Models of Data Library Development and Information Systems Services: An Overview

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THE THREE PAPERS FOLLOWING this article describe variations for the provision of data library services, as they are instituted at the universities of British Columbia, Florida and Wisconsin. The fourth paper describes an online numeric information system and discusses how the reference department in the central library at the University of Kentucky has begun to incorporate services from this resource into its routine. One clear message of these papers is that there is no single administrative structure for services related to social science data files nor for numeric information systems that is ideally suited for all institutional settings. The diversity of academia will be reflected in the variety of facilities that provide data services, with the institutional framework for these services determined by local conditions.

The papers are linked by their underlying assumption that provision of service for machine-readable data files (MRDF) or from online numeric information systems is basically a library activity. Such an assumption has not been as obvious as it may seem, however, nor has it been shared universally throughout the library and information professions. Therefore, my own paper lays considerable emphasis on the links between provision of computer-based data resource services and the general evolution of library reference services. Ray Jones and Laine Ruus each show informatively how the central university libraries of their institutions, the universities of Florida and British Columbia, respectively, have assumed responsibility for these services, albeit within differing frameworks.

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In the case of the University of Wisconsin, the Data and Program Library Service (DPLS) described did not evolve from within the university library structure, nor has it since been incorporated by it. Nevertheless, its staff has maintained close ties with campus traditional librarians, the network of campus special libraries, and the program of the Library School at Wisconsin. As Alice Robbin points out, perhaps the most important library-related aspect of DPLS has been its mandate to provide its services to the widest range of university users, regardless of their status or departmental affiliation. It thus has always operated in the spirit of traditional university library services. DPLS can serve as a viable model for those institutions planning to provide data library services outside the institutional framework of the traditional university library.

It is rather unlikely, however, that this model will be adopted by many institutions during the 1980s. A facility like DPLS was a natural product of expansion such as occurred for the social sciences during the 1960s. In addition, the creation of a data library independent of an academic department, or of a service organization with a long-established tradition of university support, requires a large institutional setting, as well as a strong commitment to the sponsorship of interdisciplinary activities. Aided by considerable vision on the part of the social scientists who secured the necessary funding, all of these conditions came together at a propitious time, and DPLS was founded.

In a period of economic retrenchment such as is being experienced by most educational institutions today, new facilities rarely are established, regardless of their merits. One can argue that creation of interdisciplinary or "umbrella-like" facilities is more warranted during periods of economic stringency than when restraint is not so necessary. Yet the reality is that they do not receive the support they need because providing it means withdrawing support from some other well-established activity. Hence, the model that most colleges and universities will probably follow for at least the next several years, presuming that they have an interest in providing services related to computer-based data resources, is the type of facility described by Laine Ruus or the services of the reference department outlined by Ray Jones, or some variation of these.

Data library services that are integrated into general university library services, or supported jointly by university libraries and computing centers, have the distinct advantage, as Laine Ruus points out, of "deriving...primary funding from...the most stable and secure budgets in the academic environment." Budget-cutting for libraries and com-

puting centers occurs when overall resources decline; it is just about inconceivable that any college or university, no matter its size, would ever eliminate library or computing center services altogether. Incorporation of computer-based resources into library and/or computing center services will undoubtedly require reallocation of some university resources; it need not necessarily imply significant new investment.

Budget considerations are not, however, the only criteria for determining the most appropriate framework for providing a particular type of service. It is equally relevant that provision of data services by university libraries, whether alone or in conjunction with the university computing center, validates them as services that are basic to the general teaching and research activities of the university community. As expressed by Ray Jones, "no significant format or method of accessing information can be excluded in the teaching and service program of a university library." Situated within the university library, data services do not become dependent upon "the grace and wisdom of the deans," to use Alice Robbin's words, nor are such services viewed, again in her words, "as expendable luxuries."

Another common theme in these papers is that there are several problems which all data libraries experience, however they are instituted. Perhaps the most important is the absence of any national or international union catalog for MRDF or for computer-based data resources, such as online numeric data-base systems. As a result there is no integration of information about MRDF into central library card or online catalogs. A related issue is the lack of any real bibliographic control for MRDF, although the standard bibliographic citation format recently adopted in the *Anglo-American Cataloging Rules* (2d ed.) is a major breakthrough toward the solution of this problem. It would seem that solutions to cataloging problems and related services can be found when the experience of catalogers and the structures of the existing traditional library network are utilized. This development is more likely if the traditional library system has a vested interest in the dissemination of information about MRDF and numeric data-base systems, which obviously occurs when the library offers services for computer-based data resources.

Several developments during the past decade are at least peripherally relevant to the issues discussed here. For example, while the nascent data library "movement" has only gradually evolved, and has some of the same basic problems at the beginning of the 1980s that it had a decade ago, there simultaneously has been a revolution in the library's provision of bibliographic information for published material. This

has occurred, of course, through the online searching of bibliographic data-base systems and the utilization of cataloging networks. An entire profession of "information scientists" has emerged, and there has been a proliferation in the literature related to "information science." In some places this has complemented the work of traditional librarians; in others, it has supplanted it. Many traditionally trained librarians have become "online searchers"; fewer are now "data librarians."

In fact, in the information science and online literature, terms such as "data-base systems" are used in contexts which suggest that the normative application of computer technology for libraries is in the areas of bibliography and catalogs. With a few notable exceptions, contemporary librarians and information scientists have seemed generally disinclined to explore the world of MRDF, although this is gradually changing. Computer technology has thus been used during the past decade or so primarily to make efficient the provision of traditional library services; provision of nontraditional (i.e., data library) services has not spread in the same way.

This is all perfectly understandable. The advent of online bibliographic data-base services and online cataloging in the traditional library in large part explains the slower growth of data library services within the traditional structure. Whether consciously or unconsciously, libraries clearly looked to the computer to solve some of the problems they had related to provision of traditional information service, before turning to this technology to provide nontraditional services. The absence of computer-based data resource services in many university libraries is thus not necessarily a sign of their resistance or inertia concerning these things, but rather a case of traditional services thus far having had priority.

The fact that there was no national organization to coordinate solutions to common MRDF problems following the termination of federal funding to the Council of Social Science Data Archives at the end of the 1960s undoubtedly also accounts for the absence of a union catalog for MRDF, and for the problems related to this. The formation during the late 1970s of the International Association for Social Science Information Service and Technology (IASSIST) again provides a forum for data producers, processors and users to coordinate their efforts at solving their common problems. However, future developments in the United States regarding the coordination of services for computer-based information resources will be affected by the policies of the federal government regarding information dissemination.

If the federal government views the provision of public information, such as statistical and survey data collected and processed at public

expense, as one of its basic responsibilities, then one can also foresee renewed involvement by the federal government in supporting the search for solutions to the problems alluded to here. If, however, as it seems to be doing, the federal government abdicates its responsibilities for the provision of public information and turns this task over to the private sector, data librarians, information scientists and the community of public data users will find themselves at the mercy of the market. With such a scenario, the future for the availability of public data and for the solution of the problems faced by the providers of computer-based information services is bleak, for it is unlikely that the private sector will ever be interested in coordinating or providing the totality of information which is publicly produced. It is in the interest of all those professionally involved in public information servicing to guarantee that the federal government retains its traditional commitment to the provision of information as one of its most basic services. Otherwise, private companies will control the availability of data generated at public expense according to their own assessment of marketability.

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