

## Multitype Library Networking

I am not sure why I was invited here today to talk about "Multitype Library Networking." North Carolina is not particularly known for its leadership in multitype networking, nor am I an authority on that subject. I have had some experience in the area of academic library cooperation, however, going back to an ill-fated project called the The Colorado Academic Libraries Book Processing Center and continuing now with a more successful project involving the libraries of the University of North Carolina at Chapel Hill, Duke University, and North Carolina State University. But neither of these projects had or has a strong multitype orientation.

There is some interesting multitype activity going on in North Carolina, however -- interesting mainly because it represents a kind of middle-of-the-road approach. So maybe I am here to represent the golden mean in multitype networking, or perhaps mediocrity, depending on how you look at it. And there is indeed a rather subtle difference between these two conditions which librarians sometimes have trouble distinguishing.

On the other hand, multitype networking activity in North Carolina does represent a networking strategy that seems to be gaining favor -- the approach that some call the "bottom-up approach," a strategy that emphasizes planning and coordination of a decentralized system rather than attempting to centralize and bureaucratize the State's cooperative effort.

The University of North Carolina, Duke University and North

Carolina State University have for several years been engaged in a project called the Triangle Research Libraries Network, which has the goal of developing linked, online catalogs to form a local area research library network. The State Library, on the other hand, has the responsibility, mandated by the Legislature, to coordinate networking activity in the state. What I plan to do this morning is to describe in some detail the networking project involving the three major research libraries in North Carolina, and then to describe how this project is expended to fit into a loosely organized state-wide multitype network plan.

As some of you may know, the area referred to as the Research Triangle in North Carolina is one of the fastest growing educational and research centers in the country. In fact, the area described by a triangle with Durham, Chapel Hill, and Raleigh at each point has the highest concentration of doctorate holders per capita than any comparable area in the world. Duke University and the University of North Carolina at Chapel Hill are only 9 miles apart and North Carolina State University is some 20 miles away in Raleigh. In between lies the Research Triangle Park with numerous government and commercial research installations, as well as institutions such as the National Humanities Center.

Ordinarily when I describe the three university libraries in the Research Triangle I say that they include the two largest research libraries in the southeast. Here in Texas, I have to be careful to qualify that statement by pointing out that I do not include Texas in the Southeast, although I am aware of some

the 1930s, and was maintained in the UNC library for over 40 years before it was turned over to the State library in 1976. Along with the OCLC data base, this catalog is still an important tool in the state's In-watts interlibrary loan network.

Also in the 1930s, collection development agreements were reached between Duke and the University of North Carolina in a number of subject areas. These have been continued and expanded through the years and have resulted for the most part in collections which compliment each other. This is not to say that these programs have been entirely successful, because they have not been without their problems, but we do believe that this cooperation has considerably extended the range of research materials available to users of the two libraries.

Let me briefly describe a few of these collection development agreements. They are basically of three types: 1) those covering geographic areas 2) those covering subject areas 3) those covering special forms or types of materials.

1) Since 1938 the countries of Latin America have been divided between the two libraries for collection concentration. This program was begun with the Rockefeller Foundation grant for cooperative acquisitions of Latin America materials and over the years has been one of our more stable and useful programs.

2) There is a similar division of our Eastern European collections. For example, Duke is building a strong collection in Polish while UNC concentrates on Czech. The University of Virginia has recently become a party to these

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agreements with responsibility for collecting in the South Slavic area. With Russian materials there is a subject division, with Duke specializing in the Soviet period and in international socialism, while North Carolina specializes in prerevolutionary Russian history and literature.

3) Another agreement involves Far Eastern materials, with North Carolina collecting Chinese and Duke Japanese. This program has been particularly successful because in recent years the predominance of faculty interested in Japanese has shifted to the University of North Carolina, yet we have been able to maintain Duke's collecting priority in this area and to insist that our faculty use the Duke Library for their materials.

4) There is also an agreement involving the Commonwealth Nations. Duke, for example, collects heavily in Canadian material while North Carolina is assigned responsibility for coverage of Australia.

In addition to the geographic area agreements there are agreements in a number of subject areas corresponding to the strengths of the instructional and research programs on each campus. North Carolina for example collects library science, journalism, music, North Carolinian. Duke emphasizes research collection in forestry, religion, engineering. There are of course many subject areas in which both libraries collect heavily but with an agreement not to duplicate expensive research materials.

The other type of agreement has to do with certain types or

formats of publications, of which government documents are the principal example. While both libraries have strong collections in federal documents, a detailed agreement was reached in 1935 on the collecting of state documents, with each library taking responsibility for collecting documents from specific states. There are similar divisions of responsibility in the collecting of newspapers with little duplication of coverage except for those indispensable few required by all libraries of any standing.

In addition to these agreements which assign areas of concentration and responsibility, the libraries have over the years made many joint purchases of library materials, mainly expensive microform sets. These are jointly owned but housed in one library or the other, depending on the use they are expected to receive. There is an understanding that if use turns out to be greater in the library that does not hold the material the set will be transferred. By combining our resources in this way we have been able to acquire many more of these important research materials than if each library had acted on its own and without coordination. We also, of course, have a mechanism for mutual consultation before placing serials subscriptions or deciding to cancel serials.

In recent years we have added a number of new areas to our original collection development agreements. For example, we have divided the African continent in a manner similar to Latin America and we are now trying to work out an agreement on the collecting of local histories. In addition to these major new

agreements there have been a number of minor refinements to our programs over the years. For example, just this year we did a study of the holdings of the two libraries in the 36 provinces of France and have made some agreements on the collecting of French regional history.

There is strong evidence that these cooperative collection development programs have had their intended effect. Comparative shelf-list measurements show that collection concentrations do in fact correspond to our assigned areas of responsibility; analysis of OCLC the archive tape shows a level of duplication in current acquisitions which is much lower than one would expect in major research libraries. It might not be unreasonable to speculate that the three collections, which aggregate to over 7 million volumes, probably represent the equivalent of single library collection in the range of 5 1/2 to 6 million volumes.

These collection development agreements have for years been the centerpiece of our cooperative programs. However we also maintain special agreements on direct borrowing privileges, operate a daily courier services between Duke, UNC-CH, NC State, and points in the Triangle area, and have special agreements to provide free photocopy services for the faculty for materials not held in the home library. Taken together, these programs represent extensive but more or less traditional cooperative programs between academic libraries located in close proximity, and we feel that they have been about as successful as such programs can be.

Yet in operating these programs over the years, the staffs

of all three libraries have become aware of many limitations to cooperation. The problems involved in adhering consistently to collection development agreements over an extended period of time is the subject of another paper, but let me assure you that they are not trivial. Some problems arise from the inherent difficulties in any cooperative activity -- that is, the inherent conflict between a idealized concept of the common good and the immediate needs of one's own users. Other limitations arise from the lack of an adequate technology to support the programs without consuming excessive staff time and the lack of technology to allow use of the two collections as if they were a single unified resource.

This last situation was the impetus for creating the Triangle Research Libraries Network. It had become evident that online bibliographic access was the key to any further expansion of our cooperative activities. We had considered, for example, 1) greater refinement of cooperative collection development programs to a degree that would affect title-by-title selection, 2) coordinated preservation programs, 3) cooperative storage facilities, 4) and bus services to transport users from library to library. A critical element in all of these would be bibliographic access which would allow the collections to be accessed and used as if they were a single collection.

For this reason, the cooperative project of highest priority among the Triangle Research Libraries is the online catalog project which I will describe very briefly in general terms. Basically, what we are doing is developing an in-house public

access online catalog for research libraries. When completed, the system will be installed in each of the TRLN libraries and linked to form a distributed network. This is not what I would call an unusual idea or project, because a lot of people these days are working toward the same general goals, but we do have what I suppose might be called a "developmental strategy" that does distinguish us from other projects to some degree. So the best way to give you a quick snapshot of what the TRLN online catalog project is all about is to point out some of the features of our developmental strategy.

1) First, we are focusing on the online catalog as the core of what will eventually be an integrated automated library system. All of the fundamental design decisions are oriented to the online catalog function in a distributed network environment rather than to circulation, processing or other library functions. It is our position that online catalogs which represent enhancements to systems designed originally for some other purpose are likely to have weaknesses as online catalogs which will be difficult to overcome without complete replacement.

2) A second feature, is that we are placing a very strong emphasis on data base integrity. This emphasis is expressed by stringent validation of records coming into our system through the OCLC archive tapes, as well as our online editing and data base maintenance facilities. Some might say that this emphasis is excessive, and perhaps overcostly, but we feel that it is absolutely essential if the

online catalog is to perform in the long-run as a replacement for the card catalog.

3) The third feature of our developmental strategy is that the TRLN system will attempt to deal comprehensively with the bibliographic and physical complexities of the materials that find their way into research library collections. Our system will represent piece-specific holdings to a level of detail and accuracy not possible in most other systems. We have devised means of handling the difficult cases, such as accompanying materials, bound with analytics, conference proceedings which are sets within series and items that require copy specific notes, and so on. We will also intend to represent the bibliographic relationships within the data base more thoroughly than any other systems we are aware of.

4) The TRLN online catalog is being designed for a library system that is organizationally complex. That is, a system with scattered collections, some separately administered and not using the same cataloging rules or classification schemes. The collections are also dynamic with a high level of transfer of materials among the collections. We expect to be able to search the TRLN data base at numerous levels. For example, a user in the Chemistry Library could search the chemistry reference collection, the chemistry collection, the institutional collection, or any subset of the institutional collection, or the combined collections of the three TRLN libraries.

5) Another distinguishing feature of the TRLN developmental effort is our emphasis on the systems interface between the local online catalog, the other local online catalogs making up the distributed network, and the bibliographic utility that serves as the source of bibliographic records. We have for some time been negotiating with OCLC on the joint development of a generic computer linkage that would result in the linking of OCLC online catalog system and TRLN local online catalog in a way that would avoid the cumbersome tape load procedures or terminal port interfaces.

Although we have not yet signed an agreement with OCLC to pursue this project, negotiations are extremely promising at this point and I expect that the remaining details of the agreement and the planning for the project will be worked out over the course of this year.

I mention this because it underscores what has long been the perspective on networking held by TRLN -- that the principal nodes of a network for research libraries are the local or subregional area network in which there is an intense level of resource sharing and collection coordination, and the national level network which is the principal resource for bibliographic records. Intermediate levels of networking also have their purposes -- and I am talking here about state and regional levels -- but they are relatively less vital to research libraries than they are to other types of libraries.

You may have gotten the impression from this description of

the Triangle Research Libraries Network that we are pursuing our own interests without regard to the interests of other libraries in the State and with little concern for multi-type networking. In one sense this is true, but in a more important sense it is not.

It is true in the sense that our bibliographic access system is being designed to serve the needs of large research libraries and will no doubt be too elaborate and costly for most other libraries. This is based on our belief that research libraries do indeed require systems which differ in many ways from those which are most appropriate and cost effective for other types of libraries.

It is also true that we have not encouraged broader participation in our systems development effort. In fact, we have found that three research libraries constitutes a barely manageable group for this type of effort, and we suspect that any broader participation would further slow down a developmental pace which even now can only be called "extremely deliberate."

Nor have we attempted to broaden participation in our coordinated collection development programs. These programs require a lot of work, including day to day attention, and a great deal of compatibility in collection development philosophy and practice. Except in very special cases, we doubt that this kind of coordination could be successful in a large group of libraries of various types and sizes.

So, it is true in a certain sense that the Triangle Research Libraries Network represents something of an exclusive group on

the networking scene in North Carolina. On the other hand, all three libraries, and particularly the two public institutions in TRLN, take their obligations to provide research library resources to all the citizens in the State very seriously. For that reason we are planning to have the central-site communications equipment required to support dial access to the TRLN catalogs for any library that requires it, and we are attempting to design the bibliographic access system so that it will be hospitable to interfaces with a number of other local area systems that may emerge in the future.

Our fundamental philosophy toward multi-type networking is that the major role of the research library is to serve as a concentrated resource for research materials for all potential users in the State. We feel that we can best serve that role by cooperating most closely with the other research libraries which also feel that as their role, and that by coordinating the development of our collections and getting the most out of our combined funds for acquisitions, we can increase the range of resources available to all users. It is a simple fact that staff and other resources available for cooperative efforts are limited in the same way as any other resource, and they need to be focused on the most productive areas to have the best effect. By concentrating on doing what we do best, we feel that we can provide better services to both the affiliated and non-affiliated user of our collections.

Although it has not always been so, the State Library in North Carolina now seems to have adopted an approach to

multi-type library networking which is very similar to that of TRLN. As I mentioned earlier, since 1977 the State Library in North Carolina has had a legislatively mandated responsibility for coordination of cooperative development among various types of libraries in the State. The major initiative to follow up on that charge has taken the form of a commissioned study by King Research, Inc. entitled North-Carolina-Library-Networking Feasibility-Study issued in 1982. A steering committee and a series of task forces is now following up on the King Research recommendations.

There are a couple of noteworthy and, in my opinion, farsighted themes in the King Research report. The first is flexibility. The report advises against imposing a rigid network structure in the State. Instead, it recommends building on existing cooperative arrangements such as TRLN and advises the State Library to encourage and support these natural groupings or alignments of libraries. The report introduces a concept called the Zone of Convenience, or ZOC, which is broadly defined as a group of libraries that can conveniently share resources or coordinate programs, either because of geographic proximity, similarity in types of patrons served, complementary collections, or existing cooperative relationships. The ZOC is to be the primary cooperative structure in the State and the role of the State Library will be to assist in the creation of ZOC's, advise on the development of ZOC programs, and support pilot and demonstration ZOCs.

Let me quote from the report a section which states the

rationale for the Zone of Convenience approach. I do so because I have the intuitive feeling that this might be relevant to conditions in the state of Texas.

"It rapidly became apparent through our discussion with librarians across the State that a rigid, very formal network structure would not be acceptable to the majority of librarians for a variety of reasons, the most common being an inherent resistance to any formal, inflexible, seemingly imposed structure. This attitude was particularly prominent in small libraries. A flexible approach to networking that would be responsive to the needs of libraries of different types and sizes is much more likely to be accepted and implemented. We have attempted to outline such an approach in order that networking activities can flourish within the State as and when needed. With a flexible structure, library networking activities can develop at different rates depending on the level of sophistication required. In this way no group of networking participants need feel constrained to wait until all libraries in the State are actively involved in networking, nor need any group feel that they are unable to participate in some way."

The second theme in the King Research report is the use of ~~appropriate~~ technology, with the emphasis on appropriate. The report advises against identifying all networking activity with the use of sophisticated computing and telecommunications, and goes on to describe a number of cooperative programs which make use of various levels of technology from the primitive to the

advanced.

The major, specific recommendation with respect to technology was that the use of OCLC for the creation of machine readable records should be the common denominator for all networking activity, and that libraries not currently using OCLC be encouraged and supported in doing so, either through individual memberships or as partners in processing centers and consortia. In the near-term future, there should be a concentration on building a machine readable bibliographic data base of state-wide holdings through OCLC. whatever use is made of these records for systems within the State would be done at the local level, either by the individual library or ZOC.

As you can imagine, IRLN was delighted by this report and by the fact that it has been embraced by the State Library. This network plan reflects our perspective on multi-type networking almost exactly, even though we did not have any particular influence on its formulation. It means that we will continue with the development of the Triangle Research Library Network as planned, except that we will also be identified as a Zone of Convenience in a patchwork of ZOCs which will eventually cover the entire State. That prospect pleases us, in spite of the undignified sound of the name.

The umbrella for the statewide aspect of the network will be universal participation in SOLINET/OCLC. The most intense level of cooperation will take place locally, and there will no doubt be some intermediate levels represented by those systems linkages between ZOC's that make sense functionally and economically. The

plan will allow librarians that wish to cooperate to focus their efforts on the programs that have the most direct and immediate payoffs to their users, and the benefits of networking will not be filtered through levels of bureaucracy and control.

While I don't presume that this sort of loose, flexible approach to multi-type networking is necessarily the best for all states, I do think that it is an option that should not be ignored by a state just beginning to embark on multi-type networking, particularly if it's a state like North Carolina in which librarians are just a little bit ornery and tend to place a high value on independence and local control.