

CHEMICAL HERITAGE FOUNDATION

SAUL HERNER

Transcript of an Interview  
Conducted by

Robert V. Williams

at

Fairfax, Virginia

on

16 July 1997

(With Subsequent Corrections and Additions)

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## SAUL HERNER

1923 Born in Brooklyn, New York, on 29 January

### Education

1945 B.S., biochemistry, University of Wisconsin  
B.S., library science, University of Wisconsin

### Professional Experience

1945-1946 Research Chemist, U.S. Army Air Corps

1946-1948 Chemical Reference Assistant, New York Public Library

1948-1950 Assistant Curator and Engineering Librarian, New York University

1950-1953 Johns Hopkins University  
Chief Librarian, Applied Physics Laboratory

1953-1956 Atlantic Research Corporation  
Head, Technical Information and Library Planning Group

1955-present Chairman and Consulting Specialist, Herner and Company

1964-1968 Adjunct Associate Professor, Drexel Institute of Technology

1966-1967 Lecturer, University of Maryland

1970-present Editor-in-Chief, Information Resources Press

### Honors

1982 Miles Conrad Award, National Federation of Abstracting and Indexing Services

## ABSTRACT

Saul Herner begins the interview with a discussion of his childhood and family background. He grew up in New York, and attended the University of Wisconsin, where he received a B.S. in biochemistry in 1945. In 1946, after a brief time in the Army, Herner was hired as a chemical reference librarian at the New York Public Library. At the same time, he began working towards a bachelor's degree in library science, taking correspondence courses at the University of Wisconsin. In 1948, Herner took a job at the engineering and science library at New York University, where he was first introduced to special libraries and the SLA. Two years later, Herner moved to the Applied Physics Laboratory at Johns Hopkins University, and he began developing an interest in user studies. He discusses his involvement in a number of organizations, including the ACS, and his colleagues in information science. In 1953, Herner joined the Atlantic Research Corporation. While there, he began to form his own company, now known as Herner and Company. Herner discusses how he gained clients, his company's involvement in particular projects, and the importance of government support in the field of information science. In addition, he discusses developments in information retrieval during his career. Herner concludes with a discussion of his teaching experiences, his involvement in IIA, and comments about the history of information science.

## INTERVIEWER

Robert V. Williams is a professor of library and information science at the University of South Carolina. He holds a Ph.D. in library and information studies from the University of Wisconsin, Madison; an M.S. in library and information science from Florida State University; and an M.A. in history from New York University. Before joining the University of South Carolina in 1978, he was an archivist and information services manager for the Ford Foundation, and the Georgia Department of Archives and History. Williams has also been an information consultant for many organizations including Appalachian Council of Governments of Greenville, South Carolina, and Pontifical Catholic University Madre y Maestra, Dominican Republic. He came to the Chemical Heritage Foundation as the Eugene Garfield Fellow in the History of Scientific Information in 1997. He is a member of the South Carolina Historical Records Advisory Board, the American Library Association (ALA), and the American Society for Information Science (ASIS), where he served as chair of ASIS History and Foundations of Information Science Special Interest Group in 1994-1995. Williams is also a member of the Special Libraries Association (SLA) and Chair of the SLA Membership Committee. Williams has numerous publications on the historical role of information science.

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## NOTES

1. Saul Herner, "Information-Gathering Habits of Workers in Pure and Applied Science," *Industrial & Engineering Chemistry*, 46 (1954): 228-36.
2. Saul Herner, "Library and Information User: Then and Now," *ASIS Bulletin*, 2 (1976): 32-33.
3. R. S. Casey, J. W. Perry, M. M. Berry, and A. Kent, eds., *Punched Cards: Their Application to Science and Industry* (New York: Reinhold Publishing Company, 1958).
4. J. D. Bernal, "Paper No. 46," *Report* (Royal Society Scientific Information Conference, London, 21 June-2 July, 1948): 589-637.
5. Saul Herner, "Selected Reading List: A Means of Improving the Use of Periodical Literature," *Special Libraries*, 41 (1950): 324-326.
6. Saul Herner, "Information-Gathering Habits of Workers in Pure and Applied Sciences," *Industrial & Engineering Chemistry*, 46 (1954): 228-236.
7. *Report and papers submitted: Royal Society (Great Britain) Scientific Information Conference Proceedings* (London: Royal Society, 1948).
8. Eugene Garfield, "Citation Indexes for Science," *Science*, 122 (1955): 108-111.
9. Saul Herner. *Research and Development and the Use of Technical Information in Small and Medium-Sized Manufacturing Firms* (Washington, DC: Herner, Meyer, and Co., 1956).
10. Saul Herner. *Research, Problem-Solving, and the Use of Technical Information in Small and Medium-Sized Manufacturing Firms*, PB 131 578 (Washington, DC: Herner, Meyer, and Co., 1958).
11. S. Herner, R. Meyer, and R. Ramsey. *How Smaller Firms Solve Problems and Keep Abreast of Technical Developments* (Washington, DC: Herner, Meyer, and Co., 1957).
12. Saul Herner and Mary Herner, "Current Status of the Government Research Report in the United States of America," *UNESCO Bulletin for Libraries*, 30 (July 1959): 41-42.
13. S. Herner, E. Leyman, and M. Herner. *A Study to Determine the Feasibility and Design for a New England Technical Information Referral Service* (Washington, DC: Herner and Company, 1969).

- T. Mulholland, E. Leyman, and S. Herner. *Survey of Technical Information Patterns and Usage in Small and Medium Sized New England Manufacturing Firms* (Washington, DC: Herner and Company, 1969).
- J. C. Moody, G. Allen, and S. Herner. *A Compendium of Sources of Technical Information for New England Manufacturers* (Washington, DC: Herner and Company, 1969).
14. Mildred B. Parten, *Surveys, Polls, and Samples; Practical Procedures* (New York: Harper, 1950).
15. Saul Herner, "The Storage and Housing of Unpublished Research Reports," *American Documentation*, 3 (1952): 110-114.
- Saul Herner, *The Establishment of Staff Requirements in a Small Research Library* (Chicago, 1952).
- Saul Herner, "New Library Carrel: Librarians and Manufacturers Collaborate," *Special Libraries*, 46 (1955): 39-40.
- Herner & Company, *A Recommended Design for the United States Medical Library and Information System* (Washington: Information Resources Press, 1966).
16. S. Herner, M. J. Vellucci, and E. Leyman. *National Inventory of Library Statistics Practices* (Washington, DC: Herner and Company, 1972).
17. Saul Herner, *The Establishment of Staff Requirements in a Small Research Library* (Chicago, 1952).
18. Saul Herner, "The Storage and Housing of Unpublished Research Reports," *American Documentation*, 3 (1952): 110-114.
19. Saul Herner. *A Pilot Study of the Use of the Stacks in the Library of Congress* (Washington, DC: 1960).
20. F. Wilfrid Lancaster, *Vocabulary Control for Information Retrieval* (Arlington, Virginia: Information Resources Press, 1986).
21. F. Wilfrid Lancaster, *The Measurement and Evaluation of Library Services* (Washington: Information Resources Press, 1977).
22. F. Wilfrid Lancaster, *If You Want to Evaluate Your Library—* (Champaign: University of Illinois, Graduate School of Library and Information Science, 1993).



23. Saul Herner, Gene P. Allen, and Nancy D. Wright. *A Brief Guide to Sources of Scientific and Technical Information* (Washington, DC: Information Resources Press, 1969).
24. Saul Herner, "Information-Gathering Habits of American Medial Scientists," in *International Congress on Scientific Information, 1958. Area 1.* (Washington, DC: NAS, 1958).  
  
Saul Herner, "Subject Slanting in Scientific Abstracting Publications," in *International Congress on Scientific Information, 1958. Area 2.* (Washington, DC: NAS, 1958).  
  
Saul Herner. *The Relationship in Information-Use Studies and the Design of Information Storage and Retrieval Systems* (Rome, NY: Grifiss AFB, 1958).
25. Claire K. Schultz, ed., *H.P. Luhn: Pioneer of information science, selected works* (New York: Spartan Books, 1968.)
26. Saul Herner, "Methods of Organizing Information for Storage and Searching," *American Documentation*, 13 (1962): 3-14.
27. Claude E. Shannon and Warren Weaver, *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1949).
28. Cyril W. Cleverdon, *Aslib Cranfield Research Project: report on the testing and analysis of an investigation into the comparative efficiency of indexing systems* (Cranfield UK: College of Aeronautics, 1962.)
29. Charles Bourne, *Bibliography on the Mechanization of Information Retrieval* (Menlo Park, CA: Stanford Research Institute, 1958).
30. Eugene Garfield, "Origins of Current Contents, ISI, and Computer-Aided Information Retrieval. How It All Began at the Welch Medical Library Indexing Project," *Essays of an Information Scientist: Ghostwriting and Other Essays* (Philadelphia: ISI Press, 1986).
31. Saul Herner, "A Brief History of Information Science," *Journal of the American Society for Information Science*, 35 (1984).
32. Saul Herner, unpublished written appreciation of Robert A. Fairthorne. See Chemical Heritage Foundation Research File, No. 164.
33. Claire K. Schultz, "Punched cards in libraries," Presented to Sci-Tech Group, Special Libraries Council of Philadelphia, Sept. 25, 1951, *Bulletin of the Special Libraries Council of Philadelphia*, April 1952.

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