

ICOHTEC NEWSLETTER

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Newsletter of the International Committee for the History of Technology ICOHTEC

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Editorial

Dear Colleagues and Friends,

It was great pleasure to meet many of you in Brasov. A first report of our conference was just published in the Newsletter of the Transilvanian University of Brasov, which is attached to this issue. Please find first information on our next symposium in Tel Aviv (16 – 21 August 2015), too. This symposium is a joint meeting with IEEE. On our symposium the Young Scholar Prize and Maurice Daumas Prize 2014 were awarded. Thus the Newsletter gives a report of ICOHTEC's Committee for the Young Scholar Prize. Francesco Gerali invites to participate in ICOHTEC's new Book Review Corner.

ICOHTEC will elect some new members of the societies governing body. This will be done by electronic voting in autumn, again.

In Brasov we got that many members still have to pay their fees. Thank you to pay now. ICOHTEC's new pay pal account on our homepage, <http://www.icohtec.org/about-icohtec-join-us.html>, might be helpful. ICOHTEC's bank account is mentioned in the subscription form on the last page of the Newsletter.

Best wishes
Stefan Poser

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I. ICOHTEC

I.1 ICOHTEC – Symposium 2015



ICOHTEC – IEEE HISTELCON 2015

INTERNATIONAL CONFERENCE ON HISTORY OF HIGH-TECHNOLOGIES AND THEIR SOCIO-CULTURAL CONTEXTS

***16-21 August 2015
TEL AVIV UNIVERSITY***

THE THEME OF THE CONFERENCE

The conference theme "History of high-technologies and their socio-cultural contexts" is designed to explore the phenomenon of "high technologies" at various historical epochs from multiple historical and contemporary perspectives.

Recognized as a major force in the modern world, "High Technology" attracts the attention of experts from many fields. This joint conference will allow the meeting and interaction of historians and sociologists of technology and science with practicing engineers and scientists reflecting on their work and discipline.

The conference is organized by ICOHTEC, with members researching the broad range of history of technology, IEEE-HISTLECON with its focus on history of electricity, electronics and software and the Cohn Institute for History and Philosophy of Science and Ideas at Tel-Aviv University.

HISTELCON is the acronym for IEEE Region 8 history conferences. Region 8 includes IEEE members in Europe, Middle East and Africa.

Tel-Aviv and the surrounding areas, with intensive high-tech activities offer a suitable venue for presentations, discussions, meetings and site visits

We understand 'high technologies' in a broad sense, without any a-priori limit on the historical period. We will welcome proposals related to any technology regarded by its developers, users or historians as 'high technology,' or as resembling the high-tech at different eras.

The applicability and usefulness of the category "high technology" as well as historical comparison of earlier technologies to fields like electronic communication and information technology will also form subjects for discussion at the conference.

We aspire to a multifaceted picture of the developments of such technologies from various historiographical and contemporary approaches, with talks discussing subjects that include (but do not restrict to) the origins, evolution and demise of various techniques and methods, their employment, spread and appropriation, the cultural, social, military, economic, scientific, natural and technical factors that shaped these events, and the ways high technologies influenced the societies that adopted them.

The symposium is open also to talks not directly related to the main theme as long as they can be regarded to be related to the history of technology.

The following non-inclusive list suggests a few subjects of interest within the larger theme of the symposium. Submissions on other themes are welcomed

- Interactions of technologies with scientific knowledge and research
- cultural and social conditions for developing high-tech communities
- small 'start-up' companies versus established corporations
- academic and private entrepreneurship
- Role of patents, monopolies and market dominance in the development of high technologies
- Developments in and of particular fields, (e.g. wireless communication, genetic engineering)
- The inner momentum of technological and scientific developments versus the shaping of technologies for the needs of social forces.
- Age, gender and minorities roles in developing and using high-technologies
- Contributions of users and tension between them and developers of high-technologies
- Cultural and social effects of high-technologies
- Oppositions for the development and use of high-technologies: ethical, cultural, economic and social aspects.
- The role of experience and expertise in the development and employment of new technologies.
- The 'failure' and 'success' of particular technologies and companies
- The effect of regulations and standardization on the evolution of high-technologies
- Traditional versus high technologies

We will welcome submission broadly related to any of the themes described above. In particular we encourage submissions of thematic sessions and symposia (of three papers and more). Please contact our chair of the local organizing committee and treasurer, Yoel Bergmann, yoelb@protalix.com

I.2 Report of the Book Prize Committee to the Board of the International Committee for the History of Technology

by Rachel Maines, Cornell University

The committee consisted of Peter Jakab, Klaus Stauber, Francesc Barca and Rachel Maines (chair).

The prize was advertised in October 2013 in the same venues as the previous year. We received 13 entries, of which twelve were complete. The committee has chosen **Dora Vargha's** *Iron Curtain, Iron Lungs: Governing Polio in Cold War Hungary 1952-1963*, a dissertation completed at Rutgers University in 2013, under the direction of Paul Hanebrink.

Below is a summary of Peter Jakab's comments on the winning entry:

Dora Vargha's *Iron Curtain, Iron Lungs* is a very nicely presented, well-argued story of the response to polio in 1950s Hungary that not only offers useful comparison to that specific history in other nations, but deftly addresses how this story impacted and reflected communist rule in Hungary, as well as larger Cold War issues. It is a well-done example of taking an interesting and compelling focused historical story and using it to tell us something broader about the nuances of the eastern European communist period, and the Cold War in general. Further, for an American audience, who are generally familiar with the history of polio in the United States, having an English language work that looks at how polio was confronted elsewhere is illuminating.

As before, the other submissions will be summarized in the ICOHTEC newsletter. The authors' abstracts follow this report.

Rachel Maines

	Works received Author	Title	Country where book was produced	Gender	Comment
1	Åberg	<i>A Gap in the Grid: Attempts to Introduce Natural Gas in Sweden 1967-1991</i>	Sweden	F	
2	Danet	<i>Los Trasplantes de Órganos en España: Cuerpo, Emociones, e Identidad Nacional en la Prensa Contemporánea 1900-1975.</i>	Spain	F	
3	Garcia-Sancho	<i>Biology, Computing, and the History of Molecular Sequencing: From Proteins to DNA, 1945-2000</i>	Spain	M	Incomplete submission
4	Haffner	<i>The View From Above: The Science of Social Space</i>	US	F	Published
5	Heine	<i>Vom großen Graben: Eine Kulturgeschichte des Nord-Ostsee-Kanals</i>	Germany	M	
6	Helbig	<i>The Known and the Lived. Studies in Techno-Scientific 'Experience.'</i>	US	F	
7	Jecu	<i>Catalytic Space: Architecture and the Virtual</i>	Portugal	F	Published
8	Jones	<i>The Medical Trade Catalogue in Britain, 1870 to 1914</i>	UK	F	Forthcoming
9	Mercelis	<i>Leo H. Baekeland (1863-1944) as Scientific Entrepreneur: A Transatlantic Perspective on the Science-Industry Nexus</i>	Belgium	M	
10	Parolini	<i>"Making Sense of Figures": Statistics, Computing and Information Technologies in Agriculture and Biology in Britain, 1920s-1960s</i>	Italy	F	
11	Sovacool	<i>The Governance of Energy Megaprojects: Politics, Hubris and Energy Security</i>	US	M	Published
12	Vargha	<i>Iron Curtain, Iron Lungs: Governing Polio in Cold War Hungary 1952-1963</i>	US	F	
13	Wisnioski	<i>Engineers for Change: Competing Visions of Technology in 1960s America</i>	US	M	Published

Abstracts

Anna Åberg, *A Gap in the Grid: Attempts to Introduce Natural Gas in Sweden 1967-1991*.

This thesis follows the process of introducing natural gas in Sweden and the construction of a Northern European gas grid from 1967 to 1991. Natural gas is a relatively unnoticed fuel in Sweden today, but this relative anonymity stands in contrast to an extensive historical activity that has taken place behind the scenes of Swedish energy policy. The single pipeline constructed between Denmark and Sweden in the early 1980s was both preceded and followed by many other attempts to construct a larger natural gas pipeline in the region made in the last 50 years. Åberg traces these attempts while discussing the complex and messy process of constructing and managing a transnational energy infrastructure.

Åberg follows actors in Sweden and other countries in their attempts to negotiate and construct a natural gas infrastructure, and puts this process into a national as well as transnational context. The perceived risks and opportunities surrounding natural gas are examined, together with factors that have influenced the development of natural gas in a broader sense. By seeing the changing and messy natural gas projects as arenas where different actors construct and negotiate risks and opportunities, as well as contextualize the projects, Åberg shows how the natural gas sector in Sweden has evolved and taken shape.

The study shows that natural gas in Sweden has suffered from unstable actor coalitions on different levels, a difficult market situation, and a changeful political context, especially with regard to energy policy. The import status of the fuel and the consequential transnationality of the natural gas infrastructure have also made the process of constructing a pipeline more complex. However, natural gas was introduced in Sweden, showing that when a strong enough actor coalition agreed that there was enough reason to warrant a natural gas introduction and was ready to join this endeavor, a connection could be achieved. This puts into question to what degree general explanations in terms of finance and policy drive energy decisions, and makes a case for showing how these explanations are adapted into their social and historical contexts in sometimes surprising ways.

Alina Danet, *Los Trasplantes de Órganos en España: Cuerpo, Emociones, e Identidad Nacional en la Prensa Contemporánea 1900-1975*.

The purpose of this doctoral project is to explore the historical-discursive construction of the positive public opinion that has positioned Spain at the forefront in number of transplants in the world. Through the analysis of the generalist Spanish press from the start of the 20th century to the end of the Francoist period, this work explains how the argumentative and emotional strategies used by the press, contributed to communicate to the readers a homogeneous vision of the goodness of organ transplantations, and to promote wide social acceptance of this medical technology.

Since the approval of the Transplants Law of 1979, and the creation of the National Organization for Transplants (ONT) in 1989, Spain has become one of the countries with the highest rates of organ donation and transplantation in the world. The Spanish transplant model, known and exported to the world as such, works through a complex and consolidated system that depends on two key factors. On one hand, through an intra and inter-hospital organizational and technical coordination, on the other, via an entrenched social support that assures donations, and that has made our country one of the most generous organ donors in the world.

Miguel Garcia-Sancho (incomplete submission), **Biology, Computing, and the History of Molecular Sequencing from Proteins to DNA, 1945-2000**. No abstract was provided, but the Amazon.com description follows: “Sequencing is often associated with the Human Genome Project and celebrated achievements concerning the DNA molecule. However, the history of this practice comprises not only academic biology, but also the world of computer-assisted information management. The book uncovers this history, qualifying the hype and expectations around genomics.”

Jeanne Haffner, *The View From Above: The Science of Social Space*

In mid-twentieth century France, the term “social space” (*l’espace social*)—the idea that spatial form and social life are inextricably linked—emerged in a variety of social science disciplines. Taken up by the French New Left, it also came to inform the practice of urban planning. In *The View from Above*, Jeanne Haffner traces the evolution of the science of social space from the interwar period to the 1970s, illuminating in particular the role of aerial photography in this new way of conceptualizing socio-spatial relations.

As early as the 1930s, the view from above served for Marcel Griaule and other anthropologists as a means of connecting the social and the spatial. Just a few decades later, the Marxist urban sociologist Henri Lefebvre called the perspective enabled by aerial photography—a technique closely associated with the French colonial state and military—“the space of state control.” Lefebvre and others nevertheless used the notion of social space to recast the problem of massive modernist housing projects (*grands ensembles*) to encompass the modern suburb (*banlieue*) itself—a critique that has contemporary resonance in light of the *banlieue* riots of 2005 and 2007. Haffner shows how such “views” permitted new ways of conceptualizing the old problem of housing to emerge. She also points to broader issues, including the influence of the colonies on the metropole, the application of sociological expertise to the study of the built environment, and the development of a spatially oriented critique of capitalism.

Eike-Christian Heine, *Vom großen Graben: Eine Kulturgeschichte des Nord-Ostsee-Kanals*.

Die Geschichte eines Gegenstandes ist der Wandel seiner Bedeutungen in der Zeit. Dieser Satz ist methodische Richtschnur, um die Geschichte eines Stücks technischer Verkehrsinfrastruktur zu erzählen. Der Nord-Ostsee-Kanal war eines jener Projekte, die während der Industrialisierungsphase in mehreren europäischen Ländern verwirklicht wurden und einen wesentlichen Beitrag, nicht nur zur Entfaltung moderner Mobilität und großräumiger Märkte, sondern auch zum Ausbau staatlicher Macht leisteten. Diese historischen Narrative sind bekannt und die Arbeit zielt darauf ab, sie durch eine historiographisch facettenreiche, nicht lineare Herangehensweise zu ergänzen und in Frage zu stellen. In der Doppeldeutigkeit des Titels kommt dies bereits zum Ausdruck; es geht sowohl um das große Graben, also den Bau des Kanals, als auch um den großen Graben, also den Kanal als Projekt, als Objekt von Erwartungen und Befürchtungen, von Publikationen und Politik, und als folgenreichen Eingriff in eine Landschaft und einen Lebensraum von Menschen, Tieren und Pflanzen. Mit dieser Multiperspektivität ergibt auch eine Multiplizität historiographischer Konzepte von Politikgeschichte, Sozialgeschichte, Verkehrs-, Technik- und Umweltgeschichte, eine Vielfalt, die als Kulturgeschichte verstanden wird. Drei Feststellungen charakterisieren darüber hinaus die Arbeit: Infrastrukturprojekte bringen neue Verbindungen und zugleich neue Trennungen, immer wird die Frage nach dem Verhältnis Natur-Technik-Mensch aufgeworfen und mit der Geschichte eines

technischen Projektes geht es immer um die Geschichte der Vielfalt und des Wandels seiner Bedeutungen.

Daniela Helbig, *The Known and the Lived. Studies in Techno-Scientific 'Experience.'*

There are few doubts about the significance of science and technology for modern human culture and society. But as historians, we are still struggling to find appropriate descriptive terms to capture the broad processes of transformation brought about by “techno-science,” the merging of technical production and modern institutionalized science.

This dissertation argues that the term “experience” may serve as such an analytic lens in the specific historical setting of German aviation research from the 1920s through 1945. I reconstruct, on the one hand, the theorization of experience as a concept by the technical physicist Paul von Handel, influenced by the British astronomer Sir Arthur Eddington’s distinction between “scientific” and “everyday” experience. On the other hand, I use the term as a historian’s analytic concept to investigate practices in the context of flight experiments that I take to be constitutive of my historical actors’ experiences. These are recordings of experimental pilots’ cognitive judgments and bodily actions, some of them—such as in-flight note taking—continuous with older cultural technologies. On both of these levels of analysis, I explore the different resonances of “experience” as a term with a legacy as a central epistemological concept in the modern sciences, and as capturing the changing everyday reality in an increasingly technicized environment.

My analysis of the textual theorization and simultaneous practical constitution of “techno-scientific experience” serves to read in a new light the story of the pilot and physicist Melitta Schiller-Stauffenberg. Of Jewish descent, Schiller chose to work for the Luftwaffe, the German air force, until her death in 1945 on a flight searching for her husband, Count Alexander Stauffenberg, who was imprisoned after his brother’s failed attempt to assassinate Hitler. The concept and practical reality of “experience” are key to understanding the two striking choices Schiller made as intrinsically connected: the professional choice of working simultaneously as a pilot and a physicist, and the political choice of supporting the Reich’s war effort. Schiller’s story may be understood as exemplifying the fragile identity of the experiencing and the knowing self in 20th-century techno-scientific modernity.

Marta Jecu, *Catalytic Space: Architecture and the Virtual*

The overall purpose of this volume is an investigation of the post-digital in connection with architecture. Spatial and temporal conditions of the emergence of the virtual and its possible modes of expression in recent architectural artworks are being pursued. In this context the virtual is not understood as an illusion, or as an altered copy of reality, but as a fluctuating, temporary manifestation of the existing potentialities of a certain situation. In these architectural works, the experience of the virtual is made possible with analogue means, with superimposition of spatial and temporal layers and with processes of destruction and reconstruction of representation.

The book gathers interviews with artists and curators, which confer an intensive insight into the artists's manner of thinking and working and of their approach to questions of analogue technology in regard to architecture. The theoretical perspectives introduced address the virtual mainly around notions of performativity, deconstruction, conceptualism. The book concentrates on the creation of space in these works, as a result of an assimilation of the problematic of the virtual experience, which

was launched by the digital era with its juxtaposition and indistinctiveness between real and virtual. The artworks temporarily actualize a world that is real, but that has no actuality in the present, the world of potentialities of matter and of architecture in particular. In this digital age, the analogue approach practiced here, has as a consequence a work that is pluri-medial.

Claire L. Jones, *The Medical Trade Catalogue in Britain, 1870 to 1914*

This book relates the medical industry's development of the trade catalogue in Britain, between 1870 and 1914, to medical practitioners and their professional codes of ethics. Under such codes, the profession rejected practitioners' involvement in product advertising to the public as it sought to gain respectability by distancing medicine from commercial trade practices. However, this thesis demonstrates that the profession accepted medical trade catalogues as a form of advertising solely to clinical audiences, with practitioners serving both as regular readers and as contributors. Within the confines of the catalogues, practitioners could balance the conflicting demands of medical professionalism and the consumerism that was almost impossible to avoid in this period. This thesis argues that medical trade companies distinguished their catalogues from other forms of advertising not only by making the catalogue readership exclusive to medical practitioners but also by using the same physical elements as a medical reference book: an informative and educational publication the profession accepted. The medical trade catalogue therefore achieved a unique status within the profession as a hybrid form of both advertising and medical reference material.

In order to conduct this analysis, the book examines the catalogue in a framework termed the 'communication circuit.' It examines the rise of the catalogue in relation to both the medical trade and the profession in chapter one, the significance of catalogue design and production in chapters two, three and four, catalogue distribution to practitioners of high social status in chapter five and the successful reception of catalogues among the practitioner readership in chapter six. By addressing practitioners' requirements in each chapter, the book broadens the scope of economic medical history and places the practitioner at the heart of the medical market. It extends practitioners' roles as merchants exchanging their medical services for fees and argues that practitioners during this period also played an acceptable role as consumers and contributors in a thriving medical industry. In doing so, it contributes to our understanding of medicine in practice, and to reinterpretations of the everyday activities of medical practitioners during the late nineteenth and early twentieth centuries.

Joris Mercelis, *Leo H. Baekeland (1863-1944) as Scientific Entrepreneur: A Transatlantic Perspective on the Science-Industry Nexus*

Starting from the career of Belgian-American chemical innovator Leo Baekeland, this dissertation casts new light on the connections and interdependencies between science and industry. It does so by focusing on the themes of intellectual property and scientific entrepreneurship, together with related ethical issues. Moreover, in contrast to earlier studies on the development of the science-industry nexus in the United States, a transnational perspective is applied.

The first part of the dissertation focuses on Baekeland's career before the invention of Bakelite, the first synthetic plastic, in 1907. Special emphasis is placed on Baekeland's social and educational background and the (dis)advantages that it brought him during his early endeavors in the Belgian and American photographic industries (chapters 2 and 3); Baekeland's intellectual property strategy for Velox photographic paper, his main innovation from the 1890s (chapter 4); and the moral context in

which Baekeland, a practically minded innovator, became a leading figure in scientific circles (chapter 5).

The second part of the study concentrates on the interplay between Baekeland and Bakelite. An overarching theme is the relation between Baekeland's preferences and actions as a techno-scientific expert and his decisions as leader of the General Bakelite Company and its successor, the Bakelite Corporation. This aspect is first discussed in connection with transnational patent issues (chapter 6) and the development of early applications of Bakelite (chapter 7). The final two chapters deal with theoretical discussions on the molecular structures of synthetic plastics like Bakelite and the Bakelite companies' dedication to science and industrial R&D.

Guiditta Parolini, *"Making Sense of Figures": Statistics, Computing and Information Technologies in Agriculture and Biology in Britain, 1920s-1960s*

Throughout the twentieth century statistical methods have increasingly become part of experimental research. In particular, statistics has made quantification processes meaningful in the soft sciences, which had traditionally relied on activities such as collecting and describing diversity rather than timing variation.

The thesis explores this change in relation to agriculture and biology, focusing on analysis of variance and experimental design, the statistical methods developed by the mathematician and geneticist Ronald Aylmer Fisher during the 1920s. The role that Fisher's methods acquired as tools of scientific research, side by side with the laboratory equipment and the field practices adopted by research workers, is here investigated bottom-up, beginning with the computing instruments and the information technologies that were the tools of the trade for statisticians.

Four case studies show under several perspectives the interaction of statistics, computing and information technologies, giving on the one hand an overview of the main tools – mechanical calculators, statistical tables, punched and index cards, standardised forms, digital computers – adopted in the period, and on the other pointing out how these tools complemented each other and were instrumental for the development and dissemination of analysis of variance and experimental design. The period considered is the half-century from the early 1920s to the late 1960s, the institutions investigated are Rothamsted Experimental Station and the Galton Laboratory, and the statisticians examined are Ronald Fisher and Frank Yates.

Benjamin Sovacool and Christopher J. Cooper, *The Governance of Energy Megaprojects: Politics, Hubris and Energy Security*

Based on extensive original research, this book explores the technical, social, political, and economic dimensions of four Asian energy megaprojects: a regional natural gas pipeline network in Southeast Asia, a series of hydroelectric dams on the island of Borneo, an oil pipeline linking Europe with the Caspian Sea, and a very large solar energy array in the Gobi desert.

This book investigates why energy megaprojects fail to deliver their promised benefits. It offers the first comprehensive assessment of the complicated dynamics driving - and constraining - megaprojects initiated in the rapid scramble for energy resources and efforts to improve energy security. The authors approach the assessment of megaprojects from a socio-technical angle, emphasizing broad issues of political leadership, regulation, financing, interest group opposition and environmental impact, as well as conventional technological factors such as engineering design and project management.

Dora Vargha, *Iron Curtain, Iron Lungs: Governing Polio in Cold War Hungary 1952-1963*

Iron Curtain, Iron Lungs uses the series of polio epidemics in communist Hungary to study a global public health emergency in the midst of an international political crisis: the Cold War. Based on extensive, thus far unexplored archival material, medical and popular literature, newspapers, audiovisual sources, memoirs and oral history interviews, the dissertation argues that due to the particularities of polio, unique spaces of cooperation opened between antagonistic sides while Cold War concepts simultaneously influenced policies and practices of disease prevention and treatment. Polio became an issue that reached over Cold War divisions, due to four attributes of the disease: the new phenomenon of epidemic polio in the 20th century; the importance of children as the main age group of the disease; the debilitating effects of the virus; and that polio was a global disease. The dissertation analyses the history of polio in Hungary at multiple registers. On an international level, it asks how Cold War divisions can be re-evaluated when viewed through the lens of a disease that disregarded borders and ideologies. On a national level, the dissertation investigates how post-war societies and nascent political systems dealt with an epidemic that worked against their modernist projects. On an individual level, it raises questions about definitions of treatment, authority of care and investigates the boundary between professional and lay knowledge.

Iron Curtain, Iron Lungs presents a new approach both to Cold War history and to the history of medicine. The dissertation shifts attention from the two superpowers to an Eastern European state and by doing so, throws new light on Cold War interactions and the effect of international politics on personal experiences. The unique geopolitical situation of Hungary on the boundary of the Iron Curtain and the construction of a new communist regime makes the country the ideal ground to understand the influence of Cold War in forming global health responses to epidemic crises. With vaccine first arriving from the West, followed by a new serum from the East, the Hungarian story highlights issues of international politics, experimentation and standardization in epidemic prevention. Furthermore, a focus on Hungary allows linking the intimate world of families with national and international agendas through the care for disabled children with polio.

Matthew Wisnioski, *Engineers for Change: Competing Visions of Technology in 1960s America*

In the late 1960s an eclectic group of engineers joined the antiwar and civil rights activists of the time in agitating for change. The engineers were fighting to remake their profession, challenging their fellow engineers to embrace a more humane vision of technology. In *Engineers for Change*, Matthew Wisnioski offers an account of this conflict within engineering, linking it to deep-seated assumptions about technology and American life.

The postwar period in America saw a near-utopian belief in technology's beneficence. Beginning in the mid-1960s, however, society--influenced by the antitechnology writings of such thinkers as Jacques Ellul and Lewis Mumford--began to view technology in a more negative light. Engineers themselves were seen as conformist organization men propping up the military-industrial complex. A dissident minority of engineers offered critiques of their profession that appropriated concepts from technology's critics. These dissidents were criticized in turn by conservatives who regarded them as countercultural Luddites. And yet, as Wisnioski shows, the radical minority spurred the professional elite to promote a new understanding of technology as a rapidly accelerating force that our institutions are ill-equipped to handle. The negative consequences of technology spring from its very nature--and not from engineering's failures.

“Sociotechnologists” were recruited to help society adjust to its technology. Wisnioski argues that in responding to the challenges posed by critics within their profession, engineers in the 1960s helped shape our dominant contemporary understanding of technological change as the driver of history.

I.3 ICOHTEC’s New Book Corner

Dear Colleagues and Friends,

The International Committee on the History of Technology (ICOHTEC) is working to open the new online project, a *Book Review Corner*. Aim of the project is to create a permanent page on the website www.icohtec.org in which to publish the book reviews submitted by contributors. ICOHTEC primarily is looking for the participation of graduate students enrolled in Master’s and PhD courses, as well as of young scholars at the beginning of their career.

For some years the ICOHTEC website has been a place where visitors find useful and updated information on prizes, scholarships, and conferences regarding history of technology, and a digital archive the organisation’s official monthly newsletter. ICOHTEC members have also access to a members-only area where they can download back issues of the journal *ICON*.

[Www.icohtec.org](http://www.icohtec.org) has become a website of interest to a wide international audience of scholars working on the history of science and technology. Therefore, it can be considered a promising virtual space for young historians who are looking for wider visibility in the academic community.

The Book Review Corner seeks reviews of books (new and old) that have been overlooked in print reviews and books considered classics in the history of science, technology, medicine and the environment. It mainly seeks reviews in English of books published in other languages, so as to help widen the audience of non-English language histories of technology. We leave to contributors the freedom to choose books that they trust it may fit in those categories listed above.

Reviews must be typed in font Time New Roman 12 and double spaced. The text should be limited to 700 words, and formatted following this pattern:

Christof Mauch and Thomas Zeller, eds. Rivers in History: Perspective on Waterways in Europe and North America. Pittsburgh: Pittsburgh University Press, 2008. Pp. 256. \$27.95.

Rivers in History, edited by Christof Mauch and Thomas Zeller, offers different perspectives about the relation between rivers and the human communities built along them. The volume’s nine essays provide ample geographical context, with contributors examining the construction of fluvial societies in the U.S. and Europe, from the eighteenth century to the very recent past. With the exception of Dorothy Zeisler-Vralsted and Charles E. Closmann, who each compare rivers....

Joe Doe, Your University, Your Country.

The Book Review Project will be administrated by Francesco Gerali, the Contents Manager, in collaboration with James Williams, the Editor-in-Chief of *ICON*. The authors should forward reviews

as a Word attachment to francesco.gerali@gmail.com, with 'Book Review Corner Proposal' and the author's name in capital letters in the subject line. An email of acknowledgement will be sent within two days of receipt. Once peer reviewed and edited, the author will receive a copy with suggested corrections and modifications. Once the edited review is mutually approved of by the author and editor, the review will be published in the Book Review Corner.

ICOHTEC is an association that fosters the involvement of young scholars in publications and conference participation. Therefore, we sincerely hope that this project will receive significant participation by graduate students and young academics at the beginning of their careers.

We ask to our older members and friends of ICOHTEC to invite their students to collaborate with ICOHTEC by sending their book review proposals.

Cordially

Francesco Gerali, Post-Doctoral Scholar, National Autonomous University of Mexico,
francesco.gerali@gmail.com

II. Impulse Paper on Technological Sciences of the National Academy of Technology and Engineering, acatech, in Berlin

The Deutsche Akademie für Technik / National Academy of Technology and Engineering, acatech, in Berlin published an impulse paper on technological sciences. The paper discusses questions as: What are the technological sciences? What are their characteristics and what sets them apart from other scientific disciplines? How did the technological sciences become established and what role do technology and the technological sciences play in our society? In doing so the institution wants to encourage discussion of the technological sciences as a knowledge system.

Please find the paper for download:

Technological Sciences. Discovery – Design – Responsibility. acatech impuls paper,
<http://www.acatech.de/de/publikationen/impuls/acatech-impuls/detail/artikel/technological-science-discovery-design-responsibility.html>

III. Conference Announcements

18 – 21 September 2014

Spinoffs of Mobility: Technology, Risk & Innovation. 12th Annual Conference of the International Association for the History of Transport, Traffic and Mobility (T²M)

Drexel University, Philadelphia

Please find the program on <http://t2m.org/conferences/2014-philadelphia-spinoffsof-mobility/program-philadelphia/>

20 September 2014

Acoustic Communication and Soundscape Design

Green College, University of British Columbia, Vancouver

Please find the program on: http://www.greencollege.ubc.ca/whats_on/index/events1070.php

Please contact:

Hans-Joachim Braun, Helmut Schmidt University, Hamburg and University of British Columbia,
hjbraun@hsu-hh.de

Barry Truax, Simon Fraser University, Vancouver, truax@sfu.ca

24 – 26 October 2014

8th European Industrial Heritage Weekend

Lyon et Vaulx-en-Velin (France)

The themes of this year's meeting are:

- * The industrial heritage: a holistic heritage
- * 2015, the European Industrial and Technical Heritage Year

Please visit: <http://www.e-faith.org/home/?q=content/2014>

14 – 15 November 2014

Transformations of the Ecology Movement. From the 'Limits to Growth' (1972) to the Rio Conference (1992)

Berlin

Transformations of the Ecology Movement. From the 'Limits to Growth' (1972) to the Rio Conference (1992) is a conference organised by Jan-Henrik Meyer (Aarhus) and Christoph Becker-Schaum and the Green Memory Archive (*Archiv Grünes Gedächtnis*) of the Green Political Foundation (Heinrich-Böll-Stiftung), to be held at the Green Memory Archive in Berlin.

The Conference seeks to take a fresh perspective on continuities and change within the Environmental Movement between what has been declared the "Environmental Revolution" of the early 1970s and the rise of the sustainability and climate change agendas of the 1990s that we associate with the Rio Conference of 1992. While the German experience will be the starting point of the inquiry, transnational and comparative contributions are particularly welcome.

Please find more information on <http://www.boell.de/en/2014/04/29/transformations-ecology-movement-limits-growth-rio-conference>

31 October – 1 November 2014

Altes Konstruktionswissen, Alte Konstruktionen: Rekonstruieren der Produkte? Workshop der Gesellschaft für Bautechnikgeschichte / Traditional Knowledge about Building Construction, Ancient Constructions: how to reconstruct old buildings? Workshop of the (German) Society of Construction History

Dresden

Please find the program on <http://gesellschaft.bautechnikgeschichte.org/dresden-2014/>

Please contact the organizers by info@bautechnikgeschichte.org

23 – 25 April 2015

Alltag und Veränderung. Praktiken des Bauens und Konstruierens. Zweite Jahrestagung der Gesellschaft für Bautechnikgeschichte

Institut für Denkmalpflege und Bauforschung, Zürich

CFP – Deadline **15 September 2014**

Please find more information and the call for papers on

<http://gesellschaft.bautechnikgeschichte.org/jahrestagung-2015/>

Please contact Christoph Rauhut, Institut für Denkmalpflege und Bauforschung, ETH Zürich, rauhutc@ethz.ch

30 June – 3 July 2015

Greening History: Studying the Environment across Disciplines, Past, Present and Future. ESEH's 8th biennial conference

Versailles, France

CFP – Deadline **1 October 2014**

The host institution is the University of Versailles-Saint-Quentin-en-Yvelines (UVSQ), a green university which combines historical sciences and environmental sciences at a very high level, located only 30 minutes by train from the city center of Paris. The Local Organising Committee is led by Gregory Quenet of UVSQ and the Programme Committee is chaired by Ellen Arnold of Ohio Wesleyan University.

Please find the call for papers on: <http://eseh.org/event/upcoming-conference/>

All questions about proposals should be sent to [conference \[at\] eseh.org](mailto:conference[at]eseh.org).

3 – 6 September 2015

**Technology – Nature – Environment. 7th Tensions of Europe Conference
Stockholm**

One way of understanding the environment is to think of it as nature appropriated by humanity, an appropriation through and by technological, scientific and representational means. We use the resources of the earth to sustain our lives at scales spanning farming to space travel. Different kinds of technology leave various traces behind in altered environments. Changes at global historical and geological scales are accumulated as heritage and geophysical strata respectively. The intersection of technology and the environment can also be understood culturally or socially. We use technology in our understanding and appreciation of nature (religious, poetic or physical), in monitoring it, assessing it, representing it. Further, technology can be a lens and a tool in shaping our relation to the environment. In analogy with the term *environing* (Sörlin & Warde, *Nature's End*, 2009) understood as the processes through which humans and societies transform nature, we could think of *environing technologies* which are used in these processes and which can be identified on several timescales and on multiple spatial levels. Environing technologies not only assist in shaping and transforming nature, they also assist us to perceive, observe, record, and communicate natures and environments, including imaginative representations of techno-natures in art, literature, and film.

The conference also invites scholarship under the general themes of the Tensions of Europe network, such as for example trans-border flows, common resources, conflicting interests, hidden integration and cultural practices.

We not only invite traditional panel-sessions with a number of papers and a commentator, but also strongly encourage different formats and new ideas. As long as quality can be demonstrated, the programme committee will not prioritize between formats. By quality we mean suggestions that promise constructive, stimulating and engaging discussion.

A first formal call for papers will be circulated in the fall of 2014.

10 – 12 September 2015

**Landscapes of the Great War: imagination, representation, experience. 8th International
Conference of the International Society for First World War Studies**

Italian-German Historical Institute – FBK in Trento and the University of Padua
CFP - Deadline **30 November 2014**

The 8th International Conference of the International Society for First World War Studies will explore the theme of “Landscapes of War”. In recent years scholars have sought to move towards a global history of the Great War, focusing on the geographical scope and diversity of the conflict, from Flanders to the Caucasus, the Alps to East Africa, from the Mediterranean to the oceans. This conference will focus on the physical spaces in which the war took place across the many different theatres of war, and the ways in which these diverse landscapes were encountered, altered, imagined, experienced, represented and remembered. How did the physical characteristics of the

various battlegrounds impact on military strategies and operations? How did men, women and children interpret the landscape? How did generals, soldiers, prisoners, workers, farmers, reporters, artists, architects, tourists and others interact with the landscapes of the war? How does the study of the landscape enhance our understanding of the military, political, economic, social and cultural history of the conflict?

The conference will take place over three days, with the first and third days devoted to academic presentations and discussions. In order to give participants a direct experience of one highly significant landscape, the second day will consist of an organised visit to the Asiago Plateau, where the keynote address will be held.

In line with the traditions of the International Society for First World War Studies, the conference aims to focus on new and innovative research, bringing together graduate students and post-doctoral scholars with established academics. The Society aims to foster dialogue between historians of all methodological approaches and geographical areas.

Themes include:

- the military and operational impact of the terrain
- diverse landscapes of war: from the mountains to the desert, the plains to the sea
- the modification, pollution and destruction of landscapes by human interventions
- cityscapes and urban landscapes during and after the war
- prisoners of war and landscapes
- landscapes of war imagined, described and depicted
- the study of landscape: cartography, geography and the natural sciences
- landscapes of war behind the lines: transit and rest areas, training camps
- landscapes after battle: ruins, traces, memories and reconstruction
- battlefield tourism and cultural heritage
- landscapes and nation: real or imagined relationships between territory and nationality
- the productive landscape: agriculture and wartime production, distribution of resources, deprivation and conflicts over food.

Please visit: <http://www.firstworldwarstudies.org/conferences.php?s=italy-2015>

Submission Email Address: landscapesofwar@gmail.com

IV. Scholarships

Scholar in Residence Program, Deutsche Museum München

Deadline for application **17 October 2013**

The Deutsche Museum München / German Museum (of Technology) in Munich announces a new scholar-in-residence-programm.

Please find more information on: <http://www.deutsches-museum.de/de/forschung/scholar-in-residence/>

V. Recently Published Books

Braun, Hans-Joachim (ed.): *Technische Netzwerke und Energiespeicher*. = Schriftenreihe der Georg – Agricola – Gesellschaft, vol. 36, Freiberg 2014.

This volume includes eight revised papers presented at the annual meetings of the Georg – Agricola – Society for the Advancement of the History of Science and Technology in Berlin 2012 and in Mannheim 2013. The topics discussed range from Roman aqueducts in Jordan and Syria to early modern water storage installations for mining, accumulators and other storage devices for electricity in the 19th and 20th centuries and to attempts to include Berlin into the European electricity grid during the Cold War.

Vera, Marta (coord.): *Mirar lo propio con ojos propios*. Procedures of the lectures around Riópar Brass Factories, Friends of the Royal Factories of Riópar association, Spain.

The work addresses a historical milestone: the first Zinc and Brass factories created in Spain (1773), pioneer in metallurgical experimentation and hydraulic devices applied to mass production. They gave birth to the current village of Riópar, closing definitely in 1996: 233 years of entrepreneurial History. The book collects an interesting experience of citizen participation in management of Industrial Heritage. 21 authors (metallurgical workers, old directors, teachers and professors, historians, architects, engineers, cooks ...) vividly reflect how past sneaks into present, tracing its history from different perspectives. The outcome is a multifaceted publication which examines in a rigorous and enjoyable way this singular industrial activity, adding, to the base of technical history, anthropological, sociological, artistic and environmental approaches.

Request home delivery is possible through fabricasderiopar@gmail.com. The acquisition brings to donate 10 Euro, an amount that will serve to defray the costs and continuity of the association's activities.

VI. Join ICOHTEC

An ICOHTEC membership makes you a member of the scholarly network of the UNESCO-based International Committee for the History of Technology, ICOHTEC.

The membership includes:

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- ICOHTEC's electronic Newsletter (published monthly – available via mailing list and on the homepage)

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