Coherence at Scale and the Research Library of the Future

The dilemmas that higher education library and IT professionals are now facing and the way we characterize them—centralizing or decentralizing—or the ways we distinguish between them—the library or the IT department—have very much to do with the origins of the modern research university and its growth and development in the period that many people call “the age of modernity.” In the mid-to-late nineteenth century, many people thought that the increasingly complex world that was emerging could be managed by reducing each problem to discrete parts and tasks. The library embodied this idea: the separation of spaces into distinct work areas and the development of library stacks, file drawers, and filing cabinets were closely linked with modern corporate techniques of classifying information and categorizing tasks. The birth of the silos that we often bemoan in our libraries, our colleges and universities, and other parts of our world seems to have begun in a moment when we thought that we could build a universal library, a vast research university, a giant corporation, and even a powerful nation-state by breaking up the work into discrete tasks.

One of the key assumptions lying at the root of this conception of the world is that knowledge and expertise, and the research products on which they are built, are also discrete and finished—built up slowly, preserved and maintained by experts with technical training in various disciplines. But the penetration of the dynamic, changeable nature of digital, web-based, linked information technologies into colleges and universities and research libraries exposed the assumptions behind some of the fixed structures into which we have organized ourselves and how we think about our work. Whereas research products were once discrete entities that we thought we knew how to organize and store, they are now fluid and malleable. Whereas information used to reside within the grand buildings of academia, it seems now to be ubiquitous. Before, we thought we could provide training through a shared professional program to prepare us for the discrete tasks we would take on, but now we must address a variety of ever-changing responsibilities that require a diverse set of people, skills, and preparations. Before, a hierarchical and rigid system of departments dedicated to specific tasks helped make our work straightforward, but now it can stand in the way of innovation and agility.

These older ways of thinking inhere in how we tackle new problems, and much of what they teach us remains relevant. I believe we can find a middle ground, a space in which we can weigh our older ideas of order against the new realities we face. This dilemma—which can often take the form of such binary oppositions as control and openness, fixed and shifting categories—seems most powerfully illuminated at the moments when we think we can build the universal library.

The sense of being at sea, the loss of control (“bibliographic control” or almost any other kind of control that the library world might exert on the notion of the universal library), has dominated in the recent past. The commercial world’s move into the world where libraries thought they held sway was rapid and jolting. Librarians’ loss of control of the discourse of information mimics the loss in other professions of the areas they used to control—or thought they did. The first analogy that comes to mind is the U.S. medical profession, whose sway over health care, one could argue, has been ceded to commercial interests, the so-called health providers of the insurance industry.

In the library community, many powerful voices want to reassert a certain kind of control. The arguments veer back and forth between centralization and decentralization in all of their meanings: from the way the local library works internally to the role of consortia, the role of cultural dominance, and the issue of commercial and noncommercial control of information. The centralized model of the universal library—divorced from the reality of the commercial world—stands against a decentralized model, one being embraced by commons-based consortium models (e.g., DPLA, Smithsonian Commons, Wikipedia). One could even evoke a kind of cultural relativism to explain the difference: could it be that the European models come from a history of centralized nation-states, whereas the U.S. model comes from a more decentralized notion of how a modern state might operate?

So what might a middle ground look like? Where is it to be found, and how can we make sound local decisions on which we can rely and that work for the medium term? Chuck Henry, President of the Council on Library and Information Resources (CLIR), has been thinking about these issues for a long time. With Vanderbilt University, CLIR has established the Committee on Coherence at Scale (http://coherence
New digital projects have begun to flourish within higher education that, if successful, would create genuine interdependencies: deep collaborations that could redefine our academic environment. . . . From a strategic vantage point, there is no ambiguity: the future of higher education rests on the ability to reconceive ourselves holistically, with the various components of scholarly information—discovering, reconstituting, publishing, and sharing knowledge, and keeping its various manifestations securely preserved and accessible—understood as interrelated and interdependent.1

How is this different from the ways in which the universal library has been characterized in the past? How does this match up against the centralized and decentralized solutions? Let me sketch out where I see the possibilities in this new formulation. The answer lies, I think, in the word “holistically.” Accepting the notion that the ways we have been thinking about the library are rooted in nineteenth-century conceptions, one could then argue that the answers and solutions we have turned to in the past are no longer appropriate. Distinct departments, notions of control based on the need to keep research materials local in inventory, the separate categories of collections and services—these inherited configurations start to lose meaning in a world that calls out for answers that go well beyond the organizational structures we have put in place. As projects mature—HathiTrust is a fascinating example—what is embodied in them are all of the categories of the old library wrapped up together (from collection management to technical services and, increasingly, to reader services and public services) as a project starts to build those capabilities on top of the collection itself, making the distinction between technical and public services start to look like a relic of the twentieth century.

Henry notes another project that points in the same direction:

Linked Data makes use of the Resource Description Framework (RDF) as a tool to share, connect, and reuse knowledge on the Semantic Web. The findings will help focus the national agenda for developing Linked Data environments, reduce redundancy of effort, and create a more sophisticated context in which practitioners and planners can develop future projects, with the aim to develop specifications, requirements, and a basic technical design for a multinational, multi-institutional prototype demonstrating the viability and efficacy of a Linked Data environment for improving discovery and navigation.2

Here we go beyond the notion of a collection that is housed somewhere in a discrete location and move toward thinking about how to connect all of us in academia in a web that facilitates sophisticated research. We could multiply the examples, but they all point in one direction: the answers to the age-old question of the universal library, if it is an attainable idea, do not lie in our own institutional precincts but call for systemic, global change. The barriers to the realization of this utopian ideal are no less formidable than they were in the past; they may, in fact, be more difficult to overcome as economic nationalism and monopoly frameworks—also constructs of the nineteenth century—vie to place limits on the scholarly use of information in a quest for profit. Henry notes organizational, industrial, academic, social, and linguistic constraints on the realization of a holistic approach to a world in which the objects of research library attention are malleable, reside elsewhere, and are difficult to bend toward interoperable ways of thinking, reading, and analyzing. To address these constraints, the Committee on Coherence at Scale aims to see if a holistic approach can help to provide the basis of the research library of the future.

Notes
2. Ibid., p. 4.
3. The 2014 E-Content columns in EDUCAUSE Review will explore various aspects of the work of the committee as it moves toward trying to realize this goal.