The two most devastating criticisms of these studies, as well as the SSHRCC study and the SAA's Goals and Priorities Task Force Report (GAP), were made by Terry Eastwood and David Bearman at the SAA Conference in Washington last year. First, Eastwood contended that such studies have not been properly used. They have been treated as discussion papers within the profession rather than the action documents they were intended to be. From references in *Documenting America* this criticism is not universally valid. Some Advisory Boards, including New York's, have not been content just to write a report. They have pressed their recommendations, in some cases successfully. But Eastwood's critique does apply to many such studies, not least the SSHRCC report.

Bearman's objection to the state reports and to the SAA's GAP Report is that they do not provide the kinds of information necessary to plan archives policies. Their basic failure is that they assume the very thing they must establish — the value and role of archives in the information community. To convince society that archives have value we must discover and explain our role. To do this we need to find out what institutions do and do not have archives and why, which people, seeking information, do and do not use archives and why, and what functions archives perform well or poorly and why. The list of questions goes on and on; the link is that they are inquiring about the world in which archives operate in an effort to locate our role in it. Such an inquiry allows for the possibility that we need to become something quite different from what we are now.

Information is needed to plan archives policies, but a different order of information from our previous attempts. Successive litanies on our poor resources have not convinced anyone that we deserve better. We must demonstrate the role we play, or can play, and its value to society. Only then is society likely to fund us as we would wish.

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Archives and Manuscripts. Machine-Readable Records. MARGARET L. HEDSTROM. Chicago: Society of American Archivists, 1984. Basic Manuals Series, 75 p. ISBN 0 931828 60 0 $6.00 (members) $8.00 (non-members).

Margaret Hedstrom has stripped automated records systems to the bone in her *Machine-Readable Records* manual. This latest offering from the remarkably helpful Society of American Archivists' basic manuals series does exactly what it sets out to do — to provide a step-by-step sequence by which archivists can come to grips with records-keeping systems fed by computers. Not only is this done in seventy-five pages, a good hour's easy reading (a compliment to the author), but Hedstrom is admirably plain and informative. She cuts through the technical paraphernalia and computer vocabulary in a very straightforward fashion without being simplistic.

The manual is quite simply organized into four chapters. Between them, they cover what a computer system amounts to, what the components of an automated records system are, how electronic data is organized from characters to file structures, what kind of devices are used to store it, how automated records are to be located, inventoried, scheduled, appraised, accessioned, processed, described, maintained, and made available for use. Diagrams are uncluttered and easily grasped. The inevitable glossary is built from

italicized terms in the text and, from footnotes and bibliography, the reader can pass to other works. Some of these probably deserve an annotation or two regarding coverage and reliability but this is a minor criticism.

Archivists will be pleased to see how much emphasis Hedstrom places on records-keeping systems. It is only too easy to be seduced or repelled by computer machinery, perhaps even more so by competing software of variable quality and application, overlooking the central concern of the archivist — understanding and elucidating the history of the records-keeping system. Hedstrom quite properly assumes that the archivist involved with automated systems will be more than ever before anxious to be in at the "front-end." The impact of changing paths of communication and storage media upon the record is the great challenge to the archivist in dealing with machine-readable information. The point is surely that, as ever, archivists are in their element when they master the process of record creation and information communication whatever the medium of the document may be.

A further important recognition by Hedstrom is reliance upon the records series "as the basic unit for archival analysis and description." Perhaps this should hardly need to be said but re-statement reinforces the spirit of familiarity which Hedstrom clearly wishes the archivist to sense in dealing with computer-driven records systems. Her contention is well-taken that "automated records systems consist of several closely related series, which contain information in several different formats on a variety of storage media." Using the input, processing, output framework, analysis of the records system, large or small, complex or simple, should hold no horrors. In fact, the techniques and benefits of systematic analysis show themselves even more readily in an automated records environment than they might in a manual one. Dealing intelligently with machine-readable records, at the point of identification and inventory, forces the archivist into a much more disciplined appraisal than might sometimes be the case with only human-readable systems. Particularly does it develop a healthy respect for "documentation" (system, programme or data) in the most specific detail, without which machine-readable information cannot be read. Hedstrom gives a special nod in this respect to the growing problems of keeping track of information stored through micro-computing on floppy disks (a non-archival medium) — "deciphering its contents would require [without adequate documentation] repeated experiments using the trial-and-error method with a variety of hardware and operating systems."

To help with the analysis needed and collect the data systematically, the manual provides some quite reasonable inventory sheets and procedure guidance. I would only argue that these should be developed as part of the inventorying and scheduling operations of any jurisdiction, rather than as a separate activity for their own sake. Most records systems are, and are likely to stay, manual and automated in an inextricable mix. In order to suppress the tendency to view machine-readable records as unrelated and as different animals, it is well to treat them as part of the process. I doubt that Margaret Hedstrom would disagree, for she advocates most welcomely that "a retention schedule should be developed for an entire information system.... Through timely scheduling, machine-readable records with lasting value will be identified and measures will be taken to assure proper maintenance of the storage medium and compilation of essential documentation while the records remain in the hands of the original custodian."

Appraisal in the pre-archival stage will of course determine whether a series from an automated records system is to be considered worthy of preservation in archival vaults,

and if so in what form and storage medium. Hedstrom has to assume for her purposes that archivists will preserve records in a machine-readable form. Indeed, the logic for so doing is as complete as it ever was for any other form; the deterrent or stumbling block facing many archives in pursuing the logic is the cost of the means to do it. That cost lies principally with duplication, maintenance, and use. No matter how well the system has been analyzed, described, and appraised, if tapes need to be kept on an archival basis there must be an institutional commitment to regular maintenance routines, master file duplication expenses, and conversion costs in transferring older storage formats to updated formats. There may not be much solace for some time either in optical disk technology, unless digital encoding onto video signals is more advanced and available, or in computer-assisted retrieval of microfilm images (CAR), if computer input microfilm (CIM) has as limited a manipulable capacity as some data archivists believe. The alternative at present to making such commitments, either internally or through external contract arrangements (hitherto unacceptable routing for public records at least), is doing nothing — a benign or rather malign neglect. Should all be well, however, and the archives is equipped to at least preserve and maintain the non-archival magnetic tape carrier, then Margaret Hedstrom offers also some assistance with description of machine-readable records, to the extent of minimal documentation covering identity, content, and data organization. Here she relies heavily on the MARC format for data files and on Sue Dodd's interpretive manual (ALA, 1982), though admits that this approach is not necessarily the only one to use. The critical aspect of machine-readable finding aids (or user's guides) is that they require item level description for each data element because of special technical characteristics. Again, such characteristics notwithstanding, Hedstrom advocates no less public profile in descriptive guides than would be given to human-readable records.

Machine-Readable Records deserves attention, not because it is an all-you-need-to-know compendium, but rather because it is the best first work an archivist could look at from a point of near-ignorance. Margaret Hedstrom asserts and stands firmly on the widely acknowledged principles of archival work. Her service to the profession is to place automated records systems comfortably in this context and thereby, by association, reject the erroneous gospel that has called for an overthrow of arrangement and description theory.

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Information Resource Management. BETTY R. RICKS and KAY F. GOW. Cincinnati: South-Western Publishing Co., 1984, 528 p., illus. ISBN 0-538-11500-9.

In a recent review of this text in ARMA's *Records Management Quarterly*, Kenneth V. Hayes asks the question, "Can a records manager ... have too many books on the subject of records management?" My answer, after perusing several new books on the subject, is a qualified "Yes."

Ricks and Gow have produced a text which restates much of what has been standard records management policy and practice for many years. It offers only a cosmetic difference from two other recent texts — Maedke, Robek, and Brown's *Information and Records Management* and Thomas, Schubert, and Lee's *Records Management: Systems*