patterned, and the indispensable text to which cartographic historians and other interested persons will turn for guidance and rationality in this discipline.

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Archivists and Machine-Readable Records. Edited by CAROLYN L. GEDA, ERIK W. AUSTIN, FRANCIS X. BLOUIN, Jr. Chicago: Society of American Archivists, 1980. 248 p. (Proceedings of the Conference on Archival Management of Machine-Readable Records, February 7-10, 1979, Ann Arbor, Mi.) ISBN 0 931828 19 8, $7.00 Members, $10.00 Non-Members pa. (Available only from SAA, 330 S. Wells St., Suite 810, Chicago, Ill. 60606, U.S.A.)

Books dealing with the impact of the computer and of records generated by electronic data processing upon archives and archivists are suddenly rising into sharp focus. And a good thing too, for archivists have generally brushed both aside in the last decade — with one or two important exceptions. Computers seemed too complex, too unsuited to the subtleties of archival variations. Too many scare stories from early computer applications in libraries nourished the aversion which so many archivists seemed to feel. There was the argument, also, that computerisation was beyond most archives' budgets and that EDP records could not be properly serviced, in storage or use, by most archives. Even more fundamentally, most archivists felt ignorant of the whole new dimension of appraising or using a record generated in a machine-readable form. Lacking professional education in any case, archivists had nothing to cling to but traditional practice or at best a feverish optimism that somehow they could cope.

Ignorance and indifference, fed from whatever source, are thankfully slipping away as market pressures on the archivist increase dramatically and a few brave colleagues have struck out a path to attract attention. *Archivists and Machine-Readable Records* and *Archives and the Computer* may well be already outdated so fast are methodologies, applications and technical breakthroughs appearing. Nevertheless, for an archivist who has less than a smattering of knowledge on these critical issues, both books are to be recommended for their survey of the field and explanation of problems — though Lawrence McCrank's more recent edition of papers given at a similar conference to that at Ann Arbor is even better, partly because of Frank Burke's contributions, while Michael Cook's run-through of selected computer systems may seem insufficient for a real understanding of application possibilities. These reservations aside, Geda *et al.* should be read to digest their broad scan of the issues facing the archivist who has to appraise, store, retrieve and make available records which are illegible without electronic conversion and manipulation. Cook nicely demonstrates how the archivist might use electronic circuitry to take the strain out of housekeeping. They both confirm that it is now professionally impossible for an archivist, especially one working with public or corporate records, to ignore the machine-readable record and that it is virtually inconceivable that an archivist anywhere can continue to resist the enticements of automation.

Cook approaches the computer as it should be treated, as a device or tool for controlling systems cheaply, expeditiously and comprehensively. As ever, he is practical, down-to-earth and specific. He makes no grand claims. Indeed, his preface is a model of precision which is carried through the unfolding of each chapter: to whit — "after a general discussion of automated systems, and their relation to manual ones, a select group of important systems is described in as much detail as may be needed for a reasonably secure understanding of their

operation, and with enough information to guide further study. Records management systems
are included, for this is an area in which there is good opening for versatile and practical
systems, which if properly planned go far to solve problems never really tackled before . . . .
it is not about the exploitation of archives in research; that interesting and worthwhile subject
has a literature of its own, but still lacks a practical manual. This book also avoids any
detailed and thoughtful study of indexing and its associated world of thesauri, syntactical and
semantic structures and contextual retrieval." Thereafter, he explores the characters and
virtues/difficulties of systems at the Public Record Office (PROSPEC), the National Archives
and Records Service (NARS A-1), the National Historical Publications and Records
Commission (SPINDEX), the Smithsonian Institution (SELGEM), the House of Lords
Records Office (STAIRS), and the East Sussex Record Office, U.K. (ARCAIC/PARC).
Three records management applications in the U.K. are also described—the most developed
and most interesting being ARMS at the Tyne and Wear Record Office at Newcastle upon
Tyne.

Pitting the elements of each of these computer systems against each other is a good exercise
for the reader. All kinds of questions emerge as one inevitably compares them with Canadian
operations. In fact, there is sense in doing this exercise first and then returning to the excellent
introductory chapter on computer systems to clarify and refine aims, processes and needs.
Cook rightly stresses that the archivist must analyse the overall system to understand exactly
what is being done and for what purpose before adopting some seductively named or priced
system package. A third of his volume is devoted to examining the scope of systems, the
structure of archival description, input and output, construction and formatting, design of
indexing and searching capabilities, processing equipment and costs. Also included is a
glossary of technical terms, each specifying whether used in an archival, computer or
information context; a directory of archival computer systems in use, mainly in Britain and
North America, with purpose designated; and a select bibliography of nearly 250 items,
"judged to be of direct value to archivists who wish to study the questions involved in applying
ADP to their discipline or to begin a related systems analysis." The final chapter considers the
machine-readable record and how the archivist confronts its existence. Cook is philosophical
about whether it should be tackled in established archival operations or in separate specialized
services, but tackled it must be and by professionally trained archivists—"someone must carry
out these operations [appraisal, arrangement, description, preservation and access] and those
persons will naturally be, in relation to these functions, archivists."

The assumption that it might just not be feasible, say outside a national archives, to set up a
fully machine-readable archives facility surfaces again in the Geda proceedings. William
Rofes of IBM made two sharp observations related to this problem in a short paper titled "The
Archival Snare: Mass and Manipulation." He asked "why information for archival retention
should be kept in magnetic media when it appears much more readily usable in either paper or
microfilm" and further "if there is no requirement to manipulate, to process or to reformulate
structure, there is no real justification for maintaining the record on magnetic media." Clearly
implicit in this apparent assault on "the medium is the message," and perhaps on many an
archivist's concern for preserving the record as created, is some nice cost-benefit calculation.
If machine-readable records are only to be "read," the reasoning goes, why set up expensive
storage and use facilities when modern technology can convert easily and cheaply through
devices like computer output and input microfilm (COM-CIM) to a more easily "readable"
form? Archivists would do well to consider this reasoning carefully, especially in view of the
evaluation provided in Richard Volz's long survey of existing computer-based mass storage
systems. He claimed in 1979, for example, that storage density problems in the video industry
(now in 1981 flourishing on the edge of yet another revolution — will the videodisc replace
micrographics?) would pre-empt research on archival-quality considerations for some time to
come. But if machine-readable archives *are* to be a mainstream archival agency
responsibility, even if (as Cook wondered) they are to be left to data archives specialists, then
few would quarrel with the sensible advice of Thomas Mills at the New York State Archives

in Albany who advises the archivist to initiate the search for EDP system documentation as early as possible in the development of computer systems – "by waiting until after a record, file or program has served its immediate goal, the archivist who seeks documentation provokes adversary situations with valuable resource personnel." Even the three national archival contributions from London, Washington and Ottawa are hesitant in predicting very positive progress (the Public Record Office was a jot more optimistic than others, curiously enough) in identification and inventorying, let alone acquisition and processing.

Geda's volume contains a number of pieces devoted to quantitative research. Allan Bogue (University of Wisconsin-Madison) tries to see problems of availability and access from the client's viewpoint and raises some important concerns about the tension between computer data bank generation and disappearance of significant social data through attempts to preserve privacy. And Meyer Fishbein, who is always worth reading, lays out never too many times what appraisal of machine-readable records is all about. If he errs, it is on the side of caution – "archivists are justified in requesting the continued retention of the files and related documentation until a reasonable discussion is reached." To which one might reply, the archivist can certainly request but who will make sure it is done?

In 1970, Jay Atherton saw what he wryly observed as "the dignity of the archivist" as the main drawback to understanding and using automation. A decade later stuffiness has been tossed out of the shop. It is the absence of the opportunity to learn that is the present obstacle. Michael Cook, Carolyn Geda and their colleagues have done much to extend that opportunity.

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Selected writings of Sir Hilary Jenkinson. Edited by ROGER H. ELLIS and PETER WALNE. London: Alan Sutton in collaboration with the Society of Archivists, 1980. 380 pp., 21 illus., ISBN 0 904387 52 6. £14.

This 380 page compendium consists of 25 texts written by Sir Hilary Jenkinson at various times between 1915 and 1960 dealing with a wide range of topics, such as tallies, diplomatic, palaeography, the profession, arranging records, seals, wartime measures and so on. The book's purpose is twofold, according to the editors: "as biographers to indicate from his writings the development of Sir Hilary's thought and the range of his experience as an archivist, and as archivists to offer to their colleagues, collected and accessible, the best of those papers relating to archive practice which are still valid and basic to the archivist's equipment."

The effort to rescue, if not from oblivion at least from the dusty pages of bygone issues of learned journals, examples of Jenkinson's works is laudable indeed. It is surprising that a full bibliography of his works (such as that published in the 1957 Festschrift compiled in his honour) was not included. Such a full bibliography would have indicated those periods of activity in Jenkinson's life and enabled the reader better to appreciate the significance of individual items in the work under review. The selections would, as it were, then be seen in context, whereas at present they appear more like random samples, which they are surely not.

Some commentary on the background to each selected article would have heightened the intrinsic interest of the book. How many times did Jenkinson visit Italy before, during or after the Second World War? How active was he in the Jewish Historical Society? Did he actually work on their collections? How receptive was he to the establishment of the professional