

Events and Sightings

Chigusa Kita, Editor
Kansai University

Making the History of Computing Relevant

On 17–18 June 2013, the International Federation for Information Processing (IFIP) Working Group (WG) 9.7, with the Science Museum and the Computer Conservation Society, held a conference at the director's suite of the Science Museum in South Kensington, London (see Figure 1). The topic of the conference concerned how displays and descriptions of computing history in museums and archives can be relevant and understandable to the general public, which might not be familiar with the technological details of old computing machinery and its historical and cultural contexts. This is related to a shift from the technological determinist perspective to other perspectives, such as the sociohistorical contextual perspective, which has been discussed for several decades in the history of computing literature. This conference was also concerned with how to apply diverse perspectives in making displays for the public.

On 16 June, a preconference activity was held at the National Museum of Computing, and attendees came to see old computing machinery displayed in working order, including a rebuild of Colossus and several sets of mainframes.

During the two days of the conference at the Science Museum, the main topics of discussion included

- how to manage projects related to creating replicas, rebuilds, or simulations of old hardware and software;
- how to conduct “storytelling” based on such artifacts in museums;
- how these artifacts could be associated with education on the history of computing;
- how to conserve and display intangible digital heritage, including software and video games; and
- the kinds of issues present in the current digital archives.

There were 15 talks on the first day and 14 on the second, covering a range of subjects. The presentations were grouped into five topics:

1. The importance of storytelling in museums.
2. Spotlight on some key collections and their future plans.
3. Thoughts on expanding the audience for computing history in depth.
4. Spotlight on some research projects.
5. Integrating history with computer science education.

More than 100 participants attended the sessions, including museum curators, archive administrators, and academics. They came from countries such as the United Kingdom, Australia, New Zealand, the United States, Germany, Belgium, Finland, Russia, Ukraine, Switzerland, and the Netherlands. The conference began with talks by Marc Weber from the Computer History Museum in the United States, Tilly Blyth from the Science Museum in London, and Arthur Tatnall, chair of IFIP WG 9.7 from Victoria University.

A number of talks discussed the present situation of displays, collections, and projects in museums or institutions. For example, Jochen Viehoff and Norbert Ryska spoke about exhibitions in the Heinz Nixdorf Museum in Germany, Marina Smolevitskaya described the collections at the Polytechnic Museum in Russia, Delphine Jenart talked about the Mundaneum in Belgium, Julian Roder and Christian Burchard discussed the contents of the Konrad Zuse Internet Archive Project, Horst Zuse talked about how he reconstructed Konrad Zuse's Z3, and Chris Avram and Barbara Ainsworth discussed the Monads project at Monash University in Australia.

Projects were also presented on intangible heritage. For example, Stuckey Swalwell Ndalianis described the Popular Memory Archive, a curated online repository of early Australian and New Zealand games. Tiia Naskali explained how she and her collaborator organized the Computer and Video Games Exhibition in Finland, and David Holdsworth from the University of Leeds discussed a software archive project and explained how the digital preservation of old software should be performed.

In particular, the practice of displaying old original computers, rebuilds, and replicas in the UK was presented in detail. Roger Johnson explained how the Computer Conservation Society is organized, and Chris Burton discussed the history of the replica exhibition of the University of Manchester's Small-Scale Experimental Machine. Kevin Murrell described how the Dekatron Computer is displayed, and Ben Trethowan discussed the museum's Independent Radar Investigation System. In addition, David Hartley and Andrew Herbert described the EDSAC Replica Project at the National Museum of Computing, which was undertaken after Maurice Wilkes's death.

The participants engaged in enthusiastic discussions. The conference proceedings, titled *Making the History of Computing Relevant*, will be published in hardcover by Springer in late 2013, with 29 chapters and 312 pages.

Mai Sugimoto is an assistant professor in the Faculty of Sociology at Kansai University. Contact her at msgmt@kansai-u.ac.jp.

Update from the Computer History Museum

I'm happy to report on many new activities at the Computer History Museum since our last report.

Research

First, our research support for students of the history of computing has greatly expanded, and we now handle more than 400 research requests a year. These enquiries come from an interesting spectrum of people—middle and high school students, postdoctoral fellows, journalists, teachers, hobbyists, independent scholars, professors, legal specialists, undergraduates, marketing departments, and Hollywood studios, to name but a few.

CHM also now has well over a linear mile of computer-related documentation, including thousands of documents unavailable anywhere else. We also host bitsavers.org, which with more than 2.7 million scanned pages, is probably the largest electronic collection of historical computer-related documentation and manuals in the world.

Oral histories are an integral part of CHM's research agenda, and we now have more than 430 interview recordings on video, with searchable transcripts online. Dozens of new oral histories are conducted each year, especially in the areas of historical storage technology, networking, semiconductors, and software. See the CHM Oral History homepage, www.computerhistory.org/collections/oralhistories/, for more details.

New IBM Watson Exhibit

With a presentation by John Kelly, director of IBM Research, on 10 June, CHM opened its Watson artificial intelligence exhibit featuring the actual stage set used in the historic man versus machine battle between the IBM Watson supercomputer and two top-tier human contestants. Visitors can “buzz in” and write answers, or their names, on the pen-based video screen, just like on the real show (see Figure 2). Watson itself, however, is still in great demand by IBM researchers at Yorktown Heights, New York, so it couldn't make an appearance. It does say hello, however, via an interactive kiosk that provides a rough facsimile of the experience. Learn more here:



Figure 1. Opening talk for the “Making the History of Computing Relevant” conference at the director’s suite of Science Museum, London.



Figure 2. Director of IBM Research John Kelley (left) and CHM President and CEO John Hollar face off on the IBM Watson Jeopardy set, part of a temporary exhibit at CHM.

www.computerhistory.org/atchm/ibms-watson-jeopardy-computer-comes-to-chm/.

Blog

The CHM blog is one year old with 70 stories by 19 different authors and more than 10,000 followers. The blog is a place where CHM curators and other staff can write about topics of interest to them, report on original research, highlight a special artifact or an interview, or comment on the historical connections between objects in our collection and new technologies. If historical software

Recently J.A.N. Lee and the IEEE Computer Society agreed to make Lee's classic book *Computer Pioneers* freely available.

source code is of interest, the blog is the place where three major releases of original source code have already taken place—Adobe Photoshop, MacPaint, and IBM APL—and similar releases will continue in the future. To permit these classic programs to be made available to the public, CHM has done groundbreaking legal work, largely directed by CHM board chairman Len Shustek.

Guest authors have written several of our most popular blog entries, and we welcome any *Annals* readers who would like to contribute. See the blog homepage here: <http://www.computerhistory.org/atcm/>.

2013 CHM Fellows

This year's awardees were Robert Taylor, Harry Huskey, and Ed Catmull. Read about the event here: www.computerhistory.org/atcm/the-2013-computer-history-museum-fellows/.

Speakers and Visitors

CHM's acclaimed speaker series, Revolutionaries, has been in full swing with 13 of these lectures being coproduced and broadcast by the northern California PBS station KQED each year. A large and diverse television audience sees the series, and while many CHM lectures are sold out, all are available on the CHM YouTube channel (www.youtube.com/user/ComputerHistory), generally within 48 hours of the event.

CHM visitorship has increased dramatically this year. In July, for example, we had more than 10,000 visitors, and in August 2013, we had visitors from an amazing 76 different countries!

Make Software

The exhibition team at CHM has been busy developing a signature exhibit about the

creation, use, and potential of computer software. Entitled "Make Software: Change the World," the exhibit features seven galleries, each of which focuses on a different type of software, such as iTunes, Photoshop, and the *World of Warcraft* video game. Visitors will be able to interact with the software, including sharing their work via social media, and learn the complex history of how software is created, sold, and used.

Gartner/Dataquest

The Gartner Group is one of the world's leading computer industry research firms. We are delighted to report that they have donated decades of historical Gartner/Dataquest reports on the semiconductor and electronics industries to CHM. The dataset will be available online soon in PDFs. Here is a brief blog entry on the donation's importance: www.computerhistory.org/atcm/25-years-of-dataquest/.

A second significant research collection to come to CHM is the archive of Disk/Trend Inc., the world's leading hard disk drive industry research firm for more than three decades. Founded in 1977 by CHM volunteer Jim Porter, who sadly passed away last year, the 140-linear-foot archive is a goldmine of historical market data on the hard drive industry. Anyone studying the economics and market forces of the "mechanical heart of the computer" will find this archive incredibly useful.

Finally, I'd like to invite all *Annals* readers to visit the museum whenever they are in the San Francisco Bay Area for a personal tour. Our stunning 25,000 square foot exhibit "Revolution: The First 2,000 Years of Computing" awaits you!

Dag Spicer is the senior curator at the Computer History Museum. Contact him at spicer@computerhistory.org.

CS History Committee Web Resources

J.A.N. Lee's classic book *Computer Pioneers*, originally published in 1995, has long been out of print. Recently J.A.N. Lee and the IEEE Computer Society (the original publisher) agreed to make the book available again. Michael Williams, a past president of the Computer Society, former *Annals* editor in chief, and current member of the CS History Committee scanned the original book, ran it through optical character recognition processing, corrected the result, and passed it to the History Committee for further processing

to turn the book's content into a website. Visit www.computer.org/computer-pioneers/ to see the result, which is freely available.

CS History Committee Chair Jeffrey Yost (who is also a former *Annals* EIC, the associate director of the Charles Babbage Institute, and a faculty member in the History of Science, Technology, and Medicine at the University of Minnesota) states, "It is wonderful to have this important reference resource broadly available again—a book that expertly chronicles the lives and careers of many of computing and software's foremost technical leaders. J.A.N. Lee [also a past EIC of the *Annals*] has long been a pioneer in using the Web to disseminate computer history. It is fitting that this book is now freely available in electronic form. The book was his individual vision as a computing historian, and it

complements other computing history resources."

In addition to publishing the Computer Pioneers website, the CS History Committee regularly updates its webpage of publications and projects (www.computer.org/comphistory/). Included on the website, again freely available, is the 2012 monograph on the *History of Computing in India, 1955–2010*, by V. Rajaraman, himself a significant participant in that history.

David Walden is a member of the CS History Committee. Contact him at dave@walden-family.com.



Selected CS articles and columns are also available for free at <http://ComputingNow.computer.org>.

ADVERTISER INFORMATION • OCTOBER-DECEMBER 2013

Advertising Personnel

Marian Anderson: Sr. Advertising Coordinator
Email: manderson@computer.org
Phone: +1 714 816 2139 | Fax: +1 714 821 4010

Sandy Brown: Sr. Business Development Mgr.
Email: sbrown@computer.org
Phone: +1 714 816 2144 | Fax: +1 714 821 4010

Advertising Sales Representatives (display)

Central, Northwest, Far East:
Eric Kincaid
Email: e.kincaid@computer.org
Phone: +1 214 673 3742
Fax: +1 888 886 8599

Northeast, Midwest, Europe, Middle East:
Ann & David Schissler
Email: a.schissler@computer.org, d.schissler@computer.org
Phone: +1 508 394 4026
Fax: +1 508 394 1707

Southwest, California:
Mike Hughes
Email: mikehughes@computer.org
Phone: +1 805 529 6790

Southeast:
Heather Buonadies
Email: h.buonadies@computer.org
Phone: +1 973 585 7070
Fax: +1 973 585 7071

Advertising Sales Representatives (Classified Line)

Heather Buonadies
Email: h.buonadies@computer.org
Phone: +1 973 304-4123
Fax: +1 973 585 7071

Advertising Sales Representatives (Jobs Board)

Heather Buonadies
Email: h.buonadies@computer.org
Phone: +1 973 304-4123
Fax: +1 973 585 7071