A NEW APPROACH TO THE ORGANIZATIONAL STRUCTURE OF LIBRARY STAFF AT ARISTOTLE UNIVERSITY OF THESSALONIKI

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## TABLE OF CONTENTS

SUMMARY ..... iii
ACKNOWLEDGEMENTS ..... iv
CHAPTER ONE
ORGANIZATION1
CHAPTER TWO
THE ORGANIZATIONAL STRUCTURE OF ACADEMIC LIBRARIES ..... 9
2.1 Organization by function ..... 11
2.2 Organization by user group ..... 13
2.3 Organization by product ..... 13
2.3.1 Subject specialists ..... 14
2.3.1.1 Organizational concerns ..... 18
CHAPTER THREE
DEPARTMENTAL LIBRARIES ..... 25
3.1 Definition ..... 25
3.2 History ..... 26
3.3 Size ..... 28
3.4 Organizational structures ..... 30
3.5 Characteristics ..... 31
3.6 Advantages and disadvantages ..... 32
3.7 Centralization versus decentralization ..... 33
CHAPTER FOURORGANIZATIONAL STRUCTURE IN BRITISH AND AMERICAN ACADEMICLIBRARIES44
4.1 United Kingdom ..... 44
4.2 United States ..... 46
CHAPTER FIVE
ALTERNATIVE METHODS OF ORGANIZATION ..... 51
5.1 Organic organization ..... 51
5.2 Project teams ..... 52
5.3 Matrix organization ..... 53
CHAPTER SIX
IMPACT OF AUTOMATION ..... 59
6.1 Technical/public services integration ..... 62
6.2 Systems librarians ..... 72
CHAPTER SEVEN
ARISTOTLE UNIVERSITY OF THESSALONIKI ..... 77
7.1 Greek university libraries ..... 77
7.2 Library system of Aristotle University of Thessaloniki ..... 80
7.2.1 Central Library ..... 81
7.2.2 Departmental libraries ..... 84
7.2.3 Library staff ..... 85
7.2.4 Automation in University of Thessaloniki ..... 87
7.2.5 Reasons for restructuring ..... 89
7.2.5.1 Financial pressures ..... 90
7.2.5.2. Rising expectations ..... 91
7.2.6 Reorganization ..... 91
CONCLUSION ..... 96
WORKS CITED ..... 101

## SUMMARY

The scope of this dissertation is not to provide an organization chart for the library system of Aristotle University of Thessaloniki, Greece but to define each unit in the system and its relation and interaction with other units and groups in order to apply a new way of organizing library staff.

Reviewing the major theories of organization provides us with the basic knowledge on the function of organizing. Academic libraries in the United Kingdom and the United States have used various methods of organizing staff. This experience is analyzed in chapters three and four along with some alternative methods in chapter five. The use of computers in libraries has introduced many changes and we examine the extend of impact on the organization of library staff. Having analyzed the major aspects of library staff organization we suggest a different organization for the library staff of Aristotle University of Thessaloniki.

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## CHAPTER ONE

## ORGANIZATION

The term organization embodies two rather distinct facets. One refers to a function, or set of functions that people engage in to bring order to what might be chaos, to bring structure to what might otherwise approach an uncomfortable level of randomness. This is often referred to as organizing, and good management is sometimes defined almost wholly in terms of the ability to organize well. The other facet of the term refers to that which results from the function of organizing: an organization, a discernible entity. Hicks and Gullett give a definition of organization "An organization is a structured process in which persons interact for objectives". ${ }^{1}$ Etzioni gives a similar one:
"Organizations are social units (or human groupings) deliberately constructed to seek specific goals. Organizations are characterized by: 1. divisions of labor, power, and communication responsibilities, divisions which are not random or traditionally patterned, but deliberately planned to enhance the realization of specific goals; 2. the presence of one or

[^0]more power centres which control the concerted efforts of the organization and direct them toward its goals; these power centres also must review continuously the organization's performance and re-pattern its structure, where necessary, to increase its efficiency; 3. substitution of personnel, i.e. unsatisfactory persons can be removed and others assigned their tasks. The organization can also recombine its personnel through transfer and promotion". ${ }^{2}$

The truth about the organizing function is that it never has an ultimate form. Once something good is found, inevitable changes will occur that automatically create or require organizational revisions.

The resultant organization is never a stable entity. To perceive or to hope for stability is also to suffer delusion because an organization is dynamic. If anything, it is highly misrepresented by an organization chart. It is no wonder that people who try to describe organizations using charts must add lines, embellish with color-coded arrows, and complete their charting with acetate overlays. They are forced to move from the stability of boxes to the dynamics of interactions. An organization is predominantly a set of relationships, and relationships are never fully stable. In these ways, organization designs and redesigns, and the organization that results changes every day. The only way to view organization

[^1]is to accept this dynamism and fluidity, and not to expect that there is an end to it somewhere.

Division of labor and specialization are the fundamental building blocks of organizations. When a job is created, it can sit side by side with other jobs that are different. Different jobs have different functions. This is the horizontal dimension of the organization. Jobs also have different prestige and value. Some jobs are considered more important and control more resources than others. There are differences in rewards which are partially explained by the nature of their controlling function. In this case jobs are hierarchically ordered and contribute to the vertical dimension of organization. Most often the vertical dimension involves increased responsibility for other people and resources and leads to direct reporting relationships.

Authority conceptions create vertical reporting relationships. This has been referred to as a scalar chain to differentiate it from horizontal or diagonal relationships. The vertical dimension of organization connects directly to the concept of control. Hierarchical arrangements thus reflect the major way in which control is sought through organization structure and design.

Delegation is the process of assigning responsibility and authority throughout the organization and creating the vertical and horizontal dimensions of the structure.

The net result of a delegation process determines how centralized or decentralized an organization is. In centralized organizations, employees at lower levels may be asked for their ideas or recommendations, but the final decisions are made at higher levels. In decentralized organizations, decisions are pushed to lower levels.

Many definitions conceive of an organization as composed of people and groups working to achieve some shared purpose or common goal. Organizations are viewed as systems with function and structure. Some definitions acknowledge the existence of division of labor and the need for coordinated activities to govern interactions. Quite often, these definitions envision the element of hierarchy and may go so far as to view the structure as a pyramid. In the modern world, most large organizations, including libraries, are structured as bureaucracies.

Max Weber originated the concept of bureaucracy as a model to be used in his analysis of organized industrial society. His 'ideal' type of organization is a bureaucracy characterized by a hierarchy of office, careful specification
of office functions, recruitment on the basis of merit, promotion according to merit and performance, and a coherent system of discipline and control. ${ }^{3}$

Beverly Lynch says that "Bureaucracy means inefficiency and red tape. The sociological meaning of the term refers to the administrative aspects of an organization and coordinate the activities of its members" ${ }^{4}$ but she analyzes the elements of Weber's hierarchy applied in libraries and concludes that "Libraries are bureaucracies. The elements of bureaucracy emerge from the library's attempt to ensure its efficiency and its competency and from its attempt to minimize its impact of outside influences". ${ }^{5}$

Mintzberg identifies five primary components of an organization when he analyses organizational structure: 1. the strategic apex, or the top management; 2. the operating core, which contains the people who do the basic work of the organization; 3. the middle line or the managers between the

[^2]operating core and the strategic apex; 4. the technostructure, which provides system design, formal planning and control; and 5. a support staff that provides indirect services, including everything from the mail room to legal services. Using these components he recognizes five basic structural configurations: 1 . simple structure 2. machine bureaucracy 3. Professional bureaucracy 4. divisional form 5. adhocracy. ${ }^{6}$

Simple structure consists of a few managers in the strategic apex and an operating core. Organizations of this type tend to be small and are controlled and coordinated by direct supervision from the strategic apex.

Machine bureaucracy emphasizes standardization of work and job specialization. Organizations in this configuration seek control over their environment rather than adaptation to it and are thus unlikely to be innovative.

Professional bureaucracy relies for coordination on the standardization and high level of skills of its operators. The professional bureaucracy structure is common in organizations such as social work agencies, universities,

[^3]hospitals, schools, and libraries. Within them trained professionals are hired to do the work and are given substantial control over their own work. Professional bureaucracy is highly decentralized, much power rests with the professionals at the bottom of the organization.

It is useful to note that the professional bureaucracy structure is both a market-based one and a functional one. That is, specialists are grouped according to the skills or knowledge or work processes they use--the functional base-and according to the needs of the clients or users--the market place. This is clearly seen in information organizations. The functional organization in them--retrieval specialist, reference librarian, cataloger, archivist, bibliographer, circulation librarian, nonprint media specialist--also dictates how the user must approach the organization for service and how service is offered to him.

Professional bureaucracies can operate effectively in a very complex environment because they can develop and apply high levels of skills. They can adapt, but they have trouble with fundamental or revolutionary change.

Divisional form exists most often when the organization's product is diverse. Units relate to the parent organization by a control system that emphasizes
standardization of outputs, in most cases short-term profit and the likely result is the cost of long-term growth and sub-optimization.

Adhocracy is a fluid structure based on interacting project teams. Coordination and control come about through informal communication and mutual adjustment among the experts who make up the project teams. Power in an adhocracy is not based on authority or hierarchical position but rather on who has the expertise to best make a given decision. It suits organizations that need to innovate in complex ways in complex environments.

Organizing is the managerial function that gives meaning and identity to various parts of the organization. The organization is best viewed as the pattern of interactions and the relationships among its members. Organizing can make these interactions and relationships more effective by reducing conflicts, defining roles, and producing an organization chart of these relationships. However, an organization chart is not the organization but a static picture of the organization.

THE ORGANIZATIONAL STRUCTURE OF ACADEMIC LIBRARIES

The appropriate organization of academic libraries is now considered to be one of the most important aspects of library management. An organizational structure is related to communication, coordination and control. A good organizational structure provides for efficient work and communication systems as it establishes the patterns of relationships and responsibilities between departments and individuals within the library and its parent organization.

Academic libraries today are organized in many different patterns, depending upon size, kind of institution, growth rate, geographic dispersal, and available space. Regardless of the organizational pattern chosen, almost all academic libraries are structured in a hierarchical manner. ${ }^{7}$ The large number of professional and nonprofessional employees in most libraries has led nearly all of them to adopt an administrative structure consisting of $a$ director and a

[^4]number of middle managers. Each manager is responsible for a particular area of expertise so that the activities lead to the survival of the organization in the environment. Areas of expertise can be the departments of the library.

An effective organizational structure should reflect the goals and objectives of the library. Also, there are three important variables to consider during the process of designing an organizational structure: the external environment, the internal environment and the interaction between the two. The size, the kind of work done by a given unit, the autonomy of the unit and the environment surrounding the library also influence the structure of the library.

In the United Kingdom until 1950 few, if any, university libraries follow more complicated organization than the basic housekeeping operations of acquisition, cataloging and placing, binding and lending service. From 1950 and until seventies there is a considerable growth in student enrolment, teaching staff and creation of new universities. This expansion affected the size of the libraries in terms of book stock and staff. The principal development during this period is the shift of book-processing to reader services.

In the United States the history of academic libraries contains little information about library organization before the late 1930s and early 1940s. The exact point where organization becomes a problem in libraries in not known but when a library's collection reaches 200,000 volumes, organizational problems begin to emerge.

Tasks, jobs, or personnel are formed into groups or departments. Departmentalization according to function, location, product (service) or user depends upon the environment. Sometimes a library may reflect two or more bases for departmentation. An agriculture library, for instance, in the university library may be viewed as organized geographically (located in the agricultural college across campus), by client (its particular students and faculty are the prime users), and by product (agricultural literature). Furthermore one basis for departmentation is often embedded in another. The agricultural library will likely have its own reference department or bibliographic service unit.

### 2.1 Organization by function

Organization by function predominates in libraries. By "function" is meant the breaking down of work assignments into the logical activities or services which enable the
enterprise to achieve its goals. The continuum of functions in the library includes acquiring, organizing, lending and using material. These are the most frequent positions: acquisition librarian, cataloger, reference librarian, circulation assistant. There is one particular plan for divisional organization that had been widely accepted in large academic libraries. This is a bifurcated functional organization in which all library activities are considered either reader services or technical services.

The advantage of functional organization is that it groups together similar activities in the departmental unit using particular skills and knowledge to work on common problems. Employees have a very clear idea of their tasks which are often consistent with their special training. Not only skills but also productivity should increase in function-based positions.

However, in functional organization it is possible to lose sight of the end product, and the danger is larger the greater the distance of the worker form that product. Also, function structures place emphasis upon expertise within functions and departments without looking at the overall organization's goals. It is the type of differentiation which is most likely to develop subcultures. Members of each
department adopt the values, goals and orientations of the particular function through their specialized skills and differences in goals and orientation.

An additional problem of functional organization is that it requires an extra measure of coordination to keep the several steps synchronized. This adds to the hierarchy of administrators, and to management costs.
2.2 Organization by user group

Organization by user group is not prevalent in academic libraries; the emphasis is either on centralized function or on subject content of resources. Subject departments are in some cases units specialized by user groups. Separate collections for law and medicine serve circumscribed clienteles with particular needs and use habits. In a few very large universities, undergraduate units have been established for students who do not need deep research. 2.3 Organization by product

Departmentalization according to product is a generic term used to describe the differentiation of libraries based on their resources, services or markets. Product differentiation is often found in academic libraries where the organization structures are designed to support the management of different types of resources (audio-visual
material, serials, books and so on) or subject specialization in which staff are involved in acquiring, processing and providing user services in specific areas.

Using subject specialists in various library services is common in British and American academic libraries. The following discussion on subject specialists tries to give a picture of their position in the university environment.
2.3.1 Subject specialists

There is not an agreement upon a standard term for subject specialists. Terms like subject specialist, subject bibliographer, area bibliographer, area specialist, professional specialist, reference bibliographer, liaison librarian, information officer are found. Definitions of subject bibliographer (and related terms) tend to be vague. Consider the following definitions: A subject specialist is a member of the Library staff
appointed to develop one or more aspects of a library's
technical or reference services in a particular subject
field.
A subject specialist is a member of the library staff
appointed to organize library services in a particular
subject field. This subject field may be fairly narrow,
or, more typically, be broad to cover an umbrella of
related
faculty/school/departmental structure. The in subject
specialist's responsibility for developing the services
${ }^{8} \mathrm{~K}$ Humphreys, The subject specialist in national and university libraries, Libri 17 (1967), 31.
and maximizing the use of the library's resources in his area implies a wide variety of duties. ${ }^{9}$

In an article titled Subject specialists in university libraries: fossils or forerunners? Holbrook provides a comprehensive definition of subject specialist as well as the range of duties performed: "By subject specialists I mean someone whose primary, if not total responsibility is subject work: someone with few or no administrative duties. Although specific to universities much of this short contribution applied equally to polytechnics. The subject specialist will have a wide variety of tasks but they can usually be assigned to the following headings: liaison with staff and researchers; provision of information services, bibliographic instruction and reader education; collection development; assistance to users; and supervision of classification. I might also add the great unwritten role, keeping an eye on the appropriate floor". ${ }^{10}$

Michalak describes the role together with the qualities of the subject specialist: "The librarian is assigned the responsibility for communications with a specific academic

[^5]department or group of academic departments. The librarian has training, usually at the graduate level, in one or more of the disciplines represented by the academic department(s); is possessed with communication skills; and has the selfconfidence so as to contribute to the research and teaching objectives of academic departments. In addition this librarian has responsibilities such as book selection and collection development, reference services, bibliographic control, instruction in the utilization of library resources, the development of current awareness or selective dissemination of information services, and what can be termed and 'ombudsman' function". ${ }^{11}$

In the American universities, librarians with subject expertise and language fluency became imperative after World War II when various universities began to devote considerable funds toward developing instructional and collection programs in selected areas. By 1950, the University of Nebraska Library had adopted the 'divisional library' approach and had hired subject specialists in the humanities, the social sciences, science and technology, and education. The

[^6]divisional approach provided separate reading rooms, circulation, reference, and collection management for each of the four subject divisions. Indiana University Library adopted a quasi-divisional approach with an upgrade of library service for those areas still in the general collection to the level of branch libraries with ten subject bibliographers.

In the British universities a similar development is observed. In the late 1940 s the University College of the University of London, faced with the need to rebuild collections destroyed during the war, developed a system of delegating detailed work on the subject libraries to assist librarians. As university libraries grew rapidly in size and moved from a custodial to an exploitive role, subject specialization schemes of various types became common, often involving a complete remodeling of an existing staff organization. Branch libraries, where staff is in effect subject specialists by definition, saw the beginnings of some such schemes.

Subject specialization sometimes developed because of the need to deal with material in particularly difficult areas, e.g. Japanese studies, Latin Americana, etc. Sometimes it had its origin in the cataloging department: typically
there would be an allocation of subject fields amongst staff, at first for cataloging and classification, but later extended to liaison with departments, reference work, reader instruction, etc.

The need for better liaison was clearly a major factor and the introduction of subject specialization helped the improvement of communication between the library and academic departments.

### 2.3.1.1 Organizational concerns

The postwar implementation of subject specialization programs in Britain, while more readily accepted than in the United States, has suffered from many of the same organizational problems.

What is the most effective use of a subject specialist in the university library and its position in the organization's structure? The answer will vary from institution to institution and even at one institution will vary over a period of time. The structure depends upon several factors. The most important is the decision to appoint subject specialists as full-time staff or employ them as part-time specialists and part-time administrators. Another factor is how old the library and the university are. Long-established universities and libraries incorporate
problems such as decentralised services in departmental or divisional libraries. Woodhead and Martin in their article Subject specialization in three British university libraries: a critical survey ensure that: "The subject specialization in the 3 libraries reflects the academic organization of the 3 universities. UCL and Leeds are organized in department with-in-Faculties, Bradford in schools of studies within 4 Boards. The range of subjects studied at UCL and Leeds, much greater than at Bradford, has produced, at least in Arts, narrow specialisation with one specialist corresponding to a department or group of departments. At Bradford each of the 4 senior subject librarians covers all the subjects studied in his Board, as does his supporting assistant". ${ }^{12}$

Bastiampillai and Havard-Williams ${ }^{13}$ propose a system of organizing the university library staff according to subect specialization. The Assistant Librarians are in charge of broad subject areas. The Senior Library Assistants which are non-graduate Associates of the Library Association or non-

[^7]qualified graduates are in charge of inter-library loans, acquisitions, cataloguing, etc. They found the structure less hierarchical, a string of subject specialists with the Librarian as a central stone.

Crossley in the article The subject specialist in an academic library: his role and place recognizes the two categories of senior library staff in academic and nonacademic staff according to the possession of a degree. According to him if the staffing structure is designed to give priority to subject specialization, the administration will be separated and may then be organized: a) by employing non-academic staff librarians on these duties, thus freeing all academic staff librarians for subject specialization; i.e. true 'division'. b) by spreading the administrative load thinly over all or many of the subject specialist librarians, which is a 'hybrid'. ${ }^{14}$

Guttsman in his article Subject specialisation in academic libraries: some preliminary observations on role confict and organizational stress describes his experience organizing a library from the beginning by making use of a

[^8]subject specialization system. He indicates that subject specialization will only work if certain corollaries are satisfied:

1. Actual fostering of scholarship among senior library staff-assistance with research projects, study leave, secondments to teaching assignments;
2. Involvement of senior library staff in the decisionmaking process within the library.
3. Administration tasks should be rotated-if not among all subjecct specialists, then at least as far as personal aptitude and experience permit;
4. Libraries should have their quota of senior posts not solely restricted to Librarian and Deputy Librarian. Access to posts should be on basis of academic excellence, bibliographic skill and subject responsibility, as much as functional responsibility and administrative competence;
5. Inter-library democracy should be reflected externally by participation of senior library staff in the work of the library committee. ${ }^{15}$

It is worth noting though that he finds the model not applicable for universities with student population over 8,000, with a large number of library staff and geographic dispersal.

Bandara in the article Subject specialists in university libraries in developing countries ${ }^{16}$ agrees that subject

[^9]specialists are also valuable in developing countries. Subject specialists need to have a clear picture of the current publishing scene in their subject area and the faculty's research and teaching needs as well as the authority to either select or influence selection in a positive manner in an environment with shrinking purchasing power and different groups of users (postgraduate researchers and undergraduate students).

All the authors agree that subject specialization is a system that helps in the creation of a balanced collection and its better service to the users. It also creates better communication links between the library and the university community.

But there are difficulties and disadvantages, too. No librarian can 'specialize' in the strict sense when serving perhaps dozens of specialist researchers, all within a given subject area. On the other hand, what the librarian can offer is bibliographical specialization in a broad subject area. Division into self-contained subject areas is not possible.

16 Samuel B. Bandara, Subject specialists in university libraries in developing countries: the need, Libri v. 36 (September 1986), 202-210.

Difficulties can arise where subjects are taught on an area or cross-disciplinary basis.

Problems may also arise because the growth and efficiency of a particular subject area will reflect the ability and enthusiasm of the appropriate head, thus a whole subject area may suffer because of an inadequate or inefficient subject librarian. Quality of service is heavily dependent on individual motivation.

The independence necessary for effective subject specialization may be a potential disadvantage. The subject specialist may develop greater loyalty to the department than the library. He/She may want to organize the collection in a manner that clashes with general planning or policy. Agreement on united library policies is less likely, e.g. the science and arts will differ frequently.

A recent and more fundamental objection is that subject specialization was conceived in affluent times when the system was expanding. It now seems that funds no longer exist to create posts to cover new subjects or fill gaps, and professional mobility has largely disappeared. Also, if budgets are to be severely curtailed then it could be argued that perhaps the most basic tenet of subject specialization
is no longer applicable, that is the capacity to develop collections.

However, in modern library services stressing the importance of user services, some form of subject specialization seems a good approach to staff organization. Subject specialists can serve as Information Officers with the objective of handling information in particular subject areas more systematically. Administrative duties and technical processing functions performed by other staff can give them the opportunity to offer high quality service.

There is not only one acceptable way of organizing staff in academic libraries. Local circumstances and requirements, the institution's own historical pattern of growth and governance are some factors affecting library services organization. A combination of various methods of organizing is followed by the individual libraries for better efficiency and the accomplishment of library's mission which is provision of information services to the learning community.

## DEPARTMENTAL LIBRARIES

We have mentioned previously that organization by geographic area is one of the ways of organizing library services. There has been no lack of discussion in the literature about organizational structures for academic library systems and the need to maintain a network of service points to provide library services to users has been accepted without question.

### 3.1 Definition

Currently, the terms "branch library" and "departmental library" are used interchangeably in reference to academic libraries although originally "departmental library" was the only terminology used. For many years "branch library" referred only to public libraries. Harrod's Librarians' Glossary provides the definition: "Departmental library (is) a library in a college or university which is apart from the main library and restricted to one subject or group of subjects. Also called 'Branch library', 'Faculty library', 'Laboratory collection', 'Office collection', 'Seminar
collection'". ${ }^{17}$ The ALA Glossary of Library and Information Science gives the following definition of departmental library: "In an academic library system, a separate library supporting the information needs of a specific academic department. May be a branch library external to the central library or housed within the central library". ${ }^{18}$
3.2 History

The creation of departmental libraries originates from Germany in the nineteenth century when professors found it necessary to amass personal libraries and, as these were inadequate, to initiate separate institute, faculty and departmental libraries without regard to the material available in the central library.

This practice spread to the rest of Europe and to the United States. In Italy, the centralization of responsibility under one or more ministries results in a chaotic situation. Humphreys notes that "At Florence for example there are 8 faculty libraries, 33 institute libraries and 3 other libraries. Cooperation between them is a matter of personal

[^10]contacts depending on the character of the individual librarians". ${ }^{19}$

In Germany, a similar situation is observed. In 1967 the State of Nordrhein, Westfalen alone had a total of 559 faculty libraries with book-stocks amounting to 5 million volumes. On the other hand, the affiliated central libraries only had a total stock of 3.4 million volumes at their disposal. At one and the same time, 33 social science libraries were in operation in Cologne, independently of each other, and without connection to the central library.

In the United Kingdom departmental libraries are sources of books for a student. Thompson quotes from First Report of the Cambridge General Board's Committee on Libraries: "It is certain that, as a matter of historical development, the prime motive behind the creation of most departmental libraries was the provision of research material for senior academic staff in order that they might have such material immediately at hand, without the necessity of going to the university library" ${ }^{20}$

[^11]In the United Kingdom, also, polytechnics were formed very quickly in the 1960s by the amalgamation of a number of separate colleges. These colleges had libraries that had little in common in terms of collections, services and administration. Some had the luck to have a new library building but most of them had to face the multi-site library problem.

In the United States departmental libraries were first established in the latter part of the nineteenth century following the departmentalization of universities into separate schools. Before World War II there are two trends: 1. Need for central administrative control over branches, and 2. Emergence of the subject divisional plan library. The main library usually encompassed the humanities and social sciences divisions and there was sometimes a separate science library. The overall pattern of university library development in this century is a central library with separate collections for selected academic departments. 3.3 Size

Board's Committee on Libraries (Cambridge, 1969) ; quoted in James Thompson, Reg Carr, An introduction to university library administration 4 th ed. (London: Clive Bingley, 1987), 91.

The size and geography of a university campus plays a key role in the degree of centralization of libraries, since distance from library resources determines their use and usefulness. The number of departmental libraries in a university library system can range from zero to more than 100 (at Harvard University). In a survey conducted by the Office of Management Studies of the Association of Research Libraries, and published as ARL SPEC Lit 99 'Branch Libraries in ARL Institutions', ${ }^{21}$ ninety-four university libraries reported on their branches with a total of 11,008 branches reported. Sixty-eight percent of the responding libraries have centralized library systems and 32 percent have decentralized systems. The average number of branches per library in a centralized system was six, while thirteen was the average in a decentralized system. The most common branches were Music (49), Mathematics (44), Engineering (39), Physics (38), Chemistry (37), Business (34), Architecture (33) and Geology (31).

The size of academic departmental libraries varies even more widely, from a few hundred items to more than a million

[^12]volumes. The ARL survey found a range of 2,000 (a business library) to 1.2 million (a science library) volumes from its respondents. The typical departmental library has between 10,000 to 50,000 volumes. There have been attempts in Britain to recommend the optimum sizes of law and architecture libraries but no full pictures of the requirements in staff, technical equipment, etc. have been suggested. It has been customary to regard law and medicine as being sufficiently sui generis to be housed separately.
3.4 Organizational structures

In another survey conducted by $A R L$, and published as SPEC Kit no. 129 'Organizational charts', ${ }^{22}$ there are the organizational charts of 61 college libraries. In analyzing the 61 charts for those libraries that reported having branches, we can find that 38 percent of the branches reported to an administrator for public services, 13 percent reported to administrators for subject libraries, 10 percent reported to the director, and, in 18 percent, the reporting lines varied by departmental library.

[^13]The predominant structure is single functional. The departmental libraries report to an administrator such as an assistant director for public services. This implies that the functional unit within which departmental libraries are placed is the primary focus of their operations denying in this way the multifunctional aspects of them. For those who report to the director, the same hierarchical structure is followed but there is the recognition of the multifunctionalism of the departmental libraries. In the case where departmental libraries report to administrators for a subject area we can see an attempt to unify the libraries according to the university's intellectual and educational mission. However, this compartmentalization might lead to a fragmented and overspecialized structure.

In polytechnics in United Kingdom the management style and organizational structure selected is influenced by the way in which the polytechnic as a whole deals with its multisite nature. Commonly, site librarians report to a head of reader services, and will be junior to the head of technical services. In some instances, librarians are relatively junior members of the professional staff, remote both geographically and organizationally from the centre of decision-making. 3.5 Characteristics

We can identify departmental libraries by form of material (map libraries), by status of user (e.g. undergraduate libraries), by subject matter. Also we can find decentralized technical services, administrative decentralization (which can include centralized technical services), modified physical decentralization (such as divisional libraries) and complete physical decentralization.

Suozzi and Kerbel provide us with a list of characteristics of departmental libraries:

Readily identifiable and vocal clientele.
Tightly focused goals and objectives.
Inter-relatednesss of functions.
Holistic view of service.
High degree of collegiality and flexibility among staff. Close physical proximity to primary user community.
Enterpreneurial management style, necessitated by both physical and spiritual isolation from other library units.
Ability to develop and personalize service.
Identification by primary clientele and staff as part of that academic unit. ${ }^{23}$

### 3.6 Advantages and disadvantages

The above characteristics also indicate the advantages and disadvantages of departmental libraries.

[^14]In a centralized library, all the subject materials are located in one physical place. Because of the interdisciplinary fields and the overlapping of subjects today, it is a great advantage to the users to have all the services and materials in the place. The centralized library is open more hours than a small branch library, and during all these hours, there is reference service, whereas the small branch library is open fewer hours, and even then, reference services may not be available all the time.

From the user's point of view departmental libraries are conveniently located near classrooms, offices and laboratories. They provide better, special and more personal service and give the various departments a direct interest in their libraries.

On the part of the administration and buildings there are advantages in centralization: closer administrative control, better utilization of the professional staff and better communication between the librarians. Departmental libraries are sensibly sized management units but they also create some problems: internal competition over funds, lower level of identification with the service as $a$ whole and tensions between site and service.
3.7 Centralization versus decentralization

The theme of departmental libraries is a continuing discussion about centralization versus decentralization of collections, services and decisions.

Thomas Watts summarizes his opposition to branch libraries under five areas: 1. The growing interdependence of knowledge; 2. Tremendous inconvenience to the user; 3. Isolation of collections; 4. Expense; 5. Communication between departments. ${ }^{24}$ He writes about his first concern: "the fractionalization of knowledge that takes place with the emergence of 'branch libraries' seems inappropriate, anachronistic". For the user's inconvenience he claims that "a single research paper could take the student all over campus unnecessarily, needlessly". About isolation he writes that "particular library collections in effect become isolated from the rest of the user community". He, also, finds the expense of collection development considerable for any library. "Communication between departments and professional schools on campus is hindered, not helped, by a movement to the branch library schema". ${ }^{25}$

[^15]
#### Abstract

Michael Bruno finds that the main disadvantages with departmental libraries are in the administrative area: 1. Administrative control (coordination, cooperation, and communication) is difficult to achieve. 2. The cost of administering such branches. 3. The problems of access and security increase. ${ }^{26}$

Snunith Shoham studied the cost of maintaining a branch library by analyzing the Library School Library at University of California at Berkeley. He estimated that 42.5 percent of the labor cost is for services and processing which are done because the library is a branch. About 14 percent is accounted for by the extra services, and only about 44 percent are labor costs that would exist, even if the library were not a branch. Only about 7 percent of the materials cost however, is for duplication, and this low figure is an outcome of the careful policy of the library. Most of the duplication exists in reference materials. Users' costs, include such items as travel cost, the time necessary to get to the information source, waiting time for retrieval, and frustration. The time spent in travelling to a distant


[^16]library, and the further loss of time resulting from the difficulty of retrieving an item in a larger system, can be calculated and compared to the time spent locating the same item in a departmental collection. He also mentions that inaccessibility of a library's resources can result in user's reluctancy to use the library, further resulting in a loss of research and instruction, which are the purposes for which universities were established. He concludes that "the users prefer accessibility to greater completeness of the collection and the additional costs of decentralization can be justified in terms of overall costs". ${ }^{27}$

Anne Woodsworth responds to Watts that with technology any faculty member, student or other user of an academic library will be able to access library material from any location, checking the circulation status of any item, recall it or request it by a low-cost delivery system. Centralized automated bibliographic functions is a tool that diminishes the isolation of disciplines and brings together all the related material. She concludes that "with the acceptance of common citizenship within a university, coordination of

[^17]policies, personnel practices, budgets, and planning can bring about a decentralized organization that is stronger through its diversity". ${ }^{28}$

Michael Hibbard agrees with the above idea by saying "it is worth noting that developments in distributed computing systems will probably make this whole question irrelevant in most cases in the near future. When all researchers have terminals in their offices through which they can access not only their own libraries but the holdings of every major research library in the country, the question of the physical location of holdings will lose its meaning for most purposes". ${ }^{29}$

Edward Holley expresses his hopes that "with computerized bibliographic information we could be able to move in the direction of small, service-oriented units of service, with a human focus. We should remember that the user

[^18]will always be asking for better access to more and more material". ${ }^{30}$

Waldhart and Zweifel, in their article Organizational patterns of scientific and technical libraries: an examination of three issues, analyze three aspects that need consideration in a library reorganization: 1. The politics of centralization. 2. The concept of accessibility, and 3. The interaction of science and technology.

They point out that centralization, with the increased physical, financial and human resources can improve library services to the university community that could not be available in highly decentralized systems, services such as selective dissemination of information, systematic collection development by subject specialists and document delivery systems. The political aspects of centralization may determine negotiations among faculty, librarians and university administration. Faculty tends to control library policies and procedures in departmental libraries and with centralization might lose this control as well as preferential treatment. Also centralization confers most

[^19]responsibility and authority for decision making to the library administration. The university librarian needs to be aware of faculty reaction and possible support to centralization and also has to provide sufficient guarantees for improved library services.

They come to the conclusions that "first, because of the uniqueness of local circumstances it is unlikely that a "general theory" of library organization, which can guide the decision-making process, will be formulated in the near future; second, if librarians need data to support the decision-making process, it will fall to them to generate such data". ${ }^{31}$

Wilfred Ashworth in his article The multi-site dilemma ${ }^{32}$ proposes organic control for the organization of libraries with many sites. The organic system allows decisions concerned with local needs to be made locally and rapidly without conflict with the overall policy and planning. The Chief Librarian does not take all decision from a position of

[^20]authority but he sets up a more corporate decision-making structure. In practice senior staff meets at intervals to discuss general policy, but when they decide that major changes of system or approach are necessary, they set up an ad hoc working party composed of the most appropriate staff for the particular issue. Decisions made as a result of such a working party's recommendations must be adhered to, and are less likely to run into opposition because they have been mutually decided and accepted, and now form part of the framework of general policy.

Superimposed on this framework will be a pattern of decision-making by the site librarians whose decisions become local policy provided that they do not conflict with the agreed general policy and that they conform to a common culture. This common culture is the nub of organic control and is an accepted manner of dealing with people and problems, and of making judgments, which is the "way" of organization.

Organic control gives staff more responsibility and commitment to the organization and is vastly more rewarding. It also offers professional satisfaction rather than employment under more autocratic direction. The system expects initiative and innovation to arise from everyone, and
provides a mechanism for ensuring that both initiative and innovation receive proper consideration and reward.

Neil McLean in the article Managing multisite polytechnic library services admits that "this particular management style still appears attractive" but it is not without its problems. "The most severe criticism of this particular management theory is that it is merely a recipe for 'sitting back and doing nothing'" and he later proposes "the most likely way of making this theory work would be to adopt a participatory management style involving all the site librarians as this may lead to some concensus on acceptable service goals". ${ }^{33}$

Joan Barry in the article Branch libraries the coordinator's view $^{34}$ comments that the Branch and Departmental Librarian is the connecting link in the relationship that exists between the central library and its branches. Coordination of the various branch libraries and liason between these and the central library are the main requirements. In order to perform this role the Branch and
${ }^{33}$ Neil McLean, Managing multisite polytechnic library services, Aslib Proceedings 34 (May 1982), 239.
${ }^{34}$ Joan Barry, Branch libraries, the coordinator's view, Australian Academic and Research Libraries 12 (March 1981), 11-20.

Departmental Librarian needs to be located within the library structure in a position which will provide automatic participation in major policy discussions and decisions. On the other hand it is necessary to be fully aware of the developments in branch libraries.

Departmental libraries have become a way of life for many universities and are likely to remain so for the foreseeable future. The challenge is to find a model of organization for the library system that departmental libraries would be an organic part of. Suozzi and Kerbel propose an integrated-collegial model "characterized by a flat organizational structure in which departmental libraries directly participate in the policy-making management of the organization, rather than reporting through a pyramidal or divisional structure". Also "The senior administrator for departmental libraries would be replaced by a coordinator, possibly rotating every few years". ${ }^{35}$ This model can work with the adoption of a participative management style. Librarians in groups would be responsible for developing

[^21]services and fulfilling client needs. It emphasizes shared responsibility and more creativity and flexibility.

We have touched on a variety of managerial problems common to departmental libraries in all countries. Our hope is not to give solutions by applying any particular management theory but identifying the problem might lead to acceptable possible solutions.

## CHAPTER FOUR

ORGANIZATIONAL STRUCTURE IN BRITISH AND AMERICAN ACADEMIC

## LIBRARIES

4.1 United Kingdom

In the United Kingdom there are no nationally accepted organizational staff structures for university libraries, because of different local circumstances and requirements, institutions' historical pattern of growth and contraction and the management style of individual chief librarians.

Even so, certain patterns can be identified. Chief amongst these is a three tier hierarchical structure, with the university librarian at the top, the graduate professional staff at various levels below him, and the library assistants at the bottom. Such structures are often also represented diagrammatically as a family-tree, depicting line-management responsibilities above and below. And any given structure can be either functional (that is organized into separate departments, each concerned with a single library process or activity) or subject-orientated (in which the professional staff are individually responsible for a range of library processes and activities in a given subject area). Until the 1960s, the general pattern was functionbased; but the more recent, and widespread, adoption of
various forms of subject specialization has led to complicated structures which are not always easily reducible to chart form.

In the more 'traditional' functional staff structure, the hierarchy of responsibility is departmentally defined. At the top of the pyramid, the librarian is responsible for the representation of the library in the university governing bodies as well as to external professional conferences and associations. Below him/her is the deputy librarian, responsible for the day-to-day operations of the library. Below the two are the heads of the major divisions of the library: acquisitions, cataloging, reader services, special collections. Within each of these major divisions there will be a further hierarchy with staff for routine and clerical operations and with special areas of responsibility.

The movement towards organization by subject rather than function started to develop in the 1960 s with the advent of the newer universities. Subject-orientated structures tend to be less hierarchical. Various structures reflecting subject specialists' use are identified. In the previous chapter we identified that subject specialists are responsible for a given subject and are also responsible for some centralized function.
4.2 United States

In the United States the Association of Research Libraries published in 1986 the organization charts of 86 academic libraries. ${ }^{36}$ Nearly all the library charts display a basically hierarchical structure. There are other indications in some charts that research libraries are implementing alternative organizational configurations, such as use of committees for decision-making, multiple reporting relationships, and reorganization around workflow patterns. Along with the use of committees, multiple reporting lines are another current option for organizational structure despite the rule that an individual have only one reporting line. One of the most common occurrences of multiple reporting relationships has been in collection development, where there is often some official relationship between departmental/branch libraries or reference activities in terms of selection, although these functions would not report to a head of collection development. Other more traditional multiple reporting lines include law and medical libraries which most often report to academic deans with relational

[^22]lines to the university library.
Span of control varies considerably. In eight libraries, there is a second ranking position, usually as associate director, to whom all assistant directors or unit heads report. The span of control ranges between five and eight.

Span of control for Number of libraries director

1 8
3 5
4 7
5 12
6 14
7 17
8 8
9 5

Based on the available organization charts, only three libraries--the University of Illinois at Urbana, Duke University and Southern Illinois University--have combined public and technical services under one heading. Several new functions have become a recognized part of library organizational structures.

As a sequel of this survey considering the movement of archival model to access model and in order to measure the extent of organizational changes the Association of Research
Libraries requested current organization charts of member
libraries showing both internal library organization and the
reporting lines of libraries within the overall structure of
the university. ${ }^{37} 71$ academic organization charts were
analyzed. By far $88 \%$ of the libraries report one step away
from the head of the institution. There appears to be little
change from the 1986 SPEC Kit in the span of control of
library directors.
Span of control for Number of libraries director

| 2 | 4 |
| :--- | :--- |
| 3 | 4 |

4 10
5 10
6 9
$7 \quad 10$
$8 \quad 12$
9 3

It is interesting to note the numbers of assistant and associate directors.
${ }^{37}$ Jay Martin Poole, Organization charts in ARL Libraries SPEC Kit no. 170 (Washington: Association of Research Libraries, 1991).

# Number of Assistant/ Number of Libraries <br> Associate Directors 

17
$2 \quad 7$
320
4 15
59

In many institutions there are 'director' titles used at the assistant/associate level; this is particularly true where assistants and associates are at the same level as heads of large branch or professional libraries. By far almost all of the titles for assistant and associate are traditional i.e. technical services, public (or access) services, systems, etc.

Many of the charts indicate committees as a part of the organization. Nineteen show the faculty library committee on their chart, and fifteen show the library management group as a part of the structure.

Systems and automation operations are present in virtually every library. In many cases, systems are separated from technical services indicating a widening definition of systems.

There appear to be few significant changes in library
organizational structure trends since the 1986 survey. Almost all the charts indicate that libraries continue to organize around traditional functions, although some of them have been renamed. The renaming is often the result of automation of the work involved. Parallel structures, like committees, have served in other fields as transitions to flatter more participative structures, like teams or self-managing work groups. The appearance of microcomputers in the current charts portends even more importance of this vital area of growth.

## CHAPTER FIVE

## ALTERNATIVE METHODS OF ORGANIZATION

Although the bureaucracy is the most common form of organizational structure, there are alternative forms. Bureaucracy exhibits all the elements of mechanistic patterns of organization. Mechanistic organizational units are the traditional pyramidal pattern of organizing. In a mechanistic organizational unit, roles and procedures are precisely defined. Communication is channelized, time spans and goals orientations are similar within the unit. The objective is to work toward machinelike efficiency. Authority, influence, and information are arranged by levels, each higher level having successively more authority, more influence, and more information. The mechanistic form is efficient and predictable. It works best for organizations performing many routine tasks and operating in a stable environment. 5.1 Organic organization

In contrast to mechanistic units, organic organizational units are based on a more biological metaphor for constructing social organization. The objective in designing an organic unit is to leave the system maximally open to the environment in order to make the most of new opportunities.

An organic organizational unit is relatively heterogeneous, containing a wider variety of time spans, goal orientations, and ways of thinking. This design may be useful in the face of uncertain tasks or those that are not well understood, and it is suitable for people tolerant of ambiguity. But it has problems too. It is demanding and stressful for people to work in. They must deal with unpredictability, varied and changing interdependencies, and multiple group memberships.

The choice of the most suitable form of organization is contingent upon the task and the people involved. There is no one form of organization that will work best in all situations, in all cultures, with every type of person. One organizational unit may be mechanistically organized but it might move to organic organization over time. Even more important one organization is likely to contain both organic and mechanistic units at the time.

Other forms of organization that academic libraries have started to use include project teams and matrix organization structure.
5.2 Project teams

It is not uncommon to find all or part of some organizations that are built around projects or project teams. The team is set up to attack a problem and may disband when the problem is solved or passed on to another group to implement. Project teams in the libraries have been called
upon to deal with situations such as the reclassification of a library collection or the installation of an online catalog.

Project teams are often made up of people who represent more permanent units. They join the team because they or their unit has relevant expertise or will later be involved in transitions to implementation or in other work associated with the project. Thus membership on a project team is a special assignment and places the team member in between the team and a parent unit.

Leadership of a project team should shift to whoever has the most knowledge at a particular stage of the work. Even though project team leaders may report to a higher level, such as a project director, consideration must be given to shifting the team's internal relationship as a function of the progress on and demands of the problem. The managerial task is to know the problem and the stage that it is in. This forms the basis for allocating people and other resources and for changing leadership.

Project management is very demanding on managers and on team members. People have to be able to cope with multiple team memberships.
5.3 Matrix organization

Peggy Johnson in her article Matrix management: an organizational alternative for libraries finds matrix
management "a more realistic alternative for creating individualized, adaptive structures. The matrix organizational structure is an intermediate form between project and functional structure". ${ }^{38}$

In its most elaborate form, matrix organization is found in research and development divisions of larger companies. It is a step further from project teams. In project teams we saw how various vertical and diagonal interactions come about. It takes the addition of important horizontal relationships to have a matrix structure. The projects depend upon a set of relatively stable units that serve each project at different times. Thus a set of vertically configured project teams will need to utilize resources from departments that exist to facilitate the work. The project manager's role is one of balancing power and resources.

Johnson comments that some suggestions for reorganization in academic libraries have the form of matrix structure without recognizing it and concludes that "matrix management is gaining in popularity as an appropriate alternative for today's academic libraries. Matrix structure encourage flexibility, professional independence, and the sharing of information and expertise. In addition, they

[^23]promote a balanced view of the importance of specialization and cooperation. Although not without difficulties and conflicts, matrix management may allow academic librarians to enhance their job skills, better adapt to technological innovations, and improve client services". ${ }^{39}$

One of the few published accounts of matrix management in libraries describes the experience of the library of San Francisco State University in implementing this style of organization in reference services and collection development. ${ }^{40}$ Program coordinators were chosen for the various services provided by the Readers Services Division: the User Education, Online, Reference, and Collection Development programs. Librarians working in the division have a dual reporting responsibility to both the Assistant Director for Public Services and to the Program Coordinator.

Helen Britton describes the case of matrix structure in California State University, Long Beach. ${ }^{41}$ Library faculty
${ }^{39}$ Ibid, 229.
${ }^{40}$ Joanne R. Euster \& Peter D. Haikalis, A matrix model of organization for a university library public services division in Academic Libraries: Myths and Realities: Proceedings of the Third National Conference of the Association of College and Research Libraries, (eds.) Suzanne C. Dodson \& Gary L Menger (Chicago: Association of College and Research Libraries, 1984), 357-364.
${ }^{41}$ Helen $H$. Britton, Interactions: a library faculty matric organization and a Public Policy and Administration Program Reference Librarian no. 20 (1988), 187-204.
formed four groups (Administration and Management, Humanities and Fine Arts, Science and Technology, and Social Sciences) that contributed to the functions of the library (Collection Development, Information Organization, Instruction, Online Search and Access, Reference and Consultation). Librarians from the Administration and Management Group were responsible to provide library services to the clientele of three specific courses of the Graduate Center for Public Policy and Administration.

The Association of Research Libraries in the SPEC Kit no. 112 "Automation and Reorganization of Technical and Public Services" suggests that "Substantial changes call for renewal and redefinition of the library's mission regarding its environment, as well as the reordering of traditional functional-based hierarchical relationships into matrix-style organizations characterized by multiple reporting relationships and a heavy emphasis on managerial teamwork and cooperation based on shared goals". ${ }^{42}$

Cline and Sinnott also speculate that "libraries will adopt matrix management. This transformation may occur initially in combination with the traditional functional organization, but we also anticipate that there may be basic

[^24]modifications in the functional organization as well". ${ }^{43}$
Martell proposes "small, client-centered work groups operating on its boundary or the points at which the library interacts with its user groups. Each member of the work group would perform multifunctions-advanced reference, collection development, instruction, original cataloging, and other forms of information service". ${ }^{44}$ He provides analytically the functions of each group and its reporting relationships. Each client-centered work group would have a staff of three to five librarians plus support staff. Each work group would be responsible for serving the information needs of a designated client group which might also have a branch library allied to it. When this occurs the branch library staff and the clientcentered work group members would be required to coordinate their activities in order to provide more effective service. In order to foster a high degree of autonomy in the clientcentered units, the traditional lines of authority and responsibility leading to a single individual are changed. Coordinating councils and governing councils are substituted. The role of management is thus significantly altered.

[^25]Not all librarians could be located in the work groups. Some librarians would still have supervisory roles in the central administration, in the branch libraries, and in the central technical processing and public services units.

However, the number of librarians in such areas could be sharply reduced by techniques such as using non-professional employees to handle questions of direction and catalog use as well as most other ready reference questions. Librarians so relieved could then be transferred to client-centered work groups that would be responsible for handling most of the advanced reference work of the library. Likewise, by placing selection and original cataloging in the client-centered work groups, many acquisition and catalog departments could be operated with a minimal number of professional staff.

It is evident from the alternative ways of organization the emphasis that is put on the participation of the library staff at all levels of administration. Membership in groups and project teams offers the librarians the opportunity to see the library organization from a broad perspective. Interaction with other units' staff and users brings librarians closer to the actual receivers of their services, and contributes to the attainment of library's mission.

## CHAPTER SIX

IMPACT OF AUTOMATION

A number of studies from the field of management and administration support the view that technology is indeed a determinant of structure, and that changes in technology lead to changes in the architecture of organizations. Academic and special libraries have capitalized on developments in computer technology and information science and have rather quickly moved beyond the use of these technologies for more "housekeeping" routines, to their application in sophisticated library operations. And libraries of all types seem to be interested in developing network technologies to increase their service effectiveness and improve efficiency.

Despite these significant technological developments, there appears to be little change in the organizational structure of libraries. One of the reasons for this phenomenon seems to be that libraries have been traditionally structured according to the nature of the raw materials which are the inputs of the library organization. The raw materials fall into two categories: resources and users, and consequently libraries have developed a bifurcated organizational pattern consisting of a technical service
division (to handle the resource input), and a public services division (responsible for the human input). The preoccupation with the nature of the raw materials with which libraries typically deal has often resulted in further structural differentiation based on the format (or other special characteristics) of the input material--for example, departments for maps, microfilm, serials, documents; or units based on the educational level of users such as undergraduate library services. The transformation processes (technologies) employed in libraries have attempted, first, to describe and organize the resources, and second, to offer services to users which would facilitate their access to needed materials--the objective being the bringing of resources and readers together.

The rapid introduction of new technologies into libraries has been widely expected to lead to sweeping changes in the ways that libraries are organized and managed. Trying to understand in what way technology has influenced library organization we'll review briefly the manner in which automation was and is being adopted in libraries.

Automation was precipitated in technical services in the early seventies by the emergence of the earliest of the bibliographic utilities, OCLC. Although many processes have
now been computerized in cataloging and acquisitions, there is still considerable layering on as card and paper files continue to duplicate machine-readable files. This is the result of two factors: 1. lack of confidence in the new technology, and 2. the needs of other departments in the library that are not automated. While individual tasks in cataloging and acquisitions have been automated, the two functions have not been integrated in most libraries.

Technical services staff have long been accustomed to detail and specificity of the kind required by the very literal computer. It is not too different from the precision which has always characterized the art or science of cataloging. Exemplified by the bibliographic record in MARC format, now a de facto international standard in library automation, the high level of standardization in technical services activities distinguishes them from public services tasks.

The history and character of automation in public services has differed. Automation of circulation occurred early, prompted in large libraries by an increasingly overwhelming volume of transactions. Circulation automation differed from automation of cataloging in that there was little standardization and less attention was paid to the
completeness and integrity of the bibliographic record or to the development of a permanent database. Circulation systems, in most cases, remained stand-alone systems existing side-byside with automated processes in the cataloging department, although sometimes they interfaced. In contrast many libraries presently report systems which integrate circulation with the online public access catalog.

In reference we see a good deal of experimentation with new services and the layering on phenomenon is very evident. Traditional reference tools, especially indexes and abstracts, are used alongside librarian-mediated database searching and user-directed or end user searching. What is being searched may be a machine-readable file based on the same material as the printed source or it may be information which exists only in machine-readable form.
6.1 Technical/public services integration

More recently as libraries have implemented integrated systems, there has been a growing recognition that the reasons for the historical compartmentalization of work units both within divisions and across divisional lines are fading. Technology has been predicted as the medium which would "blur the lines", facilitate the movement of staff positions from technical services to public services, or, alternatively,
provide for the integration of functions (particularly selection and original cataloging) into other public services departments or divisions.

Patricia Larsen in the article The climate of change: library organizational structures, 1985-199045 analyzes the results of a survey of 118 academic libraries in the United States. It focuses on the existence of basic library functions (such as cataloging, reference, circulation) and their location within the organizational structure.

Ninety three libraries continue to have public services divisions and ninety five have technical services divisions. Nine libraries reported having created technical services division during the past five years, and six other libraries reported having eliminated such divisions. Eleven libraries reported forming new public services divisions, while four other libraries eliminated divisions.

The functions most often reported as new to the libraries were systems management (31 libraries) database management (17 libraries), and preservation (10 libraries). The total number of new systems installed since 1984 (236

[^26]including acquisitions, circulation, serials control and online catalog modules) indicates the rapidly expanding need that libraries have for managing systems and databases.

Library organizational structures vary considerably in respect to the location of the preservation, systems management and collection management functions. Preservation, while primarily attached to technical services, is also frequently the responsibility of a separate department or staff person, and occasionally is included in collection management. Collection development and selection activities are more often associated with public services than with technical services, but it is also an area most often shared between the two divisions, as well as with other departments or divisions.

Circulation was moved into and out of both technical services and public services divisions. Apparently, libraries are having a difficult time deciding whether to emphasize circulation's public aspects or to align it with its operational kin, the systems and bibliographic control components of technical services.

For the $19 \%$ to $21 \%$ that do not have technical services or public services divisions size may be the reason. But it is not clear when size is perceived to make divisions


#### Abstract

organizationally feasible or desirable. For example, two libraries in the 700,000 to 950,000 volume range, with staff sizes ranging from 85 to 120 have changed from divisionalized to departmentalized structures reporting to the director. On the other hand, two libraries of similar size are considering creating divisions. In some libraries the span of control is truly amazing, with twelve to seventeen department heads reporting to the director.


Libraries reported the reasons for change on two different levels. The principle reasons cited for moving individual functions were to provide for a closer relationship with other similar functions, to create a new division, to increase the integration of functions and services to balance the workload, and to improve the workflow, efficiency and quality of work performed. On a broader plane, thirty seven libraries reported that changes were due to library-wide reorganization. The leading reasons for the reorganizations were cited as: changes in administration (37); to achieve increased efficiency (32); to improve services (32); the introduction of an online system (18); and economic conditions (7).

De Klerk and Euster ${ }^{46}$ at their informal survey with fifty three directors of large and small college and university libraries found that small size facilitates cloze cooperation between library divisions. Several college libraries reported that all librarians have combined public, technical, and collection responsibility, as do those in a few larger libraries. The present blurring of lines goes far beyond the long-standing practice in small college libraries of scheduling all librarians for time on the reference desk, which is prompted by the impossibility of one and two person reference departments covering all the needed service hours. It is revealed the "compleat librarian" model in one library, almost all librarians regularly perform all professional activities except cataloging, which is handled by one cataloger and support staff. All librarians participate in collection development and in the assignment of subject headings. At one large research library, newly appointed department librarians spend six months in the catalog department before starting working as departmental librarians. Other libraries, both large and small, are

[^27]advertising for librarians who will work in both public and technical services areas. It is discerned a difference of opinion among library directors about the extent of blurring. Several responded that there is little probability of integration of both technical and public services because of "significant differences in work attitudes, values, performance and behavioral styles". In libraries where no ongoing blurring of lines is occurring, comments such as "automation may you look at the whole picture" and "possibly because of putting aside turf considerations" speak to the influence of technology in bringing about cooperation and greater understanding of the organization.

Buttlar and Garcha in their article Organizational structuring in academic libraries ${ }^{47}$ studied how the work of academic librarians is structured and to what extent there has been a departure from the traditional bifurcated pattern of traditional and public service functions to those of a more integrated nature. They used 93 completed questionnaires of institutions ranging 5,000 to more than 20,000 student enrollment. Sixty of the 93 libraries studied are organized

[^28]along traditional lines with separate technical services and public services function. However, thirty report some partial integration of these two functions; two others have no separation of technical/public services functions.

The most common crossover activity is for catalogers to participate in reference desk service in $42.4 \%$ of the libraries. Reference librarians, on the other hand, participate in monographic cataloging in 7.5\% of the libraries. It appears that staff members often participate on an optional basis, resulting in an arrangement that is satisfactory to staff and management.

While there is some integration of public and technical service functions the traditional divisional structure is still very much an accepted, viable organizational pattern. Organizational changes tend to be incremental in nature rather than sweeping and dramatic. Radical restructuring is occurring in relatively few libraries, and each restructuring has been unique to the individual library's mission and situation.

The Association of Research Libraries conducted a survey of its 117 members in order to determine the extent to which research libraries have reorganized staff (with particular attention to the integration of public and technical services
functions), and the role played by automation in planning organizational change. ${ }^{48}$ Of the 82 respondents, 46 indicated they are currently organized along traditional technical/public services lines and 36 report some integration. No responses indicate complete integration of public and technical services.

The introduction of, or the movement toward, integrated systems was ranked first of eight possible factors contributing to organizational change. The next seven were: changes in administration, need for improved staff performance, introduction of online catalogs, economic factors, and increased emphasis on mission (service to users). The use of bibliographic utilities and the need for improved staff development/morale tied for last place.

Many libraries have concentrated their efforts on the technical aspects of automation, rather than on the reorganization that automation may require or allow.

The survey showed that there are also other possible models for organizational change besides the integration of functions. These include treating of collection development

[^29]as a line function as well as systems, sometimes including planning, circulation, and technical services within its scope; and splitting off of assistant directorships for branch and central public services (each being a separate assistant directorship). Some evidence of actual new organizational structures can be seen in the increased use of committees and task forces to address mutual public/technical services concerns, and multiple reporting relationships (e.g. for collection development, cataloging, and reference activities).

One of the most well known examples of reorganization is that of the Library of the University of Illinois at Urbana/Champaign. Michael Gorman in his article Reorganization at the University of Illinois, Urbana/Champaign Library: a case study ${ }^{49}$ gives a brief review of the restructuring. The first stage took place between 1977 and 1981. It left intact the major divisions of the library but provided new and different internal structures for each. The purpose was to increase productivity, efficiency and better communication based on clearer aims. The second stage

[^30]was evolved under the premise that modern technology, in particular the online catalog, does away with the rationale for the distinction between public and technical services professional librarians. This means that it is possible to regroup the librarians in a large library around the subject or other divisions of the library and the university and, thus, to allow the best use of the professional human resources which are the keystone of any library.

In practical terms, 'Technical' and 'Public' services are replaced by 'General' and 'Departmental Library' services. General Services comprises all the processing units (order, claiming, and receipt; copy cataloging; database maintenance and management; circulation and bookstacks; binding) and a number of other central services (central reference; special collections libraries; special languages libraries). The first group of units is staffed overwhelmingly by clerical staff and has a high degree of automation in its activities. The second is staffed preponderandly by professional librarians and paraprofessional.

Departmental Library Services comprises all the departmental and branch libraries and the Undergraduate Libraries. Within each of these units, the professional
librarians are responsible for the execution of all professional tasks connected with the subject area, departmental subject focus, or service for which those libraries exist.

De Klerk and Euster conclude that "The present spectrum of changes in library organizations strongly points to today as a period of experimentation, one in which a variety of forms are being tried in an effort to increase coordination and flexibility." ${ }^{50}$ Buttlar and Garcha come to the same conclusion "no one structure seems appropriate for all libraries at this point in time, nor, is it possible to predict the strength or stability of what appears to be an emerging trend in the organizational structure of academic libraries of the future". ${ }^{51}$
6.2 Systems librarians

The location of the systems office in the organizational structure of the library varies considerably from library to library. The multi-campus university systems office can
${ }^{50}$ Ann de Klerk and Joanne R. Euster, Technology and organizational metamorphoses, Library Trends 37 (Spring 1989), 468.
${ }^{51}$ Lois J. Buttlar, Rajinder Garcha, Organizational structuring in academic libraries, Journal of Library Administration no. 17 (1992), 16.
report to a university officer who is outside the library. In other situations, the systems office forms a department that is part of one of the major operational areas of the library, such as technical services.

The amount and methods of funding can affect the choice of systems office structure in ways that are not always readily apparent. Obviously, limited funding will limit any computerization project, which in turn will limit the level of appropriate systems support.

The type of interaction needed between the systems office and the remainder of the library also varies depending upon the organizational structure. A large systems staff with many operational responsibilities tends to establish strong lines of communication with the rest of the library in order to prevent isolation (and possible dysfunction) of computerized activities. On the other hand, when those operational responsibilities are integrated into the overall library, the systems officer attempts to establish reliable, frequent communication with top library administration in order to coordinate the computerized activities.

The Association of Research Libraries published a SPEC

Kit in $1995^{52}$ with the results of a survey about library systems office organization. Half of the heads of the 75 systems offices reported to the director of libraries, while the other half reported to an assistant or associate director.

The most commonly reported means of communication from the systems office to the library faculty and staff is electronic mail. The least commonly used choice was the library newsletter.

The maintenance of the library management system is still the most common activity for systems offices. Increased patron-centered activities, such as working with Internet resources, access to remote databases or locally mounted databases and networked CDROMs, showed tremendous increase.

Several sites mentioned an increasing need for the library systems office to have a role in the strategic and budgetary planning process not only of the library, but also at the university level. There is a need to communicate information about the rapidly changing technologies in electronic information resources and the costs of providing

[^31]this access.
The role of the library systems office in relation to other library departments, campus computer centers, and other university departments is also important. The placement of the systems office within the organizational structure of the library has an impact on the projects in which the systems office is involved and the level of support provided.

Interaction with the computing center is also vital. Many libraries depend on the campus computing center department for the support of various information systems within the libraries. Accountability may become increasingly blurred if the library assumes responsibility for Internet/Web training or operates in a distributed computing environment. The client-server environment will require that the systems office staff and individuals in other departments become skilled at diagnosing problems and find ready solutions. Service lines may also become clouded when academic departments acquire services such as document delivery or electronic bibliographic databases.

Another area of interest is the educational background and professional experience of the staff of the systems office. Often the systems librarian is a non librarian: usually a computer scientist, a programmer, or a systems
analyst from another field. How do these people perform in a setting where they are expected to cooperate, solve problems, and apply new technologies? The answer is fairly obvious: the competent people work out very well, and many of them enjoy the library and academic setting enough to remain in the field for the duration of their careers.

A climate of change surrounds libraries, and as more of the elements move into place, library organizational structures will continue to adapt and assume new forms. Librarians and libraries clearly are responding to the climate of change that surrounds them. Information technology is a tool which also provides opportunity for full organizational restructure. The extent to which restructuring has taken place is closely related to where libraries are located along the continuum of technological change. Probably more critical are the changes which are taking place within the institution as a whole which in turn put pressure on the library to evolve to serve new structures.

## CHAPTER SEVEN

## ARISTOTLE UNIVERSITY OF THESSALONIKI

### 7.1 Greek university libraries

The subject of the present thesis is the organization of the library services at Aristotle University of Thessaloniki. But first we need to look at the organization and administration of Greek universities in order to understand the place of the libraries in their environment.

There are 18 universities in Greece. Some of them were established before World War II and some are only 4 years old. Head of the university is the rector who is elected every four years by the faculty, and staff and student representatives. Governing bodies are the Senate and the Academic Council. Academic policy is the responsibility of the Senate. It is made up of teaching staff, a proportion of elected administrative staff and representatives of the student union. The Academic Council has the responsibility of the financial policy and planning. It is composed of faculty and staff. Vice rectors have delegated responsibilities for administrative and academic affairs.

The university is comprised of Schools. Each School groups together subject related Departments. Deans of the
schools are elected every four years by faculty, and staff and student representatives. Heads of the departments are elected every three years by faculty and staff members and student representatives.

The 1268/1982 law provided the guidelines under which universities should be organized. According to this law the head of the department is a professor at the highest rank elected by faculty, staff and students. The department can have smaller sections. Heads of the sections along with the chair form the council of the department which is responsible for the financial policy and administrative matters of the department. The General Assembly of the department includes all teaching faculty and decides about the academic affairs of the department.

Previous national legislation affected most of the structure of a department and also the library. Every School included several institutes or departments. Every department was subdivided into units or "chairs". The chair was occupied by a professor (kathegetes) who could hold the position for a lifetime or for a shorter specified period. Associated with most professors were auxiliary teaching staff (epimeletes and voithe). All academic and, hence, administrative power resided in these chairs.

This type of organization explains the existence of many small libraries in the universities. Every laboratory or section as soon as it was created, started to develop its library by acquiring books and journals that covered the teaching and research interests of faculty. Most of the times this material was permanently checked out to teachers' offices and wasn't available to students or any researchers from other units.

In a survey conducted by Zachos and Papaioannou in 1991 about Greek academic libraries ${ }^{53}$ the results are interesting. The 18 universities have 219 libraries. We can group the universities in three categories: The first category includes the older universities with high student enrollment and a big number of libraries. These are the University of Athens, the University of Thessaloniki, the National Polytechnic, the University of Patra and the University of Ioannina. All of these founded between 1837 and 1964.

The second category includes universities founded in 1970s and 1980s. The University of Thraki founded in 1973 and

[^32]consists of three separate campuses. The University of Crete founded in 1973 and consists of four schools located in two cities. The University of Aegean founded in 1984 and its departments are located in four islands. The University of Ionian founded in 1984 and has one campus. The University of Thessaly founded in 1984 and is located in three cities.

The third category consists of five universities that recently upgraded to the university level and four of them have business and economic studies programs.

We can obviously come to the conclusion that the older the university the more dispersed the libraries are. One addition explanation for the small number of libraries in the new universities is that the revision of 1982 law supports the creation of libraries in departments or schools and not in sections.

Libraries in the older universities follow a similar organization pattern (except that of Athens). The central library plays a partial coordination role over the departmental libraries.
7.2 Library system of Aristotle University of Thessaloniki The Aristotle University of Thessaloniki, a public university, was founded in 1925 and two years later the Central Library was established. It includes 8 Schools of

Faculty. The faculty members are about 1,600 and the enrollment is up to 55,000 students.

The library resources of the university are distributed among the Central Library, 90 departmental libraries and two departmental libraries in the respective recently created campuses in two different towns.

A kind of coordination is exerted by the Central Library over the departmental libraries. As far as budget concerns each departmental library has separate budget from the Central Library. Departmental libraries are financially supported by the department's budget for acquiring material in any form except serials. The Serials budget is centrally controlled by the Central Library.
7.2.1 Central Library

The Central Library is housed in a building especially designed as a library. The building houses in its basement closed stack collections of archival and historical importance. The ground floor is occupied by the staff offices and the reference and circulation services and the floor above is the students' reading room with a capacity of almost 1,000 seats.

The Central Library is organized in four units according to function and form of material: Cataloging, Reference and

## Circulation, Serials, and Automation.

The Cataloging Department is responsible for the processing of all acquired material. We need to mention here how the departmental libraries acquire their material. Teaching faculty are predominantly responsible for the selection of material. The librarians' duty is to process with the bibliographic search and verification, ordering and receiving of the material. Every received item goes first through the Central Library. The Cataloging Department is responsible for the bibliographic processing of the material. In this way the university has created a union catalog (at least with the material entered the library after 1986) placed in the ground floor of the Central library. After processing the material is distributed to the respective library accompanied by a shelflist card. The departmental librarians then are responsible for the reproduction of cards and updating of the local card catalog.

The Serials Department has the major proportion of the Central Library's budget. The selection of the titles is responsibility of departments' faculty and the Serials Department is responsible to order, receive, check and then distribute the issues to the respective departmental libraries. Part of the Serials Department is the Interlibrary

Loan Service.
It is obvious that there is a constant interaction between the Central Library and the departmental libraries at the area of bibliographic process services.

Reference and Circulation Department staff helps the clientele to locate the needed information. This is accomplished by guiding them to search at the library's catalogs and checking material out to them that it has in its closed stacks. Also Reference Department staff helps clients to use bibliographic databases in CD-ROM format. An additional responsibility of the department is the observation of the faculty reading room which is located in the Reference Department area. The development of the reference collection is not a systematic effort or an assignment undertaken by a particular staff member.

The Automation Department until recently was responsible in providing help to departmental libraries with the automation of their processes. Now its new job is to facilitate access to networked CD-ROMs and the Internet.

The governing body is the Library Committee. It is comprised of eight faculty members appointed by the Senate every three years, the library director, one staff representative and one student representative. Meetings occur
every month. The participation of the faculty is low and the student representative seems to be always absent from the meetings. The committee proposes to the Senate the budget and any major changes about the library. The low participation of some faculty members leads to the regular attendants to exert more power especially when participation in administrative positions is part of the faculty's promotion.
7.2.2 Departmental libraries

With the term departmental libraries in the University of Thessaloniki we include libraries that are organizational units of departments, sections or laboratories. Their size range from a few hundred volumes to 30,000 volumes. Some departmental libraries, especially in the School of Philosophy, have also large reading rooms.

The main purpose of the departmental libraries is to serve the educational and research needs of undergraduate and graduate students, and teaching and research faculty of the department.

Most of the departmental libraries are one-person libraries who perform all the functions. Together with the disadvantages of departmental libraries this leads sometimes to professional isolation, a narrow view of library services and resistance to change and application of new methods.

Librarians report to the head of the section. If the library serves the department as a whole, the librarian reports both to the heads of the sections and the head of the department, mostly for budget matters and the general function of the library.

In all departmental libraries there is a library committee. This committee supervises the everyday functions and sets policies about various aspects, e.g circulation policies, acquisition policies, sometimes different classification systems, etc. The governing authority of these committees varies from library to library and depends on various reasons such as how involved committee members want to be in an administrative duty, how much respect they have for the professional experience and work of the librarian etc.

These multiple reporting lines create stress sometimes because the librarian is put in an unpleasant position to set priorities in incompatible orders.
7.2.3 Library staff

Staff who work in the university's libraries have various educational backgrounds. In some departments the responsibility for the library's function rests to administrative staff who also have secretary duties of the
department or section. In other departments the library is run by staff who also are responsible for the functioning of electronic devices of the department. The qualifications of staff vary too. Some have only high school diploma and some have university degree relevant to the departments' subject and not at all library science education. Only 38 of the departmental libraries' staff have library science degree.

A new law (1404/1983 which is a revision of 1268/1982) requires that the university hires only educated librarians. There are three categories of professionals who can be hired in a library: 1. Graduates with Library Science degrees from foreign universities. 2. University graduates from Greek universities with experience in library practice. In the case of departmental libraries the graduate needs to be from the particular subject area. 3. Librarians who are graduates from the Technological Education Institutes.

Library training is provided at the tertiary education level at Technological Education Institutes. The Department of Library Science is a unit of the Business and Management School in these Institutes. A recently established School of Librarianship and Archives at Ionian University has not yet any graduates of its program.

The hiring of staff is responsibility of the individual
departments. The Central Library follows the procedures for every administrative unit in the Greek social services. This results to a distinction between staff in departmental libraries and Central Library. Departmental librarians are named Special Educational and Technological Staff and librarians in Central Library are named Administrative Staff. This creates variations in schedules, leaves and levels of supervision. For instance the departmental libraries have not supervisory or director positions. The Central Library has and these are held according to years of service and education degree. This distinction along with the absence of a central administrative direction and responsibility for library matters result in a complicated situation.
7.2.4 Automation in University of Thessaloniki

Attempts in applying automated procedures in the libraries began ten years ago. One information science graduate, a member of Central Library's staff was assigned to create a cataloging computer program and an Online Public Access Catalog for internal use for the new library material. Concurrently the library subscribed to OCLC Europe and had resolved somehow the problem of cataloging foreign language material. The original cataloging of material in Greek language is input in MARC Format and entered in the database
along with the OCLC records. In result the database records can be used immediately on any new automated program and it is also accessible by any departmental library.

Along with the Central Library's efforts departmental libraries started to have interest in using computers in their daily work. Various programs created by independent commercial firms or by faculty that had fluency in computers and some libraries used the Central Libray's OPAC which was available without charge.

Two years ago the university received a grant by the European Community for the implementation of an integrated library system and the ultimate use of information technology in providing library service. The Central Library Committee and the Senate decided to buy the system created by the University of Crete that had been used for some years.

A systems office was created for the planning, implementation and coordination of the project. The staff of the office consists of one librarian and one system analyst working under contract for the duration of the project (to the end of 1999). The systems office is housed in the Central Library Building but reports to a faculty committee. The committee consists of five faculty members (two of them are also members of the Central Library Committee) mainly from

Sciences and Applied Sciences departments. This committee is accountable to the university and the European Community for the following of deadlines and the financial supervision of the project.

The systems office staff cooperates with the University Network Office for partial technical support of the project. This summer the network of fiber optics will be connected to all university buildings. Librarians and clientele will then have access from any terminal in the university campus.

The systems office uses also the human resources of the Central Library. Staff from the Cataloging Department works both with every day transactions and the project.
7.2.5 Reasons for restructuring

It is obvious from the above that the library environment is affected by the technological changes in a positive way. Technology has introduced and become part of most activities in the library. From circulation, to business activities, to information seeking, technology is there, making it easier to carry out our role in information providers. But technology is not inexpensive and has made overall operations more expensive. The impact of technology has been not so much the efficiencies that have resulted from it, but rather the improved service that it has made
possible.
However, libraries are exposed to an array of external forces that they have virtually no control. Some of these forces are:
7.2.5.1 Financial pressures

Anyone working in the libraries and universities generally knows of the difficulties that the institutions are having in assuring the needed resources to support the institution at the same level as in the past. Most of the academic institutions experience faculty cuts and creation of more interdepartmental undergraduate and graduate studies instead of new ones. Along with the faculty cut there is a decrease in hiring new staff, including librarians.

In addition to the difficulty in budget, there is the need to deal with the rapid rise of costs associated with library operations. At the top of these is the incredible rate of inflation experienced annually in the costs of books and journals. With that rate averaging around 15 per cent per year, few, if any, libraries have been able to secure annual increases sufficient to keep pace with it. Additionally, the exchange rates in Greece have an impact on the acquisition of foreign language material.
7.2.5.2. Rising expectations

Even while libraries are receiving less financial support than necessary, the expectations of users are continually rising. Patrons want more information, and they want it faster. Many of them are unaware of the funding dilemma faced by libraries or simply refuse to let it dampen their own enthusiasm.

Not only do patrons expect the library to continue making books and journals available, they also demand that the library make available all the new media that contain the information that they are seeking. And if the library cannot purchase all the books and journals that they want, they expect fast, easy, and inexpensive or free interlibrary loan or document delivery service.

Associated with the expectations for quality service is the desire of Greek universities to possess a high rank among European Community institutions and compete with foreign universities.
7.2.6 Reorganization

The library system can be organized in a way to make full use of all available human and technical resources. Restructuring the academic library would be a major undertaking that would affect the work flow, the role of management and finally the entire organization, and it can
not be a one-step or immediate full-scale approach. The implementation would rest on a step-by-step transformation considering various factors such as personality characteristics, areas of competence and attitudes of some organizational members.

One possible way of organizing is the creation of one library for every School housing the scattered material and providing the full range of services for the longest possible period during the day. This choice calls for new buildings and a large amount of reserved financial sources. The staff could work on a wide variety of activities and help in the access of interdisciplinary subject material. The recently finished building of School of Law and the under construction building of School of Philosophy could house the compound libraries of the departments of the respective Schools.

Another option can use the current system of central and departmental libraries in a different way. The departmental libraries' staff (the sectional and laboratory libraries need to be incorporated) along with the Central Library's staff can work in client-centered groups.

The library staff currently working in the departmental libraries can be considered subject specialized and has a very good knowledge of selecting, acquiring and cataloging
material of the particular field as well as the information needs of faculty and students. Also most of the Central Library's staff is knowledgeable of the bibliographic processes. Bringing together two groups with different background experience increases the communication potential and enhances the quality of working life.

Each client-centered work group would have a staff of three to five librarians plus support staff. Each work group would be responsible for serving the information needs of a designated client group. The client-centered work group members would be required to coordinate their activities in order to provide more effective service.

Coordinating councils would be the major mechanism for insuring that the individual work groups act in a manner consistent with the needs of other related client groups (such as between physicists and mathematicians), departmental or main library units serving the same client group, and the organization as a whole. Each coordinating council would have one representative from each work group serving a set of related client groups, such as the physical sciences.

In addition, the overall coordinators for bibliographic control, information services and collection development would be formal members of each coordinating council. These
coordinators would be important links to the Associate Director for Client Services and to the support group responsible for bibliographic control.

The Associate Director for Client Services would report to the governing council. The Associate Director would be responsible for the overall planning and coordination of client services. The coordinator for bibliographic control would report to the head of the bibliographic control support group. The coordinator would help to insure that original cataloging done in the client-centered work groups is accomplished in a timely manner and is consistent with accepted standards.

The governing council would be comprised of one representative from each coordinating council (who is not coordinator or the head of departmental libraries or the central library), the Associate Director for Client Services, the head of departmental libraries, the head of the central library, and the Director of Libraries. The Director would act as the chair of the governing council and would have a full scale staff in order to respond to the recommendations of the governing council.

In this type of organization the emphasis is on the coordination of the groups for the good function of the


#### Abstract

system. The Central Library's director position probably would eliminate. Instead the new library director would supervise and coordinate all the various groups. His/Her major responsibility would be to establish and maintain open channels of communication with the groups of users and the university governing bodies in order to receive support on any library matters. He/She would participate to a great extent in the development of information policy on campus. Similarly, more time and effort would be spent on interinstitutional cooperation, consortia, and nationally coordinated efforts.


However, any form of organization applied should bear in consideration the continuously changing academic and technological environment, the societal forces and the need for innovative and flexible structure to accomplish the mission of the library.

## $\underline{C O N C L U S I O N}$

All academic libraries are unlike others to some degree or another. Therefore, the application of any ideas or models discussed would take different forms in different libraries and the tempo and sequence of change would differ from library to library. It is not only true that the similarities between libraries have always far outnumbered their differences, but also that we now live in a world in which the interdependence of libraries is great and growing. This interdependence demands a climate of opinion in which emphasis is laid upon the similarities in mission and activities of libraries and not upon their differences.

Libraries need to work with information in electronic form in a manner which would bring more and better information to the library's end users, and which will make the librarian a central component in the information cycle.

It is to this latter goal, stated and restated many times, libraries need to change and reorient themselves to deal with the products of innovative information technologies, before that role is taken over by another type of institution, leaving libraries as museums of the past.

Library leaders have to be alerted to changes in the library environment and take the appropriate steps to enable the research library of the future to serve increasingly
divergent needs of faculty and students; to establish the appropriately flexible, fluid, and responsive organizations; and to foster a climate of cooperation with and among librarians, scholars, researchers, publishers, others in the information industry, and key government agencies.

Librarians must first and foremost prepare themselves to changes, to begin making moves toward realizing their vision of the research library 30 years hence. Outside the library, other key players need to shift their perceptions and attitudes. Students, faculty, and researchers, who form the primary groups of information users; university administrators, who control the planning mechanisms, academic programs, and other intersecting interests; those running components of the information industry; those involved in scholarly associations and foundations; and government officials at various levels, all will have to recognize and support the new role for the research library of the future.

On the university campus some initial steps may be taken:

1. Articulate and promote on campus a concept or vision of the library that better defines its unique role as an information provider.
2. Experiment with new or enhanced services to special target groups in order to gain experience in evaluating user needs
and to build credibility in functioning as part of the team that generates/produces manages information.
3. Develop and implement services tailored to student needs.
4. Incorporate information literacy into the curriculum by establishing informal and formal contacts with academic program decision makers, and educating faculty about the importance of information literacy.
5. Establish mechanisms and funding sources for research, development, and implementation of new services as the information technology evolve.
6. Focus the planning activities of the university on information needs and information management.
7. Begin to develop cost and funding structures that will endure and build a foundation for the future research library.
8. Change the mandate and scope of the library advisory committee to encompass management of and access to information resources throughout the university.

Inside the library, transitional steps will have to lead toward acceptance of more proactive and diverse roles for staff and more frequent and diverse organizational changes. The skills and attitudes of the library staff will need to shift. Some ways to foster these needed changes are following:

1. Articulate and broadcast a vision of the future within the library itself.
2. Educate existing staff, both attitudinally and technologically, to work in a more collaborative manner with users and to promote the use of information technology. Accomplishing such change will demand that educational opportunities be provided for staff to develop subject expertise, interpersonal skills, technological competency, and leadership ability.
3. Experiment; take risks with organizational structures.
4. Recruit library staff from a broader base of education and experience.
5. Adopt an attitude of partnership with library schools in responsibility for the preparation of librarians through a. the redesign of library education or creation of alternatives, b. the provision of more in-house training and education, and c. increased practitioner interaction with library educators.

However, no matter how the library defines its future, collaboration, flexibility, and fluidity will be the key attributes that characterize its operations and services. No research library can afford to drift toward the turn of the century without a vision for the future. Only with a clear vision of its future mission and a strategy for navigating
the transition can a research library retain and improve both relevance and support on campus.

## WORKS CITED

Ackerman, Page. Governance and academic libraries, Library Research, 2 (Spring 1980-81), 3-28.

Ashworth, Wilfred. The multi-site dilemma, Journal of Librarianship 12 (January 1980), 1-13.

Atkinson, Hugh C. Abrief for the other side, Journal of Academic Librarianship 9 (September 1983), 200-201.

Bakewell, K.G.B. Managing user-centered libraries and information services. London: Mansell, 1990.

Bandara, Samuel B. Subject specialists in university libraries in developing countries: the need, Libri 36 (September 1986), 202-210.

Barry, Joan. Branch libraries, the coordinator's view, Australian Academic and Research Libraries 12 (March 1981), 11-20.

Bastiampillai, Marie Angela and Peter Havard-Williams. Subject specialization re-examined, Libri 37 (September 1987), 196210.

Boisse, Joseph A. Adjusting the horizontal hold: flattening the organization, Library Administration \& Management 10 (Spring 1996), 77-81.

Booz, Allen \& Hamilton, Inc. Organization and staffing of the libraries of Columbia University: a case study. Westport, Conn.: Redgrave Information Resources Corp., 1973.

Branch libraries in ARL insitutions. SPEC Kit no. 99. Washington, D.C.: Association of Research Libraries, 1983.

Britton, Helen H. Interactions: a library faculty matrix organization and a public policy and administration program, Reference Librarian no. 20 (1988), 187-204.

Bruno, J. Michael. Decentralization in academic libraries, Library Trends 19 (January 1971), 311-317.

Bryson, Jo. Effective library and information centre management. Hants, England: Gower, 1990.

Busch, B. J. Automation and reorganization of technical and public services. SPEC Kit no. 112. Washington, D.C.: Association of Research Libraries, 1985.

Buttlar, Lois J., Rajinder Garcha. Organizational structuring in academic libraries, Journal of Library Administration no. 17 (1992), 1-21.

Cargill, Jennifer. Integrating public and technical services staff to implement the new mission of libraries, Journal of Library Administration no. 10 (1989), 21-31.

Clayton, Peter. Japanese management theory and library administration, Journal of Academic Librarianship 18 (November 1992), 298-301.

Cline, Hugh F., Loraine T. Sinnott. The electronic library: the impact of automation on academic libraries. Lexington, Mass.: Lexington Books, 1983.

Conroy, Barbara and Barbara Schindler Jones. Improving communication in the library. Phoenix, Ariz.: Oryx Press, 1986.

Cooper, Jane. The governing role of university library committees in British and Canadian universities, Journal of Librarianship 17 (July 1985), 167-184.

Coppin, Ann. The subject specialist on the academic library staff, Libri 24 (1974), 122-128.

Cowley, John, ed. The management of polytechnic libraries. Hants, England: Gower in association with COPOL, 1985.

Crossley, Charles A. The subject specialist in an academic library: his role and place, Aslib Proceedings 26 (June 1974), 236-249.

Cyert, Richard M. The management of nonprofit organizations with emphasis on universities. Lexington, Mass.: Lexington Books, 1975.
de Klerk, Ann and Euster, Joanne R. Technology and organizational metamorphoses, Library Trends 37 (Spring 1989), 457-468.

Dunlap, Connie R. Organizational patterns in academic libraries, 1876-1976, College and Research Libraries 37 (September 1976), 395-407.

Durey, Peter. Effective structures for the management of human resources, Australian Academic and Research Libraries 16 (June 1985), 88-96.

Emery, Richard. Staff communication in libraries. London: Clive Bingley, 1975.

Etzioni, Amitai. Modern organizations. Englewood Cliffs, N.J.: Prentice-Hall, 1964.

Euster, Joanne R. The new hierarchy: where's the boss? Library Journal 115 (May 1, 1990), 40-44.

Evans, G. Edward. Management techniques for librarians. 2nd ed. Orlando: Academic Libraries,

Fisher, William, Brin Beth L. Parallel organization: a structural change theory, Journal of Library Administration 14 (1991), 51-66.

From Max Weber: essays in sociology, translated, edited, and with an introduction by H.H. Gerth and C. Wright Mills. New York: Oxford University Press, 1958.

Gorman, Michael. Reorganization at the University of IllinoisUrbana/Champaign Library: a case study, Journal of Academic Librarianship 9 (September 1983), 223-225.

Gorman, Michael. The organization of academic libraries in the light of automation in Advances in Library Automation and Networking v.1, 151-168.

Gossen, Eleanor, Frances Reynolds, Karina Ricker, and Helen Smirensky. Forging new communication links in an academic library: a cross-training experiment, Journal of Academic Librarianship 16 (March 1990), 18-21.

Guttsman, W.L. Subject specialisation in academic libraries: some preliminary observations on role conflict and organizational stress, Journal of Librarianship 5 (January 1973), 1-8.

Handy, Charles. Understanding organizations. 4th ed. Harmondsworth: Penguin, 1993.

Hanson, Eugene R. College and university libraries: traditions, trends, and technology in Advances in Library Administration and Technology v.7, 209-244.

Hawkins, Katherine W. Implementing team management in the modern library, Library Administration \& Management 4 (Winter 1989), 11-15.

Hay, Fred J. The subject specialist in the academic library: a review article, Journal of Academic Librarianship 16 (March 1990), 11-17.

Hibbard, Michael. Centralized library collections? Well, maybe: a response, Journal of Academic Librarianship 9 (September 1983), 199-200.

Hicks, Herbert G, C. Ray Gullett. Management. 4th ed. New York: McGraw Hill, 1981.

Hirshon, Arnold. Automated library systems in ARL libraries. SPEC Kit no. 126. Washington, D.C.: Association of Research Libraries, 1986.

Beyond our walls: academic libraries, technical services and the information world, Journal of Library Administration no. 15 (1992), 43-59.

Hoadley, Irene B. Organization sharts in ARL libraries. SPEC Kit no. 129. Washington, D.C.: Association of Research Libraries, 1986.

Holbrook, A. Subject specialists in university libraries: fossils or forerunners?, UC\&R Newsletter n.s. 12 (1984), 7-9.
--------. The subject specialist in polytechnic libraries, New Library World 73 (1972), 393-396.

Holley, Edward G. Reaction to "A brief...", Journal of Academic Librarianship 9 (September 1983), 201-202.

Howard, Helen. Innovation in university organization: the communication model, Journal of Academic Librarianship 6 (May 1980), 77-82.
--------. Organizational theory and its application to research in librarianship, Library Trends 32 (Spring 1984), 477-493.

Howard, Helen A. Organizational structure and innovation in academic libraries, College and Research Libraries 42 (September 1981), 425-434.

Humphreys, K. W. Centralization and decentralization in university libraries, Australian Academic and Research Libraries 12 (March 1981), 1-6.
--------. The subject specialist in national and university libraries, Libri 17 (1967), 29-41.

Johnson, Peggy. Matrix management: an organizational alternative for libraries, Journal of Academic Libraries 16 (September 1990), 222-229.

Johnson, Robert K. and Roscoe Rouse. Organization charts of selected libraries: school, special, public and academic. Ann Arbor, Mich.: University Microfilms, 1973.

Jones, Noragh, Peter Jordan. Staff management in library and information work. 2nd ed. Hants, England: Gower, 1987.

Karp, Rashelle S. The academic library of the 90s: an annotated bibliography. Westport, Conn.: Greenwood Press, 1994.

Keller, Dean H., ed. Academic libraries in Greece: the present situation and future prospects. New York: Haworth Press, 1993.

Koontz, Harold, Cyril O'Donnell, Heinz Weihrich. Management. 8th ed. New York: McGraw Hill, 1984.

Larsen, Patricia M. The climate of change: library organizational structures, 1985-1990, Reference Librarian no. 34 (1991), 7993.

Lewis, David W. An organizational paradigm for effective academic libraries, College and Research Libraries 47 (July 1986), 337-353.

Line, Maurice B. Library management styles and structures: a need to rethink, Journal of Librarianship and Information Science 23 (June 1991), 97-104.

Lynch, Beverly P. Organizational structure and the academic library, Illinois Libraries 56 (March 1974), 201-206.
--------, ed. Management strategies for libraries: a basic reader. New York: Neal-Schuman Publishers, 1985.
--------, ed. The academic library in transition: planning for the 1990s. New York: Neal-Schuman Publishers, 1989.

Lynch, Mary Jo, ed. Academic libraries: research perspectives. Chicago: American Library Association, 1990.

McCombs, Gillian M. Technical services in the 1990s: a process of convergent evolution, Library Resources and Technical Services 36 (April 1992), 135-148.

McClure, Charles R. and Alan R. Samuels. Strategies for library administration. Littleton, Colo.: Libraries Unlimited, 1982.

McDonald, John P. "The Rutgers university library: a study of current problems of organization and service in a decentralized university", in Studies in library administrative problems: eight reports from a seminar in library administration directed by Keyes D. Metcalf, pp. 95132. New Brunswick, N.J.: Rutgers State University, Graduate School of Library Service, 1960.

McDonald, Joseph. Organizational structure and the effectiveness of information organizations, Drexel Library Quarterly 17 (Spring 1981), 46-60.

McElroy, A. Rennie, ed. College librarianship: the objectives and the practice. London: Library Association, 1984.

McGrath, William E. Circulation clusters-an empirical approach to decentralization of academic libraries, Journal of Academic Librarianship 12 (September 1986), 221-226.

McLean, Neil. Managing multisite polytechnic library services, Aslib Proceedings 34 (May 1982), 237-248.

Marchant, Maurice P. Participative management in academic libraries. Westport, Conn.: Greenwood Press, 1976.

Marchant, Maurice and England, Mark M. Changing management techniques as libraries automate, Library Trends 37 (Spring 1989), 469-483.

Martell, Charles R. The client-centered academic library: an organizational model. Westport, Conn.: Greenwood Press, 1983. Martin, Lowell A. Organizational structure of libraries. Metuchen, N.J.: Scarecrow Press, 1984.

Martin, Susan K. Library management and emerging technology: the immovable force and the irresistible object, Library Trends 37 (Winter 1989), 374-382.
--------. The role of the systems librarian, Journal of Library Administration 9 (1988), 57-68.

Michalak, Thomas J. Library services to the graduate community: the role of the subject specialist librarian, College and Research Libraries 37 (May 1976), 257-265.

Miller, R. Bruce. Systems office organization. SPEC Kit no. 128. Washington, D.C.: Association of Research Libraries, 1986.

Mintzberg, Henry. Organizational design: fashion or fit?, Harvard Business Review 59 (Jan/Febr 1981), 103-116.

Moran, Barbara B. Academic libraries: the changing knowledge centres of colleges and universities. Washington, D.C.: Association for the Study of Higher Education, 1984.

Moran, Robert F. Improving the organizational design of academic libraries, Journal of Academic Librarianship 6 (July 1980), 140-145.

Mount, Ellis. University science and engineering libraries. 2nd ed. Westport, Conn.: Greenwood Press, 1985.

Muir, Scott P. Library systems office organization. SPEC Kit no. 211. Washington, D.C.: Association of Research Libraries, 1995.

Neal, James G. Empowerment, organization and structure: the experience of the Indiana University Libraries, Journal of Library Administration no. 19 (1993), 81-96.

O'Mara, Mary. Branch libraries-a branch libararian's view, Australian Academic and Research Libraries 12 (March 1981), 21-25.

Olsgaard, John. The physiological and managerial impact of automation on libraries, Library Trends 37 (Spring 1989), 484-494.

Person, Ruth J., ed. The management process: a selection of readings for librarians. Chicago: American Library Association, 1983.

Poole, Jay Martin. Organization charts in ARL libraries. SPEC Kit no. 170. Washington, D.C.: Association of Research Libraries, 1991.

Riggs, Donald E., ed. Library communication: the language of leadership. Chicago: American Library Association, 1992.

Rizzo, John R. Management for librarians: fundamentals and issues. Westpost, Conn.: Greenwood Press, 1980.

Royan, Bruce. Staff structures for today's information services, British Journal of Academic Librarianship 5 (January 1990), 165-169.

Schauder, Don. The technology of wisdom: applying organization theory to academic libraries, Australian Academic and Reasearch Libraries 17 (September 1986), 126-147.

Schwartz, Ruth. Multicampus libraries: organization and administration case studies. Metuchen, N.J.: Scarecrow Press, 1988.

Seal, Robert A. Academic branch libraries in Advances in Librarianship, v.14. Orlando: Academic Press, 1986.

Shaughnessy, Thomas W. Technology and the structure of libraries, Libri 32 (June 1982), 149-155.

Shimmon, Ross, ed. A reader in library management. London: Clive Bingley, 1976.

Shkolnik, Leon. The continuing debate over academic branch libraries, College and Research Libraries 52 (July 1991), 343-351.

Shoham, Snunith. A cost-preference study of the decentralization of academic library services, Library Research 4 (summer 1982), 175-194.

Southwell, Brian. Branch libraries-the university librarian's view, Australian Academic and Research Libraries 12 (March 1981), 7-10.

Spyers-Duran, Peter and Thomas W. Mann, eds. Issues in academic librarianship: views and case studies ffor the 1980 s and 1990s. Westpost, Conn.: Greenwood Press, 1985.

St.Clair, Guy and Joan Williams. Managing the new one-person library. 2nd ed. London: Bowker, Saur, 1992.

Stevens, Norman D. Communication throughout libraries. Metuchen, N.J.: Scarecrow Press, 1983.

Stirling, John F., ed. University librarianship. London: Library Association, 1981.

Studies in library management. v.5, edited by Anthony Vaughan. London: Clive Bingley, 1979.

Stueart, Robert B. and Barbara B. Moran. Library and information center management. 4th ed. Englewood, Colo.: Libraries Unlimited, 1993.

Suozzi, Patricia A. and Kerbel, Sandra S. The organizational misfits. College and Research Libraries 53 (November 1992), 513-522.

Thompson, James, ed. University library history: an international review. New York: Saur; London: Clive Bingley, 1980.

Thompson, James, Reg Carr. An introduction to university library administration. 4th ed. London: Clive Bingley, 1987.

Walbridge, Sharon L. New partnerships within the library, Journal of Library Administration no. 15 (1991), 61-72.

Waldhart, Thomas J. and Zweifel, Leroy G. Organizational patterns of scientific and technical libraries: an examination of three issues, College and Research Libraries 34 (November 1973), 426-435.

Watts, Thomas D. A brief for centralized library collections, Journal of Academic Librarianship 9 (September 1983), 196197.

White, Herbert S. Library personnel management. White Plains, N.Y.: Knowledge Industry Publications, 1985.

Wilkinson, J.P. The psycho-organizational approach to staff communication in libraries, Jornal of Academic Librarianship 4 (March 1978), 21-26.

Williams, Delmus E. Managing technical services in the 1990's: the ruminations of a library director, Journal of Library Administration 15 (1991), 25-41.

Wilson, Louis Round and Maurice F. Tauber. The university library: the organization, administration, and functions of academic libraries. 2nd ed. New York: Columbia University Press, 1956.

Woodhead, P.A. and J.V. Martin. Subject specialization in British university libraries: a survey, Journal of Librarianship 14 (April 1982), 93-108.

Woodhead, Peter. Subject specialization in three British university libraries: a critical survey, Libri 24 (1974), 3060.

Woodsworth, Anne. Decentralization is the best principle of organization design where it fits, Journal of Academic Librarianship 9 (September 1983), 198-199.

Woodsworth, Anne and June Lester. Educational imperatives of the future research library: a symposium, Journal of Academic Librarianship 17 (September 1991), 204-209.

Young, H., ed. The ALA glossary of library and information science. Chicago: American Library Association, 1983.

Zaxos, George, Takis Papaioannou. Ellinikes panepistimiakes vivliothikes: Sinthesi, organosi, leitourgia, prooptikes. Ioannina, 1991.


[^0]:    ${ }^{1}$ Herbert G. Hicks, C Ray Gullett Management 4th ed. (New York: McGraw Hill, 1981), 53.

[^1]:    ${ }^{2}$ Amitai Etzioni, Modern Organizations (Englewood Cliffs : Prentice-Hall, 1964), 3.

[^2]:    ${ }^{3}$ Max Weber, "Bureaucracy" in From Max Weber: essays in sociology, trans. H.H. Gerth and C. Wright Mills (New York: Oxford University Press, 1962), 196-244.
    ${ }^{4}$ Beverly P. Lynch, "Libraries as bureaucracies", in Management strategies for libraries: a basic reader; ed. Beverly P.Lynch. (New York: Neal-Schuman, 1985), p. 59.
    ${ }^{5}$ Ibid, 67.

[^3]:    ${ }^{6}$ Henry Mintzberg, Organization design: fashion or fit? Harvard Business Review 59 (Jan/Febr. 1981), 104.

[^4]:    ${ }^{7}$ Barbara B. Moran, Academic libraries: the changing knowledge centres of colleges and universities (Washington, D.C.: Association for the Study of Higher Education, 1984), 31.

[^5]:    ${ }^{9}$ A. Holbrook, The subject specialist in polytechnic libraries, New World Library 73 (1972), 393.
    ${ }^{10}$ A. Holbrook, Subject specialists in university libraries: fossils or forerunners?, UC\&R Newsletter no. 12 (1984), 7.

[^6]:    ${ }^{11}$ Thomas J. Michalak, Library services to the graduate community: the role of the subject specialist librarian, College and Research Libraries v. 37 (May 1976), 258.

[^7]:    ${ }^{12}$ P.A. Woodhead and J.V. Martin, Subject specialization in British university libraries: a survey, Journal of Librarianship 14 (April 1982),
    ${ }^{13}$ Marie Angela Bastiampillai and Peter Havard-Williams, Subject specialization re-examined, Libri 37 (September 1987), 196-210.

[^8]:    ${ }^{14}$ Charles A. Crossley, The subject specialist in an academic library: his role and place, Aslib Proceedings v. 26 (June 1974), 243.

[^9]:    ${ }^{15} \mathrm{~W}$.L.Guttsman, Subject specialisation in academic libraries: some preliminary observations on role conflict and organizational stress, Journal of Librarianship v. 5 (January 1973), 8.

[^10]:    ${ }^{17}$ R. Prytherch. Harrod's librarians' glossary. 6th ed. (Aldershot: Gower, 1987), 237
    ${ }^{18} \mathrm{H}$. Young. The ALA glossary of library and information science. (Chicago: American Library Association, 1987), 71

[^11]:    ${ }^{19}$ K.W. Humphreys. Centralization and decentralization in university libraries, Australian Academic and Research Libraries v. 12 (March 1981), 1
    ${ }^{20}$ Cambridge University, First Report of the General

[^12]:    ${ }^{21}$ Branch libraries in ARL institutions SPEC Kit no. 99 (Washington, D.C.: Association of Research Libraries, 1983)

[^13]:    ${ }^{22}$ Irene B. Hoadley, Organization charts in ARL libraries SPEC Kit no. 129 (Washington, D.C.: Association of Research Libraries, 1986).

[^14]:    ${ }^{23}$ Patricia A Suozzi and Sandra S. Kerbel, The organizational misfits, College and Research Libraries 53 (Nov.1992), 514.

[^15]:    ${ }^{24}$ Thomas D. Watts, A brief for centralized library collections, Journal of Academic Librarianship 9 (Sept. 1983), 196.
    ${ }^{25}$ Ibid, 197.

[^16]:    ${ }^{26}$ J. Michael Bruno, Decentralization in academic libraries, Library Trends 19 (Jan.1971), 313.

[^17]:    ${ }^{27}$ Snunith Shoham, A cost-preference study of the decentralization of academic library services, Library Research 4 (Summer 1982), 189.

[^18]:    ${ }^{28}$ Anne Woodsworth, Decentralization is the best principle of organization design where it fits, Journal of Academic Librarianship 9 (September 1983), 199.
    ${ }^{29}$ Michael Hibbard, Centralized library collections? Well, maybe: a response, Journal of Academic Librarianship 9 (September 1983), 200.

[^19]:    ${ }^{30}$ Edward G. Holley, Reaction to "A brief ...", Journal of Academic Librarianship 9 (September 1983), 202.

[^20]:    ${ }^{31}$ Thomas J. Waldhart and Leroy G. Zweifel, Organizational patterns of scientific and technical libraries: an examination of three issues, College and Research Libraries 34 (November 1973), 434.
    ${ }^{32}$ Wilfred Ashworth, The multi-site dilemma, Journal of Librarianship 12 (January 1980), 1-13.

[^21]:    ${ }^{35}$ Patricia A. Suozzi and Sandra S. Kerbel, Organizational misfits, College and Research Libraries 53 (November 1992), 520 .

[^22]:    ${ }^{36}$ Irene B. Hoadley, Organization charts in ARL libraries SPEC Kit no. 129 (Washington: Association of Research Libraries, 1986).

[^23]:    ${ }^{38}$ Peggy Johnson, Matrix management: an organizational alternative for libraries Journal of Academic Librarianship 16 (September 1990), 224.

[^24]:    ${ }^{42}$ Busch, B.J., Automation and reorganization of technical and public services SPEC Kit no. 112 (Washington, D.C.; Association of Research Libraries, 1985).

[^25]:    ${ }^{43}$ Hugh F. Cline, Loraine T. Sinnott, The electronic library: the impact of automation on academic libraries (Lexington, Mass. : Lexington Books, 1983), 174.
    ${ }^{44}$ Charles R. Martell, The client-centered academic library: an organizational model (Westport, Conn.: Greenwood Press, 1983), 66-67.

[^26]:    ${ }^{45}$ Patricia M. Larsen, The climate of change: library organizational structures, 1985-1990, Reference Librarian no. 34 (1991), 79-93.

[^27]:    ${ }^{46}$ Ann de Klerk and Joanne R. Euster, Technology and organizational metamorphoses, Library Trends 37 (Spring 1989), 457-468.

[^28]:    ${ }^{47}$ Lois Buttlar, Rajinder Garcha, Organizational structuring in academic libraries, Journal of Library Administration no. 17 (1992), 1-21.

[^29]:    ${ }^{48}$ B.J. Busch, Automation and reorganization or technical and public services. SPEC Kit no. 112. (Washington, D.C.: Association of Research Libraries, 1985).

[^30]:    ${ }^{49}$ Michael Gorman, Reorganization at the University of Illinois, Urbana/Champaign Library: a case study, Journal of Academic Librarianship 9 (September 1983), 223-225.

[^31]:    ${ }^{52}$ Scott P. Muir, Library Systems Office Organization. SPEC Kit no. 211 (Washington, D.C.: Association of Research Libraries, 1995).

[^32]:    ${ }^{53}$ Georgios Zaxos, Takis Papaioannou, Ellinikes panepistimiakes vivliothikes: synthesi, organosi, leitourgia, prooptikes [Greek university libraries: structure, organization, function, perspectives] (Ioannina, 1991).

