



Guide to the John C. McPherson Collection

Creator: John C. McPherson

Dates: 1921-1993, bulk 1950-1971

Extent: 9.17 linear feet, 7 record cartons and 1 manuscript box

Collection number: X3853.2007

Catalog number: 102733950

Collection processed by: Bo Doub and Kim Hayden, 2015

Finding aid prepared by: Bo Doub, Kim Hayden, and Sara Chabino Lott, 2015

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Abstract

The John C. McPherson collection contains materials from McPherson's career at IBM, which lasted from 1930 to 1971. During his time at IBM, McPherson witnessed and participated in IBM's shift from punched card machines to electronic computers and, at the end of his career, became a key supporter of the programming language APL (A Programming Language). Materials include manuals, papers, and administrative records relating to APL; conference proceedings – including materials from the Joint Computer Conference, of which McPherson served as chairman in 1951; technical papers and articles written by McPherson, Kenneth E. Iverson, and others; IBM administrative records reflecting policies and projects spanning four decades; personal papers and correspondence, including letters between McPherson and Thomas J. Watson, Jr.; and manuals and books published by IBM, MIT, and the Harvard University Computation Laboratory. The records span 1921 through 1993, with the bulk of the collection being from 1950 to 1971.

Administrative Information

Access Restrictions

The collection is open for research.

Publication Rights

The Computer History Museum (CHM) can only claim physical ownership of the collection. Copyright restrictions may apply and users are responsible for satisfying any claims of the copyright holder. Requests for copying and permission to publish, quote, or reproduce any portion of the Computer History Museum's collection must be obtained jointly from both the copyright holder (if applicable) and the Computer History Museum as owner of the material.

Languages

The collection is almost entirely in English. There are very small amounts of materials in German and Chinese.

Preferred Citation

[Identification of Item], [Date], John McPherson Collection, Lot X3853.2007, Box [#], Folder [#], Catalog [#], Computer History Museum.

Immediate Source of Acquisition

Gift of Ray Polivka, 2001.

Processing Information

Shortly after this collection was donated, a small amount of items were processed and cataloged at the item level. However, the majority of this collection is processed and cataloged at the folder level.

Repository

Computer History Museum
1401 N. Shoreline Blvd.
Mountain View, CA 94043
USA
650-810-1010
research@computerhistory.org
www.computerhistory.org

Biographical/Historical Note

John C. McPherson was born in Short Hills, New Jersey, on October 16, 1908. He graduated from Princeton University in 1929, receiving a BS in electrical engineering. In 1930, McPherson started his long career at IBM, initially working as a trainee in its Railroad Department. McPherson worked in this department for seven years developing systems to provide statistics about the movement of freight and passengers, including a widely-used set of charts called Machine Methods for Railroad Accounting. In 1940, McPherson was promoted to Manager of Future Demands and from 1943 to 1946 he worked as IBM's Director of Engineering. During these years McPherson was instrumental in the establishment of a punched card computing facility at the Aberdeen Proving Grounds Ballistic Research Laboratory and also in planning the development of the IBM Selective Sequence Electronic Calculator (SSEC).

In 1948, McPherson was elected an IBM vice president. Other milestones in McPherson's career include acting as chairman of the 1951 Joint Computer Conference and becoming the first director of IBM's graduate-level Systems Research Institute (SRI) from 1960-1965. In his later years at IBM, McPherson focused on the business, marketing, and advancement of APL, the programming language developed by Kenneth E. Iverson in the 1960s. McPherson retired in 1971, but stayed in contact with many IBM projects and colleagues until his death in 1999.

Scope and Content of the Collection

The John C. McPherson collection is made up of technical papers and reports, conference proceedings, manuals, books, personal papers, and IBM administrative records from 1921 to 1993, with the bulk of the material from 1950 to 1971. A large part of this collection focuses on McPherson's interest in and support of the programming language APL, and includes APL and APL2 manuals and technical papers about the language.

Arrangement

The collection is arranged into 6 series:

- Series 1, APL, 1952-1991, bulk 1967-1983
- Series 2, Conference proceedings, 1946-1991, bulk 1952-1956
- Series 3, Technical papers and articles, 1921-1989, bulk 1952-1962
- Series 4, IBM administrative records, 1938-1993, bulk 1942-1965
- Series 5, Personal papers, 1933-1993, bulk 1960-1980
- Series 6, Books and manuals, 1924-1983, bulk 1956-1966

Indexing Terms

APL (Computer program language)
Computer Industry
International Business Machines Corporation
Iverson, Kenneth E.
McPherson, John C., 1908-1999
Punched card systems
Watson, Thomas J., 1914-1993

Separated Material

Electronics components, the bulk of the donated photographs, and an APL data cartridge were separated from the main collection. To view catalog records for the separated items please search CHM's online catalog at <http://www.computerhistory.org/collections/search>.

Related Collections at CHM

Cuthbert C. Hurd papers, Lot X2772.2004, 102733944, Computer History Museum.

Harwood G. Kolsky papers, Lot X3021.2005, 102658131, Computer History Museum.

Related Collections at Other Repositories

John McPherson, an oral history conducted in 1992 by William Aspray, IEEE History Center, Hoboken, NJ.

Collection Contents

Series 1, APL, 1952-1991, bulk 1967-1983

This series contains manuals, technical papers and reports, administrative records, conference proceedings, correspondence, and promotional material relating to the programming language, APL. The majority of this series is comprised of manuals instructing users on how to use APL, APL2, and tools and functions written in APL. This series also contains a large amount of technical papers about APL written by Kenneth E. Iverson, Adin D. Falkoff, Harwood G. Kolsky, McPherson, and others. The administrative records in this series were mostly written at IBM and primarily concern market development reports for APL. This series contains proceedings from committee meetings and conferences as well as APL newsletters published within IBM. Also of interest are personal narratives written about APL, including parts of an unpublished manuscript and an essay titled "A Personal View of APL" by Dave Macklin. Smaller amounts of APL promotional material and program listings are included as well. This series is arranged alphabetically by folder title.

Series 2, Conference proceedings, 1946-1991, bulk 1952-1956

This series contains conference proceedings from computer, calculator, and electrical engineering conferences from 1946 through 1991, with the bulk of materials from 1952 to 1956. Also included are a small amount of printed talks and conference programs. The majority of the materials are proceedings from the Joint Computer Conference and the Institution of Electrical Engineers. Also represented are conferences sponsored by Harvard University Computation Lab, the U.S. Department of the Navy Bureau of Ordnance, WESCON, the American Institute of Electrical Engineers, the Institute of Radio Engineers, and the Association of Computing Machinery. This series is arranged alphabetically by folder title.

Series 3, Technical papers and articles, 1921-1989, bulk 1952-1962

This series contains technical papers, reports, and articles on such topics as processing, programming, punched card machines, and teleprocessing from 1921 through 1989, with the bulk of material from 1952 to 1962. The majority of this series consists of IBM technical reports and research papers, with a large focus of the series on programming. Included is a manuscript for Kenneth E. Iverson's book *Automatic Data Processing*, McPherson's manuscript on the SSEC and the correspondence that goes along with its publication in the *Annals of the History of Computing*, correspondence and papers about the history of the IBM NORC scientific computer, a large report on IBM's Harvard Mark 1 machine, and a folder on punched card machines used by the railroad industry. This series is arranged chronologically.

Series 4, IBM administrative records, 1938-1993, bulk 1942-1965

This series contains correspondence, memoranda, legal documents, and photographs documenting work at IBM primarily during the middle years of McPherson's career there from the 1940s through the 1960s. The largest part of this series is comprised of administrative records regarding IBM products and project development. Projects covered in this series include the IBM 7030 ("Stretch") computer, computers designed to write Braille, and various notes and improvements proposed for punched card collator and tabulator machines. Another significant portion of this series relates to programming languages being used and developed at IBM. Fortran, Scamp, BASIC, and ALGOL are all featured in these records. Materials relating to IBM policies and personnel regarding topics such as efficiency, business policies, service and security clearances with the National Security Agency (NSA), and personal appearance guidelines for IBM employees are all covered, along with records about IBM's research and education programs – specifically its industrial research and engineering program. And lastly, this series includes records from IBM events, including photographs from "a special meeting in Europe" held in Rome from June 26-30, 1962. This series is arranged alphabetically by folder title.

Series 5, Personal papers, 1933-1993, bulk 1960-1980

This series contains personal correspondence, materials relating to oral histories, notes, memorabilia, and a personal collection of articles. Of particular note within the correspondence are personal letters between McPherson and Thomas J. Watson, Jr. and materials concerning a critical review written by Herbert Grosch about one of McPherson's articles. Also included is McPherson's personal collection of articles with stories featuring his promotions and accomplishments at IBM and writings about his personal interests. This series is arranged alphabetically by folder title.

Series 6, Manuals and books, 1924-1983, bulk 1956-1966

This series contains books about computing and programming, and manuals for computer systems, programming languages, and punched card machines from 1924 to 1983, with the bulk of materials from 1956 to 1966. The majority of the materials are IBM programming and processing manuals. A smaller portion of manuals are from companies and institutions other than IBM, such as MIT and the Harvard University Computation Laboratory. Among the punched card manuals is one from the Tabulating Machine Company, one of the companies that merged to form IBM. The earliest manual in this series is McPherson's locomotive maintenance manual from the Pennsylvania Railroad, where he apprenticed while he was in college in the 1920s. A notable book in this series is *The Transistor*, a reference book put out by Bell Telephone Laboratories in 1951. This series is arranged alphabetically by folder and book title.

	<u>Catalog Number</u>	<u>Title</u>	<u>Date</u>
		Folder List	
		APL	
Box 1	102734231	A personal view of APL	1983-01
Box 1	102734230	APL manuscript	ca. 1970s
Box 1	102734221	APL Quote-Quad, APL News, and SHARE APL\360 newsletters	1969; 1967-1978; 1985-1990
Box 1	102734224	Conference talks and programs	1970-1983
Box 1	102734219	Correspondence and memos	1952-1991; bulk 1970-1971
Box 1	102734229	IBM 5100 portable computer APL computer aided instruction	1976
Box 1	102734216	Internal IBM-APL newsletters	1968-1971
Box 1; 2	102734220	Manuals	1968-1979; 1991
Box 2	102734217	Planning, progress, and market development reports	1967-1974
Box 2	102734223	Proceedings and materials from APL as a Tool of Thought seminars	1983-1987
Box 2	102734222	Proceedings and materials from APL ITL Committee meetings	1976; 1985-1987
Box 2	102734225	Proceedings of the APL Users Conference	1969
Box 8	102734226	Programming materials	1970-1983
Box 2	102734228	Promotional materials	ca. 1969-1984
Box 3	102734218	Technical papers	1967-1978
Box 3	102734215	Technical reports	1969-1972; 1991

	<u>Catalog Number</u>	<u>Title</u>	<u>Date</u>
	Conference proceedings		
Box 3	102734183	Computing bit by bit, or digital computers made easy	1953
Box 3	102734214	Conference talks and programs	1946; 1961; 1969-1971; 1991
Box 3	102709682	Proceedings of a second symposium on large-scale digital calculating machinery	1949
Box 3	102709684	Proceedings of a symposium on large-scale digital calculating machinery	1947
Box 3	102709676	Proceedings of an international symposium on the theory of switching, Part I	1959
Box 3	102709677	Proceedings of an international symposium on the theory of switching, Part II	1959
Box 3	102684005	Proceedings of the Eastern Joint Computer Conference	1953-12
Box 3	102684006	Proceedings of the Eastern Joint Computer Conference	1956-12
Box 3	102684007	Proceedings of the Eastern Joint Computer Conference	1959-07
Box 3	102648849	Proceedings of the Eastern Joint Computer Conference	1960-12-13
Box 4	102734180	Proceedings of the Institute of Electrical and Electronics Engineering	1963; 1968
Box 4	102683996	Proceedings of the Institution of Electrical Engineers	1952-04
Box 4	102683998	Proceedings of the Institution of Electrical Engineers	1953-07
Box 4	102683997	Proceedings of the Institution of Electrical Engineers	1953-10

	<u>Catalog Number</u>	<u>Title</u>	<u>Date</u>
	Conference proceedings		
Box 4	102683999	Proceedings of the Institution of Electrical Engineers	1954-05
Box 4	102684000	Proceedings of the Institution of Electrical Engineers	1955-07
Box 4	102684001	Proceedings of the Institution of Electrical Engineers	1956-07
Box 4	102684002	Proceedings of the Institution of Electrical Engineers	1956-11
Box 4	102684003	Proceedings of the Institution of Electrical Engineers : convention on digital-computer techniques	1956-04
Box 4	102684004	Proceedings of the Institution of Electrical Engineers : convention on digital-computer techniques	1956-04
Box 4	102683986	Proceedings of the WESCON Computer Sessions	1954-08
Box 4	102683991	Proceedings of the Western Computer Conference	1953-02
Box 4	102683989	Proceedings of the Western Joint Computer Conference	1955-03
Box 4	102683987	Proceedings of the Western Joint Computer Conference	1956-02
Box 4	102683988	Proceedings of the Western Joint Computer Conference	1957-02
Box 4	102683993	Review of electronic digital computers	1952-02
Box 4	102683994	Review of input and output equipment used in computing systems	1953-03

	<u>Catalog Number</u>	<u>Title</u>	<u>Date</u>
Conference proceedings			
Box 4	102734181	Symposium on commercially available general-purpose electronic digital computers of moderate price	1952
Box 4	102683990	Trends in computers : automatic control and data processing	1954-04
Box 4	102683992	Western Joint Computer Conference : new computers, a report from the manufacturers	1957-03
Technical papers and articles			
Box 8	102734227	Railroad tabulating machines	ca. 1921-1932
Box 4	102734211	Programming and processing	1937; 1951-1977; bulk 1954-1962
Box 4	102734204	Punched card machines	1937-1950
Box 4	102734195	IBM Harvard Mark 1	1941-1949
Box 5	102734209	NORC history	1946-1989, bulk 1979-1989
Box 5	102734199	U.S. Navy reports	1953-1956
Box 5	102734200	IBM research reports and working papers	1956-1968
Box 5	102734202	IBM technical reports and memos	1956-1980; bulk 1960
Box 5	102734206	Teleprocessing	1958-1972
Box 5	102734194	Automatic data processing manuscript	1959
Box 5	102734210	SSEC paper publication records	1948; 1962-1965; 1982
Box 5	102734198	Braille translation programming	1969-1973

	<u>Catalog Number</u>	<u>Title</u>	<u>Date</u>
	IBM administrative records		
Box 5	102653975	FORTRAN experience at the New York data processing center	1957-07
Box 5	102734201	International Business Machines Corporation (IBM) events	1940-1961
Box 5	102734197	International Business Machines Corporation (IBM) policies and personnel	1938-1972
Box 5; 6	102734182	International Business Machines Corporation (IBM) programming	1956-1971
Box 6	102734191	International Business Machines Corporation (IBM) projects and products	1940-1993, bulk 1942-1962
Box 6	102734193	International Business Machines Corporation (IBM) recruitment, training, research, and education	1950-1983
Box 6	102734203	Legal documents	1960
Box 6	102679230	Matrix inversion order 5	ca. 1958
Box 6	102653980	Memorandum to Mr. J.C. McPherson: FORTRAN II	1957-11-05
Box 6	102653978	Memorandum to Mr. J.W. Backus	1957-09-23
Box 6	102653979	Memorandum: FORTRAN II	1957-11-01
Box 6	102722321	Memory array module	1972-04-12
Box 6	102653976	Preliminary report: proposed specifications for FORTRAN II for the 704	1957-08-28
Box 6	102653977	Present status of FORTRAN: memorandum to Mr. J.C. McPherson	1957-09-01

	<u>Catalog Number</u>	<u>Title</u>	<u>Date</u>
Personal papers			
Box 6	102734207	Notes and memorabilia	1971-1993
Box 6	102734205	Oral histories	1972-1980
Box 6	102734208	Personal collection of articles	1933-1972
Box 6	102734212	Personal correspondence	1966-1991
Books and manuals			
Box 6	102676889	Encyclopedia of computer science and engineering	1983
Box 7	102734184	IBM 1620 and 700/7000 series manuals	1959-1964
Box 7	102734186	IBM 5100 manuals	1976-1979
Box 6	102734185	IBM 650 manuals	1955
Box 7	102734187	IBM Harvard Mark 1 manual	1953
Box 7	102734189	IBM programming manual	1966
Box 7	102734188	Non-IBM manuals	1956-1968
Box 7	102676794	Programming for digital computers	1959
Box 7	102701123	Programming the IBM System/360	1970
Box 7	102734190	Punched card machine manuals	1934-1949
Box 7	102734213	Railroad manual	1924-10-09
Box 7	102709681	Synthesis of electronic computing and control circuits	1951
Box 8	102709686	Tables of the Bessel functions of the first kind of orders 79 through 135	1947

	<u>Catalog Number</u>	<u>Title</u>	<u>Date</u>
	Books and manuals		
Box 8	102711714	The transistor : selected reference material on characteristics and applications	1951