have passed on are most welcome. It is important to keep a collective memory of people and their contributions. This is especially important for scholars outside the Anglo-American community whose contributions and passing might not be well known in the Anglo-American community.

Previous Obituaries can be read at: <http://www.idtc-iuhps.com/obituaries.html>

Recent HPS&ST Research Articles

- Allchin, D., Werth, A. J. (2016). The Naturalizing Error. *Journal for General Philosophy of Science*, 1-16. doi: 10.1007/s10838-016-9336-x online first
- Ariza, Y., Lorenzano, P., & Adúriz-Bravo, A. (2016). Meta-Theoretical Contributions to the Constitution of a Model-Based Didactics of Science. *Science & Education*. 1-27. doi: 10.1007/s11191-016-9845-3 online first
- Castellani, E., Ismael, J. (2016). Which Curie's Principle? *Philosophy of Science*. doi: 10.1086/687933 online first
- Deem, M. J. (2016). Dehorning the Darwinian dilemma for normative realism. *Biology & Philosophy*, 1-20. doi: 10.1007/s10539-016-9529-z
- Fox, C. W. (2016). The Newtonian Equivalence Principle: How the relativity of acceleration led Newton to the equivalence of inertial and gravitational mass. *Philosophy of Science*, 1-12. doi: 10.1086/687935 online first
- Herman, B. C., Clough, M. P. & Olson, J. K. (2015). Pedagogical Reflections by Secondary Science Teachers at Different NOS Implementation Levels. *Research in Science Education*. Doi: 10.1007/s11165-015-9494-6. Online first
- Herman, B. C. & Clough, M. P. (2016). Teachers' longitudinal NOS understanding after having completed a science teacher education program. *International Journal of Science and Mathematics Education*, 14(1), 207-227. doi: 10.1007/s10763-014-9594-1
- Herman, B. C., Clough, M. P. & Olson, J. K. (2013). Association between Experienced Teachers' NOS Implementation and Reform-Based Science Teaching Practices. *Journal of Science Teacher Education*. 24(7), 1077-1102
- Herman, B. C., Clough, M. P. & Olson, J. K. (2013). Teachers' NOS Implementation Practices Two to Five Years after Having Completed an Intensive Science Education Program. *Science Education*, 97(2), 271-309.
- Isozaki, T. (2016). Historical insights into British, Japanese and US general science from the first half of the twentieth century. *Asia-Pacific Science Education*, 2(1), 1-16. doi:10.1186/s41029-016-0007-3 online first
- Justi, R., Mendonça, P. C. C. (2016). Discussion of the Controversy Concerning a Historical Event Among Pre-service Teachers. *Science & Education*. doi: 10.1007/s11191-016-9846-2 online first
- Kampourakis, K., Silveira, P., & Strasser, B. J. (2016). How Do Preservice Biology Teachers Explain the Origin of Biological Traits?: A Philosophical Analysis. *Science Education*. Doi: 10.1002/sce.21245 online first
- Kožnjak, B. (2016). Kuhn meets Maslow: the psychology behind scientific revolutions. *Journal for General Philosophy of Science*, 1-31. doi: 10.1007/s10838-016-9352-x online first

- Laudan, L., Laudan, R. (2016). The re-emergence of hyphenated history-and-philosophy-of-science and the testing of theories of scientific change. *Studies in History and Philosophy of Science Part A*, 1-4. doi: 10.1016/j.shpsa.2016.06.009
- Longino, H. (2016). Foregrounding the Background. *Philosophy of Science*. doi: 10.1086/687990 online first
- MacPherson, A. C. (2016). A Comparison of Scientists' Arguments and School Argumentation Tasks. *Science Education*. doi: 10.1002/sce.21246 online first
- Malik, S. (2016). Observation Versus Experiment: An Adequate Framework for Analysing Scientific Experimentation? *Journal for General Philosophy of Science*, 1-25. doi: 10.1007/s10838-016-9335-y online first
- Myers, J. Y., Abd-El-Khalick, F. (2016) "A ton of faith in science!" nature and role of assumptions in, and ideas about, science and epistemology generated upon watching a sci-fi film. *Journal of Research in Science Teaching*, 1-29. doi: 10.1002/tea.21324 online first
- Nauenberg, M. (2016) Max Planck and the birth of the quantum hypothesis. *American Journal of Physics*, 84, 709-720. doi: 10.1119/1.4955146

Recent HPS&ST Books

- Clough, M. P & Olson, J. K. (2016). Connecting Science and Engineering Practices: A Cautionary Perspective. In Annetta, L. A. & Minogue, J. (Eds.) *Connecting Science and Engineering Education Practices in Meaningful Ways - Building Bridges*. Contemporary Trends and Issues in Science Education Series, Dordrecht, The Netherlands: Springer.

"While including the teaching and learning of engineering concepts and practices in the science curriculum has potential to aid in achieving often-stated goals for science education, significant and legitimate concerns do exist with the kind and level of emphasis being placed on engineering practices. Generally speaking, the science education community has been remiss in its uncritical adoration of engineering and the inclusion of engineering concepts and practices in the science curriculum. Important concerns exist about K-12 engineering education in general and its inclusion in the science curriculum in particular. Raising these concerns is not an effort to maintain the status quo or a negative view of engineering and technology, but rather a thoughtful and scholarly effort to ensure students receive the best possible science and engineering education. Considerable thought and caution ought to occur in light of the marked changes being proposed regarding the content of the science curriculum in order to infuse engineering concepts and practices. Our cautionary perspective challenges simplistic rationales and strategies for integrating engineering in the science curriculum, and raises issues that need considerable thought and action for reform efforts to successfully promote a meaningful STEM education." (From the abstract)

More information at: http://link.springer.com/chapter/10.1007/978-3-319-16399-4_15

- Clough, M. P. (2015). Role of Visual Data in Effectively Teaching the Nature of Science. In Finson, K.D. & Pedersen, J. (Eds.) *Application of Visual Data in K-16 Science Classrooms*. Information Age Publishing, Charlotte, NC.

"This book examines visual data use with students (PK-16) as well as in pre-service in-service science teacher preparation. Each chapter includes discussion about the current state of the art with respect to science classroom application and utilization of the particular visual data targeted by the author(s), discussion and explanation about the targeted visual data as applied by the author in his/her classroom, use of visual data as a diagnostic tool, its use as an

assessment tool, and discussion of implications for science teaching and/or science teacher preparation.” (From the Publisher)

More information at: <http://tinyurl.com/zb685fc>

Clough, M. P., Olson, J. K & Niederhauser, D. S. (Eds.) (2013). *The Nature of Technology: Implications for Learning and Teaching*, Sense Publishers, Rotterdam, The Netherlands. ISBN: 978-94-6209-267-9.

How does technology alter thinking and action without our awareness? How can instantaneous information access impede understanding and wisdom? How does technology alter conceptions of education, schooling, teaching and what learning entails? What are the implications of these and other technology issues for society?

Meaningful technology education is far more than learning how to use technology. It entails an understanding of the nature of technology — what technology is, how and why technology is developed, how individuals and society direct, react to, and are sometimes unwittingly changed by technology. This book places these and other issues regarding the nature of technology in the context of learning, teaching and schooling. (...) Prudent choices regarding technology cannot be made without understanding the issues that this book raises. This book is intended to raise such issues and stimulate thinking and action among teachers, teacher educators, and education researchers.

The contributions to this book raise historical and philosophical issues regarding the nature of technology and their implications for education; challenge teacher educators and teachers to promote understanding of the nature of technology; and provide practical considerations for teaching the nature of technology.

More information at: <http://tinyurl.com/z46drmh>

Friedman, Michael & Schäffner, Wolfgang (Eds.) (2016). *On Folding: Towards a New Field of Interdisciplinary Research*. New York, NY: Columbia University Press.

“It is only recently, with the increasing interest in origami and folding in natural sciences and the humanities, that the fold as a new concept in a whole range of disciplines has begun to be thought of in a broader way. Folding as a material and structural process offers a new methodology to think about the close relationship of matter, form, and code. It undoes old dichotomies, such as the organic and the inorganic or nature and technology, and blurs the boundaries between experimental, conceptual, and historical approaches. This anthology aims to unfold this new interdisciplinary field and its disciplinary impact, ranging from materials science, biology, architecture, and mathematics to literature and philosophy.” (From the Publisher)

More information at: <https://cup.columbia.edu/book/on-folding/9783837634044>

Gillett, Carl (2016). *Reduction and Emergence in Science and Philosophy*. Cambridge, MA: Cambridge University Press.

“This impressive book by Carl Gillett offers a new perspective on an old idea, emergence, an idea that has refused to go away in spite of the many damaging criticisms over the years. It is noteworthy that the concept has found many champions among the practicing scientists working in fields such as physics, life science, cognitive neuroscience, and systems theory. Gillett’s account is based in a deep knowledge of the history of emergence in both philosophy

and science, presenting a formidable challenge to the critics and skeptics in the field. It should help to elevate the debates to a new level. Highly recommended to all who are interested in mind, philosophy of mind, and philosophy of science.” Jaegwon Kim, Brown University, Rhode Island

More information at: <http://tinyurl.com/gm9ropo>

Richards, R. A. (2016). *Biological Classification: A Philosophical Introduction*. Cambridge, MA: Cambridge University Press,

“Modern biological classification is based on the system developed by Linnaeus, and interpreted by Darwin as representing the tree of life. But despite its widespread acceptance, the evolutionary interpretation has some problems and limitations. This comprehensive book provides a single resource for understanding all the main philosophical issues and controversies about biological classification. It surveys the history of biological classification from Aristotle to contemporary phylogenetics and shows how modern biological classification has developed and changed over time. Readers will also be able to see how biological classification is in part a consequence of human psychology, language development and culture. The book will be valuable for student readers and others interested in a range of topics in philosophy and biology.” (From the Publisher)

More information at: <http://tinyurl.com/zyhigt7>

Richards, Robert J. & Ruse, Michael (2016). *Debating Darwin*. Chicago, IL: The University of Chicago Press

“This engaging dialogue between Richards and Ruse is both an excellent, accessible summary of two distinguished scholarly careers of research on Darwin and evolution and a source of fresh insights. Although the authors situate Darwin’s life and thought in two very different cultural contexts—German romanticism (Richards) and English gentlemanly society (Ruse)—the reader is struck more by how compatible and instructive these accounts are for understanding Darwin’s thought as a rich and fertile source of subsequent inspiration and debate. A highly recommended introduction to the topic for students and general readers and an entertaining read for veterans of the Darwin wars.” By David Sepkoski, author of *Rereading the Fossil Record: The Growth of Paleobiology as an Evolutionary Discipline*

“Debating Darwin offers readers a ringside seat at a friendly but no-holds-barred fight about Charles Darwin’s place in history. Was the British Enlightenment the making of Darwin, as Ruse contends? Or was Darwin a child of the Romantic science of Goethe and his followers, as Richards suggests? Watching these two outstanding scholar-teachers argue it out is an education in history, science, and the pleasures of serious disagreement.” By Gregory Radick, author of *The Simian Tongue: The Long Debate about Animal Language*

Smith, Pamela H. (2016). *The Business of Alchemy: Science and Culture in the Holy Roman Empire*. Princeton, NJ: Princeton University Press

"No one has described with such authority and with the career of one of those projectors who haunted the courts of late Renaissance and Baroque Europe like so many Pied Pipers, offering philosophers' stones and irresistible weapons to any monarch who would offer them an open ear trumpet. Pamela Smith's book, in short, is fascinating, elegant, and incisive." Anthony Grafton, Princeton University

"Smith has written an incisive and intelligent study which, together with affording a wealth of fascinating archival material, provides an original and well researched overview of the rise of early capitalism and modern science. Most importantly, she has given us an insight into one of the roles of alchemy in the workings of the Holy Roman Empire in the seventeenth century." Lyndy Abraham, Parergon

"A fine study of the relation between alchemy and commerce in the German-speaking lands of the later seventeenth century..." Simon Schaffer, London Review of Books

"Spirited and fascinating... This blending of the modern with the traditional, this seamless knitting of commerce with princely extravagance, alchemy with science, commerce, and industry, stands as the major achievement of Smith's portrait of intellectual life in the late-seventeenth-century Hapsburg territories." Margaret C. Jacob, American Historical Review

More information at: <http://press.princeton.edu/titles/10868.html>

Shapiro, Larry (2016). *The Miracle Myth: Why Belief in the Resurrection and the Supernatural Is Unjustified*. New York, NY: Columbia University Press.

"There are many who believe Moses parted the Red Sea and Jesus came back from the dead. Others are certain that exorcisms occur, ghosts haunt attics, and the blessed can cure the terminally ill. Though miracles are immensely improbable, people have embraced them for millennia, seeing in them proof of a supernatural world that resists scientific explanation. Helping us to think more critically about our belief in the improbable, *The Miracle Myth* casts a skeptical eye on attempts to justify belief in the supernatural, laying bare the fallacies that such attempts commit. Through arguments and accessible analysis, Larry Shapiro sharpens our critical faculties so we become less susceptible to tales of myths and miracles and learn how, ultimately, to evaluate claims regarding vastly improbable events on our own. Shapiro acknowledges that belief in miracles could be harmless, but cautions against allowing such beliefs to guide how we live our lives. His investigation reminds us of the importance of evidence and rational thinking as we explore the unknown" (From the Publisher)

More information at: <https://cup.columbia.edu/book/the-miracle-myth/9780231178402>

Coming HPS&ST Related Conferences

September 16-17, 2016, Mathematical Biography: A MacTutor Celebration, St Andrews University, Scotland

Details at: <http://www.mcs.st-and.ac.uk/mathbiog/>

September 19-23, University of Copenhagen, Graduate HPS&ST course

Details at: www.ind.ku.dk/hpscource

And from: Ricardo Karam (ricardo.karam@ind.ku.dk).

September 22-23, 2016, Philosophy of Scientific Experimentation 5(PSX5), University of Belgrade, Belgrade, Serbia

More information at: <http://philsci.org/images/docs/flyers/Flyer.pdf>

September 22-24, 2016, The 7th International Conference of the European Society for the History of Science (ESHS), Prague

Details at: <http://www.7eshs2016.cz>

October 2-4, 2016, Feminist Epistemologies Methodologies Metaphysics and Science Studies (FEMMSS) University of Notre Dame, Indiana, USA.

Details at: <http://femmss.org/http://femmss.org/>

October 3-7, 2016, XII International Ontology Congress, San Sebastian, Spain

- Submissions by July 15. Details at: www.ontologia.net
- October 26-28, 2016, Conference on science and democracy, Pisa, Italy
Details at: <http://iasc.me/2016-conference/>
- October 26-28, 2016, Nature of Science Symposium, Limerick, Ireland
Details at: LimerickNOS2016@gmail.com
- October 28, 2016, Science and Religion in Education Conference, Oxford, UK
Details at: <http://www.faradayschools.com/events/conference/>
- October 28-29, 2016, 32nd Boulder Conference on the History and Philosophy of Science:
“Gravity: Its History and Philosophy”
Deadline for Submission: August 1, 2016.
Contact: Allan Franklin Allan.Franklin@colorado.edu
- November 3-5, 2016, Philosophy of Science Association, Biennial Conference, Atlanta GA.
Details at: philsci.org/psa-biennial-meeting
- November 5, 2016, Leibniz: Legacy and Impact, Manchester Metropolitan University, UK
Abstract deadline: February 28.
Details at: <http://leibniz-translations.com/leibniz2016.htm>
- November 14-15, Symposium: The Dilemmas of Upright Scientists, Israel, Tel-Aviv
University
Inquiries to: Yuliana Litov, ylitov@tauex.tau.ac.il
- November 27-27, 1st Inter-regional Research Conference on Science and Mathematics
Education: Interfacing Arab and European Science and Mathematics Education
Research, American University of Beirut, Beirut, Lebanon
Details at: <http://www.aub.edu.lb/fas/smec/Pages/1stInter-RegionalConference.aspx>
- December, 2-4, 2016, Disability and Religion: Disease, Disability & Medicine in Medieval
Europe. 10th Anniversary Annual Meeting, Swansea University, Wales.
Contact: Dr Irina Metzler at I.V.Metzler@swansea.ac.uk
- December, 14-16, 2016, Third Lisbon International Conference on Philosophy of Science:
Contemporary Issues, Portugal, Lisbon University
Details at: <http://lisbonicpos.campus.ciencias.ulisboa.pt/>
- December, 15-18, 2016, 3rd Asian HPS&ST Conference, Pusan National University, South
Korea.
Details at: <http://asiahpsst2016.bolog.com/welcome.php>
- January 5-8, 2017, 131th Annual Meeting of the American Historical Association, Denver,
Colorado, USA.
Details at: <http://historians.org/annual-meeting/future-meetings>
- January 19-20, 2017, “Interdisciplinary Futures: *Open the Social Sciences 20 years later*”,
Lisbon, Portugal.
Conference web site: <https://ifoss20.wordpress.com/>
- February 16-20, 2017, AAAS Annual Meeting, Boston, USA
Details at: <https://aaas.confex.com/aaas/2017/cfp.cgi>
- February 24 – 25, 2017, Conceptions of Experience in the German Enlightenment between
Wolff and Kant, University of Leuven
Organized by Karin de Boer (University of Leuven) and Tinca Prunea-Bretonnet
(University of Bucharest)
Submission deadline: October 15, 2016
- March 24-25, 2017, Biodiversity and its Histories, University of Cambridge
Deadline for submission: 1 September 2016
Details at: <http://philsci.org/images/docs/flyers/CFP.pdf>
- May 18-20, 2017, The 28th Baltic Conference on the History of Science, Tartu, Estonia

- Details from: tarmo.kiik@gmail.com and : www.bahps.org
- July 4-7, 2017, 14th IHPST International Biennial Conference, Ankara, Turkey.
Conference Chairs Mehmet Fatih Taşar [mftasar@gazi.edu.tr] & Gultekin Cakmakci [cakmakci@hacettepe.edu.tr]
Details at: <http://ihpst.net/>
- July 6-7, 2017, Historical Perspectives on Essentialisation and Biologisation of Gender Interdisciplinary Symposium of the Working Group of Women's and Gender History (AKHFG) at the Ruhr-Universität Bochum, Germany
Organizers: Dr. Muriel González Athenas, Dr. Falko Schnicke and Prof. Dr. Maren Lorenz, muriel.gonzalez@rub.de schnicke@ghil.ac.uk maren.lorenz@rub.de
- July 16-21, 2017, International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB) 2017 Meeting, São Paulo, Brazil.
Details at: <http://www.ishpssb.org/announcements/148-ishpssb-2017-meeting>
- July 23-29, 2017, 25th International Congress of History of Science, and Technology (ICHST), Rio de Janeiro, Brazil.
Details at: <http://www.ichst2017.sbhc.org.br/site/capa>
- August 24-26, 2017, European Workshops on Philosophical Practice, Mazuri, Poland
Details at: <http://mazury2017.pl/>
- September 7-10, 2017, 8th Tensions of Europe Conference Athens, Greece.
Details at: <http://8toe2017.phs.uoa.gr/>
- September 14-15, 2017, Joseph Banks: Science, Culture and Exploration, London
Details at: <http://www.rmg.co.uk/work-services/what-we-do/learning-partnerships/joseph-banks-science-culture-and-remaking-indo-pacific-world>