Introduction

While in the literature of Library and information Science (LIS) there is much discussion of organizational approaches to solve the problems and opportunities posed by change, there is surprisingly little reference to the “classical” foundations of organizational theory. While by no means comprehensive, the purpose of this article is to provide an overview of classical organizational theory for academic librarians to inform the discussions of change.

How should academic libraries respond to change? Change impacts academic libraries from many dimensions, causing an intensity of introspection and soul searching never before seen in the field’s history. This self-reflection brings into question the changing professional responsibilities of academic librarians and the organizational approaches of our institutions. To inform academic librarians about change from an organizational theory viewpoint, this essay provides a review of organization theory, focusing upon the concept of managing change. In considering the current environment of change for academic libraries, one may note a few points:

The Web has altered the process of library acquisitions, collection development, and reference service delivery.

The trend of delivering access to electronic resources impacts the relationship between libraries and publishers; and between librarians and patrons.

New questions that have never existed before are now being asked: Are physical libraries necessary in the age of digital collections? How does the librarian manage these collections? How does the librarian effectively communicate with patrons in the digital age?

A noteworthy point in this discussion is that while collections are changing as a result...
of the electronic revolution, and the practices of librarians are changing in how they do their jobs, the institutions of academic libraries are still rooted in the same notions as before, and the organizational structures have not changed to reflect these developments. Tension exists between the expanding digital information system and the traditional scholarly publishing environment in terms of subscriptions and storage. Relating to organizations, tension exists between the mechanistic, hierarchical structures of academic libraries and the new roles academic librarians play in delivering this information.

This essay notes the importance of classical organization theory as a foundation for the management of academic libraries, while acknowledging the impact of other organizational schools in fostering different notions of the post-bureaucratic organizations. The essay provides an overview of the classical, human resource, organizational environment, and organizational culture schools of thought. Next, a brief discussion of change in academic libraries is presented, linking organizational theory to current challenges. The author notes that the Organizational Development (OD) movement has now become the basis upon which academic libraries approach organizational change, but it may be limited if it neglects earlier organizational approaches.

**Organization Theory and Change: An Introductory Discussion**

The following discussion provides an overview of what may be described as the “classical models” of organizational theory, broadly categorized into the classical, human resource, organizational environment, and organizational culture schools. For the purposes of this article, these broad classifications serve as a starting point to present traditional models of organizational theory to inform the discussion of change within academic librarianship.

**Classical School**

Libraries, like organizations, are as old as civilization itself. (In fact, one could argue that the classification of, and access to knowledge, is itself the most important barometer of “civilization.”) Therefore to explore the roots of organization theory, one must go back to the ancient world. For example, a recent collection of “classic” texts on the subject begins with selections from the *Book of Exodus* and Xenophon’s account of Socrates in the *Anabasis* (Shafritz, Ott, and Jang, 2005). While the former deals with the importance of delegation, in which Moses is chastised for not delegating authority, the latter work illuminates the critical point that all types of organizations possess related characteristics, in that an effective leader would be able to oversee a public or private organization, regardless of the dissimilar functions. This early idea informs classical organization theory, in that while organizations may have different purposes and functions, all organizations are essentially similar, in that an able manager or leader would be equally adept at directing any type of organization. Also both texts relate the importance of leadership and decision making from the top of a hierarchical organization.

Jumping from ancient Athens to industrializing England in the eighteenth century and the burgeoning United States in the nineteenth century, the industrial revolution created problems for managers to run their larger and more complex organizations. Adam Smith’s *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776/2000) endures as one of the most influential books ever written on organization, and many other topics. Smith (1776), who stands as the intellectual father of organizational theory (and of capitalism and of economics), discusses the division of labor using the famous example of a pin factory. The text emphasizes the importance of organization and efficiency as factory managers develop systems, so that the organizations themselves function as well-oiled machines. Approximately one hundred years after Smith, in the rapidly expanding United States, Daniel C.
McCallum (1856), the father of the American railroad system, relates the principles of classical organization theory in a memorandum that established the reporting structures of organizations to this day, in which responsibilities are divided, power is in proportion to responsibility, and a hierarchical reporting system allows managers to identify successes, problems, and underperforming employees.

The characteristics of a bureaucratic organization were further identified by figures in the early 20th century. Max Weber (1922), as a sociologist and scholar of organizations, characterizes most large organizations as structured based upon the ideal-type bureaucratic model. Weber (1922) describes bureaucracy in terms of rules and regulations, hierarchy of authority, division of labor, and promotion/hiring based upon technical competence. This type of structure is also supported by Henri Fayol and Frederick Taylor (1916) in which hierarchical authority is exercised through delegation. In the case of Fayol (1916), there is the necessity of "unity of command" through the process of hierarchy. For Taylor (1916), the hierarchical structure provides an opportunity for the manager to educate the employee, and even improve their social and moral conditions, through the process of scientific management.

While any discussion of classical organizational theory inevitably begins with the names of classical thinkers such as Smith, Fayol, Taylor, and Weber, it is Luther Gulick’s vision of scientific management that serves as the highlight for this discussion, since his managerial vision continues to resonate for organizations into the modern era (and, as will be argued, remains key for as a paradigm for academic libraries). Gulick (1937) developed the acronym for the seven functions of the chief executive – POSDCORB – for planning, organization, staffing, direction, coordination, reporting, and budgeting. While best known as for his work with the President’s Committee on Administrative Management, his authorship of Notes on the Theory of Organization, was the “contribution that immortalized Gulick’s name” (Fitch, 607) and remains a relevant blueprint for management, even seven decades later. (The two efforts of Gulick were actually conjoined since Notes was based on work done for the Commission.) These functions of the chief executive are still relevant in guiding change, although perhaps not necessarily in a strictly hierarchical organization. Therefore the traditional vision of scientific management still exists as a paradigm, and continues to resonate for certain organizations, into the modern era. Even in the modern period of complex, technologically advanced professional organizations, such as academic libraries, Gulick’s POSDCORB still serves as a guideline for the academic library director to implement change.

From the ancient times to the mid-twentieth century, delegation, management, efficiency, hierarchy, and control, have all been established as basic principles of classical organizational theory. These characteristics still serve as the basic skeleton of any bureaucratic organization. Based upon this framework, traditional organizational change takes place within the POSDCORB frame of reference, through the guidance of top management.

**Human Resource School**

The rise of this school of thought emphasizes the human element of organizations, in that organizations, and people, are intertwined in interdependent relationships. This is certainly important for modern organizations as they face a struggle for strategic direction, organizational restructuring, and the need for leadership. From Follett’s (1926) argument of participatory leadership to Maslow’s (1943) theory of the hierarchy of needs; from McGregor’s (1957) contention that managerial presumptions influence employee behavior to Janis’ (1971) study on the influence of “groupthink” upon decision-making, human resource theory radically altered the theoretical universe of organizational behavior. Shafritz, Ott, and Jang (2005) describe the theoretical framework of human resource theory as based upon the following assumptions:

- Organizations exist to serve human needs
Organizations and people need each other

- When the fit between the individual and the organization is poor, one or both will suffer: individuals will be exploited, or will seek to exploit the organization, or both.
- A good fit between the individual and the organization benefits both: human beings find meaningful and satisfying work, and organizations get the human talent and energy that they need.

The effectiveness of traditional organizational approaches, including those of the human resource school, continues to be challenged in an age of knowledge and technological change. Human resource theory, the impetus behind of the movement of Organizational Development (OD), especially from the work of McGregor (1957), encourages organizational restructuring and leadership development, and promotes the evolution of more open and flexible organizations. Within this viewpoint, change becomes a necessary component of organizational life in order to foster the “good fit” between the individual and the organization, in order to maximize organizational performance. Human resource theory is an important school of organizational thought to acknowledge, since, as will be discussed, it has had a strong influence upon academic libraries. The significance of OD shall be addressed as the most important school of thought now impacting academic librarianship.

**Organization Environment School**

Thompson (1967) offers an organizational framework to view three different levels of organizational responsibility and control: technical, managerial, and institutional (10-13). Within this outlook, problems can be identified as falling within the realm of certain levels of the sub-organization. The “technical” function is the core function of the organization. The “managerial” level includes the mediating functions of connecting the technical sub-organization with its clientele and procuring the necessary resources for carrying out the technical function; and also controls and administers the technical function. Finally the “institutional” dimension is a combination of both the technical and managerial systems, and forms part of a wider social system that grants legitimation to the organization’s goals. Based upon his seminal work *Organizations in Action* (1967), Thompson, in discussing organizational approaches to changing technology and an altered task environment, relates that organizations need to be more flexible and adaptive, by deploying necessary professionals into groups such as “task forces” or “project management” teams for operational purposes (80).

Thompson’s (1967) work stresses an “open systems” view of organizations. Organizations are systems, which can be defined as “a set of interacting units with relationships among them” (Miller, 1978). The following graphic representation of the OST framework illustrates how all organizations (public, private, non-profit) rely on the external environment to deliver critical inputs and to carry out the outputs:
As one can see from this figure, the various inputs from the environment include supplies, money, personnel, and information. Transforming these inputs, by adding value, organizations then produce the outputs, which include both planned and unplanned results. These outputs include services, information, waste, and reputation. OST, in contrast to mechanistic approaches to organization theory, provides a different perspective in thinking about managing organizations. Chisholm (2008) highlights the following four points as several important implications:

1. Open systems thinking emphasizes the criticality of the external environment in providing required inputs, in determining the acceptability of outputs, and in affecting appropriate design of internal structures and processes.

2. Understanding environmental demands and constraints on an organization is essential to understanding organizational functioning. However, the environment does not dictate organization design. Rather, equifinality indicates that there is more than one route to organizational effectiveness.

3. OST emphasizes the dynamism inherent in organizations.

4. Open systems thinking also focuses attention on maintaining the input-generating capacity of the external environment. (1373)

The concept of “equifinality” means that reaching a desired state for an organization can be accomplished in many different ways. Therefore organizations within the same industry can be successful using different strategies and organizational designs.

Cohen and March (1974) discuss the problems of ambiguity in organizations, focusing specifically upon college and university environments. In their view, these types of entities belong to a class of organizations that can be called “organized anarchies.” In their view, these organizations exhibit the following properties: problematic goals, unclear technology, and fluid participation (3). Of relevance to this discussion of change within organization theory is Cohen and March’s (1974) development of the idea of the “garbage can” model. The model can be understood by the following description:

A key to understanding the processes within organizations is to view a choice opportunity as a garbage can into which various problems and solutions are dumped by participants. The mix of garbage in a single can depends partly on the labels attached to the alternative cans; but it also depend on what garbage is being produced at the moment, on the mix of cans available, and on the speed with which
garbage is collected and removed from the scene. (81).

This model visualizes the approach to change, in which decisions are ostensibly made to solve a problem at hand, as not necessarily working in a linear fashion. In this framework, problems, solutions, participants, and choice opportunities can be viewed as “independent streams” all flowing into the same chasm. While statistical modeling is necessary to make any conclusions based upon this approach, and outside the scope of this discussion, the importance of this topic is that implementing change is not a straightforward or simplistic approach in which a problem is identified, and a choice of three solutions will need to necessary change. Based upon different variables, and the speed of problems and/or solutions, in many cases, a particular solution will no longer be relevant to the problem, or will in fact become a new problem itself.

**Organizational Culture School**

An important development in viewing organizational change arises from the school of organizational culture. Schein (1993) proposes a formal definition for organizational culture that has gained wide acceptance. “A pattern of shared assumptions that the group has learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (365). Cook and Yanow (1993) explore the relationship between culture and organizational learning. “Organizational learning,” as defined by the authors, refers to the capacity of an organization to learn based upon the group itself, and not by individual members (368). Trice and Beyer (1993) offer eight “prescriptive aphorisms” which are valuable in considering organizational change, and also describe a model of culture change. As Trice and Beyer’s aphorisms form a sort of puzzle, Martin (2002) describes the puzzle of defining culture and offers a metaphorical approach rather than viewing it as a variable to be studied. Ouchi (1981) describes the type of companies that achieved a high state of consistency in their organizational cultures. He views these companies as social beings. Type Z organizations are less rigid and the “decision making process is typically a consensual, participative one” (427). Peters and Waterman (1982) describe the difficult balance of managing a successful organizational culture.

The topic of organizational culture must take into account Senge’s concept of learning organizations. Senge (1990) describes how change occurs through teeming, and learning to change. He argues that five new “component technologies” are converging that will permit the emergence of the learning organization: systems thinking, personal mastery, mental models, building shared vision, and team learning. “Systems thinking” is the fifth discipline, an integrative discipline that links the others into a coherent body of theory and practice (441). According to Senge, the definition of the learning organization is “where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (ibid, 441). Another description provides a similar framework, but based more upon organizational structure: “Typically learning organizations are flatter, have looser formal links, and look more like networks. The links are looser in terms of rules and regulations, but nonetheless tight informal links are required in terms of cooperative synergies” (Van Wart, 2008, 1150). So based upon these statements, one may see a learning organization as one where individuals are able to nurture learning in cooperation with others in the organization; and the organization tends to be more flexible, and generally less hierarchical.

**Implications for Academic Libraries**

In considering this overview of different schools of classical organization theory, academic librarians need to inquire: why do organizations change? Often it is not a
conscious decision on the part of a senior leader or committee of leaders, but rather a reaction to an altered internal or external force. Organizational change occurs as a response to some phenomenon from outside and/or within the organization. The external forces impacting organizations, especially technological transformations such as the World Wide Web (WWW), have created various pressures for academic libraries to change. However, many organizations, while investigating new approaches, continue to uphold traditional structures. For example a recent Australian study shows that organizations, in reacting to various external and internal forces, have not abandoned traditional structures at all, while experimenting with new forms of hybrid organizations (Graetz and Smith, 2009, 10).

While there have been calls to dismantle bureaucracy, it does not exist as a realistic option. The traditional coordinating and control elements of bureaucracy providing accountability, uniformity and quality are “reassuring continuity” in an unstable world of dizzying change (ibid.). So while technology may now facilitate a service interaction between a customer and a business firm or between a citizen and the local government, for example, it has not necessarily replaced the organizational structure, nor the public servant receiving and processing the request.

In summary, the following points from schools of organizational theory are relevant to academic libraries:

- Gulick's (1937) scientific management approach of POSDCORB still forms the basis of hierarchy and bureaucracy in academic libraries.
- Open Systems Theory: Thompson’s (1967) view of the three dimensions of responsibility reveal the interaction of the academic library director across different areas
- Open Systems Theory: the use of cross-functional teams is relevant for operations across units of academic libraries
- Human resource theory serves as the impetus behind the movement of Organizational Development

The POSDCORB hierarchical structure is the most common type found in libraries, placing the decision making and authority with the head of the library and delegates diminishing amounts of responsibility down different levels of the organizational pyramid. Since academic libraries are generally structured in a purely hierarchical manner, inspired by classical organizational theory as described above, certain challenges arise in a changing, technologically advanced environment. While this type of structure is efficient and predictable, it can be inflexible. Major disadvantages include organizational stratification, poor communication, stifled-initiative, bureaucratic over staffing, and a lack of responsiveness to rapid change (Johnson, 1990, 223). While these challenges are a result of hierarchical structure, elements of traditional organizational theory are still relevant as a bridge between the old and the new forms of organization, as shall be discussed.

In viewing Thompson's (1967) dimensions of the organization, in the case of an academic library, the technical function would include the conduct of library instruction classes, reference interactions, acquisition of materials, and delivery of information, etc. The managerial function would be the work of the library director, or department heads in making managerial decisions. The institutional dimension would be larger college or university environment. The cross functional teams would cross departments within the academic library, such as reference and technical services; or could cross over academic or service units with the university, such as the academic library and the information technology (IT) unit.

In Thompson's (1967) framework, as applied to the modern academic library, the open systems transformation process has shifted, from one traditionally based upon paper books and journals, to one based upon a hybrid mix of both electronic and paper books and journals. One can see that his open systems view of organization, as applied to academic libraries, reveals that the inherent mission of the academic library has not changed in the electronic environment. Academic libraries are still in the “transformation” business, through adding value to published content, by
providing proprietary access to indexed journal article databases, online book catalogs, and various types of non-journal textual and numeric databases. For academic libraries, the concept of “equifinality” reveals that there are many organizational approaches for academic libraries based upon their own individual characteristics.

What should a restructured, 21st century, academic library look like in terms of organizational structure? Harkening back to how research libraries had been organized in the past, the basic structure of the organization was centered upon the essential product, the book. Within the classic research library, organizational units formed around functions like acquisitions, cataloging, processing, shelving, etc. The typical research library formed an organizational pyramid with functional units under the control of functional managers, and functional managers under the control of top management (Lee, 1993, 131). Now the essential product is a hybrid combination of the electronic journal article and the paper book. With the switch from paper to electronic article indexes, and the introduction of electronic articles and books, the institutions of academic libraries are still delivering access to information, but within different formats of electronic documents instead of paper. Modern academic libraries may look to the past in which units were organized by function but apply that approach to the electronic environment. Through training and embracing the incremental changes in processes over time to adjust to technology, the library director must guide this transformation, rooted in tradition, but always looking towards the future.

**Academic Libraries Choose OD**

Considering the various dimensions of organizational theory, academic libraries are choosing a hybrid approach to managing change. Incremental approaches to organizational change, such as improving organizational culture and putting decision making closer to people doing the work, are elements of what has become known as the “Organizational Development” (OD) movement in academic research libraries (Holloway, 7, 2004). Increasingly embraced by research libraries, OD is becoming so pervasive that there are increasing numbers of OD specialist positions that have been created in research libraries (Russell, et al., 2003, 190). Organizational development cannot be easily defined however and appears to have different, and at time, contradictory meanings. At its core, OD may serve as an organizational tool to initiate change in terms of either culture, approach to problem solving, or structure, and often involves outside facilitation (Gabris, 2008, 1383). While there remain questions as to how effective OD as a movement has been, it appears to be the key approach to organizational change in academic libraries, and relies upon the importance of “transformational leaders.”

There are many articles that address the use of OD approaches in academic libraries. Parsch and Baughman’s (2010) survey of Association of Research Libraries (ARL) institutions indicate that academic libraries are using OD tools in a variety of formal and informal programs (3-19). Russel (2008) describes OD as an umbrella “super discipline” that encourages organizational effectiveness through evidence-based-practice (924). Phipps (2004) provides a case study of OD activities within the University of Arizona Libraries, emphasizing the concepts of a team based, customer focused, learning organization (70). Phipps (2004) identifies Deming, Scholtes, and Senge as forming the core of the “systems theory” approach, with an identification of Senge’s (1990) work as the main inspiration (70). Lowry (2005), also citing Senge, views the process of OD as “continuous,” and coins the term, “COD,” for “continuous organizational development” (1-6), as he envisions it taking place at the University of Maryland. Stephens and Russel (2004) declare OD to be an approach to create and maintain a healthy organization, improve services and culture, and manage change. Stephens and Russel (2004) relate that OD serves as an approach to “change management” in which the rapid pace of environmental change for academic libraries requires them to redefine and redesign themselves organizationally to meet new challenges (253). Lee (1993) in an earlier LIS article advocating for the embrace
of OD in academic libraries, relates that just as business firms raise their level of
generality in which they define their products, with the example given as oil
companies being in the “energy” business; similarly academic libraries need to move
away from the focus upon the “book and journal” business to be in the “information”
business (131).

Advancing leadership development is of primary importance for academic libraries to
embrace change and redesign flexible organizations. A critical component of this
development is that the senior decision-makers are transformational leaders.
According to Riggs (1997) transformational leaders must be excellent strategists,
strong planners, synthesizers, change agents, and visionaries (8). This
transformation, by limiting hierarchy and sharing authority and control, requires that
senior transformational leaders acknowledge that they do not necessarily possess
the expertise or relevant knowledge to make informed decisions without the input of
middle managers. “In reality, middle managers may be more highly informed and in
far better position to provide leadership and influence the accomplishment of
organizational goals” (Cawthorne, 2010, 155). Therefore the senior transformational
leaders, in order to flatten the organizational hierarchy, and share authority,
knowledge, and control, must be able to nurture leaders from the middle of the
organizational hierarchy.

How did we arrive at the point in which the environment of the academic research
library is changing in such a radical way? Why are academic librarians looking to OD
as the panacea to address current challenges? The electronic information
transformation has impacted how academic libraries deliver access to resources and
services. Within this environment, the major developments facing academic libraries
concern change. There are changes in the availability of technology, changes due to
reduced or constrained library budgets, and changes being brought about by the
higher education funding crisis. As a result of the electronic transformation, academic
libraries have enhanced access but diminished control. During this tumultuous
period, there are great opportunities for the transformation of scholarly
communication that will strongly impact academic libraries and the scholarly
communities that these libraries serve.

Conclusion

How should academic libraries respond to change? There are no easy answers to
this question. Increased or changing professionalization, coupled with technological
changes, are certainly challenging traditional organizational approaches. Academic
libraries exist in an unprecedented environment of change, arising from internal and
external technological factors impacting scholarly publishing and academic
librarianship. This essay notes the importance of classical organization theory as a
foundation for the management of academic libraries, while acknowledging the
impact of other organizational schools in creating different notions of the post-
bureaucratic organizations. Academic libraries are now embracing the OD movement
as a multifaceted, although ambiguous approach, since one school cannot apply to
the modern academic library. Embracing multiple aspects of organizational theory,
the academic library director must provide leadership in guiding the management of
change.

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