

SHOT Annual Meeting

November 3-6, 2005
Hyatt Regency Minneapolis
Minneapolis, Minnesota, USA

Program Committee, SHOT 2005:

Dan Holbrook (chair)
Jennifer Light
Ruth Oldenziel

Local Arrangements Committee, SHOT 2005:

David Rhees

Special thanks to:

- The Smithsonian's Lemelson Center for the Study of Invention and Innovation
- The University of Minnesota, Office of the Dean, Institute of Technology; and the University of Minnesota, Program in History of Science and Technology
- The University of Chicago Press
- Iowa State University, the ISU College of Liberal Arts and Sciences, the ISU Department of History, and the ISU Program in History of Technology and Science (HOTS)
- Jay Malone and the staff of the History of Science Society
- David Rhees and the staff of the Bakken Library and Museum
- The Science Museum of Minnesota and its staff

THE SOCIETY FOR THE HISTORY OF TECHNOLOGY

President - Rosalind Williams

Vice President/President Elect - Steve Usselman

Secretary - Amy Sue Bix

Treasurer - Richard Hirsh

Editor of *Technology and Culture* - John Staudenmaier, S.J.

The Society for the History of Technology (SHOT) was formed in 1958 to encourage the study of the development of technology and its relations with society and culture. As an interdisciplinary organization, SHOT is dedicated not only to the history of technological devices and processes, but also to the relationships of technology with politics, economics, labor, social change, business, the environment, public policy, science, and the arts and humanities. SHOT includes almost 1500 individual members and 1000 institutional subscribers. In addition to professional historians and museum curators, SHOT members include practicing scientists and engineers, anthropologists, librarians, political scientists, and economists. An international society, SHOT meets annually in North America or Europe and also jointly sponsors smaller conferences focused on more specialized topics of common interest with other scholarly societies and organizations. *Technology and Culture*, a quarterly journal, is published by The Johns Hopkins University Press for the Society for the History of Technology. SHOT's *Current Bibliography in the History of Technology* is also published as part of *Technology and Culture*. In addition, SHOT publishes a quarterly newsletter, and, jointly with the American Historical Association, a booklet series, *Historical Perspectives on Technology, Society, and Culture*. For further information about the Society, please contact the secretary at: shot@jastate.edu or visit our website, www.shot.jhu.edu

To the SHOT 2005 Annual Meeting Participants:

We are delighted to welcome you to this exciting co-located meeting of the Society for the History of Technology and the History of Science Society. We want to thank you for joining us, and we hope that you will have a rewarding time, both intellectually and socially.

Credit for the strength of this meeting goes in very large part to the efforts of our 2005 Program Committee, which has done a terrific job. SHOT wants to extend its deepest thanks to chair Dan Holbrook, along with Jennifer Light and Ruth Oldenziel, for the many hours dedicated to preparing this year's program.

We also owe the deepest gratitude to the History of Science Society and its staff and officers, for their kind help in ensuring the success of this co-located meeting. HSS Executive Director Jay Malone and office manager Bif Sheffield, along with HSS staffers Michal Meyer, Allison Riggs, and others, have been of the greatest assistance in preparing this printed program, arranging the book exhibit, and helping handle hundreds of other details. It's a joy to work with them, and they deserve many thanks for the development of this co-located meeting. Many thanks, as well, to David Rhee of the Bakken Library and Museum, who helped handle local arrangements for SHOT. Jole Shackelford of the University of Minnesota also generously shared with us the information he prepared for HSS on visiting Minneapolis.

Special thanks to the Smithsonian's Lemelson Center for the Study of Invention and Innovation for its generous sponsorship of our SHOT Friday night reception at the Science Museum of Minnesota, in connection with the Lemelson national traveling exhibit "Invention at Play." Please see our insert in your program folder for our acknowledgements of additional supporters.

Many thanks to our SHOT committee chairs and committee members, Executive Council, and other officers, who have dedicated many hours of effort to SHOT's well-being over this last year. And last, but by no means least, special thanks to our SHOT Administrative Assistant Cynthia Bennet. She has worked long hours (not to mention working miracles), arranging everything from food and buses to audio-visual equipment and rooms. Please join me in thanking Cynthia for her fabulous job. Thanks also to Greg Bennet, to Wade Franck, to Alan Marcus, and to other faculty, staff, and students at Iowa State University for their support and assistance with SHOT.

Amy Sue Bix
SHOT Secretary

SHOT Meeting Overview:

SHOT registration and information desk:

Thursday: 3:00 p.m. – 7:30 p.m. (Nicollet Ballroom Promenade)

Friday: 8:00 a.m. – 5:00 p.m. (Nicollet Ballroom Promenade)

Saturday: 8:00 a.m. – 5:00 p.m. (Nicollet Ballroom Promenade)

Sunday: 8:00 a.m. – noon (Nicollet Ballroom Promenade)

Book exhibit:

Friday: 8:00 a.m. – 5:00 p.m. (Exhibit Hall)

Saturday: 8:00 a.m. – 5:00 p.m. (Exhibit Hall)

Sunday: 8:00 a.m. – noon (Exhibit Hall)

Thursday SHOT tours:

Bakken Library and Museum tour: 1:30 p.m. – 5:00 p.m. Admission by ticket only

Mill City Museum tour: 1:30 p.m. – 5:00 p.m. Admission by ticket only

Trolley transportation for both tours will depart from the Hyatt Regency lobby entrance.

SHOT group events, banquets and receptions:

Thursday:

5:30 p.m. - 7:30 p.m.: joint SHOT and HSS opening plenary (Nicollet Ballroom)

7:30 p.m. - 9:00 p.m.: joint SHOT and HSS opening reception (cash bar)
(Exhibit Hall)

Friday:

7:00 p.m. - 10:00 p.m.: SHOT reception, Science Museum of Minnesota. Buses will depart from the Hyatt Regency lobby.

Saturday:

7:00 p.m. - 10:00 p.m.: SHOT Awards Banquet, admission by ticket only
(Regency Room)

SHOT Society business:

Thursday:

8:00 a.m. - 5:00 p.m.: SHOT Executive Council Meeting (open to all members)
(Lake Nokomis Room)

Saturday:

5:45 p.m. - 6:30 p.m.: SHOT Business Meeting (open to all members) (Lake Nokomis Room)

SHOT Special Interest Group (SIG) meetings and other groups:

Friday:

7:30 a.m. - 8:45 a.m.: Albatrosses breakfast (Lake Calhoun Room)

7:30 a.m. - 8:45 a.m.: Tensions of Europe breakfast (Cedar Lake Room)

7:30 a.m. - 8:45 a.m.: new SIG on Strengthening Relations Between SHOT & the Engineering Community breakfast (Lake Minnetonka Room)

7:30 a.m. - 8:45 a.m.: *Technology and Culture* Editor's breakfast (Lake Nokomis Room)

12:30 p.m. - 1:30 p.m.: Military Technology SIG lunch (outside the hotel - Brit's Pub, 1100 Nicollet Mall)

12:30 p.m. - 1:30 p.m.: WITH (Women in Technological History) lunch (Lake Superior A Room)

Saturday:

7:30 a.m. - 8:45 a.m.: Envirotech breakfast (Lake Calhoun Room)

7:30 a.m. - 8:45 a.m.: Jovians/Mercurians breakfast (Lake Minnetonka Room)

7:30 a.m. - 8:45 a.m.: Graduate Students and Current International Scholars breakfast (Lake Superior A Room)

12:00 p.m. - 1:00 p.m.: Computers, Information, and Society lunch (Lake Calhoun Room)

12:00 p.m. - 1:00 p.m.: TEMSIG (Technology Museums) lunch (meet in hotel lobby)

SHOT Social Events:

Friday:

10:00 p.m. – midnight: SHOT Hospitality Suite (Regency Room)

Saturday:

10:00 p.m. – midnight: SHOT/HSS/Grad Students and Everyone Else Co-located Party (Mirage Room)

SHOT Daily Summary - Thursday, November 3:

SHOT registration and information desk - 3:00 p.m. – 7:30 p.m. (Nicollet Ballroom Promenade)

SHOT Executive Council Meeting - 8:00 a.m. – 5:00 p.m. (open to all members) (Lake Nokomis Room)

SHOT tours - 1:30 p.m. – 5:00 p.m.:

- Bakken Library and Museum tour (Admission by ticket only)
 - Mill City Museum tour (Admission by ticket only)
- Trolley transportation for both tours will depart from the Hyatt Regency lobby entrance

Joint SHOT and HSS opening plenary - 5:30 p.m. – 7:30 p.m. (Nicollet Ballroom)
“The Public Presentation of Science and Technology”

Joint SHOT and HSS opening reception - 7:30 p.m. – 9:00 p.m. (cash bar) (Exhibit Hall)

SHOT Daily Summary - Friday, November 4:

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SHOT registration and information desk - 8:00 a.m. – 5:00 p.m. (Nicollet Ballroom Promenade)

Book exhibit - 8:00 a.m. – 5:00 p.m. (Exhibit Hall)

Breakfast meetings - 7:30 - 8:45 a.m.:

- Albatrosses breakfast (Lake Calhoun Room)
- Tensions of Europe breakfast (Cedar Lake Room)
- new SIG on Strengthening Relations Between SHOT & the Engineering Community breakfast (Lake Minnetonka Room)
- *Technology and Culture* Editor’s breakfast (Lake Nokomis Room)

SHOT early morning paper sessions - 9:00 - 10:30 a.m.:

1. Roundtable: Philosophy of Technology: Forty Years and Counting (Nicollet D3)
2. Serve Yourself: Reconfiguring the Retail Experience, 1900-1980 (Nicollet A1)
3. Resourceful Science and Mineral Resources: The Geology and Technology of American Mining (Nicollet D2)
4. Global Circulation of Knowledge in the Solid-State Electronics Industry

(Nicollet A3)

5. The Creation of Automobile-Oriented Landscapes in the 20th Century

(Nicollet BC)

6. Technology's Middle Ground: Exploring Class, Skill and Technological Change through the Repair of Everyday Things (Nicollet D1)

SHOT late morning paper sessions - 10:45 am - 12:15 p.m.:

7. Roundtable: At the Intersection of Environmental History and the History of Technology: Themes, Methods, and Directions (Nicollet D2)

8. Use and Usability in Personal Computing: International Perspectives (Nicollet D3)

9. Works in Progress: Political Tools of Unity and Division (Nicollet D1)

10. The Logic of Non-Adopters: Multinational Perspectives on High- and Low-Tech (Nicollet A1)

11. Designing Technologies (Nicollet A3)

12. System, Infrastructure, Network: Metaphor as Method in the History of Technology (Nicollet BC)

Lunch meetings – 12:30 p.m. – 1:30 p.m.:

- Military Technology SIG lunch (outside the hotel - Brit's Pub, 1100 Nicollet Mall)
- WITH (Women in Technological History) lunch (Lake Superior A Room)

SHOT early afternoon paper sessions - 1:45-3:45 pm:

13. The Edible Industrial: Food as a Technology in the Twentieth Century (Nicollet A3)

14. Materials Matter: The Role of Materials in Technoscience (Nicollet D1)

15. Worlds' Fairs: Amusing Nations, Securing Nations (Nicollet A1)

16. Challenging SCOT (Nicollet D2)

17. Touch and Control: Human-Machine Interfaces as Co(a)gents in 20th-Century Consumption Technologies (Nicollet D3)

18. Intellectual Cultures and the Meaning of Technology (Nicollet BC)

SHOT late afternoon paper sessions - 4:00-6:00 pm:

19. Politics of Beverage Production: Milk, Beer, Rum (Nicollet D2)

20. Roundtable: The Central Role of Peripheral Histories of Science and Technology (Nicollet A3)

21. Stories of Magic and Momentum: Myths in the History of Science, Technology, and the Environment (Nicollet D1)

22. Technology Goes Public: Australia, Norway, and the U.S. (Nicollet D3)

23. Questionable Ethics: Concentration Camps, Army Labs, and the Environment as Testing Grounds (Nicollet BC)

24. Dis/Embodying Labor (Nicollet A1)

SHOT reception, Science Museum of Minnesota - 7:00 p.m. - 10:00 p.m.:

Buses will depart from the Hyatt Regency lobby.

SHOT Hospitality Suite: 10:00 p.m. – midnight (Regency Room)

SHOT Daily Summary - Saturday, November 5:

SHOT registration and information desk - 8:00 a.m. – 5:00 p.m. (Nicollet Ballroom Promenade)

Book exhibit - 8:00 a.m. – 5:00 p.m. (Exhibit Hall)

Breakfast meetings - 7:30 - 8:45 a.m.:

- Envirotech breakfast (Lake Calhoun Room)
- Jovians/Mercurians breakfast (Lake Minnetonka Room)
- Graduate Students and Current International Scholars breakfast (Lake Superior A Room)

SHOT Special Sessions - 9:00 - 10:00 am:

- A. The HoT Job Market: Professional Prospects for Graduate Students (Nicollet D1)
- B. Reconfiguring the History Survey: How the History of Technology Can Make a Difference (Nicollet A1)
- C. Anywhere but School: Historians of Technology in Nonacademic Settings (Nicollet A3)
- D. Looking Forward to SHOT's Fiftieth Anniversary: A Discussion of Planning for 2007-2008 (Nicollet D2)
- E. Academic Publishing: A Brief Tutorial – The Nuts and Bolts of Academic Publishing (Nicollet BC)

SHOT late morning paper sessions - 10:15 - 11:45 am:

25. Artful Engineering (Nicollet A3)
26. Technology and the State in Latin America (Nicollet D1)
27. Provincializing Western Definitions of Technology (Nicollet D2)
28. Engineering New Nations: American Engineers and Asia after 1945 (Nicollet D3)
29. Roundtable: Ethnic Studies and the History of Technology (Nicollet BC)
30. Engaging Engineers in the Classroom and Beyond (Nicollet A1)

Lunch meetings – 12:00 - 1:00 p.m.:

- Computers, Information, and Society lunch (Lake Calhoun Room)
- TEMSIG (Technology Museums) lunch (meet in hotel lobby)

SHOT early afternoon paper sessions -1:15 - 3:15 pm:

31. Controlling Birth: The Technologies of Planning Parenthood (Nicollet D2)
32. Everyday Technology in Transition: Subways, Bicycles and Railroads, 1870-1960 (Nicollet A1)
33. "The Far Away Near By": Remote Sensing (Nicollet D1)
34. The Politics of Technological Internationalism (Nicollet A3)
35. Nota Bene: SHOT Meets Theory (Nicollet D3)
36. No Nature: Negotiating the Intersections of the Histories of Science and Technology (Nicollet BC)

SHOT late afternoon paper sessions - 3:30 - 5:30:

37. Technology and Privatization (Nicollet A3)
38. Radio Users (Nicollet D1)
39. Yankee Go Home, Yankee Come In: Japanese Air Conditioning, Brazilian Cars, Indian Computing 1945-1985 (Nicollet A1)
40. Engineering Failure (Nicollet D2)
41. Historiographical Tools: How Machines Help Humans Shape Meaning (Nicollet D3)
42. Producing Food and Consumers: Historical Perspectives on the Food Industry (Nicollet BC)

SHOT Business Meeting - 5:45 p.m. - 6:30 p.m. (open to all members) (Lake Nokomis Room)

SHOT Awards Banquet - 7:00 p.m. - 10:00 p.m. (admission by ticket only) (Regency Room)

SHOT/HSS/Grad Students and Everyone Else Co-located Party: 10:00 p.m. – midnight (Mirage Room)

SHOT Daily Summary - Sunday, November 6:

SHOT registration and information desk - 8:00 a.m. – noon (Nicollet Ballroom Promenade)

Book exhibit - 8:00 a.m. – noon (Exhibit Hall)

SHOT morning paper sessions - 9:15 – 11:15 am:

- 43. Capturing the Invisible: Sniffing, Sending, Snoring (Nicollet D2)
- 44. Path Dependencies? (Nicollet D3)
- 45. Users as Agents (Nicollet A1)
- 46. Technology and Representation in Airpower (Nicollet BC)
- 47. Making Room for Technology (Nicollet D1)
- 48. Creating the Scientific Persona: Identity, Media & Politics (Nicollet A3)

THURSDAY NOVEMBER 3, 2005

8:00 a.m. – 5:00 p.m.

SHOT Executive Council Meeting (open to all members) (Lake Nokomis Room)

1:30 p.m. – 5:00 p.m.

SHOT tours:

- Bakken Library and Museum tour (Admission by ticket only)
- Mill City Museum tour (Admission by ticket only)
Trolley transportation for both tours will depart from the Hyatt Regency lobby entrance

3:00 p.m. – 7:30 p.m.

SHOT registration and information desk (Nicollet Ballroom Promenade)

5:30 p.m. - 7:30 p.m.

SHOT-HSS Opening Plenary Session – “The Public Presentation of Science and Technology” (Nicollet Ballroom)

Roger Launius, National Air and Space Museum, USA, "Serving Society/
Surviving Scorn? Presenting Science and Technology in a National Museum"

Svante Lindqvist, Nobel Museum, Stockholm, Sweden

Katherine Pandora, University of Oklahoma, USA, "'What have we to do with Mr. Everyman, or he with us?' Reflections on Professionalism, the Public, and the Digital Age"

7:30 p.m. - 9:00 p.m.

SHOT-HSS Opening Reception (cash bar) (Exhibit Hall)

FRIDAY NOVEMBER 4, 2005

7:30 a.m. – 8:45 a.m.

Technology and Culture Editor's Breakfast (Lake Nokomis Room)

SIG Meetings:

Albatrosses breakfast (Lake Calhoun Room)

Tensions of Europe breakfast (Cedar Lake Room)

New SIG on Strengthening Relations Between SHOT and the Engineering Community
breakfast (Lake Minnetonka Room)

8:00 a.m. – 5:00 p.m.

SHOT registration and information desk (Nicollet Ballroom Promenade)

8:00 a.m. – 5:00 p.m.

Book exhibit (Exhibit Hall)

FRIDAY NOVEMBER 4

9:00 a.m. – 10:30 a.m.

1. Roundtable: Philosophy of Technology: Forty Years and Counting

Room: Nicollet D3

Organizer: Carl Mitcham, Colorado School of Mines, USA

Chair: Carl Mitcham, Colorado School of Mines, USA

Comment: Audience

Topi Heikkerö, University of Helsinki, Finland, "Philosophy of Technology in Scandinavia: Coming in from the Cold"

Martijntje W. Smits, Technical University of Eindhoven, The Netherlands, "Philosophy of Technology in the Netherlands: Making a Mark"

Juan Bautista Bengoetxea, Colorado School of Mines, USA, "Philosophy of Technology in Spain: Between Analytic Approaches and STS"

2. Serve Yourself: Reconfiguring the Retail Experience, 1900-1980

Room: Nicollet A1

Chair: Regina Lee Blaszczyk, Hagley Museum and Library, USA

Comment: Tracey Deutsch, University of Minnesota, USA

Mark Samber, Independent Scholar, USA, "The Technological Deconstruction of Social Systems: The Rising Significance of Self-Service Technology in Retail"

Finn Arne Jørgensen, Norwegian University of Science and Technology, Norway, "From Rational Backroom Handling to Helping the World Recycle: Defining Users of Tomra's Reverse Vending Machines" (Robinson Prize Candidate) - [abstract](#)

Meredith TenHoor, Princeton University, USA, "Eating by Machinery: Space, Gender and Pleasure in the Automat, 1900-1965" (Robinson Prize Candidate) - [abstract](#)

3. Resourceful Science and Mineral Resources: The Geology and Technology of American Mining - [abstract](#)

Room: Nicollet D2

Organizer: Jeremy Vetter, Max Planck Institute, Germany

Chair: Beverly Sauer, Johns Hopkins University, USA

Comment: Fredric L. Quivik, Quivik Consulting Historian, Inc. USA

Jeremy Vetter, Max Planck Institute, Germany, "Knowledge and the Mining Business: The Technological Agenda of the Colorado Scientific Society" - [abstract](#)

Peter Shulman, MIT, USA "Alaska: Infinite Coal Mine of the Imperial Imagination" (Robinson Prize Candidate) - [abstract](#)

Paul Lucier, Independent Scholar, USA, "From Courtroom Geology to Corporate

R&D: Anaconda Copper and the Origins of Science-Based Mining" - [abstract](#)

4. Global Circulation of Knowledge in the Solid-State Electronics Industry

Room: Nicollet A3

Organizer: Hyungsub Choi, Johns Hopkins University, USA

Chair: David Hounshell, Carnegie Mellon University, USA

Comment: Paul Ceruzzi, Smithsonian Institution, USA

Mila Davids, Technical University Eindhoven, The Netherlands, “Solid-State Technology and International Knowledge Transfer: The Case of Philips”

Hyungsub Choi, Johns Hopkins University, USA, “Circulation of Knowledge in Solid-State Electronics: A Perspective from the U.S.”

Takushi Ootani, Kibi International University, Japan, “The Introduction and Development of Transistor Technology in Japan, 1948-1965”

5. The Creation of Automobile-Oriented Landscapes in the 20th Century

Room: Nicollet BC

Organizer: Libbie Freed, University of Wisconsin, Madison, USA

Chair: Thomas Zeller, University of Maryland at College Park, USA

Comment: Thomas Zeller, University of Maryland at College Park, USA

Christopher Wells, Macalester College, USA “Building for Traffic: Engineers, “Sound” Roads, and the Path to Federal Aid”

Mathieu Flonneau, Université Paris I Panthéon-Sorbonne, France “The Construction of Car Dependence in the Parisian Area After the Second World War: Myth and Realities of 'Americanization'”

Libbie Freed, University of Wisconsin, Madison, USA, “Roads and the Transformation of Landscapes in Colonial French Central Africa”

6. Technology's Middle Ground: Exploring Class, Skill and Technological Change through the Repair of Everyday Things - [abstract](#)

Room: Nicollet D1

Organizer: Kevin Borg, James Madison University, USA

Chair: Douglas Harper, Duquesne University, USA

Comment: Frank Wilson, Stanford University, USA

Kevin Borg, James Madison University, USA "The Diagnostic Fix: Computerization's Impact in the Auto Repair Shop" - [abstract](#)

Maggie Dennis, Smithsonian Institution, Lemelson Center, USA "Reinventing Accuracy: Watch Repair in the Electronic Age" - [abstract](#)

Mark Thomson, Australasian Institute of Backyard Studies, Australia, "Curiosity, Memory and Fencing Wire: The Three Essential Components Needed to Fix Just About Anything" - [abstract](#)

FRIDAY NOVEMBER 4

10:45 a.m. – 12:15 p.m.

7. Roundtable: At the Intersection of Environmental History and the History of Technology: Themes, Methods, and Directions - [abstract](#)

Room: Nicollet D2

Organizer: Hugh Gorman, Michigan Technological University, USA

Chair: Hugh Gorman, Michigan Technological University, USA

Comment: Audience

John Staudenmaier S.J., University of Detroit Mercy, USA

Edmund Russell, University of Virginia, USA

Martin Reuss, U.S. Army Corps of Engineers, USA

8. Use and Usability in Personal Computing: International Perspectives

Room: Nicollet D3

Organizer: Thomas Haigh, University of Wisconsin, Milwaukee, USA

Chair: Paul Ceruzzi, Smithsonian Institution, USA

Comment: Thomas Haigh, University of Wisconsin, Milwaukee, USA

James Sumner, University of Manchester, UK, "The Mighty Microcosm: Home Computers and User Identity in Britain, 1980-1990"

Martin Campbell-Kelly, University of Warwick, UK “Number Crunching without Programming: The Evolution of Spreadsheet Usability”

Frank Veraart, Technical University of Eindhoven, The Netherlands, “The Introduction and Use of Personal Computers in the Printing and Publishing Industries in the Netherlands, 1975-1990” (Robinson Prize Candidate)

9. Works in Progress: Political Tools of Unity and Division

Room: Nicollet D1

Chair: Hans-Joachim Braun, Universität Hamburg, Germany

Comment: Audience

Seung-joon Lee, UC Berkeley, USA, “Rice, Science, and Power: the World Rice Market and the Chinese Republican State, 1907-1937” (Robinson Prize Candidate)

Vincent Legendijk, Technical University of Eindhoven, The Netherlands, "High Voltages, Low Tensions: The Interconnections of Eastern and Western European Electricity Grids during the Cold War" (Robinson Prize Candidate) - [abstract](#)

Gustav Sjoblom, University of Cambridge, UK, "Between Flexibility and Co-ordination: British and German Policies on the Commercial Motor Vehicle between the World Wars" - [abstract](#)

10. The Logic of Non-Adopters: Multinational Perspectives on High- and Low-Tech

Room: Nicollet A1

Chair: Howard Segal, University of Maine, USA

Comment: Eric Schatzberg, University of Wisconsin, USA

Stacy Holden, Purdue University, USA, “ Modernization in the Islamic World: The Mechanization of Flour Production in Morocco, 1878-1912” (Robinson Prize Candidate)

Yasushi Sato, University of Tokyo, Japan, “Where Systems Engineering Does Not Work: A Cross-Cultural Perspective”

Siger Zeischka, Free University Amsterdam, The Netherlands, "Social Elements in the Debate on Dutch Technological Backwardness: New Perspectives from Local Drainage

History, 1700-1850" - [abstract](#)

11. Designing Technologies

Room: Nicollet A3

Chair: Sarah Lowengard, Independent Scholar, USA

Comment: Karin Zachmann, Technische Universitaet Munich, Germany

Julie Wosk, Maritime College, SUNY, USA, "Designing Electronics For Women and Men"

Sarah Johnson, University of Hertfordshire, UK, "Transcending Gender: Women Industrial Designers in the late 19th Century American Factory"

Bruce Wright, Industrial Fabrics Association International, USA, "Folding Money: The Design History of Folding Camp Furniture" - [abstract](#)

12. System, Infrastructure, Network: Metaphor as Method in the History of Technology

Room: Nicollet BC

Organizer: Richard John, University of Illinois at Chicago, USA

Chair: JoAnne Yates, Sloan School of Management, MIT, USA

Comment: Thomas Hughes, University of Pennsylvania, USA

Eric van der Vleuten, Technical University Eindhoven, The Netherlands, "Europe's System Builders"

Arne Kaijser, Royal Institute of Technology, Sweden, "Infrastructure and Infrsystems: Useful Concepts for Comparative Inquiry?"

Richard John, University of Illinois at Chicago, USA, "From System to Network: Rethinking the History of American Telecommunications"

FRIDAY NOVEMBER 4

12:30 p.m. - 1:30 p.m.

SIG Meetings:

Military Technology lunch (outside the hotel - Brit's Pub, 1100 Nicollet Mall)

WITH (Women in Technological History) lunch (Lake Superior A Room)

FRIDAY NOVEMBER 4

1:45 p.m. – 3:45 p.m.

13. The Edible Industrial: Food as a Technology in the Twentieth Century - [abstract](#)

Room: Nicollet A3

Organizer: Jenny Smith, MIT, USA

Chair: Karen Freeze, University of Washington, USA

Comment: Roger Horowitz, Hagley Library, USA

Shane Hamilton, University of Georgia, USA "Supermarket USA: The Technology, Ecology, and Politics of Industrial Food Distribution in the Cold War" - [abstract](#)

John Varty, McGill University, Canada, "On Wonder; Or, Why Mass-Produced Bread Looks a Little Like Bauhaus Furniture" - [abstract](#)

Jenny Smith, MIT, USA "The Taste of Modernity: Pork, Processed Food and the Rise of an Industrial Diet in the Soviet Union, 1945-1955" - [abstract](#)

14. Materials Matter: The Role of Materials in Technoscience

Room: Nicollet D1

Organizer: Christophe Lecuyer, Chemical Heritage Foundation, USA

Chair: John Kenly Smith, Lehigh University, USA

Comment: Philip Scranton, Rutgers University, USA

Christophe Lecuyer and David Brock, Chemical Heritage Foundation, USA, “The Materiality of Microelectronics”

Glen Asner, NASA and Gaurab Bhardwaj, Babson College, USA, “The History of Thermoelectric Materials Research: 180 Years of Moving, Anchored Search”

Cyrus Mody, Chemical Heritage Foundation, USA and Michael Lynch, Cornell University, USA “Test Objects and the Materials of Community”

15. Worlds’ Fairs: Amusing Nations, Securing Nations

Room: Nicollet A1

Chair: Cathleen Lewis, Smithsonian Institution, NASM, USA

Comment: Joe Corn, Stanford University, USA

Julie Brown, Independent Scholar, USA, "Protecting the Public: Disease and Crime at International Expositions in the United States 1876 - 1904" - [abstract](#)

Dorothy Barenscoott, University of British Columbia, Canada, "Mobilizing the Cinematic Gaze: Fin de Siecle Film, Cultural Displacement, and the Politics of New Technologies of Vision on the Periphery of Europe" (Robinson Prize Candidate) - [abstract](#)

Matthew Sneddon, University of Washington, USA, “Heroic or Prosaic? History, Heritage, and Exhibitions of American Technology, 1876-1933”

16. Challenging SCOT

Room: Nicollet D2

Chair: Marianne Fedunkiwi, York University, Canada

Comment: Park Doing, Cornell University, USA

Allan Dafoe, Cornell University, USA, "Theoretical Reconciliation: Selectionism in the Social Construction of Technology and the Diffusion of (Military) Innovations" - [abstract](#)

Robert Bud, The Science Museum, UK, "Brands, Baudrillard and SCOT: The Case Study of 'penicillin'" - [abstract](#)

Darrin Durant, University of Toronto, Canada, "Why Artifacts Don't Have Politics: Machinic & Group Action in the Nuclear Debate" - [abstract](#)

17. Touch and Control: Human-Machine Interfaces as Co(a)gents in 20th-Century Consumption Technologies - [abstract](#)

Room: Nicollet D3

Organizers: Heike Weber, Technical University Munich, Germany, Martina Heßler, RWTH Aachen, Germany, and Gwen Bingle, Technical University Munich, Germany

Chair: Ulrich Wengenroth, Technical University Munich, Germany

Comment: Edward Tenner, Lemelson Center, NMAH, USA

Heike Weber, Technical University Munich, Germany, "At Your Fingertip! - Buttons and Operating Controls from the Mechanical to the Digital Ages" - [abstract](#)

Stefan Schmitt, Technical University Munich/ ZEITWissen Hamburg, Germany, "A Genesis of (alternative) User Interfaces in Video Gaming Controllers" (Robinson Prize Candidate) - [abstract](#)

18. Intellectual Cultures and the Meaning of Technology - [abstract](#)

Room: Nicollet BC

Organizers: Matthew Wisnioski, Washington University, USA and Adelheid Voskuhl, Cornell University, USA

Chair: Amy Slaton, Drexel University, USA

Comment: Langdon Winner, Rensselaer Polytechnic Institute, USA

Adelheid Voskuhl, Cornell University, USA, "Technology and Decline: Ideas on a Philosophy of Technology in the Conservative Revolution of the Weimar Republic" - [abstract](#)

Matthew Wisnioski, Washington University, USA "'Keeping Pace' in 1960s America: Value and Agency in the Intellectual Crisis of Technology" - [abstract](#)

Rayvon Fouché, Rensselaer Polytechnic Institute, USA, "Black Intellectuals and the Technological Politics of African Decolonization"

FRIDAY NOVEMBER 4

4:00 p.m. – 6:00 p.m.

19. Politics of Beverage Production: Milk, Beer, Rum

Room: Nicollet D2

Chair: Richard Rosenbloom, Harvard Business School, USA

Comment: Michael Kucher, University of Washington, USA

Gustavo Gutierrez, Iowa State University, USA, “Rum Production in Early America: A Pioneer Technology in the Transition from Subsistence to Industrial Technology”

Micah Rueber, Mississippi State University, USA, “Milking Time: Dairy Farms, Expertise, and Technological Change”

Richard Yntema, Otterbein College, USA, "Markets, Technology, Politics and Resistance to Technological Change in Holland's 16th Century Brewing Industry" - [abstract](#)

20. Roundtable: The Central Role of Peripheral Histories of Science and Technology

Room: Nicollet A3

Organizer: Maria Paula Diogo, New University of Lisbon, Portugal

Chair: Daryl Hafter, Eastern Michigan University, USA

Comment: Audience

Maria Paula Diogo, CHFCT/Faculty of Science and Technology/New University of Lisbon, Portugal, Ana Cardoso de Matos, CIDEHUS/University of Évora, Portugal, and Tiago Saraiva, CHFCT & Institute of Social Sciences, Portugal, “Bringing the Centre to the Periphery: Portuguese Engineers and their Travels of Learning”

Aristotle Tympas, University of Athens, Greece, “Ancient Greek History in a Modern Engineering Journal: Elaborating on the Centrality of Technological Determinism by Considering Peripheral Versions”

Carles Puig-Pla, Francesc X. Barca, Antoni Roca-Rosell and Guillermo Lusa, Universitat Politècnica de Catalunya, Spain, "The Industrial School of Barcelona (1904): a Turning Point for Engineering in Catalonia”

Irina Gouzévitch, EHESS, France and Dmitri Gouzevitch, EHESS, France, “Mediative Action of The Engineer Augustin Betancourt: a Peripheric Story of European Dimension in the Late 18th and Early 19th Century”

21. Stories of Magic and Momentum: Myths in the History of Science, Technology, and the Environment - [abstract](#)

Room: Nicollet D1

Organizer: Mikael Hard, University of Technology Darmstadt, Germany

Chair: John Staudenmaier, S.J., University of Detroit Mercy, USA

Comment: Tom Misa, Illinois Institute of Technology, USA

Christian Kehrt, University of Technology Darmstadt, Germany, "Heroes and Knights: On the Mythology of Aeroplanes and Pilots" (Robinson Prize Candidate) - [abstract](#)

Mark Walker, Union College, USA, "The Myths Surrounding Science, Technology, and Medicine under Hitler" - [abstract](#)

Sabine Hoehler, University of Hamburg, Germany, "Spaceship Earth: Myth as a Theme for Environmental History" - [abstract](#)

Mikael Hard, University of Technology Darmstadt, Germany, "David against Goliath: Myths in the History of Information Technology" - [abstract](#)

22. Technology Goes Public: Australia, Norway, and the U.S.

Room: Nicollet D3

Chair: Helmuth Trischler, Deutsches Museum, Germany

Comment: Joyce Bedi, Smithsonian Institution, USA

Kristin Gjerde, Norwegian Petroleum Museum, Norway, "Ekofisk Industrial Heritage - How to Document a Large Technical-Industrial Monument at Sea" - [abstract](#)

Amy Newman, Friends of the Astor House Museum and Clear Creek History Park, USA, "The Fight for First Flight: Using Museum Theater to Address Ethics and Controversy" (Robinson Prize Candidate) - [abstract](#)

Elouise Oyzon, Rochester Institute of Technology, USA, "What the Tech?"

23. Questionable Ethics: Concentration Camps, Army Labs, and the Environment as Testing Grounds

Room: Nicollet BC

Chair: Atsushi Akera, Rensselaer Polytechnic Institute, USA

Comment: Hugh Gorman, Michigan Technological University, USA

Jennifer Alexander, University of Minnesota, USA, "Building the K-Ration: Eating and

Starving for the Second World War" - [abstract](#)

Anne Sudrow, Technical University Munich, Germany, "Measuring the Use-Value: The Beginnings of Comparative Consumer Good Tests in National Socialist Germany" - [abstract](#)

Edward Lorenz, Alma College, USA, "What Did They Know and When Did They Know It: Early Knowledge of Environmental Contamination" - [abstract](#)

24. Dis/Embodying Labor

Room: Nicollet A1

Chair: Suzanne Moon, Colorado School of Mines, USA

Comment: Arwen Mohun, University of Delaware, USA

Diana Covell, University of Sydney, Australia, "Women Versus BHP: Australian Women in Steel: A Comparative Study" (Robinson Prize Candidate) - [abstract](#)

Marie Hicks, Duke University, USA, "Women's Work and the Computerization of British Offices after the Second World War" (Robinson Prize Candidate)

Sarah Rose, University of Illinois at Chicago, USA, "Creating the Disabled: Mechanization, Industrial Accidents, and Ideal Workers, 1900-1925"

FRIDAY NOVEMBER 4

7:00 p.m. - 10:00 p.m.

SHOT reception, Science Museum of Minnesota, St. Paul in connection with the Lemelson Center exhibit "Inventions at Play." Buses will depart from the Hyatt Regency lobby.

10:00 p.m. – Midnight

SHOT Hospitality Suite (Regency Room)

SATURDAY NOVEMBER 5, 2005

7:30 a.m. - 8:45 a.m.

SIG Meetings:

Envirotech breakfast (Lake Calhoun Room)

Jovians/Mercurians breakfast (Lake Minnetonka Room)

Graduate Students and International Scholars breakfast (Lake Superior A Room)

8:00 a.m. – 5:00 p.m.

SHOT registration and information desk (Nicollet Ballroom Promenade)

8:00 a.m. – 5:00 p.m.

Book exhibit (Exhibit Hall)

SATURDAY NOVEMBER 5

9:00 a.m. – 10:00 a.m.

SHOT Special Sessions:

A. "The HoT Job Market: Professional Prospects for Graduate Students."

Room: Nicollet D1

Organizer and Chair: Steven W. Usselman, Georgia Institute of Technology, USA

B. "Reconfiguring the History Survey: How the History of Technology Can Make a Difference."

Room: Nicollet A1

Organizer: Daniel Holbrook, Marshall University, USA

Gregory Clancey, National University of Singapore, Singapore

Merritt Roe Smith, MIT, USA

C. "Anywhere but School: Historians of Technology in Nonacademic Settings"

Room: Nicollet A3

Organizer and Chair: Andrew Butrica, Research Historian, USA

Glen R. Asner, NASA History Division, USA

Virginia P. Dawson, History Enterprises, Inc., USA

Barton C. Hacker, Smithsonian National Museum of American History, USA

Joseph N. Tatarewicz, University of Maryland, Baltimore County, USA

D. "Looking Forward to SHOT's Fiftieth Anniversary: A Discussion of Planning for 2007-2008"

Room: Nicollet D2

Organizer, Chair and Panelist: Bob Post, Smithsonian Institution, USA

Steven H. Cutcliffe, Lehigh University, USA

Bob Post, Smithsonian Institution, USA

E. "Academic Publishing: A Brief Tutorial – The Nuts and Bolts of Academic Publishing"

Room: Nicollet BC

Organizer, Chair, and Panelist: John M. Staudenmaier S.J., University of Detroit, Mercy, USA: Editor in Chief: Technology and Culture

Sara Meirowitz, Associate Editor: Book Acquisitions - Science, Technology and Society, MIT Press

Bill Breichner, Journals Publisher - The Johns Hopkins University Press

SATURDAY NOVEMBER 5

10:15 a.m. – 11:45 a.m.

25. Artful Engineering

Room: Nicollet A3

Chair: Richard Hirsh, Virginia Tech, USA

Comment: Stephen Cutcliffe, Lehigh University, USA

Katherine Pandora, University of Oklahoma, USA, "Redesigning the Engineering Mind: The Revelations of the Arcturus IV Science Fiction Project at Mid-century MIT" - [abstract](#)

Vincent Willoughby, Idaho State University, USA, "Optical Telegraphs and Romantic Literature"

Tom Crouch, NASM, Smithsonian Institution, USA, "Jumping the Gun of Propriety: Space Flight Discussions in the American Rocket Society, 1945-1955" - [abstract](#)

26. Technology and the State in Latin America

Room: Nicollet D1

Organizer: Margaret Power, Illinois Institute of Technology, USA

Chair: Gregory Downey, University of Wisconsin, Madison, USA

Comment: Gregory Downey, University of Wisconsin, Madison, USA

Lina Del Castillo, University of Miami, USA, "The Science of Nation Building: The Construction of Colombian Territories Through the Production of Scientific Knowledge, 1830-1903"

Eden Medina, Indiana University, USA, "Making the "Ugliest Automobile in History": Technology, Ideology, and the Citroen Yagán"

Margaret Power, Illinois Institute of Technology, USA "The Technologies and Politics of Birth Control in Chile in the 1960s"

Ana Maria Kapelusz Poppi, University of Wisconsin-Oshkosh, USA, "Political Populism and the Hope for Scientific Progress in Post-revolutionary Mexico"

27. Provincializing Western Definitions of Technology

Room: Nicollet D2

Chair: Nina Lerman, Whitman College, USA

Comment: Bryan Pfaffenberger, University of Virginia, USA

Lauren Nauta, University of Pennsylvania, USA, "Left-Overs of the Gods: The Role of Bovine Milk and Colostrum Offerings in Autumnal Fever Therapeutics in the Punjab Plains, 1870-1930" (Robinson Prize Candidate) - [abstract](#)

Zoran Ergarac, School of Machine Engineering, Prijedor, Bosnia and Herzegovina, "Tradition For Everyday: Contrasting Realities of The Food Industry In Serbia" - [abstract](#)

Clapperton Mavhunga, University of Michigan, USA/WISER, South Africa, "Firearms. Tsetse Fly. Animals. Humans - Technopathogens: How the Presence/Absence of Each Has Mattered In The Great Limpopo Transfrontier Area's History"

28. Engineering New Nations: American Engineers and Asia after 1945 - [abstract](#)

Room: Nicollet D3

Organizer: John DiMoia, Princeton University, USA

Chair: Bill Leslie, Johns Hopkins University, USA

Comment: Bill Leslie, Johns Hopkins University, USA

John DiMoia, Princeton University, USA, "From Trucks to Televisions: South Korea's Chaebol, MAP (Military Assistance Program), and Hyundai, 1945-1975" - [abstract](#)

Daniel Klingensmith, Maryville College, USA, "Managing Water and Managing the 'Orient'" - [abstract](#)

David Biggs, University of California-Riverside, USA, "Reclamation Nations: The US Bureau of Reclamation's Role in Nation-Building on the Lower Mekong, 1945-1972"

29. Roundtable: Ethnic Studies and the History of Technology

Room: Nicollet BC

Organizer: Julia GoodFox, University of Kansas, USA

Chair: Julia GoodFox, University of Kansas, USA

Comment: Audience

Sylvia Hood Washington, Northwestern University/DePaul University, USA

John Jackson, Jr., University of Colorado, USA

Clara Sue Kidwell, University of Oklahoma, USA

30. Engaging Engineers in the Classroom and Beyond

Room: Nicollet A1

Organizer: Ann Johnson, University of South Carolina, USA

Chair: Leo B. Slater, National Institutes of Health, USA

Comment: Rosalind Williams, MIT, USA

Bruce Seely, Michigan Technological University, USA, “Historians of Technology and Nanotechnology”

Ann Johnson, University of South Carolina, USA, “Historical Sensibility and Engineering Ethics”

Sarah Pfatteicher, University of Wisconsin, USA, “Lessons of Terrorism: Engineering Education for the 21st Century”

SATURDAY NOVEMBER 5

12:00 noon - 1:00 p.m.

SIG Meetings:

Computers, Information, & Society lunch (Lake Calhoun Room)

TEMSIG (Technology Museums SIG) lunch (meet in hotel lobby)

SATURDAY NOVEMBER 5

1:15 p.m. – 3:15 p.m.

31. Controlling Birth: The Technologies of Planning Parenthood

Room: Nicollet D2

Organizers: Ruth Cowan, University of Pennsylvania, USA; Joan Rothschild, Center for Human Environments, CUNY, USA

Chair: Elizabeth Watkins, University of California, San Francisco, USA

Comment: Judith Houck, University of Wisconsin, Madison, USA

Rene Almeling, University of California at Los Angeles, USA, "A Comparative History of Egg and Sperm Donation" (Robinson Prize Candidate)

Tanfer Emin-Tunc, SUNY at Stony Brook, USA, "Beyond the First Trimester: Technological Change in Mid to Late Term Pregnancy Termination" (Robinson Prize Candidate)

Rebecca Kluchin, California State University, Sacramento, USA, "Revolutionizing the Technology of Female Sterilization: The Development of Endoscopic Female Sterilization Techniques and the Legitimization of Permanent Contraception in America, 1965-1980"

32. Everyday Technology in Transition: Subways, Bicycles and Railroads, 1870-1960 - [abstract](#)

Room: Nicollet A1

Organizer: Betsy Mendelsohn, University of Maryland, College Park, USA

Chair: Hans-Liudger Dienel, Technische Universität Berlin, Germany

Comment: Zachary Schrag, George Mason University, USA

Betsy Mendelsohn, University of Maryland, College Park, USA, "Bicycles on the Road, 1870-1900: Litigation and Legislation Shaping New Transportation Technology" - [abstract](#)

Terri Lonier, NYU, USA "Networks of Transport, Networks of Influence: Alfred Ely Beach's Pneumatic Subway" - [abstract](#)

Takashi Nishiyama, Dibner Institute, MIT, USA, "War, Peace, and Non-Weapon Technology in Modern Japan: The Impact of the Culture of Defeat on Railroad Car

Construction, 1880s-1950s" (Robinson Prize Candidate) - [abstract](#)

Ian Petrie, Saint Joseph's University, USA, "'We recommend this vehicle to young Bengal': Bicycles and the Objects of Modernity in India, 1900-1960" - [abstract](#)

33. "The Far Away Near By": Remote Sensing

Room: Nicollet D1

Chair: Daniel Holbrook, Marshall University, USA

Comment: Jonathan Coopersmith, Texas A&M University, USA

John Cloud, NOAA, USA, "What's That Sound?--The Historiography and Uncertain Memory of Positioning at Sea by Underwater Acoustics" - [abstract](#)

Etienne Benson, MIT, USA, "Wild Animals and Radio Landscapes: Wildlife Telemetry at the Cedar Creek Natural History Area, 1960-1980" (Robinson Prize Candidate)

Amber Musser, Harvard University, USA, "Representing Pleasure" - [abstract](#)

34. The Politics of Technological Internationalism

Room: Nicollet A3

Chair: Mary Ann Hellrigel, Stevens Institute of Technology, USA

Comment: Kathryn Steen, Drexel University, USA

Waqar Zaidi, Imperial College, USA, "Proposals for the International Air Police: A Case of Interwar Technological Internationalism" (Robinson Prize Candidate) - [abstract](#)

Frank Schipper, Technical University of Eindhoven, The Netherlands, "The Drive for Peace? Road Planning and the European Project during the Interbellum" (Robinson Prize Candidate) - [abstract](#)

Alexander Badenoch, Technical University Eindhoven, The Netherlands, "Touring Between War and Peace: Symbolizing the Transcontinental Motorway Plan 1930-1950" - [abstract](#)

35. Nota Bene: SHOT Meets Theory

Room: Nicollet D3

Chair: Andre Millard, University of Alabama, Birmingham, USA

Comment: Steven W. Usselman, Georgia Institute of Technology, USA

Mark Russell, Virginia Tech, USA, "Where Historiography Meets Applied History: 'Genealogical' Methods and the Articulation of Knowledge Structures in the Search for Missing World War Two Aircraft" - [abstract](#)

W. Bernard Carlson, University of Virginia, USA, "Nikola Tesla and the Tools of Persuasion: Rethinking the Role of Agency in the History of Technology" - [abstract](#)

Srinivas Rao Yenda, Indian Institute of Technology, India, "Alternative Historiography: A Tool for Construction of Colonised History" - [abstract](#)

36. No Nature: Negotiating the Intersections of the Histories of Science and Technology

Room: Nicollet BC

Organizer: Michael Egan, McMaster University, Canada

Chair: Joy Parr, University of Western Ontario, Canada

Comment: Joy Parr, University of Western Ontario, Canada

Michael Egan, McMaster University, Canada "The Alchemy of Nature: Mediating Nature, Machine, and Systems of Knowledge"

David Nye, Warwick University, UK, "Re-thinking Robinson Crusoe: Constructions of Nature"

Benjamin Cohen, University of Virginia, USA, "Seeing Like the State of Virginia: Nature and the Technological Mediation of the Old Dominion"

SATURDAY NOVEMBER 5

3:30 p.m. – 5:30 p.m.

37. Technology and Privatization

Room: Nicollet A3

Organizer: Ian Slater, York University, Canada

Chair: Glenn Bugos, Moment LLC, USA

Comment: Audience

Eric Vettel, University of California, Berkeley, USA, "Cetus: A Scientific Private Enterprise"

Sally Hughes, Bancroft Library, University of California, USA, "Privatizing Science at Genentech"

Andrew Russell, Johns Hopkins University, USA, "Market Incentives May Already be Sufficient': Coordination Mechanisms for Cellular Standards" (Robinson Prize Candidate)

Ian Slater, York University, Canada, "Global Developments in the Privatization of High-Technology Industries"

38. Radio Users

Room: Nicollet D1

Organizer: Timothy Stoneman, Georgia Institute of Technology, USA

Chair: Martin Collins, Smithsonian Institution, USA

Comment: Trevor Pinch, Cornell University, USA

Chen-Pang Yeang, MIT, USA, "Between Users and Developers: Amateurs and Radio Technology in the Early Twentieth Century"

John Wedge, Eastern Illinois University, USA, "Echoes in the Night: The Tuning of Users in the Radio Age"

Timothy Stoneman, Georgia Institute of Technology, USA "Using Radio to Win Souls: American Missionary Broadcasters and Their Captive Audiences, 1931-1975"

Christina Dunbar-Hester, Cornell University, USA, "Activist Uses? Hams, Pirates, and Geeks in FM Radio Broadcasting" (Robinson Prize Candidate)

39. Yankee Go Home, Yankee Come In: Japanese Air Conditioning, Brazilian Cars, Indian Computing 1945-1985

Room: Nicollet A1

Chair: Jennifer Bannister, Independent Scholar, USA

Comment: Paul Josephson, Colby College, USA

Joel Wolfe, Rice University, USA, “Are Cars Democratic?: Brazilian Modernity and the Politics of Objects”

Ross Bassett, North Carolina State University, USA, “Facing Two Ways: The Indian Institute of Technology Kanpur, American Technical Assistance, and the Indian Computing Community, 1961-1980”

Masafumi Miyajima, Daikin Air-conditioning R&D Laboratory, Ltd., Japan, "A Study on Japanese Refrigerating and Air-conditioning Industry Rebuilding during Military Occupation by the United States, 1945-1952" - [abstract](#)

40. Engineering Failure

Room: Nicollet D2

Chair: Terry Reynolds, Michigan Technological University, USA

Comment: Paul G. Gillespie, U.S. Air Force Academy, USA

Alexander Brown, MIT, USA, "Accidents, Engineering and History at NASA, 1967-2003"

Matthew Eisler, University of Alberta, Canada "Bringing It Down to Earth: The U.S. Army, NASA, and the Politics of Fuel Cell Research and Development, 1959-1970" - [abstract](#)

Miwao Matsumoto, University of Tokyo, Japan, “The Complex Relationship between Success and Failure in the Development Trajectory of a War Technology”

41. Historiographical Tools: How Machines Help Humans Shape Meaning

Room: Nicollet D3

Organizer: Bernadette Longo, University of Minnesota, USA

Chair: David Grier, George Washington University, USA

Comment: Audience

Amy Propen, University of Minnesota, USA, “Geographic Information Systems: Historicization-Meets-Visualization; STS-Meets-Semiotics” (Robinson Prize Candidate)

Bernadette Longo, University of Minnesota, USA, “Robots and the Transfer of Computer Technology to Civilian Life”

Elizabeth Shea, Northeastern University, USA, “Genetic Resistance: Writing Histories

in Opposition to Globalization”

Wendy Winn, University of Minnesota, USA, “Conveying Scientific Knowledge Through Illustration: A Historical Study of Visual Representation in Ornithology” (Robinson Prize Candidate)

42. Producing Food and Consumers: Historical Perspectives on the Food Industry

Room: Nicollet BC

Organizer: Gabriella Petrick, University of Delaware, USA

Chair: Ruth Schwartz Cowan, University of Pennsylvania, USA

Comment: Audience

Kolleen Guy, University of Texas, San Antonio, USA, “Making Food French: Marketing Technology and the Making of French Cuisine in the Nineteenth and Twentieth Centuries”

Gabriella Petrick, University of Delaware, USA, “The Industrialization of Taste: Food Habits and Technological Change in the United States, 1900-1970”

Gerard Fitzgerald, Dibner Institute, MIT, USA, “The Handmaiden of Industry: The Development of Industrial Microbiology in the U.S. Food Industry, 1900-1950”

SATURDAY NOVEMBER 5

5:45 p.m. – 6:30 p.m.

SHOT Business Meeting (open to all members) (Lake Nokomis Room)

7:00 p.m. – 10:00 p.m.

SHOT Awards Banquet (Admission by ticket only)(Regency Room)

10:00 p.m. – Midnight

SHOT/HSS/Grad Students and Everyone Else Co-located Party (Mirage Room)

SUNDAY NOVEMBER 6, 2005

8:00 a.m. – noon

SHOT registration and information desk (Nicollet Ballroom Promenade)

8:00 a.m. – noon

Book exhibit (Exhibit Hall)

9:15 a.m. – 11:15 a.m.

43. Capturing the Invisible: Sniffing, Sending, Snoring

Room: Nicollet D2

Chair: Martina Blum, Munich Center for the History of Science and Technology, Germany

Comment: Rachel Maines, Cornell University, USA

Thomas Staley, Virginia Tech, USA, "Technologies of Smell in the 18th and 19th Centuries: The Measurement, Production, and Use of Odor" (Robinson Prize Candidate) - [abstract](#)

John McVey, Montserrat College of Art, USA, "Thesauruses, Messages and Mundane Telegraphy 1870-1930" - [abstract](#)

Matthew Wolf-Meyer, University of Minnesota, USA, "Medical Abstractions, Biopolitics, Matters of Concern, and Sleep in American Life"

44. Path Dependencies?

Room: Nicollet D3

Chair: Janet Abbate, Virginia Tech, USA

Comment: Steve Crandall, Notre Dame College, USA

William McMillan, Eastern Michigan University, USA, "The Standard Register Company's Developments in Systems Analysis during the Early 1940s in Anticipation of Automated Data Processing" - [abstract](#)

Steven Walton, Penn State, USA, "The Military-Industrial-Academic-Complex 80 Years Too Early: the U.S. Navy, Torpedoes, and Inventors, 1865-1890" - [abstract](#)

Michael Geselowitz, IEEE History Center, USA, "Tinkerers Ever to Chance: Computation and the Rise of Probabilistic Thinking" - [abstract](#)

45. Users as Agents

Room: Nicollet A1

Chair: Robert Ferguson, USA

Comment: Ron Kline, Cornell University, USA

Kenji Ito, RCAST, The University of Tokyo, Japan, "When Users Become Makers: Use and Production of Industrial Robots in Japan, 1970-1990" - [abstract](#)

Christopher Neumaier, Technical University Munich, Germany, "Rationality Constructs: Understanding the Diametrically Opposed Acceptance of Diesel Automobiles in Germany and the United States" - [abstract](#)

Dolores Jorgensen, University of Virginia, USA, "Controlling Technology by Controlling Users in Order to Control the Environment in Medieval Coventry" (Robinson Prize Candidate) - [abstract](#)

Jeffrey Tang, University of Pennsylvania, USA, "Armchair Engineering: The Empowerment of Users in High-Fidelity Audio"

46. Technology and Representation in Airpower - [abstract](#)

Room: Nicollet BC

Organizer: John Terino, SAASS, USA

Chair: Alex Roland, Duke University, USA

Comment: Susan Lindee, University of Pennsylvania, USA

Timothy Schultz, Duke University, USA, "Human Limitations on High-Performance Aviation" - [abstract](#)

Stephen Chiabotti, School of Advanced Air and Space Studies, USA, "Social Construction of a Primary Training Aircraft" - [abstract](#)

John Terino, School of Advanced Air and Space Studies, USA, "Technology to Represent and Evaluate the Effect of Modern Airpower" - [abstract](#)

47. Making Room for Technology

Room: Nicollet D1

Chair: Karen Utz, Sloss Furnaces National Historic Landmark, USA

Comment: Molly Berger, Case Western Reserve University, USA

Elizabeth Cromley, Northeastern University, USA, "The Spatial Implications of Food Technologies in Recent American Houses"

Alison Hoagland, Michigan Technological University, USA "Negotiating Convenience: Utilities in Working-Class Houses in Michigan's Copper Country" - [abstract](#)

Els De Vos, University of Leuven, Belgium, "Room for the Automobile: A Struggle for an Appropriate Place in the Belgian Single-Family Home" - [abstract](#)

Janin Hadlaw, York University, Canada, "Necessity or Accessory? Designing the Modern Telephone, 1920-1939" - [abstract](#)

48. Creating the Scientific Persona: Identity, Media & Politics - [abstract](#)

Room: Nicollet A3

Organizer: Jennifer Ferng, MIT, USA

Chair: Amy Bix, Iowa State University, USA

Comment: Miriam Levin, Case Western Reserve University, USA

Kieran Downes, MIT, USA, "Actually it **is** Rocket Science: the Military, the Media, and the Americanization of Wernher von Braun" (Robinson Prize Candidate) - [abstract](#)

Jennifer Ferng, MIT, USA, "Designing Conclusions for a Cold-War Humanity" (Robinson Prize Candidate) - [abstract](#)

David Unger, Harvard University, USA, "From Technology to History: The Afterlife of Early Artificial Intelligence Machines" (Robinson Prize Candidate) - [abstract](#)