

Jackson Chosen as 1992-93 Adelle and Erwin Tomash Fellowship Recipient

Michele Jackson has been awarded the fourth Adelle and Erwin Tomash Fellowship in the History of Information Processing by the Charles Babbage Institute. Ms. Jackson is a Ph.D. candidate in the Department of Speech Communication at the University of Minnesota. She received a B.A. in Speech Communication from Macalester College in 1987, and a M.A. in Speech Communication from the University of Minnesota in 1990.

Ms. Jackson's research project examines the development of Group Decision Support Systems (GDSS). These are software systems that support interactive, parallel, multi-user information processing in contrast to the sequential processing supported by groupware or electronic mail. While these systems began nearly twenty years ago, very little is known about their development.

Jackson will investigate GDSS development using a comparative approach. She plans to develop case histories of four different academic projects. She will study each project through its first five years in order to determine the factors that shaped the projects and the systems, and how these factors are reflected in each of the software systems. Although the projects shared the same goal of group support, the developers had different approaches and used different technologies. The projects she will investigate are at the New Jersey Institute of Technology, the University of Arizona, the University of Michigan, and the University of Minnesota.

The case studies will serve as empiri-

cal data for constructing and testing models of the social construction of technology. Because GDSS projects are designed to produce a particular social environment, rather than an artifact, the development is driven by a perception or vision of desirable social interaction. By discerning the different visions held by GDSS developers, both within single projects and among the four different projects, Jackson hopes to gain insight into the software development process and increase our understanding of the role of vision in the development of technology.

We look forward to frequent visits by Ms. Jackson to CBI, as she will be working on her project primarily at the University of Minnesota through the 1992-93 academic year. □



Michele Jackson

DATAmatic Records Donated

In 1955, the Raytheon Corporation entered into a joint venture with the Minneapolis Honeywell Regulator Company (now Honeywell) establishing the DATAmatic Corporation in Newton Highlands, Massachusetts, to develop and market electronic data processing equipment. Edward L. Gilfix joined Raytheon two weeks before the establishment of DATAmatic, and found himself reassigned as head of training for the new computer manufacturer. He recently retired from Raytheon, and donated a number of manuals and reports to the Charles Babbage Institute.

The donation is significant because DATAmatic is not well documented by CBI or other historical repositories. The company's first major computer, the D-1000, was introduced in 1957 and was considered one of the fastest of the period. Records from Gilfix include a wide variety of reports on the D-1000, including training program notes, informational bulletins, operation manuals, and an assembly program manual. Of special note is a sales manual, which includes assessments of competing manufacturers' computers. Also included are separate proposals detailing the application of the D-1000 to U.S. Savings Bond transactions of the Bureau of the Public Debt and inventory management of the Rossfor Ordnance Depot.

Three years after the formation of DATAmatic, Honeywell bought Raytheon's share in the company. Thereafter, the company announced the development of a medium scale solid-

DATAmatic continued on page 3...

Recent Publications

Robert J. Chapuis and Amos E. Joel, Jr., *Electronics, Computers and Telephone Switching: a Book of Technological History as Volume 2: 1960-1985 of "100 Years of Telephone Switching."* Amsterdam, The Netherlands: North-Holland Publishing, 1990.

Steve J. Heims, *The Cybernetics Group.* Cambridge, MA: MIT Press, 1991.

Ernst Martin, *The Calculating Machines (Die Rechenmaschinen): Their History and Development.* Vol. 16, CBI Reprint Series for the History of Computing. Translated and edited by Peggy Aldrich Kidwell and Michael R. Williams. Cambridge, MA: MIT Press; Los Angeles: Tomash Publishers, 1992.

Hartmut Petzold, *Moderne Rechenkunstler: Die Industrialisierung der Rechentechnik in Deutschland.* Munich: Beck, 1992.

Jon Palfreman and Doron Swade, *The Dream Machine: Exploring the Computer Age.* London: BBC Books, 1991.

CHARLES BABBAGE INSTITUTE NEWSLETTER

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William Poundstone, *Prisoner's Dilemma: John von Neumann, Game Theory and the Puzzle of the Bomb.* New York: Doubleday, 1992.

Herbert A. Simon, *Models of my Life.* New York: Basic Books, 1991.

U.S. Congress, Office of Technology Assessment, *Finding a Balance: Computer Software, Intellectual Property, and the Challenge of Technological Change, OTA-TCT-527.* Washington, DC: U.S. Government Printing Office, 1992.

Articles of Interest

Paul E. Ceruzzi, "When Computers were Human," *Annals of the History of Computing*, 13:3(1991): 237-244.

Gerald Estrin, "The WEIZAC Years (1954-1963)," *Annals of the History of Computing*, 13:4(1991): 317-340.

Lars Heide, "From Invention to Production: The Development of Punched-card Machines by F. R. Bull and K. A. Knutsen 1918-1930," *Annals of the History of Computing*, 13:3(1991): 261-272.

F. W. Kistermann, "The Invention and Development of the Hollerith Punched Card: In Commemoration of the 130th Anniversary of the Birth of Herman Hollerith and for the 100th Anniversary of Large Scale Data Processing," *Annals of the History of Computing*, 13:3(1991): 245-260.

J. Lesourne and R. Armand, "A Brief History of the First Decade of SEMA," *Annals of the History of Computing*, 13:4(1991): 341-350.

Special Issue: "Time-Sharing and Interactive Computing at MIT, Part 1: CTSS," *Annals of the History of Computing*, 14:1(1992).

Special Issue: "Time-Sharing and Interactive Computing at MIT, Part 2: Project MAC," *Annals of the History of Computing*, 14:2(1992). □

Acknowledgements

CBI would like to thank Mrs. Lee E.M. Bright for her recent generous donation in memory of her husband Herbert S. Bright.

We would also like to welcome Mr. A.R. Zipf as a new colleague level "Friend of CBI" and thank George E. Gourrich and F. W. Kistermann for their recent renewals as Participating Associate Members. □

Conferences

SHOT Special Interest Group: *Information, Computing, and Society*

The Society for the History of Technology (SHOT) will hold its annual meeting in Uppsala, Sweden 16-21 August 1992. Information, computing, and society is a special interest group of SHOT for those interested in the history of computing. The special interest group will hold its sixth annual meeting at the SHOT conference. For information about the special interest group contact Judy O'Neill, Charles Babbage Institute, 103 Walter Library, 117 Pleasant Street, S.E. University of Minnesota, Minneapolis, Minnesota 55455.

Delay in European History of Computing Conference

The "History and Development of Informatics" conference, originally scheduled for September 1992, is now scheduled for September 1993 in Sophia-Antipolis, France. The call for papers for this conference will be re-issued.

Second ACM SIGPLAN History of Programming Languages Conference

The Second ACM SIGPLAN History of Programming Languages Conference (HOPL-II) will be held in Cambridge, Massachusetts on April 20-23, 1993. In 1978, the first History of Programming Languages Conference presented the development and evolution of thirteen languages, the people who participated in that work, and the context in which it was undertaken. HOPL-II will address the history of some of the significant developments that have happened since then. In addition to histories of specific languages, HOPL-II also expects papers on histories of language features and concepts, and histories of classes of languages related by language paradigm or application area. Developers of six important languages have accepted invitations to tell their stories at HOPL-II: Bill Whitaker (Ada), Dennis Ritchie (C), Ralph Griswold (ICON), Niklaus

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Please let us know your new mailing address. This will ensure your receiving the CBI Newsletter on a timely basis and also save us postage costs. Thank you.

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state computer, the H-800. This computer is also well represented in the materials donated by Gilfix. They include a full set of product manuals and preliminary manuals, the H-800 newsletter, and proposals to Blue Cross/Blue Shield of Chicago and Guaranty Trust of New York for H-800 installations.

Other records in the donation include literature on Raytheon's RAYDAC and RAYCOM computers, material from the Willow Run seminars during the 1950s, coding manuals developed by Prudential Insurance for the UNIVAC, and other computer product literature. Of special note is a 1959 report on the data processing industry prepared by Raytheon's Commercial Product Planning. The information in it was intended to be used as a basis for the future expansion of Raytheon's commercial business. The author classified the digital machine industry in three segments (see illustration), and estimated the revenues from digital computer manufacturing would grow from \$446 million in 1958 to \$650 million in 1962. (One source later estimated actual domestic data processing revenues as \$395 million in 1958 and \$1.09 billion in 1962).

Most of the records from this donation will be added to CBI's existing collection of product literatures and computer manuals. CBI is grateful to Edward L. Gilfix for donating these materials. □

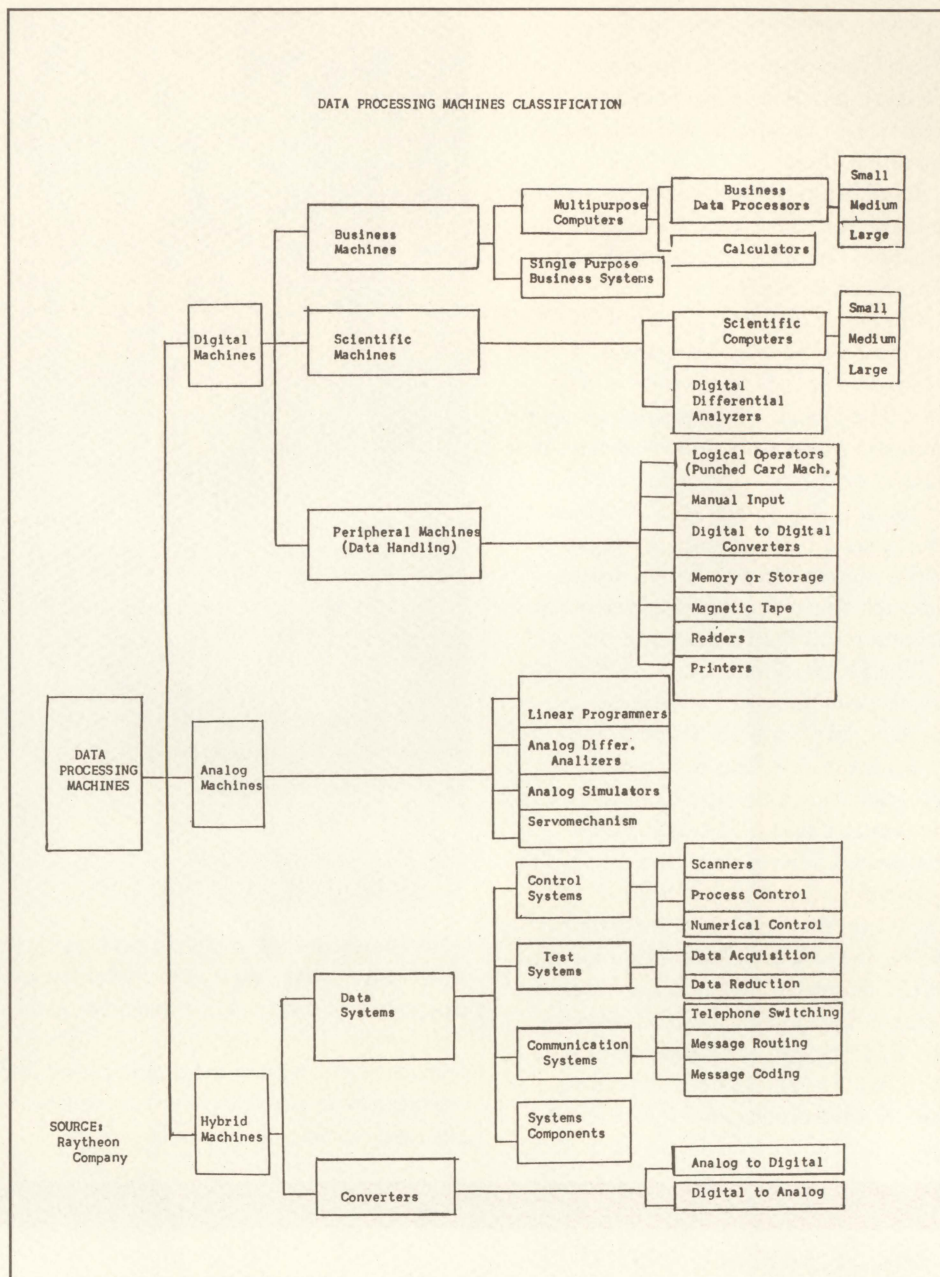
Corrections to CBI Newsletter, Vol. 14 No. 2, Winter 1992

There were two errors in the winter issue of the *CBI Newsletter*. The list of "Other Trustees" on page 3 failed to note that Gene M. Amdahl is one of the founders of CBI.

The MIT Press address given on page six was incorrect. For those who are not "Friends of CBI," the correct address to order CBI Reprint Series books is:

*Order Department
The MIT Press
55 Hayward Street
Cambridge, MA 02142*

800 356-0343 or 617 625-8724 □



SOURCE: Raytheon Company

A classification scheme of digital computers developed by Raytheon in 1959 to assess its future in the data processing industry. Note the distinction between scientific and business computers, as well as peripheral tabulating equipment.

Smithsonian Videohistory Program

The Smithsonian Institution has a collection of videotapes dealing with the history of science and technology that is now open and available for use. The videotapes are part of twenty-two different projects that cover a wide range of topics in American science and technology. Some of the tapes deal explicitly with aspects of the history of computing, including tapes on the

ENIAC, Mini- and Micro-Computers, RAND Corporation, and Robotics. Tapes, transcripts, and finding aids are available for researchers, and copies are available for a fee.

For more information, contact the Smithsonian Institution Archives, 2135 Arts and Industries Building, Smithsonian Institution, Washington, D.C. 20560 202-357-1420. □

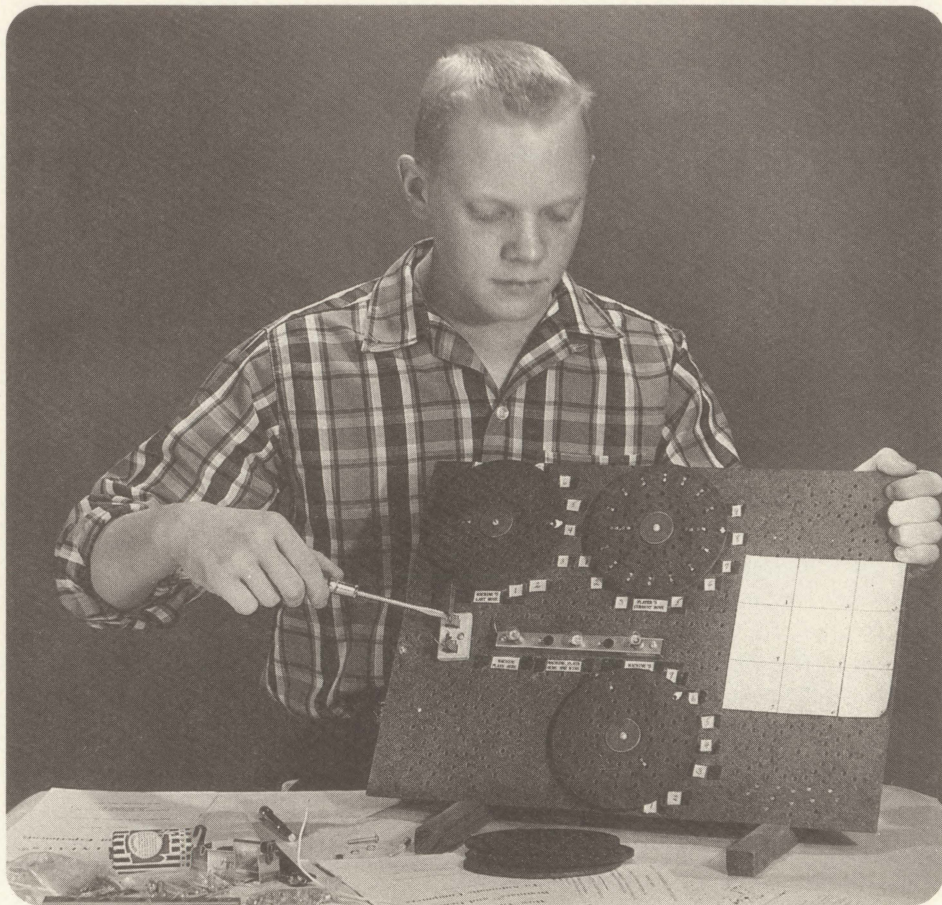
Conferences continued from page 2...

Wirth (Pascal), Alain Colmerauer (Prolog), and Alan Kay (Smalltalk). Frederick P. Brooks, Jr. will deliver the keynote address.

In addition, submitted papers are now being reviewed for inclusion in the program. The final program will be announced in September, 1992.

On April 20, 1993, as part of HOPL-II and prior to the main program, a "Forum on the History of Computing" will be held. The Forum will introduce computer scientists to the work and challenges that abound in the craft of the history of computing. [for details see *CBI Newsletter 14.2*, page 2.] A separate pre-registration is required for the Forum session, although the evening Forum session will be open to all HOPL-II registrants.

The HOPL-II Conference Chair is J.A.N. Lee (Virginia Polytechnic Institute and State University), the Program Chair is Jean E. Sammet (Programming Language Consultant) and the Forum Chair is Robert F. Rosin (Enhanced Service Providers, Inc.). For more information about HOPL-II (including the Forum) please contact the HOPL-II Publicity Chair: Dan Halbert, DEC Cambridge Research Lab One Kendall Square, Bldg. 700, Cambridge, MA 02139 USA, telephone: (617) 621-6616, fax: (617) 621-6650, electronic mail: hopl@crl.dec.com.



Thirty-five years ago, in 1957, Berkeley Enterprises introduced a computer kit that was designed for young people from twelve to sixteen years old. Edmund C. Berkeley began designing semi-automatic computer kits in the early 1950s. His design work on miniature "mechanical brains" was reported in *Scientific American* in 1950 and by 1954 he had produced a prototype of the Brainiac, the Geniac. By 1964 the Brainiac kit had been expanded to include 600 parts that could be assembled to create over 200 small computing and logic machines that could be powered by a flashlight battery.

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