

Shorter Features

CHRISTOPHER BEAM, *Editor*

The Shorter Features department serves as a forum for sharply focused archival topics which may not require a full-length article. Members of the Society and others knowledgeable in areas of archival interest are encouraged to submit papers for consideration. Shorter Features should range from 500 to 1,000 words in length and contain no annotation. Papers should be sent to Christopher Beam, Shorter Features Editor, the *American Archivist*, National Archives and Records Service (NLTN), Washington, DC 20408.

Toward National Information Systems for Archives and Manuscript Repositories

DAVID BEARMAN

The summer 1980 issue of the *American Archivist* carried a report by Richard H. Lytle, chairman of the SAA National Information Systems Task Force (NISTF), on the plans of the task force. Since that article was written the NISTF has received two grants from the National Endowment for the Humanities (NEH) to advance its work. The first grant funded a study of the descriptive elements employed in archives and manuscript repositories and underwrote a series of meetings of the task force to formulate a policy to guide the involvement of the profession in future national information systems. This initial phase was completed in June 1981. The second NEH grant provided funds to draft standard

definitions of archival description elements and to design a format to facilitate the exchange of archival information among repositories. This article discusses both the work of the task force during 1980-81 and its plans for the next two years.

A position paper adopted by the SAA Council in January 1981 and published in the May 1981 *SAA Newsletter* defined a role for the archival profession in guiding the development of national information systems for archives and manuscript repositories. The paper outlined a strategy to establish multi-institutional data bases for documenting the nation's historical records; the strategy was based on findings that com-

David Bearman is Project Director of the SAA National Information Systems Task Force.

mon descriptive categories are employed in both archives and manuscript repositories. Since the fundamental resource of any future national information system will be existing inventories, registers, and finding aids, the articulation of these data bases into a viable national network will require the adoption of standard definitions of descriptive elements and a format to facilitate data exchange.

Standard data definitions will provide a common language. All information elements currently employed by any institution will be included in a data definition dictionary. Each discrete atom of information an archivist wishes to record will be defined separately, even if in some systems certain data exist only in molecular form (for example, name and vital dates, or a type of access restriction and the terminal date of the restriction).

A format, as the task force uses the term, is a map indicating the location of a data element in a record description. It is a blueprint providing instruction archivists need to project the data that appear in their internal information systems into a structure compatible with similarly translated data from other institutions. The standard format is designed only as a container, as a shipping crate to hold data in transit; the task force does not anticipate that institutions will use it in their internal operations nor that it would be an efficient vessel for such purposes.

Even though the standard format does not enforce a particular list of descriptors, it can still standardize practice. Because the task force provides a standard menu of data elements for use in describing archival and manuscript materials, repositories may adopt the standard categories that seem useful to them. Even if each institution retains its own information systems, the identification of a standard will permit archives to

exchange information by providing a one-to-one correspondence between the information each records and the standard data elements. The principle is similar to that of an international meeting at which proceedings are rendered in one language for the record, while the participants continue to speak their native languages. No one need speak the language of record, yet each will have a record of the entire meeting that can be translated later. A standard archival data element dictionary and format will permit each institution to convert data into a standard format for exchange purposes without radically altering in-house practices or requiring the adoption of a particular hardware or software configuration. An institution can easily participate simultaneously in several data exchange networks, such as NUCMC, NHPRC, RLIN (Research Libraries Information Network), OCLC (on-line computer library catalog), statewide survey updates, or local exchanges without any extra effort.

The potential of a standard format both for the eventual establishment of inter-institutional information exchanges and for improving descriptive practices led the NISTF to seek support for the adoption of such a standard from a number of organizations that would almost certainly assume key roles in any national system. Since February 1981, when the task force proposed the establishment of a working group to design a standard data element dictionary and communications format, the Library of Congress has agreed to reconsider its MARC format for manuscript cataloging, to automate its Manuscripts Division and its National Union Catalog of Manuscript Collections (NUCMC), and to commit its resources to systems development once a format is agreed to. The Research Libraries Group (RLG) has established an Advisory Committee

on Archival and Manuscript Formats to provide expertise in designing a format for the exchange of data within the RLG bibliographic utility (RLIN). The advisory committee will assure that the collective perspective of RLG curators and archivists is taken into consideration in the design of the standard format. The NHPRC has endorsed the role of the NISTF working group in defining a format, and the institutions participating in the NHPRC Data Base Project have agreed to send representatives to work on a common format. The National Archives and Records Service has established a committee to review its internal information needs and current systems capabilities as a preliminary to engaging in a profession-wide discussion of standards.

Representatives of these organizations met during the summer and fall of 1981 and will submit a preliminary draft of a format for the SAA membership to review early in 1982. The task force will then coordinate tests of the format at archival and manuscript repositories. Institutions will be asked to describe a variety of records in order to reveal any problems with the draft. Individual SAA members will be encouraged to describe records in their custody according to the standard format and to report any difficulties to the NISTF.

The NISTF recognizes that while standard formats are necessary for the exchange of information among institutions and can help set standards for internal descriptive practices, they are far from being sufficient to assure the development of a comprehensive national information system or even to provide a secure foundation for regional information exchange networks. Substantial barriers to the emergence of a national information system for archives and manuscript repositories will remain even if standard formats are widely adopted.

Among the impediments the task force has identified are inadequate financial incentives for the exchange of data; limited information processing, transmission, or conversion facilities in most institutions; lack of agreement on mechanisms to control vocabulary; and insufficient data on user need.

To address these and other problems, the project director of the NISTF will prepare a background paper that will consider possible scenarios for the evolution of inter-institutional archival information networks, cite models of similar organizations in other information-related enterprises, and indicate critical points at which to influence such developments. From this document the task force will draft a position paper for SAA consideration suggesting whether and how the profession ought to be involved in influencing the emergence of national information systems. It will assess the relative advantages of either a comprehensive system or a number of smaller multi-institutional networks, such as among state archives, academic archives and manuscript repositories, or specialized collections on similar subjects. In developing this position paper the task force will be advised by an exceptionally notable committee of information scientists comprised of Margaret Park of the University of Georgia, F. Theodore Brandhorst of ERIC (Educational Resources Information Center), and Richard Lineback of the Philosophy Documentation Center. The position paper will be submitted to the SAA Council and membership before the 1982 annual meeting.

The issues confronting the task force and the profession are not essentially technical. They are, however, of considerable complexity and will require archivists to think carefully about the premises of archival practice and the

underlying tenets of archival theory. Eventually, when common descriptive practices, standard data elements, and a standard format of data exchange make archival networks possible, archivists will have to study who uses archival records and how the users approach them in order to design the information services of value to archivists and their clients. Among the questions designers of archival information systems will have to address are the following:

—What needs are multi-institutional archival information systems attempting to satisfy?

—Who will use such systems, what products will they require, and can these products justify the support of networks?

—What role does hierarchy play in archival description and retrieval?

—Should subject access to records be a goal of such systems? If so, who will design subject headings or key-word thesauri for archival applications?

—What implications will networks have for the organizing of work within

repositories?

—What implications will networks have for the profession and for individual professionals?

The National Information Systems Task Force would like to hear from the archival community and invites comments on its plans. For further information about the NISTF, please write to David Bearman, Project Director, NIS Task Force, Smithsonian Institution Archives, A&I Building, Room 2135, Washington, DC 20506, or contact any member of the task force. Members are Richard H. Lytle (chair) of the Smithsonian Institution, Maynard Brichford of the University of Illinois at Urbana, Charles Dollar of the National Archives and Records Service, John Daly of the Illinois State Archives, Lawrence Dowler of Yale University, Max J. Evans of the State Historical Society of Wisconsin, Steven L. Hensen of the Library of Congress, H. Thomas Hickerson of Cornell University, Charles G. Palm of the Hoover Institution, and Nancy A. Sahli of NHPRC.

Boston is... Baked Beans and SAA '82!

Plan to spend October 19-22, 1982 at the Boston Park Plaza Hotel for SAA's 46th annual meeting. There will be many opportunities to explore Boston's historic sites and cultural institutions, including Faneuil Hall, the Kennedy Library, Quincy Market, the Massachusetts State Archives, and the Northeast Document Conservation Center.

Spend some of autumn 1982 in New England---participate in SAA '82!