Panel Proposal for SHOT 2007

Title: 50 Years of Computing Historiography

Organizer:

Thomas Haigh, University of Wisconsin-Milwaukee, thaigh@computer.org

Chair:

Christopher Sterling, George Washington University, chriss@gwu.edu

Presenters:

The Many Histories of Computing
Michael S. Mahoney, Princeton University, mike@princeton.edu

Charles Babbage: Famous Object of Neglect
Allan Olley, University of Toronto, allan.olley@utoronto.ca

Historiography in the History of Computing: New Challenges from Other Disciplines?
Janet Delve, University of Portsmouth, Hampshire, UK, Janet.Delve@port.ac.uk

Bridging the gap between historians and hobbyists in the history of technology
Evan Koblentz, Independent Scholar, evan@snarc.net

Commentator:

Thomas Haigh, University of Wisconsin-Milwaukee, thaigh@computer.org

Relationship to Conference Themes:

Two papers in this panel consider the evolution of the historiography of computing over the past fifty years. This fulfills both the "Looking Back" element of the proposal and the call for papers with a historiographical theme.

Panel is organized by the SIG on Computers, Information and Society

"The Historian and other Disciplines" & request for "Diversity of Approaches" within a panel: one presenter is an independent scholar and hobbyist, another a history of science graduate student, the third a computing faculty member, and the fourth a history professor. The chair is a professor of Media and Public Policy, while the commentator and organizer is a history of computing specialist teaching in a library school. The panel contains British, American and Canadian participants. One paper squarely addresses the call for consideration of minor, specialized technological museums and their volunteers.

Session Abstract
Fifty Years of Computing Historiography

This panel surveys the historiography of computing in its fifth decade, exploring its roots, its ongoing relationship with computer hobbyists, and its potential to grow through attention to the methods of other historical subfields. The history of technology, as represented by SHOT, emerged as a distinct field of study at around the same time as the electronic computer. Like other fields, computing needed to build itself a past. Its initial role was as a scientific calculator, and so early works such as Edmund Berkeley's celebrated *Giant Brains or Machines That Think* (1949) presented the computer as both a revolutionary break with pre-electronic devices and an evolutionary development of earlier techniques for calculating and information processing. Over the next five decades both the history of technology and the historiography of computing evolved rapidly. Within the history of computing, changes were driven by shifts in the perceived nature and application of computer technology itself (science to corporate, corporate to personal) and by a gradual handover from elderly and eminent computer scientists to younger scholars with graduate degrees in the history of technology. Yet the history of computing community retains a distinctive engagement with computer scientists and engineers, and with organizations such as the IEEE.

Mahoney argues for a view of computing that goes beyond computers themselves to the communities of practitioners who adopted and adapted computers to their enterprises and purposes. In that view, computing has not one history but a constellation of histories (and historiographies) which explain its development without imposing its presence on the past.

Olley returns to the origin myth of computing: Charles Babbage. More has been written about Babbage than any other figure in the history of computing, and his story is familiar far beyond academia. Olley surveys the diverse uses made of Babbage's story by computing pioneers and historians to document his afterlife as an icon.

Delve surveys earlier work on the historiography of computing, providing a characterization of the field as overly internalist and concerned more with technical histories than social context. She then argues for the adoption of methods from various "mainstream" historical fields, and from the history of mathematics, as a cure for this malady.

Koblentz brings the voice of the enthusiastic amateur to challenge this diagnosis. Drawing from experience as a coordinator for the hobbyist museum community and a participant in a project that brought together historians and enthusiasts to create a new museum, he insists that professionals and amateurs must learn to work together to preserve historical knowledge.

In his commentary, Haigh will briefly weave together elements from the presentations to examine the question of a "useful past" for computing. For whom is history being written?

The Many Histories of Computing

Michael S. Mahoney, Princeton University

In thinking about the historiography of computing, it may help to reflect more broadly on just what it is that we are writing the history of and whether it is just one history that we are trying to write. We have tended to think in the singular, referring to "the computer" and to "computing". But that is misleading technically, historically, and historiographically. There is no one computer, and there is no one history of it. The first electronic digital computers were variations on the protean design of a limited Turing machine. Like the Turing machine itself, which has served as the fundamental abstract model of computation, the design described not a single device but a schema. It was indefinite. It could assume many forms, it could develop in many directions. What it became was what various people made of it. The computer has little or no history of its own. Rather, it has histories derived from the histories of the groups of practitioners who saw in it, or in some yet to be envisioned form of it, the potential to realize their agendas and aspirations. What kinds of computers have been designed since 1945 and what kinds of programs have been written for them reflects not so much the nature of the computer as the purposes and aspirations of the groups of people who made those designs and wrote those programs, and the product of their work reflects not the history of “the computer” but the histories of those groups, even as computers in many cases fundamentally redirected the course of those histories. Only within the histories of these groups did the computer become a supercomputer, an engineering design environment, a data processing system, a personal computer, a multimedia entertainment center, a medium of virtual reality, a form of artificial intelligence, a worldwide web.

In telling the story of the computer, historians have commonly mixed those histories together, choosing from each of them the strands that seem to anticipate or to lead to the computer, referred to in the singular. Quite apart from suggesting connections and interactions where none existed, that retrospective construction of *a* history of *the* computer makes its subsequent adoption and application relatively unproblematic or even inevitable. Separating the histories of computing, or perhaps even of computings, shifts attention to the major communities, or bodies of shared disciplinary practices, who embraced the new device and helped to shape it by adapting it to their needs and aspirations. It is the histories of these groups that reach back before the computer to lay out the strands that determined how they would see the computer, what they would want to do with it, and where they would direct its development. The major communities offer histories rooted in direct connections between people and institutions. There are other histories that stretch across these communities, histories of ideas and techniques that appear in different forms in different settings, in some cases because they reflect beliefs and practices shared and conveyed at more general cultural levels, in other cases because they adumbrate an idea that has only emerged clearly with its expression in a particular form of computing.

Drawing on some recent works in the field, I shall explore the challenges of writing histories of computing(s) and suggest how shifting the focus from computers to the communities of practitioners may help in dealing with that most elusive of technical artifacts known as software.

Charles Babbage: Famous Object of Neglect

Allan Olley, University of Toronto

Topic: Charles Babbage is now popularly recognized as originating the idea of the automatic digital computer. However, the term automatic digital computer only arose in the mid-twentieth century at the culmination of various developments machine computation in World War II. Early computer pioneers would put forward a history of Babbage's machines as the neglected precursor of their own work. Eventually historians would examine Babbage's life and work in closer detail. Historians would also examine the narrative put forward by the computer pioneers and workers.

Argument: Although, the surge in interest, after the invention of the modern computer, has been viewed as a rediscovery of Babbage's work, much of it has precedence in earlier responses to Babbage. Specifically prominent figures interested in machine computation before the resurgence, such as L. J. Comrie, knew of and commented on Babbage's work with machine computation and viewed it as a precursor of their own efforts. Even the neglect of his ideas was commented upon by one biographer around 1919. More widely Babbage remained a prominent figure in the years after his death, but before the advent of modern computing. For example *Encyclopedia Britannica* maintained an entry on him throughout the late 19th and early 20th century. Pioneers of the modern computer did however increase Babbage's prominence. Also, they took Babbage as a precursor of their own work, using him as an example to delineate what was meant by a modern automatic computer. This lead to new and detailed discussion of his proposed machines. Some computer pioneers went further and named Babbage as an inspiration for and perhaps even influence on modern machines. Professional computer historians have further detailed his life and work. Modern studies also reveal the complexities of Babbage's work and sought to correct misconceptions about its nature and influence.

Evidence: As this is a historiographic essay I will draw on published accounts of Babbage's machine computation work from his own time to the present day. These will include obituaries, successive encyclopedia articles, journal articles (both histories and technical works) from the entire period (searched via databases such as JSTOR), and some of the several biographies of Babbage. Of particular note are revaluations of Babbage's place in history by more recent historians of computing, such as I. B. Cohen's examination of the connection between Babbage and computer pioneer Howard Aiken.

Contribution to the Existing Literature: Babbage is one of the most famous and studied figures in the history of computing. This paper seeks to add some perspective to that extensive but often narrow literature. Specifically it seeks to add to the critical revaluations of the received history of Babbage and his work. This paper also deals with issues of presentist (or whig) history. This is a topic extensively discussed in the broader history of science and technology, but less often discussed with respect to Babbage.

Historiography in the History of Computing:
New Challenges from Other Disciplines?

Janet Delve, University of Portsmouth, Hampshire, UK

Topic: It is arguable that the dominant discourses in the history of computing are based in no small part on accounts that have gone unchallenged for decades (reminiscent of Mike Mahoney's 'insider histories'). In addition, there are many papers dwelling to a large extent on detailed technical aspects of the field, with little attempt to situate the work in a broader historical context. It would seem an appropriate time to stop and reflect on our historical methods in the history of computing in relation to two other disciplines: mainstream history, and the history of mathematics.

Argument: The historical methodology landscape of mainstream historians is well-developed and extremely wide-ranging, covering such areas as: the 'Annales School', labour history, women's history, race and culture, nationalism and postcolonial theory, to name but a few of the many to be found on the websites of major British and American universities. This wide array of theories represents a depth and breadth of historical expertise and experience which can inform the way historiography develops in the history of computing. Recent work in the history of mathematics reveals a greater awareness of historical methods which may also be applicable to the history of computing.

Evidence: Taking French history as an example, the events of May 1968 attracted various contemporaneous interpretations, which were replaced over the decades as the period was revisited and repositioned in the country's history. This contrasts with the single accounts that still pervade the history of computing. Another exemplar, the field of history and memory has sprung mainly out of the work of two French historians, Pierre Nora and Henri Rousso. They both consider the interplay of myth and memory, and bring a nuanced approach to the making of history. Luke Hodgkin considers historicism and 'presentism', Kuhn's scientific revolution, and eurocentrism, amongst other topics, in his introduction to his recent work on the history of mathematics, all of which provide a richer contextualisation for his work.

Contribution to Existing Literature: Bill Aspray, Mike Mahoney and Kenneth O. May have all written dedicated articles on historiography. This paper will look at progress made in history of computing historiography since their papers, and will consider what we can practically incorporate in this respect from more mature fields.

Bridging the gap between historians and hobbyists in the history of technology

Evan Koblentz, Independent Scholar

This year, 2007, marks the 30th anniversary of truly personal computer from companies like Apple, Commodore, and Tandy. Microcomputers before then were only sold in kit form. The plug-and-play nature of the Apple II, Commodore Pet, and Tandy TRS-80 changed history forever – microcomputers ceased being entirely for hobbyists and became just another retail product. Yet hobbyists are now back in force as collectors of antique computers – loosely defined as anything from the 1950s to 1980s. Their efforts to collect and restore vintage computers require the consolidation of vast amounts of historical material, typically involving discussions in online forums, participation in events like the Vintage Computer Festival, and collaborative projects to preserve things like advertisements, books, club newsletters, magazines, and user manuals. It is these modern collectors who represent what the IEEE History Center called "an important new group of people interested in helping to preserve… the history of electrical engineering and computing." So the relationship between professional historians and this informal but global society of lay historians needs to be fostered.

However, the area where historians and hobbyists can best share knowledge is in grassroots museum efforts. Approximately 30 computer-focused museums and historical institutes currently exist in the U.S. alone. Some, such as the Charles Babbage Institute (Minneapolis, Minn.), Computer History Museum (Mountain View, Calif.), and Smithsonian Institution (Washington, D.C.) possess significant budgets and professional staff. But most of the other museums are small, homegrown efforts. They are administered by collectors and volunteers, surviving on small donations. While professional museums usually focus on less accessible landmarks such as Babbage's difference engine or the ENIAC, hobbyist-led museums focus on computers which had a major consumer impact, such as the IBM System 360 or M.I.T.S. Altair. But collectors serving as lay historians may not always grasp context. A restored, operational, and stand-alone Digital Equipment Corp. PDP-8 may wow an audience of their follow enthusiasts, but the exhibit may lack context and signage to educate non-technical visitors about the computer's historical relevance. Amateurs and hobbyists also sometimes have lower standards for verifying research: a brief search on Wikipedia may satisfy a hobbyist, while a professional historian will triple-check sources. Collectors also lack an organized structure, yet tens of thousands of their ranks thrive around the world, usually unaware of professionals or lacking any way to make contact.

My paper focuses on lessons extracted from a recent example of computer hobbyists and professional historians working together. This began in 2005 when a user group called Mid-Atlantic Retro Computing Hobbyists formed. By a chance meeting with a group of antique radio collectors at that year's Trenton Computer Festival, MARCH became a partner of the upstart InfoAge Science Center in Wall, New Jersey. This campus, formerly an R&D center for the Marconi Wireless Telegraph Co. and later a top-secret electronics laboratory for the U.S. military, is now being renovated by volunteers on a shoestring budget but with research assistance from the nearby David Sarnoff Library, IEEE, and Lucent Technologies. MARCH now has 150 members from Boston to Pittsburgh to Washington, D.C. Their role at InfoAge includes planned exhibits such as "Computers of New Jersey" and "Computing in the Military", which wouldn't be possible without both local knowledge and professional research. It's up to historians and hobbyists together to make sure such examples turn into long-term trends for public benefit.

Christopher H. Sterling
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Professor of Media and Public Affairs, and of Public Policy and Public Administration, The George Washington University

Career: Dr. Sterling has been an academic for 37 years, and has served as a member of the GW faculty since 1982. He directed the university's graduate telecommunication program from 1984 to 1994, and again from 2001 to 2003. He served as associate dean for graduate affairs in the arts and sciences from 1994 to 2001. Before coming to GW, he served as a special assistant to one of the members of the Federal Communications Commission from 1980 to 1982. Through the 1970s he was on the communications faculty at Temple University in Philadelphia.

Publications: His primary research interests focus on the history of and policy for both electronic media and telecommunications. With several books still forthcoming, he has authored or edited nearly 20 monographs since the first appeared in 1973 (these are pictured on the full listing reached by clicking on "publications"). He was general editor of a three-volume and multi-author *Encyclopedia of Radio* (2004), edits *Communication Booknotes Quarterly*, and serves on the editorial boards of six scholarly journals. His most recent book is *Shaping American Telecommunications: A History of Technology, Policy, and Economics* (co-author, 2006). Among his earlier monographs are *Stay Tuned: A History of American Broadcasting* (co-author, 3rd ed., 2002), *The Focal Guide to Electronic Media* (editor of this CD-ROM, 1998), *and Broadcasting in America: A Survey of Electronic Media* (co-author with others, several editions). Sterling has also contributed articles to a variety of scholarly books and journals (among the most recent is "Pioneering Risk: Lessons from the U.S. Teletext/Videotex Failure." in the *IEEE Annals of the History of Computing*, as well as numerous encyclopedia entries and essays.

International Experience: Sterling has enjoyed wide experience overseas, having been a part of conferences, delivered talks or courses, or undertaken consulting in (among others) Belgium, Chile, England, France, Hong Kong, Monaco, Spain, Venezuela, and Central Europe.

Education: Sterling grew up in Wisconsin, earned his B.S. (political science, 1965) and M.S. (communication, 1967) and then his Ph.D (communication, 1969) from the University of Wisconsin-Madison.

Avocational Interests: His recreational interests include development of commercial air transport, passenger liners, medieval castles and fortification history, pre-Columbian archeology, classic cars from the 1930s, and works by and about Winston S. Churchill. He has published articles and reviews in several of these fields.

Michael S. Mahoney

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Education: Phillips Academy, Andover, l953-57; Harvard University, B.A. magna cum laude (History and Science), l960;Universität München, 1960-1962; Princeton University, Ph.D. (History and History of Science), l967

Academic Honors, Fellowships, and Grants: National Merit Scholar, l957-l960; Harvard National Scholar, 1957-1960; Stipendiat des Deutschen Akademischen Austauschdiensts, 1960-1962; National Science Foundation Graduate Fellowship, 1964-1965; NSF-NATO Postdoctoral Fellow, 1969-1970; National Endowment for the Humanities Summer Stipend, 1975; Director, National Endowment for the Humanities Summer Seminar for Secondary School Teachers, 1984, 1985; Alfred P. Sloan Foundation, Grants in support of research and development of curricular materials on "The Engineer's Experience and the New Liberal Arts", 1984-91 (with D.P. Billington, R. Mark, and J. Mulvey); Fellow, Dibner Institute for History of Science and Technology, MIT, 1995-96; Visiting Scholar, Department of History of Science, Harvard University, 1995-96; Corresponding Member, Académie Internationale d'Histoire des Sciences

Teaching Career: *Princeton University*, Instructor in History to Professor of History, 1965--; Director, Program in History and Philosophy of Science, 1972-1976; Program in History of Science and Program in Science in Human Affairs, 1983-1984, 1987-90; Associate Chair of History, 2005-07.

Non-Academic Employment: Computer Programmer, Melpar Electronics, Boston, 1959-1960 (parttime); Member of Technical Staff, AT&T Bell Laboratories, Government Information Systems, Holmdel, NJ, Summer 1987; Consultant on Software Development, 1987-88; Consultant on History of UNIX, 1989-90

Memberships and Professional Service (selected): History of Science Society; Society for the History of Technology; Association for Computing Machinery (Historical Consultant to SIGPLAN History of Programming Language Conferences II [1993] and III [2007] and to SIGSOFT Impact Project); IEEE Computer Society; Consulting Editor, *Studies in History and Philosophy of Science*; Editorial Board, *Annals of the History of Computing*, *Interdisciplinary Science Reviews*; Chair, OTA Advisory Panel for "Computer Software and Intellectual Property: Meeting the Challenges of Technological Change and Global Competition", 1990-91

Pertinent Recent Publications (since 2001):

"Boys' Toys and Women's Work: Feminism Engages Software", in Londa Schiebinger, Elizabeth Lunbeck, and Angela N.H. Creager (eds.), *Science, Medicine, and Technology: The Difference Feminism Has Made* (Chicago: University of Chicago Press 2001) , Chap. 9

"Software: The Self-Programming Machine", in Atsushi Akera and Frederik Nebeker (eds.), *From 0 to 1: An Authoritative History of Modern Computing* (New York: Oxford U.P., 2002)

"Software as Science - Science as Software", in Arthur Norberg and Ulf Hashagen (eds.), *Mapping the History of Computing: Software Issues* (Heidelberg/Berlin: Springer Verlag, to appear)

"In Our Own Image: Creating the Computer", in Ida Stamhuis, Teun Koetsier, and Kees de Pater (eds), *The Changing Image of the Sciences* (Dordrecht: Kluwer Academic Publishers, 2002)

"Finding a History for Software Engineering", *Annals of the History of Computing* 26,1(2004), 8-

"The Histories of Computing(s)", a lecture in the series "Digital Scholarship, Digital Culture", at the Centre for Computing in the Humanities, King's College, London, 18 March 2004; published version in *Interdisciplinary Science Reviews* 30,2(June, 2005)

"What Was the Question? The Origins of the Theory of Computation", in *Using History to Teach Computer Science and Related Disciplines* (Selected Papers from a Workshop Sponsored by Computing Research Association with Funding from the National Science Foundation) ed. Atsushi Akera and William Aspray (Washington, DC: Computing Research Association, 2004), 225-232.

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University Address:
Institute for History and Philosophy of Science,
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91 Charles St. West,
University of Toronto,
Toronto, ON, M5S 1K7

Education:
In progress: PhD at the Institute for History and Philosophy of Science and Technology at University of Toronto, 2003- .
M.A. at Institute for the History and Philosophy of Science and Technology at University of Toronto, 2003.
BSc, in Great Books and Physics at Brock University, 2002.

Thesis topic:
The impact of electronic computers on the astronomical calculation work of Wallace J. Eckert in the period following the Second World War.

Publications:
Non-refeered:
"Digitizing Measurement: Automatic Scientific Table Making." in *Proceedings of the XXV Scientific Instrument Symposium*, Krakow, 2006 (forthcoming).

Conference experience:
"Savour of Extravagance: Punched Card Accounting Machines in Science, 1928-1945" at the Annual Meeting of the Canadian Society for the History and Philosophy of Science, May 29-31st, 2006, York University, Toronto Ontario.
"Digitizing Measurement: Automatic Scientific Table Making." at the XXV Annual Scientific Instrument Symposium, September 6-9, 2006, Krakow, Poland.

Academic Awards:
SSHRC CGS Scholarship 2004-2007.

Work Experience:
Teaching Assistanceship, September to December, 2006 for HPS210, Scientific Revolutions I.

Teaching Assistanceship, January to April, 2006 for HPS211, Scientific Revolutions II.

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Full vitae online at http://www.port.ac.uk/research/ceisr/members/title,28440,en.html

SELECTED ACADEMIC:

University of Portsmouth, Principal Lecturer, School of Computing, 1996 -

University of Winchester, Senior Lecturer, Computing and Mathematics, 1992-1996

University of Canterbury, Christchurch, New Zealand, Visiting Researcher, Department of Philosophy, 2002-

Middlesex University, History of Mathematics Ph.D. Jan 1999

UCL (UK), Department of Electrical and Electronic Engineering, M.Sc., 1978-1979; Department of Mathematics, B.Sc., 1975-1978

SELECTED PEER REVIEWED PUBLICATIONS:

Delve, J.,2003, 'The College of Preceptors and the *Educational Times*: Changes for British Mathematics and Education in the Mid-Nineteenth Century. *Historia Mathematica*, Elsevier Press, vol. 30, 140-172.

Delve, J., 2004, 'Thomas Turner Wilkinson' *Dictionary of National Biography* on CDROM, Oxford University Press.

Delve, J., 2004, 'William John Clarke Miller' *Dictionary of National Biography* on CDROM, Oxford University Press.

OTHER PUBLICATIONS, HONORS & SERVICE:

Delve, J., Anderson, D. and Croarken, M., 2003 'Max Newman: forgotten father of the computer? *Annals of the History of Computing,*

Delve, J., 2002, 'Bootstrapping', *Global Business and Economics Review,* 4.2, 370-372.

Delve, J., Anderson, D., 2001, 'The Pinkerton Lecture', *Annals of the History of Computing* 23.2, 68-73.

Elected member of Council of the British Society for the History of Mathematics, 2002- 2006. Elected Committee member of the UK branch of the Association for History and Computing, 2003-2007. Editorship of BSHM / BLC Turing 2004 Conference Proceedings – to be published imminently by the British Computer Society on their eWiC site. Referee for the Encyclopedia of Data Mining and Warehousing. Invited lecture on Max Newman at the Royal Institution, London, 2001. Co-director of the Winchester Project, University of Winchester. Invited lecture for the BCS CCS (Computer Conservation Society) at the Science Museum, London. Organiser of Turing 2004 BSHM / BLC conference.

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Objective:

My ongoing goal is to help individuals and companies understand technology through unique research and writing

Experience:

Feb. 2007-present: Online Editor, *Electronic Component News*:
• *ECN* is a monthly print magazine with a daily web site for designers and electrical engineers
• For editorial, my role is to copy edit articles, write features, and produce two blogs
• For production, my role is to post daily news items, produce audio tutorials, maintain industry links
• I sometimes also work on our sister magazine, *Wireless Design & Development*

Nov. 2004-Oct. 2006: Editor-in-Chief, *FierceEnterprise*:
• *FierceEnterprise* is a daily IT newsletter published via e-mail by FierceMarkets
• Each issue includes a summary and analysis of the morning's news
• Special sections each week include Venture Capital, Deals, and the *Editor's Corner* column
• Special sections each winter include a year-end summary and a year-ahead trends preview

July 2000-Dec. 2003: Senior Writer, Ziff-Davis' *eWeek* (formerly *PC Week)*:
• Beat reporter for enterprise storage, backup/recovery, and disaster recovery (two and a half years)
(covered trends such as EMC Corp.'s evolution, industry standards, and legal regulation of corporate data)
• Beat reporter for outsourcing, web hosting, and application service providers (one year)
(covered trends such vendor growing pains, thin-client computing, and emerging technology)
• Also reported on databases, networking monitoring/testing, and servers
• Wrote approximately five stories per week; frequent travel; based in Woburn, MA

Jan. 1998-July 2000: Technology Editor/Staff Engineer, TMC Labs:
• TMC Labs is the product review arm of TMC, a publisher of monthly telecommunications magazines
• Magazines I supported included *CTI*, *Customer Interactions Solutions*, and *Internet Telephony*
• Role was to acquire, install, test, and report on hardware and software for call center, CTI, and VoIP
• Also wrote a biweekly column about personal and small-office technologies for TMCnet.com
• Wrote approximately four reviews per month; frequent travel; based in Norwalk, CT

June 1997-Dec. 1998: Staff Writer, *Home News Tribune*:
• Gannett-owned daily newspaper covering central New Jersey
• Role was staff writer, covered the township of Woodbridge, NJ, (pop. 90,000)
• Wrote approximately two-three stories per day

Related:

• Blogger, *Computerworld* – I write about the vintage computing hobby for this mainstream IT newsweekly
• Co-founder and president, Mid-Atlantic Retro Computing Hobbyists – MARCH is a regional user group
• Member, Board of Directors, Information Age Learning Center – science museum in Wall, New Jersey
• Founder and moderator, Computer Museum Administrators web forum – a group for museum staffers to share advice
• Recurring speaker at hobbyist events such as the Vintage Computer Festival and Trenton Computer Festival
• Co-author, *Vault.com Guide to IT Careers* – book for industry newcomers published in Dec. 2004
• Currently researching a new book about the history of portable computers

Education:

• May 1997 - Boston University, all but thesis / MS-level studies in journalism
• May 1996 - Kean University, Union, NJ, BA in English, minor in technology / industrial design

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SELECTED ACADEMIC:

University of Wisconsin--Milwaukee, Asst. Professor**,** School of Information Studies, 2004-

Indiana University, Bloomington, Visiting Assistant Professor, Informatics School, Fall 2003

Colby College, Visiting Instructor/Visiting Researcher, STS/Admin. Sci., 2001-3

University of Pennsylvania, History and Sociology of Science Ph.D. May 2003

Manchester University (UK), Department of Computer Science, B.Sc. & M.Eng, 1991-1995

SELECTED PEER REVIEWED PUBLICATIONS:

"Remembering the Office of the Future: Word Processing and Office Automation before the Personal Computer," forthcoming in *IEEE Annals of the History of Computing* 28:4 (October-December 2006).

“Engineering the Progressive Office: Technical Claims to Administrative Authority, 1917-1931” forthcoming in *Enterprise and Society*

"'A Veritable Bucket of Facts:' Origins of the Data Base Management System," ACM SIGMOD Record 35:2 (June 2006).

Thomas Haigh, “Software in the 1960s as Concept, Service, and Product”, *IEEE Annals of the History of Computing 24* (January-March 2002): 5-13.

Thomas Haigh, "The Chromium Plated Tabulator: Institutionalizing an Electronic Revolution, 1954-1958", *IEEE Annals of the History of Computing 23* (October-December 2001): 75-104

Thomas Haigh, “Inventing Information Systems: The Systems Men and the Computer, 1950-1968” *Business History Review 75* (Spring 2001): 15-61.

OTHER PUBLICATIONS, HONORS & SERVICE:

Around twenty five other publications, including research articles, book reviews, obituaries, biographies, and a review essay. Around thirty published or forthcoming oral history interviews.

Seventeen competitively reviewed presentations, including four SHOT papers, three Business History Conference papers, and papers at the North American Labor History Conference and Hagley conference on the Technological Fix. Ten invited presentations and departmental seminars including Tokyo University and a public keynote address at the 2005 CHOC workshop in Amsterdam.

Awards, Grants and Fellowships include: Software History Center Research Fellowship (2003), IEEE Life Member Fellowship in Electrical History (2000-01), Tomash Fellowship in the History of Information Processing (Babbage Institute, 1999-00), William Penn Fellowship (1995-99), Fulbright Award for post-graduate study in the US (1995-96)

Biographies editor and board member of *IEEE Annals of the History of Computing*
Chair, SHOT SIG on Computers, Information and Society, 2005-