Computer
History
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Guide to the Mark Halpern papers

Creator: Mark Halpern
Dates: 1955-1990, bulk 1959-1973
Extent: 8.75 linear feet, 7 record cartons
Collection number: X3762.2007
Catalog number: 102733959
Collection processed by: Bo Doub and Kim Hayden, 2015
Finding aid prepared by: Bo Doub, Kim Hayden, and Sara Chabino Lott, 2015
Sponsor: Processing of this collection was made possible through generous funding from The Andrew W. Mellon Foundation, administered through the Council on Library and Information Resources' Cataloging Hidden Special Collections and Archives grant.

Abstract
The Mark Halpern papers consists of technical papers and reports, conference proceedings, manuals, the majority of which were published by IBM, and periodicals that document programming languages and computer technologies from 1955 through 1990, with the bulk of the material from 1959 to 1973. Included in the collection are papers authored by Halpern and others about programming languages, computing, and military electronics.

Administrative Information

Access Restrictions
The collection is open for research.

Publication Rights
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Languages
The collection is almost entirely in English. There is one Russian manuscript, which has an English translation.

Preferred Citation
[Identification of Item], [Date], Mark Halpern papers, Lot X3762.2007, Box [#], Folder [#], Catalog [#], Computer History Museum.

Immediate Source of Acquisition
Gift of Mark Halpern, 2006.

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Biographical/Historical Note
Mark Halpern was born on March 1, 1931 in New York, New York. He received a BA from City College of New York in 1951 and went on to pursue a PhD in English Language and Literature at Columbia University. However, in 1957, Halpern left his doctoral program at Columbia to begin work for IBM as a computer programmer. This transition occurred just months after IBM's Programming Research Department announced the release of Fortran, and much of Halpern's training and work at IBM involved working with this new programming language. In 1961, Halpern left IBM and began working at the Palo Alto Research Laboratories of Lockheed Missiles and Space Company (LMSC) as the Head of Programming Application Research. During his time at LCSC, Halpern made significant progress on XPOP, a macroprocessor-based programming system.

In 1967, Halpern was invited to speak at a conference held internally by IBM and was subsequently re-hired by the company as part of its Assembler Language Department and Mission in San Jose, California. After two years in this position, Halpern resigned from IBM for a second time in December of 1969 and worked in a number of brief jobs including developing

software for Fairchild Camera & Instruments and working for Crocker National Bank in Data Processing & Systems Administration.

In 1972, Halpern started working at Tymshare, Inc., a company that provided public time-shared computer networking. Halpern stayed at Tymshare for almost six years working on the development of a "SuperFORTRAN" compiler with its vendor, the Digital Equipment Corporation (DEC). In 1978, Halpern left Tymshare for a job as compiler-department manager with the Western Development Center (WDC) of Datapoint. Halpern's last job programming and managing software development started in 1983 with a company called Dialogue Systems (later renamed Enhansys).

After this job, Halpern shifted his career to technical writing, starting in 1987 as a technical writer for Tandem Computers, Inc. Since then, Halpern has devoted his career to writing and publishing works on various topics relating to technology and linguistics including two books, *Binding Time: Six Studies in Programming Technology and Milieu* (Ablex Publishers, 1990) and *Language & Human Nature* (Regent Press, 2006).

Scope and Content of the Collection

The Mark Halpern papers contain technical papers and reports, conference proceedings, manuals, and periodicals written and collected during Halpern's career as a computer programmer at IBM's Programming Research Department, Lockheed Missiles and Space Company, and Tymshare, Inc. Some of the earliest materials in the collection coincide with Halpern's start at IBM in 1957, just after the release of Fortran and span the following decades until 1990. The bulk of the collection is comprised of technical papers, reports, and manuals related to specific programming languages and compilers: Fortran, ALGOL, SIMSCRIPT, Lisp 1.5, JOVIAL , and many others are represented. A smaller amount of material covers hardware and software technologies and products from Tandem Computers, Inc. and various IBM computers, including the IBM System/360 and IBM 7090. Also of interest are conference proceedings spanning the 1960s from IBM Programming Symposia, Association for Computing Machinery annual meetings, a RAND Computer Symposium, and the National Winter Convention on Military Electronics.

Arrangement

The collection is arranged into 4 series:
> Series 1, Technical papers and reports, 1957-1983
> Series 2, Conference proceedings, 1961-1969
> Series 3, Manuals, 1955-1987, bulk 1956-1972
> Series 4, Periodicals, 1958-1990, bulk 1958-1974

Indexing Terms

Halpern, Mark
Computer programming languages
Compilers (Computer programs)
International Business Machines Corporation
Macros (Domain-specific programming languages)

Separated Material
A computer and commercial software were separated from the main collection. The computer is a Poquet PC unit with integrated display and keyboard, and slipcase. The software includes IBM 709/7090 program analyzer, and Medhalp Archives and Medhalp Absolute. 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
Computer History Museum Fortran Archive collection, http://www.computerhistory.org/collections/fortranarchive/.

Collection Contents
Series 1, Technical papers and reports, 1957-1983
This series contains technical papers and reports that document programming languages and the development of computer automation and word processing from 1957 through 1983. A large portion of this series consists of reports about macros, compilers, and the development and syntax of programming languages. There are also reports on specific languages, including Fortran, LISP, JOVIAL, SPL, Pascal, PL/I, ALGOL, and NELIAC. A smaller portion of the collection includes papers about new computing technologies and documents containing computer industry employment data. Some correspondence is interfiled among the papers. This series is arranged alphabetically by folder title.

Series 2, Conference proceedings, 1961-1969
This series contains proceedings from computer and electrical engineering conferences held between 1961 and 1969. Conferences include IBM Programming Symposia, Association for Computing Machinery annual meetings, a RAND Computer Symposium, and the National Winter Convention on Military Electronics. Of note are the proceedings and preprint papers from the first Spaceborne Computer Software Workshop held in 1966, which include a paper by Halpern entitled "Standardize the System, not the Language!" in session four. This series is arranged chronologically.

Series 3, Manuals, 1955-1987, bulk 1956-1972
This series contains manuals about programming languages, hardware, and software. The bulk of the manuals in this series were published by IBM and include instructions on Fortran, the IBM 7090, and the IBM System/360. Also included are manuals published by Digital Equipment Corporation (DEC), Lockheed Missiles & Space Company, Inc., Fairchild Camera & Instrument Corporation, and Tymshare, Inc. Some of the manuals published by Tymshare and Fairchild are administrative, covering employee recruitment and human resources policies. There is a small amount of correspondence, papers, reports, and presentation materials interfiled with manuals that they relate to. This series is arranged alphabetically by folder title.

Series 4, Periodicals, 1958-1990, bulk 1958-1974
This series contains periodicals that document programming languages and computer automation from 1958 to 1990. A large part of the series is made up of issues of the ALGOL Bulletin from 1959 to 1970 and the Annual Review in Automatic Programming from 1969 to 1974. Also included are issues from Machine Oriented Languages (MOL) Bulletin, Information System Language Studies, Computer Group News, and Communications of the Association for Computing Machinery. Halpern authored articles in some of the publications, and there is also a small number of clippings. This series is arranged alphabetically by folder title.

Catalog Number	**Title**	**Date**

<div align="center">**Folder List**</div>

	Technical papers and reports	
Box 1	102734146	ALGOL and NELIAC	1960-1976
Box 1	102734159	Compilers	1957-1977
Box 1	102734161	Computer industry salary and employment data	1968-1978
Box 1	102734162	Computing development	ca. 1962-1983
Box 1	102734142	Fortran	1963-1965
Box 1	102679239	Fortran assembly program (FAP) for the IBM 709/7090	1961 ca.
Box 1	102734151	JOVIAL and SPL	1961-1968
Box 2	102655319	Language debugging	1965-1980
Box 2	102734157	Language syntax and development	1958-1969
Box 1	102734153	LISP	1964-1967
Box 2	102734139	Macros	1959-1971
Box 2	102734152	Pascal and Modula-2	1970-1980
Box 2; 3	102734143	PL/I	1966-1969
Box 3	102734140	Shadow and related programs	1960-1962
Box 3	102734145	Sprint	1970
Box 3	102734148	Zagatasky's "Procedures in Algol-like Programming Language" Russian and English manuscripts, correspondence	1972-1973
	Conference proceedings	
Box 3	102734135	Rand Computer Symposium	1962
Box 3	102734134	National Winter Convention on Military Electronics	1964
Box 4	102734132	Spaceborne Computer Software	1966

	Catalog Number	**Title**	**Date**
		Workshop	
Box 3	102655288	Association for Computing Machinery national meeting	1961; 1967
Box 4	102734131	International Business Machines Corporation (IBM) programming symposia	1968-1969

Manuals

Box 4	102734137	ALGOL manuals	1959-1965
Box 4	102734154	Digital Equipment Corporation (DEC) manuals	1964-1972
Box 4	102734149	Fairchild Camera & Instrument Corporation recruitment manual	ca. 1970
Box 4	102679237	FORTRAN I, II, and 709: Customer Engineering Manual of Instruction	1958-2
Box 4	102734144	Fortran manuals	1956-1963
Box 4; 5	102655284	IBM 704 manual	1955-08-05
Box 5	102655285	IBM 7090 manuals	1959-1967
Box 5	102653972	IBM 7090/7094 programming system: FORTRAN II input/output package	1964-10-16
Box 5	102653971	IBM 7090/7094 Programming systems: FORTRAN II assembly program (FAP)	1965-04-07
Box 5	102655277	IBM System/360 manuals	1964-1968
Box 5	102734147	Information Processing Language V (IPL-V) manual	1960
Box 5	102655281	International Business Machines Corporation (IBM) manuals	1959-1982
Box 5	102734156	Lockheed Missiles & Space Company, Inc. manuals	1964-1965
Box 5	102734141	Modula-2	1982
Box 6	102734155	NLS (oN-Line System) manuals	1978

	Catalog Number	**Title**	**Date**
Box 6	102734158	Programming manuals	1961-1966; 1982
Box 6	102679238	Programming Systems Analysis Guide: 709/7090 32K FORTRAN	1961
Box 6	102734138	Tandem Computers, Inc.	1986-1987
Box 6	102734150	Tymshare, Inc. administrative records	1972-1977
		Periodicals	
Box 6; 7	102734133	ALGOL Bulletin	1959-1970
Box 7	102655289	Annual Review in Automatic Programming	1969-1974
Box 7	102655317	Information System Language Studies	1968-1969
Box 7	102734136	Machine Oriented Languages (MOL) Bulletin	1972-1973
Box 7	102686000	Publications and articles	1958-1969; bulk 1958-1959
Box 7	102686009	Windows 3.0 publications	1989-1990