

THE CENTER FOR THE HISTORY OF INFORMATION PROCESSING

Charles Babbage Institute Annual Report for 1986-87

With each passing year, the CBI program increases in depth and strength. Partly it is the result of the expanding number of people who aid in the work of CBI by writing or calling and sending material or comments to us. These people come from a wide range of organizations and have a broad array of backgrounds. Through them, the work of CBI is becoming more and more influential. And the other part is due to the efforts of the staff.

The year past at CBI has been the best one so far, when one measures the accomplishments. Substantial progress was made in two separate research projects on the early years of electronic digital computing. We can look forward in the next year or two to the completion of two book-length manuscripts and a variety of smaller pieces for different audiences. These studies also guided archival development, especially the recording of new interviews. A substantial collection has been assembled at CBI. As we become more knowledgeable about the holdings of archives around the world through use of these collections, so much the better is our information for others. And so the cycle goes: the better the information, the more people involved with CBI. A dream come true!

The dream could only have come true because of the continued support of our many sponsors. Last year's report commented on the faith they had in us as demonstrated by their yearly support. We must pay tribute again to that faith. We acknowledge the strong support of the University of Minnesota, which has contributed to this venture in many ways. The Trustees and Directors of the Babbage Foundation have given unstintingly of their time and financial resources. We are equally grateful to the foundations and corporations that have offered their support again this year. The staff of CBI cannot say thank you enough for offering us this great opportunity.

RESEARCH PROGRAM

General Program

Over the past six years, CBI has put into place a research program investigating the wide range of topics that have been the basis

of the development and growth of information processing in the period 1935 to 1960. Past and continuing studies have examined academic and government laboratory developments of computer systems in the 1940s and 1950s; origins of the computer industry and its interaction with government agencies; origins of theoretical computer science; scientific computation; computer architecture; printers and the computer printer industry; marketing of computers; international diffusion of computer technology; and origins and growth of the software industry.

These studies have been undertaken for many different purposes. Some are intended to give broad overviews, to aid archivists everywhere in making better informed decisions. Other studies have delved deeply into particular subjects to abet CBI's collecting activities. Still others have contributed to our scholarly knowledge of modern information processing. Although these projects were undertaken for many specific reasons, in toto they have contributed to an increased general understanding of the influencing forces and resulting impacts of modern information processing, especially in the period before 1960. This should serve as a strong basis for extending our study into the period after 1960 in the coming years.

Research Projects

Two areas continue to receive substantial attention.

(1) An Investigation of the Origins of the Computer Industry in the United States.

What began two years ago as a study of the history of the role and influence of Engineering Research Associates, Inc., has broadened into an analysis of the origins of new engineering-oriented companies founded to develop digital computers for market. Selected companies, government agencies, and academic projects are being investigated in order to examine the institutional context of technological change and the transfer of technology from military to civilian use.

(2) The History of the Computer as a Scientific Instrument.

An intellectual study concentrating on John von Neumann's contributions to computing will result from an investigation of the changing role of computation in the sciences and of von Neumann's use of the computer as a scientific instrument. This expanded study will include an analysis of von Neumann's involvement in projects at the Institute for Advanced Study, the Atomic Energy Commission, Los Alamos Scientific Laboratory, Aberdeen Ballistic Research Laboratory, and consulting work for IBM, Standard Oil, and various government agencies. The study will serve as a springboard for a more general investigation of the impact of the computer on the sciences.

These projects are entering their final research phases, and writing has begun on book-length manuscripts.

ARCHIVAL PROGRAM

Guides to Resources

As part of CBI's National Collecting Strategy Program, a series of guides to resources for the history of computing was undertaken. In August 1986, the Guide to the Oral History Collection of the Charles Babbage Institute was published by CBI. This guide provides access to one of the two substantial collections of oral histories for the history of computing in the world.

A second guide to the manuscript and records collections in United States and Canadian repositories is in process. Over 350 academic, corporate, state and federal government organizations were surveyed to obtain information about the amount and type of their holdings related to the history of computing. Through the generous cooperation of archivists at these organizations, the most comprehensive source of information on collections in the field of computing, and the first guide to collections in the history of technology, will appear in September 1987.

Another feature of the National Collecting Strategy Program is to provide historical aids for collecting. Three of these were completed this year: a chronology of software

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CBI Announces Predoctoral Fellowship and Professional Internship for 1988-89

The Charles Babbage Institute was founded in 1978 with the goal of conducting and promoting historical research in the technical and socio-economic aspects of information processing. Located on the University of Minnesota campus, the Institute maintains an archival center, serves as a clearinghouse for historical information, and sponsors other scholarly activities. In an effort to increase the number of qualified scholars in the field, the Institute is sponsoring a Predoctoral Fellowship and a Professional Internship.

Predoctoral Fellowship

The Charles Babbage Institute is accepting applications for a Graduate Fellowship to be awarded for the 1988-89 academic year to a graduate student whose dissertation will address some aspect of the history of computers and information processing. Topics may be chosen from the technical history of hardware or software, economic or business aspects of the information processing industry, or other topics in the social, institutional, or legal history of computing. These which consider technical issues in their socio-economic context are especially encouraged.

There are no restrictions on the venue of the fellowship. It may be held at the home academic institution, the Babbage Institute, or any other location where there are appropriate research facilities. The stipend will be \$6,000 plus an amount up to \$2,500 for tuition, fees, travel, and other approved research expenses. Priority will be given to students who have completed all requirements for the doctoral degree except the research and writing of the dissertation, though less advanced and incoming graduate students will also be considered. Fellows may reapply for up to two one-year continuations of the fellowship.

Applicants should send biographical data and a research plan. The plan should contain a statement and justification of the research problem, a plan of procedure for research and writing, and information on availability of research materials and faculty support for the project. Applicants should arrange for three letters of reference, certified transcripts of college credits, and GRE scores to be sent directly to the Institute.

Professional Internship

The Charles Babbage Institute is accepting applications for a Professional Internship to be awarded for a period of three to nine months between June 1, 1988 and May 31, 1989. The internship is available to professional staff interested in an introduction to the history of information processing. Appropriate applicants might include, but are not limited to, historians and social scientists interested in the history of information processing and its infrastructure, academics interested in

preparing new courses in this history, or records managers and archivists interested in related archival problems.

Residence is required at the Babbage Institute, on the University of Minnesota campus. Interns are required to conduct a research project under the direction of the Institute staff. Routine office and clerical support services are provided.

The stipend for the internship is \$1,000 per month. Interns may receive additional outside support, but must devote their full time to the history of information processing while the

internship is in effect.

Applicants should send biographical data, a statement of interests, a proposal of dates during which the internship would be held, and the names (with telephone numbers and addresses) of three references.

Complete application materials should be received by January 15, 1988 by The Charles Babbage Institute, University of Minnesota, 103 Walter Library, 117 Pleasant Street S.E., Minneapolis, MN 55455, U.S.A. Telephone 612/624-5050. The number of awards is dependent upon funding. □

Manchester University Announces the Opening of the British National Archive for the History of Computing

This article was prepared by Dr. Geoffrey Tweedale of the British National Archive.

Computing, in its many ramifications, is central to technological and social change in the late 20th century. Britain has played a major role in this technology. Yet although many of the pioneers are still accessible, the artefacts and the historical records are fast disappearing. Aware of this fact, in 1985 a committee of industrialists and computer scientists began discussions which led to the selection of Manchester University as the home for a National Archive for the History of Computing.

The importance of Manchester and its region in the history of British computing is well known. It was at Manchester University that the Mark I, the world's first stored-program computer, operated in 1948. Moreover, the Manchester region remains an important centre for the British computer industry, and the University itself has continuing strengths in computer science.

The NAHC was officially opened, through the financial generosity of the Leverhulme Trust, on 1 July 1987. The Archive will:

- produce a comprehensive listing of records relating to the history of computing in Britain and encourage their preservation,
- find secure homes, in Manchester University Library or elsewhere, for such records as are at risk,
- conduct and record interviews with leading figures in the history of computing to establish an oral history archive, and
- undertake research into computer history and stimulate research by organising conferences and postgraduate teaching and supervision.

Dr. Geoffrey Tweedale will be the head of the National Archive. Dr. Tweedale completed Masters and Ph.D. degrees in American economic history at the London

School of Economics. He worked from 1984 to 1986 on the research staff of the School's Business History Unit on the *Dictionary of Business Biography*. He is the author of *Sheffield Steel and America: A Century of Commercial and Technological Interdependence, 1830-1930* (Cambridge University Press, 1987).

The National Archive will be based in the Centre for the History of Science, Technology & Medicine at the University of Manchester. The Centre is rapidly developing its work on the history of technology, of which the computer project will form a major part. Furthermore, the Centre forms part of the University's Department of Science and Technology Policy, which itself has a long record of research in many areas closely connected to the history of the computer industry, and recently has developed its expertise in information technology. Through its research arm PREST it is currently engaged on an evaluation of the Alvey Project.

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CHARLES BABBAGE INSTITUTE NEWSLETTER

The Charles Babbage Institute, The Center for the History of Information Processing, is sponsored by the information processing community and the University of Minnesota. Arthur L. Norberg, Director.

The Charles Babbage Institute Newsletter is a publication of the Charles Babbage Institute, University of Minnesota, 103 Walter Library, 117 Pleasant Street S.E., Minneapolis, Minnesota 55455, telephone (612) 624-5050. The Newsletter reports on Institute activities and other developments in the history of information processing. Permission to copy without fee all or part of this material is granted provided that the source is cited and a copy of the publication containing the copied material is sent to the Institute.
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Archival Resource Guide is Now Available at CBI

The publication, *Resources for the History of Computing: A Guide to U.S. and Canadian Records*, has been printed and is now available from CBI for \$9.00. The guide is the first compilation of archival resources relating to the history of computing. More information about its scope can be found in the last issue of the newsletter (vol. 9, no. 4, 1987). The guide may be ordered by writing to CBI at the address on the last page of the newsletter.

The guide includes more than 350 entries from academic, corporate, state, private, and government repositories. Below is a listing of CBI's collections that are abstracted in the guide. Abstracts for most of these collections can also be found in the Research Libraries Information Network (RLIN).

Allen, Alden W.

Papers, 1950-1971. 1 cubic ft. CBI 26.

Anderson, Walter L. (1922-).

Papers, 1942-1955. 0.4 cubic ft. CBI 28.

Association for Computing Machinery. Los Angeles Chapter. Special Interest Group on Programming Languages. Working Group 4. PL/I Bulletins, 1966-1967. 0.1 cubic ft. CBI 35.

Association for Women in Computing. Twin Cities Chapter.

Records, 1980-1984. 1 cubic ft. CBI 7.

Auerbach Associates, Inc.

Records, 1958-1976. 91 cubic ft. CBI 30.

California Computer Products.

CalComp vs. IBM Trial Records, 1963-1972. 7 cubic ft. CBI 2.

C-E-I-R, Inc.

Records, 1954-1970. 1 cubic ft. CBI 8.

Computer and Communications Industry Association.

Antitrust Records, ca. 1957-1982. 75.5 cubic ft. CBI 13.

Computer Literature Collection.

ca. 1940-ongoing. 270 cubic ft. CBI 12.

Conference on Data Systems Languages.

Records, 1959-ongoing. 24.5 cubic ft. CBI 11.

Eckert, Wallace John (1902-1971).

Papers, 1931-1975. 1.5 cubic ft. CBI 9.

Educom.

Records, 1971-1979. 2.3 cubic ft. CBI 18.

Glaser, George.

Papers, 1967-1979. 6.5 cubic ft. CBI 23.

Hammer, Carl (1914-).

Papers, 1949-1984. 10 cubic ft. CBI 3.

Hill, John L. (1909-).

Papers, 1947-1981. 1 cubic ft. CBI 24.

History of Programming Languages Conference (1978 : Los Angeles, Calif.).

Records, 1959, 1972-1983 (1976-1982). 7 cubic ft. CBI 19.

Hoelzer, Helmut (1912-).

Papers, 1946-1985(?). 0.1 cubic ft. CBI 33.

Honeywell, Inc.

Honeywell vs. Sperry Rand Records, 1864-1973 (1925-1973). 19.5 cubic ft. CBI 1.

IFIP Working Group 2.1 on Algol.

ALGOL Bulletins, 1959-1976. 0.3 cubic ft. CBI 29.

Jacobi, George T.

Papers, 1948-1959. 0.7 cubic ft. CBI 41.

Kagan, Claude A. R.

Papers, 1958-1966. 1.0 cubic ft. CBI 16.

Kalb, Robert M. (1904-1976).

Papers, 1926-1976. 8.2 cubic ft. CBI 4.

Larson, Earl R. (1911-).

Papers, 1981-1985. 1 folder. CBI 31.

Nash, John Purcell (1915-1969).

Papers, 1949-1957. 0.1 cubic ft. CBI 14.

Pair, Paul M. (1898-).

Papers, 1962-1985. 0.2 cubic ft. CBI 38.

Patton, Peter C.

Class notebooks, 1956. 0.1 cubic ft. CBI 34.

Patent Data Publications.

Computer Patent Abstracts, 1931-1982. 3.5 cubic ft. CBI 25.

Phillips, Charles A. (1906-1985).

Papers, 1959-1976. 1.3 cubic ft. CBI 39.

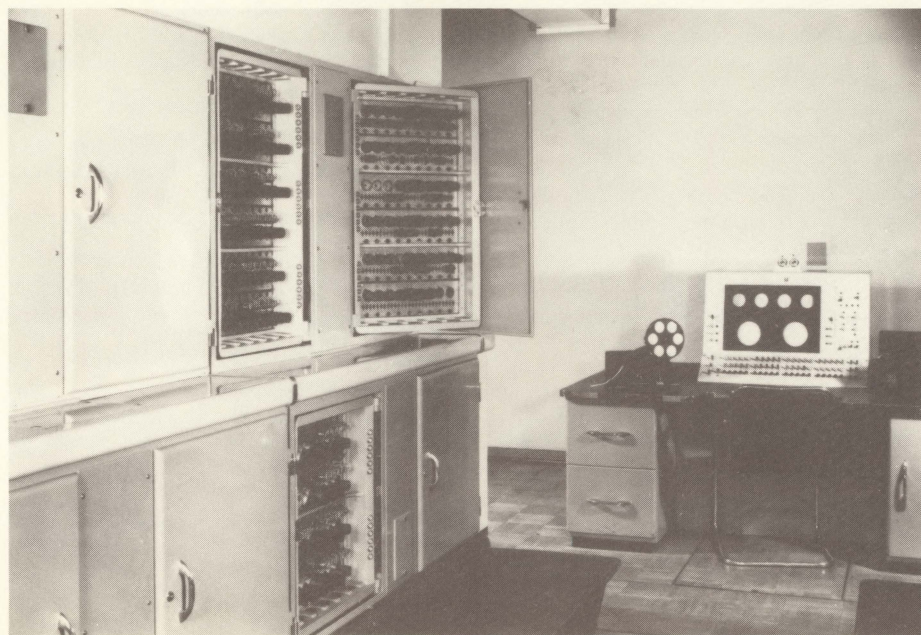
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Besides its involvement with the University and the new and expanding Greater Manchester Museum of Science and Industry, the National Archive also has an Advisory Panel, including Dr. Simon Lavington (Professor of Computer Science at the University of Essex), Dr. Jack Howlett (former director of the Atlas Project, and now editor of ICL's technical journal), and Mrs. E.D.P. Symons (Archivist of the Institution of Electrical Engineers), as well as other experts.

With these resources, the National Archive looks forward to enriching the development of the study of science and technology in the

field of computer history. The success and continuance of the NAHC will require both the financial support and the active cooperation of firms and individuals in the computer industry. The NAHC will therefore welcome notification of the existence of manuscripts and relevant material and any offers of funding.

For further information contact: Dr. Geoffrey Tweedale, Centre for the History of Science, Technology & Medicine, Department of Science and Technology Policy, The University, Manchester M13 9PL, England. □



The Ferranti Mark I, with cover doors removed and with the control desk in the background, ca. 1957.

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Early Calculating Devices Part of Special Collection in West German Museum

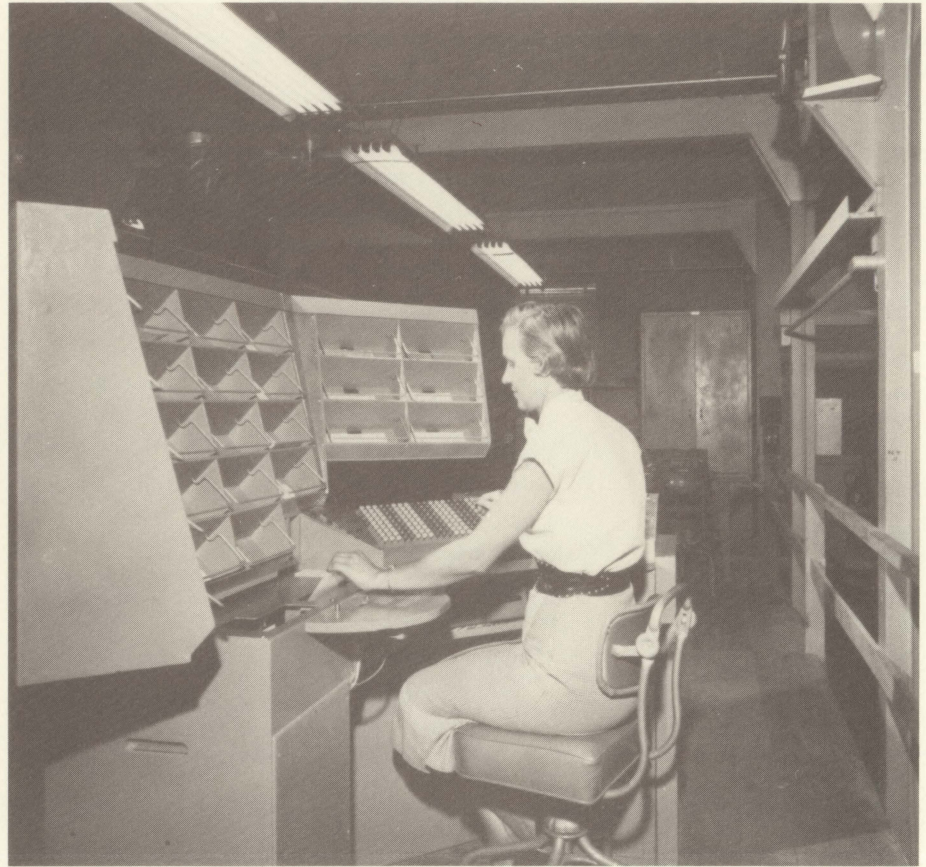
The Braunschweigisches Landesmuseum für Geschichte und Volkstum (Braunschweig Provincial Museum of History and National Heritage), located in Braunschweig, West Germany, houses a special collection of early calculating instruments and machinery, as well as historical documents that include plans, specifications, sketches, and explanations for the use of these machines.

The most primitive artifacts in the collection are Japanese, Chinese, Russian, and Roman abaci and Napier rods. The earliest mechanical machine is a reconstructed model of a calculating machine invented and built by Wilhelm Schickard in 1623-1624. Although the original model was destroyed, the letters and sketches sent by him to Johannes Kepler have survived. Other machines held in the collection include an adding machine designed by Blaise Pascal (1623-1662) and the calculating machine designed by Wilhelm Leibniz (1646-1716), claimed to be the first mechanical device that could add, subtract, multiply and divide without operator intervention. Eighteenth century machines housed in the collection include the adding and subtracting machine of Christian Ludwig Gersten (1701-1762) and the calculating machines of Philipp Matthaeus Hahn (1739-1790) and Johann Helfreich Müller (1746-1830). Machines from the nineteenth century include the arithmometer of Charles Xavier Thomas (1785-1870), calculating machines of Maurel and Jayet and Arthur Burkhardt, Dorr. E. Felt's Comptometer and the adding machine of William Seward Burroughs (1857-1898). Several early twentieth century ten key models and some typical electronic models are also on display.

In addition to these artifacts, the museum has a collection of documents that include a fifteenth century text on calculating, the description and use of a calculating machine by Samuel Moreland, the description and construction drawings for a calculating machine designed by Johann Polenus, plans for calculating machines by Jacob Leupold that were later developed by Hahn, Hahn's description and defense of his own machines, descriptions and construction plans for a machine by Charles Xavier Thomas, and the guarantee for a Brunsviga calculator from 1905.

The museum is located in the Burgplatz in Braunschweig. For further information write Mr. Gerd Biegel, Museumdirektor, Braunschweigisches Landesmuseum, Burgplatz I, D-3300, Braunschweig, West German. □

From CBI's Photograph Collection



Prototype check sorter for the ERMA system, ca. 1955. The sorter was designed and built at Stanford Research Institute (SRI) for the Electronic Recording Machine—Accounting, a banking automation system that eventually was developed and marketed by the Computer Division of General Electric. The photograph was donated by Bill Petterson, formerly with GE, who commented that the SRI photographs were obtained mainly so that GE could develop a manufacturing plan as part of a bid to build a system for the Bank of America. GE's ERMA system was the first large-scale computer automation system to be widely accepted by the banking industry.

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SHARE.

Records and Proceedings, 1955-1981. 6 cubic ft. 32 reels of microfilm (35mm). CBI 21.

Smith, Albert E. (1907-).

Papers, 1946-1963. 0.2 cubic ft. CBI 17.

Stein, Marvin L. (1924-).

Papers, 1949-1971. 4.6 cubic ft. CBI 10.

United States. National Bureau of Standards.

Computer Literature Collection, 1961-1978. 180 cubic ft. CBI 32.

University of Michigan. Willow Run Research Center. Special Course on Digital Computers (1953).

Proceedings Summary, 1953. 0.2 cubic ft. CBI 15.

University of Minnesota. Microelectronics and Information Sciences Center.

Records, 1977-1981. 1.6 cubic ft. CBI 5.

USE, Inc.

Records, 1956-1959. 0.3 cubic ft. CBI 20.

Wagner, Francis V.

Papers, 1946-1985. 0.75 cubic ft. CBI 6.

Ware, Willis H. (1920-).

Papers, 1971-1980. 18 cubic ft. □

History of Information Processing Lectures Presented at Recent SHOT/HSS Meeting

The last newsletter described a session organized by CBI on the history of computing to be held this October at the joint History of Science Society and Society for the History of Technology annual meeting. The programs for these meetings are now available and we are pleased to see that there are a number of additional lectures on computing and information processing. A complete listing of these lectures is given below. Times that are listed are for the sessions in which the lectures appear. All sessions are held in the Radisson Plaza Hotel in Raleigh, North Carolina.

Friday, October 30

HSS: Works in Progress: Mathematics and the Physical Sciences in the Modern Era
9:00-11:30 a.m.

Frederik Nebeker (Princeton University):
The Importance of Computational Aids in Meteorology.

SHOT: Computer History Interest Group Organizational Meeting 1:00-2:15 p.m.

HSS/SHOT: Science and Regional Development 2:30-5:00 p.m.

Henry Lowood (Stanford University):
Steeple of Excellence and Valley of Silicon: Origins of the University Connection at Stanford, 1937-1958.
Commentator: Helen Samuels (MIT).

SHOT: Work in Progress 2:30-5:00 p.m.

Linda M. Strauss (Rensselaer Polytechnic Institution): Automata and Automatism in the Nineteenth Century.

Saturday, October 31

CBI/HSS/SHOT: Modern Computing Reexamined: Historical Investigations
9:00AM-noon.

I. Bernard Cohen (Harvard University):
Howard Aiken's Computers: Were New Ideas Encased in Traditional Technologies?

Arthur L. Norberg (CBI): The Perils of Companies on Technological Frontiers: Designing and Manufacturing Electronic Computing Machines in the 1940s.

William Aspray (CBI): The Computer as a Scientific Instrument: A New Climate for Meteorological Science and Practice.

Commentator: Michael S. Mahoney (Princeton University).

SHOT: Large-Scale Soviet Technologies
9:00-11:30 a.m.

Naum Kipnis (Bakken Library): High Technology on Government Demand: The Case of Soviet Computers, 1946-1956.

William McHenry (Georgetown University): Enterprise Level Computing in the Soviet Economy.

Commentator: Paul Ceruzzi (National Air and Space Museum).

SHOT: Work in Progress 9:00-11:30 a.m.

John E. Burke (John Hopkins University): The Birth of the American Computer Industry, 1946-1952.

Sunday, November 1

SHOT: Social Construction of Technology
9:00-11:30 a.m.

Bryan Pfaffenberger (University of Virginia): The Social Construction of the Personal Computer.

Commentator: Peter Meiksins (University of New York, Geneseo). □

NBS Symposium on Science and Technology

A Symposium on Science and Technology in the Public Interest: The National Bureau of Standards in the Post-War Era, 1945-1985 was held at the National Bureau of Standards in Gaithersburg, Maryland September 17-18, 1987. Three lectures may be of interest to our

readers: Lewis Branscomb (Harvard University) presented the keynote lecture on "A Policy Perspective from 1951-1972"; Stuart Leslie (Johns Hopkins University) lectured on "From Tinkertoys to VLSI: The NBS and the Federal Mission in Electronics Technology"; and CBI Associate Director delivered a paper jointly written with Michael Gunderloy (Rensselaer Polytechnic Institute) on "The NBS Contributions to Early Computing and Numerical Analysis."

For further information about the conference and conference proceedings, please contact Professor Stuart W. Leslie, Department of the History of Science, Johns Hopkins University, Baltimore, MD 21218, telephone (301) 338-7501. □

ACM History of Medical Informatics Conference

The Association for Computing Machinery (ACM) is organizing a Conference on the History of Medical Informatics to be held November 5-6, 1987, at the National Library of Medicine in Bethesda, Maryland. The objective of the conference is "to provide a better understanding of the insights that led to our current applications, the impact of this early work on both medical computing and computer science, and the ways in which these pioneering efforts have molded our vision of the future." Twenty-five leading pioneers in the field of medical informatics have been invited to lecture or participate in panel discussions.

For further information contact the conference chair, Mr. Bruce I. Blum, Applied Physics Laboratory, Laurel, Maryland, (301) 953-6235; or the local arrangements chair, Dr. John Parascandola, National Library of Medicine, Bethesda, Maryland 20208, (301) 496-5405. The Babbage Institute is a sponsoring organization for the conference. □

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developments, a bibliography to the history of software, and an overview of the history of computer architecture. The chronology appeared in the CBI Newsletter. The bibliography and the architecture paper are in the process of review and we expect publication soon.

Final preparations have been completed for our major activity in the National Collecting Strategy Program for the coming year, a joint project with Control Data Corporation to study records generated by significant industrial computer projects of various types. Funding was secured, project staff hired, final arrangements reached with CDC personnel, and work begun in June 1987.

Archives Development

Again this year, the archives grew at a greater rate than in previous years. Some significant accessions were the Auerbach Associates records from Calculon Corporation, the Computer and Communications Industry Association (CCIA) Antitrust Case records, the ACM History of Programming Languages Conference records, and large collections of manuals from the University of Minnesota and Systems Development Corporation. Smaller collections include materials on Engineering Research Associates, Inc., and early records of AFIPS. Nineteen new interviews were recorded during the year, nine of these are part of the von Neumann study and seven are related to the history of ERA.

Processing

A significant milestone was reached this year in CBI's effort to make our collections available to as many researchers as possible. Descriptions of more than eighty percent of CBI's holdings were added to the Research Libraries Information Network (RLIN), a growing, on-line database of materials in 1,000 academic libraries in the U. S. and Canada. The guide to manuscript collections that CBI prepared provides another access to this information.

The time-consuming activity of processing collections continued at a steady pace in the past year. CBI's computer literature collection, computer surveys materials, the

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CCIA Antitrust collection, CODASYL records, Auerbach Associates records, and the History of Programming Languages conference records all received attention. The latter collection involved the creation of a database listing each report up to 1968. Another eleven oral histories were opened for research this year.

COMMUNITY PROGRAM

This year we increased our outreach in several major areas. CBI strengthened its relationship to the European community through participation in an international conference honoring John von Neumann held in Hungary and visits to several European museums and research projects. Interaction with the academic and professional communities in the United States continued to occur frequently through the participation of staff in conferences and meetings. This year major presentations were given at the Society of American Archivists annual meeting, the Small College Computer Conference, Arizona State University, and Cornell University. In addition, CBI staff continue to influence the educational program of the University of Minnesota by offering graduate-level courses in the history of technology.

A symposium CBI organized on Computing in the 21st Century attracted a large number of people from the business community. CBI and the Smithsonian Institution's National Museum of American History are planning another conference for the fall of 1987. In a research conference setting, historians from fields of technology, business, and economics, and sociologists will discuss similarities and differences of their research activities to those of the history of information processing.

CBI's involvement in publication remains strong. Besides publication of the quarterly newsletter, CBI staff contribute to the CBI Reprint Series, the MIT Press History of Computing Series, and the **Annals of the History of Computing**.

Fellowship

The CBI Predoctoral Fellowship for 1987-88 was awarded to Frederik Nebeker, of Princeton University, to support his dissertation research on the impact of electronic computers on the science of meteorology. His research traces the uses of punched card machines, desk calculators, and graphical and nomographic techniques in the decades prior to the Second World War and the use of digital computers in the succeeding period. One objective of the study is to investigate in detail an important example of what happened to various sciences when the computer became available.

OBJECTIVES FOR 1988

CBI continues to focus on its main mission to:

- engage in historical research to foster greater understanding of significant events in information processing, and
- identify and preserve the significant records associated with this field.

In 1987-88 CBI objectives, consistent with this mission, will be to:

- continue research in its two main research projects and write a substantial portion of two books on these topics,
- conduct research on the probe of archival materials at CDC and make progress on the analysis of corporate records and the technological process,
- intensify archives collecting efforts,
- conduct background research on computing in the 1960s and 1970s with an eye toward defining major research programs of the future and preparing new overview studies of particular areas. □

CHARLES BABBAGE INSTITUTE NEWSLETTER

The Charles Babbage Institute
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