The current issue and full text archive of this journal is available on Emerald Insight at:
https://www.emerald.com/insight/2755-0761.htm

Holding it together: an exploratory study on the social structures of digital collection management

Paul Rosenstein
Vanderbilt University, Nashville, Tennessee, USA

Received 25 May 2023
Revised 14 July 2023
Accepted 20 July 2023

Abstract

Purpose – The academic library's physical capacity and its service obligations to local users structured the traditional print collection. Largely freed of these constraints, the digital collection manager enjoys unprecedented freedoms but now contends with a collection susceptible to resource sprawl and scope ambiguity. This exploratory study aims to consider the possibility that intra-field social processes help to structure and routinize digital collection practice.

Design/methodology/approach – Lacking the constraints to which print collections are subject, electronic resource and digital library collections are more likely to reflect idiosyncratic institutional interests and therefore, to demonstrate significant variation. Evidence of homogeneity may suggest the influence of heretofore underexplored social structures. To determine the extent of such homogeneity, the author performed exploratory/descriptive content analyses on ten electronic resource collection development policies and six digital library collection development policies.

Findings – The data reveal among both the electronic resource and digital library collection policies significant uniformity. Content analyses demonstrate consistent themes (e.g. media, audience, selection priorities, etc.) and rhetoric. These findings lend support to the study's central hypothesis regarding latent social structures. Analyses also reveal a set of unanticipated constraints unique to digital collection management.

Originality/value – Despite the breadth and maturity of literature addressing the Digital Turn in academic librarianship, relatively little attention has been paid to the social dimensions of collection management. This work represents an important corrective and suggests new theoretical approaches to the study of digital collection practice.

Keywords Digital information, Digital services, Information and knowledge organization

Paper type Research paper

Introduction

For many years, academic libraries' shelves sagged with books, journals, maps, and other texts germane to patrons' research interests. Because physical space was limited, managers of these print collections faced difficult selection decisions; new acquisitions often demanded proportionate deaccessions. Not even the appearance during the 1980s of new media like floppy discs, CD-ROMs, and videocassettes fundamentally altered the collection manager's calculus as these materials no less than books claimed shelf space. Separately, notwithstanding interlibrary loan agreements, the brick-and-mortar academic library served few users beyond its limited university community, and users had access to few resources beyond those that the library provided (Miller, 2000). Expedient collections emerged out of the dialectic between libraries' physical limitations and local users' needs.

© Paul Rosenstein. Published in *Digital Transformation and Society*. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode

Since acceptance of this article, the following author(s) have updated their affiliations: Paul Rosenstein is at the University of Richmond.

Digital Transformation and Society
Vol. 3 No. 1, 2024
pp. 80-98
Emerald Publishing Limited
e-ISSN: 2755-077X
p-ISSN: 2755-0761
DOI 10.1108/DTS-05-2023-0039

The emergence in the 1990s of the *digital collection*, which here refers to the constellation of digital materials located in or accessible through a school's electronic resource and digital library collections, presented a new set of challenges. Leaving aside its host servers, the digital collection occupies virtual rather than physical space. While the digital collection manager, like her print counterpart, may face various budgetary and political constraints, decisions concerning the inclusion or exclusion of new materials are less contingent on physical capacity. Meanwhile, the digital collection's form facilitates greater access—both wider user access *into* the local collection and expanded access *out of* the institution to the wider research ecosystem—than the traditional print collection (Donovan, 2012; Dempsey, Malpas, & Lavoie, 2014). Despite these apparent benefits, as a near-limitless object vessel, the digital collection suffers the potential for resource sprawl, and as the service provider for an increasingly diffuse and heterogeneous population, it is at risk of scope ambiguity. Lacking the traditional constraints that structure print collection practice, digital collection managers may struggle to establish expedient collections.

This study aims to understand how academic libraries organize their digital collection management activities under these uncertain conditions. Put differently, if they lack print collections' spatial and relational constraints, then might digital collections be structured in other ways?

The following work seeks to address this and related questions by examining a selection of academic libraries' current electronic resource and digital library development policies. With few exceptions, the policies articulate organizational missions and/or animating visions, identify materials appropriate for collection, and specify an intellectual focus or foci. Through content analysis of ten electronic resource and six digital library collection development policies, this exploratory study seeks to account for ordered digital collections under disordering conditions.

Background

Print collections

For much of its history, the academic library collected physical materials for the benefit of its local user population. Early editions of the *Encyclopedia of Library and Information Science*, for example, defined a collection as the "books, manuscripts, serials, government publications, pamphlets, catalogs, reports, recordings. . .that make up the holdings of a particular library" (Kent & Lancour, 1971, p. 260). Factors governing collection development, the encyclopedia entry continues, include "the available space and staff" and "the variety and number of the clientele served" (p. 260). Dempsey *et al.* (2014) observe that libraries long "deployed collections locally, as well as the systems and staff required to acquire, process, organize, and provide access to those collections" (p. 395). In short, the traditional print library's collection was tangible, situated near its patrons, and made accessible to local users through in-house infrastructure.

The proliferation of new media during the 1980s challenged traditional collection development practices. Floppy disks, videocassettes, and CD-ROMs threatened to unseat the book as the coin of the academic library collection realm (Miller, 2000). During this transitional period, "librarians. . .nervously eyed a rapidly changing marketplace in which new products, services, and ideas were appearing and disappearing faster than Andy Warhol's 15-minute celebrities" (Pitman, 1995, p. 352). Pitman observed at the time an escalating conflict between, on the one hand, the Bibliophile who "gives up library real estate to upstart formats grudgingly, if at all," and, on the other, the Technowidget who maintains "books are deader than the trees that made them" (p. 352). In hindsight, this conflict appears quaint: neither the Bibliophile nor the Tehcnowidget foresaw the impending digital revolution.

The digital turn

In contrast to the field's incremental adaptations to new, if still relatable, physical objects (e.g. CD-ROMs, videocassettes, etc.), the rise during the 1990s of "virtual" objects and networked service infrastructures demanded radical reassessments of academic library collection practice and theory (Branin, 1998; Branin, Groen, & Thorin, 2000). Much of the scholarship published during this period addressed the emergent challenges of electronic resource collection management. For example, Casserly (2002) argued:

> While. . .libraries have extensive expertise building print-based collections, digital resources pose many challenges. In order to "collect" them libraries must lease rather than purchase, access rather than house, and develop ways of evaluating, describing, and maintaining the accessibility of dynamic content (p. 581).

Unprecedented digital materials, storage demands, vendor relations, and selection criteria demanded similarly unprecedented collection strategies. Contemporary research documented new patterns of academic resource acquisition (Wallace, 2004; Dorner, 2004), preservation (Nelson, 2001; Bekaert, De Kooning, & Van de Walle, 2005), and circulation (Jacoby & Laskowski, 2004). Other scholars addressed pressing technical challenges like electronic resource collection organization (Campbell, 2003; Arms *et al.*, 2002) and remote access (Rapp, Taylor, & Crane, 2003).

The new digital landscape seemed to compress the research ecosystem and blur distinctions between locally held electronic resources and internet materials. Dempsey *et al.* (2014) reflect on the "progressive move away from purchasing and local storage at one end of a spectrum toward general facilitated access at the other" (p. 397). For examples of such facilitated access, the authors highlight the modern research library's tendency to "point users at Google Scholar, load metadata for freely available e-books into the catalog, (and) create resource guides that include freely available materials" (p. 397). "This is a significant shift," Dempsey *et al.* argue, "as facilitated access. . .may or may not be attached to local materials" (p. 397).

The Digital Turn also introduced important theoretical questions. Relieved of her print counterpart's spatial constraints, the digital collection manager appeared free to "eliminate selection and collect everything" (Arms, 2012, p. 587). But does a "collection of everything" still constitute a collection, as such? And should the freely available materials to which libraries increasingly direct users be counted among its collection? Lee (2000) concludes that the Digital Turn challenged at least two tenets fundamental to traditional assumptions regarding the nature of a collection: "tangibility and ownership" (p. 1107).

Managing these new electronic resources forced academic librarians to adapt existing collection practices and to negotiate new theoretical uncertainties. The emergence during this period of the digital library, however, often demanded entirely new approaches to and understandings of collection management. Bishop *et al.* (2003) define digital libraries as "*sociotechnical systems*—networks of technology, information, documents, people, and practices" (p. 1, italics original). In this light, the research digital library represents a supernode that connects users—local and remote—to digital resources, information services, institutional repositories, and distinctive and special collections (Witten, Bainbridge, & Nichols, 2009; Phillips, Andrews, & Krahmer, 2019).

The emergence of the digital library appeared to complicate collection management in at least two significant ways: by obscuring collection boundaries and by alienating the library and its users.

First, the digital library introduces liminal uncertainty. Unlike the academic print library, which is bounded in time and space, the academic digital library represents a network that is embedded within an even broader network of proximal digital libraries, which itself is only tenuously separated from the internet (Donovan, 2012). If the edges of a digital library are

inherently uncertain, then its managers may be at pains to demarcate the limits of a collection. Witten *et al.* (2009) explain:

> Digital libraries are libraries without walls. But they do need boundaries. The very notion of a collection implies a boundary: the fact that some things are in the collection means that others must lie outside it. And collections need a kind of presence, a conceptual integrity, that gives them cohesion and identity. . .Indeed, it is exactly these features that distinguish digital libraries from the anarchic mess that we call the World Wide Web (p. 8).

Deprived of the brick-and-mortar library's material boundaries, Witten *et al.* imply that the digital library manager must delimit her collection *ideally*, according to a set of abstract organizing principles. If, as Arms (2012) suggests above, these managers can "collect everything," then selection criteria seem simultaneously more ambiguous and more important than they were during the print era (Kiszl & Fodor, 2021).

Second, the digital library tends to alienate information providers and users. Prior to the Digital Turn, patrons who wished to use their library's resources had to do so in person. This arrangement encouraged face-to-face interaction, mutually beneficial relationships between library patrons and staff, and collections tailored to user needs. Because patrons can access digital resources virtually, the digital library collection manager often is deprived the meaningful patron interactions from which her print counterpart benefited. And because patrons can access these resources from anywhere in the world, the digital library manager faces a diffuse, heterogeneous, and frequently anonymous user population (Pomerantz & Marchionini, 2007; Koehler, 2004).

Lacking consequential interaction with recognizable patrons, the digital library's value becomes less clear and its collection manager may struggle to satisfy her service obligations. Donovan (2012) argues that a "library exists in its fullest, most complete sense when it is tied to the histories, opinions, and expectations of an identifiable community" (p. 102). He continues: "As [its] community becomes more diffuse and abstract, the final, reifying achievement of the library becomes more uncertain" (p. 102).

Unhindered by the spatial constraints that delimit print material collection and relatively estranged from its user population, the academic library's digital collection appears at risk of both resource sprawl and scope ambiguity. It remains possible, however, that some other phenomena structure its management.

Institutional isomorphism

In their seminal work, "The Iron Cage Revisited," sociologists Paul DiMaggio and Walter Powell (1983) ask why organizations operating in the same field tend to behave similarly. The authors argue that this apparent convergence is the outcome of institutional isomorphism. Derived from the Greek words *isos*—"equal"—and *morphē*—"form"—*isomorphism* describes a "constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions" (DiMaggio and Powell, p. 149). Unlike competitive isomorphism, in which "market competition, niche change, and fitness measures" drive homogeneity in organizational fields, the authors argue that institutional isomorphism follows from organizations' desire for legitimacy.

DiMaggio and Powell specify a reliable historical sequence through which institutional isomorphism unfolds. Organizations attempt to negotiate new environmental uncertainties; apparently successful attempts crystalize as dominant models; these dominant models come to exert within the organizational field normative force; in time, both new entrants and established organizations recognize the performance of these models as a moral imperative. Importantly, the authors argue that a dominant model may or may not prove expedient for particular organizations, but its enactment almost always confers social benefits: "As an

innovation spreads, a threshold is reached beyond which adoption provides legitimacy rather than improves performance" (p. 148). The net effect of these intra-field pressures is "an inexorable push towards homogeneity" (p. 147).

Among the environmental conditions that precipitate institutional isomorphism, DiMaggio and Powell identify two that are particularly significant to this study: (1) organizational task uncertainty and (2) organizational professionalization.

(1) "The greater the extent to which technologies are uncertain or goals are ambiguous within a field, the greater the rate of isomorphic change" (p. 156).

Forced to navigate new technologies and unfamiliar contexts, and following brief periods of idiosyncratic experimentation, DiMaggio and Powell argue that organizational practice will crystallize rapidly around apparently successful models. "When organizational technologies are poorly understood (and) when goals are ambiguous" the authors argue, "organizations may model themselves on other organizations" (p. 151).

The preceding sections of this work argue that digital collection management represents highly uncertain practice. In contrast to print collection management, electronic resource selection criteria are ambiguous, digital library patrons may be remote and anonymous, and networked infrastructures obscure distinctions between local and global collections.

(2) "The greater the extent of professionalization in a field, the greater the amount of institutional isomorphic change" (p. 156).

DiMaggio and Powell suggest that organizational fields demonstrating a high degree of professional standardization (e.g. credentialing, training, prevalence of professional and trade associations, etc.) will exhibit greater institutional isomorphism. Given their many organs of information dissemination (e.g. newsletters, conferences, etc.) and means of practical conformity (e.g. graduate programs, continuing education obligations, etc.), the authors insist that highly professionalized fields are both materially equipped and ideally predisposed to standardize practice.

Even prior to the Digital Turn, academic librarianship demonstrated a high degree of professionalization. The contemporary academic librarian may join national professional associations like the American Library Association (ALA), the Association of Research Libraries (ARL), national associations' various divisions (e.g. Association of College and Research Libraries [ACRL]), as well as their respective state and regional chapters. She also may attend these associations' regular professional conferences, online courses, webcasts, and continuing education seminars (ACRL, 2022; ARL, 2022; ALA, 2022). Further, academic library practitioners are expected to complete comprehensive training and demonstrate technical mastery through a self-regulated credentialing system. At present, the ALA empowers over 60 institutions of higher education in North America to award master's degrees in library and information studies (ALA, 2022).

Demanding the negotiation of uncertain tasks in a highly professionalized organizational field, digital collection management appears to satisfy DiMaggio and Powell's theoretical preconditions for rapid and substantial isomorphic change.

Research design and data

Absent the sort of social forces that DiMaggio and Powell describe, academic libraries' digital collection management policies should demonstrate wide variation. If digital collections are unconstrained by the spatial and relational affordances that structured traditional print collections, then they are likely to reflect heterogeneous institutional interests (e.g. economic, geographic, etc.), distinct organizational aspirations, and their managers' biases and idiosyncrasies. Evidence of substantive and rhetorical uniformity therefore may lend support

to the presence of social processes like institutional isomorphism. This finding would help explain how digital collection development unfolds under radically uncertain conditions and would draw attention to a variable thus far neglected in the economic resource and digital library collections literature.

Scholars argue that content analysis can reveal the sort of intertextual regularities that this study hypothesizes (Altheide, 1996; Berelson, 1952). Specifically, the present work subjects a sample of academic libraries' electronic resource and digital library collection policies to *exploratory/descriptive* content analysis (Krippendorff, 2013). While researchers have conducted content analyses of collection development policies in public libraries (Kelly, 2015), American art museum libraries (Rutherford, 2022), and special collections (Youngman, 2021), none yields a suitable dictionary of keywords or search terms. Coding therefore proceeded inductively, and intertextual interpretation was completed manually without assist from Computer Aided Textual Analysis (CATA).

This study follows the analytic procedure Altheide (1996) prescribes in his seminal work, *Qualitative Media Analysis*. Because it represents an exploratory study, the present work engages several but not all twelve of Altheide's research steps (Chapter 3). Specifically, it "pursues a specific problem to be investigated" (Step 1, p. 23), "becomes familiar with the process and context of the information source" (Step 2, p. 24), and "becomes familiar with several examples of relevant documents" (Step 3, p. 24). The following section describes the sixteen collection policies analyzed.

The present study also follows Altheide through his steps 4, 9, 10, 11 and 12. Step 4 encourages the researcher to "list several items or categories (variables) to guide data collection" (p. 25). Steps 9, 10, and 11 specify, respectively, the performance of data analysis, the identification of "extreme" variation across the selected items including supplemental brief excerpts from the texts, and the comparison of these variations with "typical cases" from the material (pp. 41-42). In step 12, the researcher "integrates the findings with [his or her] interpretation and key concepts" (p. 44). Altheide's steps 5-8, which this work forgoes, concern sampling and data collection procedures beyond the relatively narrow scope of this exploratory study.

It is important to acknowledge here that a longitudinal approach offers certain advantages over this cross-sectional design. Institutional isomorphism is an historical process and an ideal research design would demonstrate organizational homogenization over time. However, reliance on digital collection development policies poses significant challenges for the researcher considering a longitudinal design.

Digital collection policies tend to be born-digital texts and prior iterations more closely resemble elusive internet ephemera than carefully archived institutional records (Corrigan, 2005). Even if the researcher manages to recover earlier versions of collection development policies, she is likely to face small-*N* challenges even more significant than those faced in the present study. Alternative methodological approaches are discussed at greater length in the Limitations and Future Directions section but suffice to say here that researchers who seek longitudinal data may do better to conduct in-depth interviews with longtime digital collection practitioners.

The cross-sectional data utilized in this study nonetheless yield valuable insight. DiMaggio and Powell do not specify a fixed duration over which institutional isomorphism unfolds. They imply that this period will vary across fields according to organizational density, degree of professionalization, relative uncertainty of tasks, and so on. Academic libraries have been collecting digital materials since the early 1990s. It is reasonable to assume that, if present, evidence of institutional isomorphism will by now be evident.

In this light, the circumstantial evidence betrayed by cross-sectional data should carry nearly as much explanatory power as the direct evidence suggested by longitudinal data. Consider, for example, the observer who rises in the morning to find five inches of snow on the

ground. Her claim that it snowed the previous night will be as persuasive as a separate observer's account of remaining awake and bearing direct witness to the snowfall. Similarly, a close examination of contemporary digital collection development policies provides a reasonable means of deducing the historical consequences of isomorphic processes.

Sample

Scholars have demonstrated that the organizational field of academic librarianship assumes a center-periphery structure (Cervone, 2007; Gertzog, 1989). This arrangement implies a dense and authoritative core of organizations and a more dispersed and dependent periphery (Borgatti & Everett, 2000). When organizational fields assume this structure, DiMaggio and Powell (1983) argue, "central organizations serve as both active and passive models; their policies. . .will be copied throughout their field" (p. 153). If institutional isomorphism helps to explain why digital collection managers adopt dominant models—legitimacy, reduction of task uncertainty, expediency, etc.—then the center-periphery structure suggests the direction in which these models radiate through an organizational field.

The center-periphery structure also implies sampling priorities. This study sought digital collection development policies from libraries occupying various network positions within the academic library field—from inner core to outer edge. Given dissimilar network locations and correspondingly dissimilar institutional responsibilities, libraries serving Research 1 institutions should demonstrate different collection strategies than, for example, libraries serving Master's and Baccalaureate colleges. Evidence of homogeneity therefore may suggest the proliferation from central to peripheral organizations of dominant digital collection models.

Additionally, the author selected digital collection policies from libraries that varied according to size of institution served and geographic location. Care also was taken to include collection policies from libraries serving both public and private institutions. In sum, the author selected from the broader population a set of electronic resource and digital library collection development policies from academic libraries that share an organizational field where institutional isomorphism is possible but which differ sufficiently that divergence is otherwise likely.

Given the specificity of the data desired and the relatively limited research resources available for this exploratory study, the author employed *purposeful sampling*. Palinkas *et al.* (2015) reinforce the use of this sampling technique "in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources" (p. 534). The author selected ten electronic resource collection policies and six digital library collection plans drawn from academic libraries. . .

> serving institutions engaged in varying levels of research activity (e.g. Research 1, Research 2, Master's Colleges and Universities, Baccalaureate Colleges, etc.),
>
> serving both public and private institutions,
>
> serving institutions of different sizes, and
>
> located in different geographic regions throughout the United States.

Electronic resource collection development policies

(1) **University of Louisiana at Lafayette** (hereafter "ULL") is a public Research 1 University located in Lafeyette, Louisiana. ULL serves 16,450 students (undergraduate and graduate combined). https://library.louisiana.edu/about-us/policies-procedures/e-resources-serials-management

(2) **University of Maryland** (UMD) is a public Research 1 University located in University Park, Maryland. UMD serves 40,709 students. https://www.lib.umd.edu/collections/policies/electronic-resources

(3) **Duquesne University** (DU) is a private Research 1 University located in Pittsburgh, Pennsylvania. DU serves 8,830 students. https://guides.library.duq.edu/c.php?g=815321&p=5818426

(4) **University of Richmond** (UR) is a private Baccalaureate College located in Richmond, Virginia. UR serves 4,056 students. https://libguides.richmond.edu/c.php?g=154264&p=1012707

(5) **Boston University** (BU) is a private Research 1 University located in Boston, Massachusetts. BU serves 32,718 students. https://www.bu.edu/library/research/collections/collection-development/cderes/

(6) **Colgate University** (Colgate) is a private Baccalaureate College located in Hamilton, New York. Colgate serves 3,054 students. https://cul.colgate.edu/e-resources-collection-development-policy

(7) **Columbia University** (Columbia) is a private Research 1 University located in New York, New York. Columbia serves 30,135 students. https://library.columbia.edu/about/policies/collection-development-policies-strategies.html

(8) **Florida Atlantic University** (FAU) is a public Research 1 University located in Boca Raton, Florida. FAU serves 30,805 students. https://library.fau.edu/policy/collection-development-policy-electronic-resources

(9) **Ithaca College** (IC) is a private Master's 1 College located in Ithaca, New York. IC serves 5,354 students. https://library.ithaca.edu/policies/CDP.pdf

(10) **Valley City State University** (VCSU) is a public Baccalaureate College located in Valley City, North Dakota. VCSU serves 1,676 students. https://libguides.library.vcsu.edu/AMLpolicies/eresources

Digital library collection development policies

(1) **Pepperdine University** (PU) is a private Research 3 (D/PU) University located in Malibu, California. PU serves 9,554 students. https://library.pepperdine.edu/collections/policies/digital-collections-policy.htm

(2) **Georgetown University** (GU) is a private Research 1 University located in Washington, DC. GU serves 19,371 students. https://library.georgetown.edu/digital-project-policy

(3) **University of Wisconsin-Madison** (UWM) is a public Research 1 University located in Madison, Wisconsin. UW serves 44,640 students. https://www.library.wisc.edu/archives/archives/our-collections-2/online-collections/web-and-born-digital-policy-and-procedures/

(4) **Williams College** (WC) is a private Baccalaureate College located in Williamstown, Massachusetts. Williams serves 1,987 students. https://specialcollections.williams.edu/collection-development-policies/digital-collections/

(5) **University of Washington-Seattle** (UWS) is a public Research 1 University located in Seattle, Washington. UWS serves 48,149 students. https://www.lib.

washington.edu/scholpub/scholarly-publishing-services/researchworks/researchworks-collection-policy

(6) **Northern Illinois University** (NIU) is a public Research 1 University located in Dekalb, Illinois. NIU serves 16,769 students. https://digital.lib.niu.edu/policy/collection-development-policy

(All above institutional data drawn from Indiana University's *Carnegie Classification of Institutions of Higher Education*. Figures are current as of Fall 2020 semester.)

Results and findings

Electronic resource collection development policies

Content analysis of the electronic resource collection development policies specified above revealed six overlapping themes/foci: *media*, *audience*, *selection priorities*, *interorganizational considerations*, *technical considerations*, and *quality considerations*. The following sections explore these themes in detail.

Media. Nine of the ten policies surveyed furnish clear definitions of electronic resources. Two policies—VCSU (para. 2) and FAU (para. 2)—provide identical definitions: "resources that require computer access." Most others offer similar, if more specific, definitions. IC's description of "digital resources accessed by means of hardware and software connections to a communications network" (para. 1) is typical, as are the examples IC offers: "bibliographic databases…full text/image/numeric databases…e-journals…e-books…streaming media…hybrid services…(and) websites" (para. 2). While many policies allude to born-digital materials in physical form, only UMD cites CD-ROMs as a type of electronic resource (para. 3).

Audience. Eight of the ten electronic resource collection development policies specify an intended audience. Five of the policies—Columbia, Colgate, DU, UMD, and ULL—refer to the college or university's "community." In general, the public-school policies recognize broader audiences than their private school counterparts. The public ULL, for example, caters to the "University's academic community, the region, and the state" (para. 2). Another public school, VCSU, serves "authorized users—faculty, students, staff, and walk-in users" (para. 20). IC and DU draw specific attention to the demands of distance education with the latter reaffirming its commitment to the "entire university community—regardless of school or department—including distance students and those accessing electronic resources remotely" (para. 3).

Selection priorities. UMD neatly summarizes the tightly coupled challenges of electronic resource selection and collection demarcation: "With the rapidly growing body of electronic information, what is universally available must be considered in relation to what should be available on the University of Maryland campus" (para. 1). Five of the ten policies reviewed—VCSU, FAU, Columbia, BU, and UR—explicitly limit collected electronic resources to those that support their parent institution's instructional and research needs. ULL further specifies hierarchical selection criteria: "(1) college curriculum; (2) faculty research interests; (3) general university goals; (4) use of library materials; (5) content value of library materials" (para. 3). Some schools—BU and Colgate—specify a utilitarian approach to collection development. The latter policy privileges materials that "offer economies of scale by benefiting the most faculty and students" (para. 6).

Interorganizational considerations. Eight of the ten policies surveyed—VCSU, FAU, Columbia, Colgate, BU, UR, DU, and UMD—identify interorganizational conditions that may affect electronic resource collection development. Without exception, these schools participate in university and college consortia that diffuse acquisition expenses and share resources. Seeking to avoid duplication, for example, UR's electronic resource policy asks the

purchasing librarian if the potential resource is "currently (available) through VIVA (Virtual Library of Virginia consortium) or Lyrasis or does it offer content similar to a current VIVA or Lyrasis resource" (para. 10). Other policies note interlibrary loan as a consequential variable in material selection. Colgate, for example, asks selectors to consider if "there are restrictions on the use of the (resource) for interlibrary lending" (para. 14).

Technical considerations. All ten electronic resource collection development policies identify technical issues that selectors should consider when acquiring new materials. Among other positive affordances, the policies demand that materials are accessible by IP recognition, allow for cross-platform compatibility (e.g. Mac, Windows, Linux, etc.), are compatible with extant course management software and open URL link resolvers, allow intuitive use and provide users technical assistance where appropriate, furnish automatic update protocols, and permit off-campus access. The policies also note several negative affordances: the materials should not include restrictive rights and permissions, demand additional hardware or software purchases, require additional staff training, or necessitate onerous and/or ongoing maintenance. Other policies like Columbia's emphasize accessibility: "As our investment in electronic resources grows over time, it is incumbent on the libraries to ensure that the information and communication technologies it acquires with Columbia resources are accessible to and useable by individuals with disabilities" (para. 5).

Quality considerations. Given its focus on the electronic resource's collectively constructed and sustained value, it is fair to reframe this final theme—*quality* considerations—as *cultural* considerations. Six of the collection development policies—VCSU, FAU, Columbia, Colgate, BU, UR, and UMD—address the "reliability," "credibility," "authority," "accuracy," "reputation," and/or "status" of the electronic resource or vendor. Colgate encourages collection managers to consider the "reputation of the publisher, producer, or host" (para. 13). UR emphasizes the accuracy of the resource's information: "Does the resource identify its sources for factual information?" (para. 6) Not only does FAU demand that selectors pay "special attention to the credibility, institutional affiliation, authority, status, and reputation" of the resource, but further precludes consideration of "websites that advertise a service or product" (para 6).

Digital library collection development policies

In general, the digital library collection development policies demonstrate greater substantive variation than the electronic resource policies reviewed above. Based on a broader review of the literature than included here, this distinction does not appear unique to this sample. Rather, it seems indicative of the wide variety of functions to which institutions of higher learning assign their digital libraries: they may or may not represent ancillary digital platforms of the schools' Special Collections and Archives departments; they may or may not include the schools' institutional repositories (IR); they may or may not engage in web archiving; and they may or may not be responsible for resource digitization activities. In the relatively small sample surveyed here, for example, UWS's digital collection development plan largely concerns policies related to the university's institutional repository while Georgetown's plan omits IR considerations altogether.

Despite such variation, content analysis of the following six digital library policies reveals multiple points of convergence. These digital libraries tend to provide access to audiences beyond the immediate university community, privilege local and unique materials, and embrace interorganizational collaboration and collection co-development. In all, five common themes/foci emerged: *media*, *audience*, *selection priorities*, *interorganizational considerations*, and *technical considerations*. The following sections explore these themes at depth.

Media. All six policies reviewed—NIU, UWS, WC, UWM, GU, and PU—identify media and resources appropriate to their respective digital library collection. Three policies—NIU,

WC, PU—encourage the collection of "rare" and/or "unique" materials. Among the policies surveyed, GU's provides the most comprehensive list of media types to be collected: "text and manuscript documents, photographs, fine art, illustrations, sound recordings, video recordings 3-D objects, and other types of materials" (para. 3).

Audience. Against the electronic resource collection policies reviewed above, which tend to specify intra-university audiences, many of the digital library collection policies are outward directed. Of the five policies—NIU, UWS, WC, GU, and PU—that define an intended audience, all refer to users located beyond the immediate university community. NIU seeks to serve the "general public, including genealogists" (para. 4), WC attempts to make content "accessible to a wide audience" (para. 3), and PU furnishes materials for "outside researchers" (para. 9). Meanwhile, both UWS (para. 9) and GU (para. 1) presuppose "worldwide" use of their collections. GU's digital library collection development policy neatly summarizes this expansive focus: "The Georgetown University Library selects, creates, and manages collections, including digital collections, for the benefit of the Georgetown community as well as scholars, researchers, and others worldwide" (para. 1).

Selection priorities. Five of the six digital library collection development policies—NIU, WC, UWM, GU, and PU—formalize selection priorities. Most of these policies emphasize the collection of materials illustrative of the collecting institution's history and location. NIU, for example, prioritizes the collection of objects "related to the history of NIU" (para. 5) and "related to the history of DeKalb County, the other seventeen northern counties of Illinois, and Cook County" (para. 6). WC similarly encourages the collection of materials that "illuminate the history of the College" (para. 5). GU prioritizes objects "not well-documented by other collections within or beyond the Library," and particularly those that "have institutional, local, (or) regional. . .significance" (para. 7). Separately, NIU, WC, and GU's policies echo electronic resource collection development policies by privileging "materials that support the teaching and research mission of the University" (NIU, para. 1). "Designated an official state repository for records" (para. 1), UWM appears to have less autonomy than the other institutions surveyed regarding materials selection and therefore may be considered an outlier.

Interorganizational considerations. Many of the electronic resource and digital library policies surveyed appreciate the interconnectedness of digital collections. The former tend to encourage the collection of materials that, on the one hand, allow for interlibrary loan activities and, on the other, avoid intra-consortium duplication. Digital library collection development policies also attend to interorganizational relations, if within a far broader network. The above section regarding digital libraries' *Audience* demonstrates their global aspirations. But given the inherently limited focus of digital library collections highlighted above in *Selection Priorities*, broad exposure may prove elusive. As a possible means of transcending this paradox, the three policies—NIU, WC, and GU—that address interorganizational relations encourage both interinstitutional collaboration and joint-promotion. GU, for example, affirms the "potential for collaborative digital collection building or other collaborative relationships with other institutions" (para. 9). NIU similarly promotes "collaborative partnerships with other institutions" (para. 1).

Technical considerations. All six of the digital library policies reviewed—NIU, UWS, WC, UWM, GU, and PU—address technical issues significant to collection management. Because these libraries seek to furnish material for a broad audience beyond the immediate university community, they uniformly address copyright and privacy concerns. GU neatly summarizes the digital library's legal and moral obligations:

> The Library has a strong preference to make its digital collections freely available to a worldwide audience for research and educational purposes. The following questions provide a structure for evaluating a collection from a rights and privacy perspective:

Copyright:

(1) Are the materials clearly in the public domain?

(2) Does the library have permission to digitize the materials?

(3) Are there other options that would allow digitizing the materials and making them freely available?

Privacy:

(1) Does the collection contain materials with personal information or other content which, if made public, would violate privacy laws or University policy?

(2) Is there any reason why it would be unwise to make the collection, or certain materials within the collection, public? (paras. 16-17).

Aside from copyright and privacy concerns, but still germane to the potential reach of its digital library holdings, WC ensures collection fidelity and supports system interoperability by observing "A Framework of Guidance for Building Good Digital Collections (NISO) and the Federal Agencies Digitization Initiative Still Image Working Group's Technical Guidelines for Digitizing Cultural Heritage Materials (FADGI)" (para. 8). Also critical for broad usership, NIU prioritizes accessibility by employing "web design that complies with section 508 of the Americans with Disabilities Act, and internal standards set by NIU" (para. 20).

Discussion

Conducted four decades following the Digital Turn, this cross-sectional study is well positioned to capture the homogenizing effects of institutional isomorphism. To determine the presence of these effects, the author performed content analysis on a sample of current electronic resource and digital library collection development policies. In general, the data reveal striking uniformities—substantive and rhetorical—and suggest the influence of isomorphic processes.

The ten electronic resource and six digital library collection management policies demonstrate widespread substantive overlap (see Table 1). Fifteen of the 16 policies specify *media* appropriate for collection, and the same number articulate resource *selection priorities*. All electronic resource and digital library collection policies draw attention to *technical considerations*, and most highlight *interorganizational considerations* and address their collections' intended *audiences*.

Both the electronic resource and digital library collection policies attempt to mitigate the risks of resource sprawl by specifying materials appropriate for collection and distinguishing their schools' holdings from proximal information resources. These efforts surface most clearly in sections that address media, selection priorities, and quality considerations. UMD's position regarding the collection of electronic resources is illustrative: "With the rapidly growing body of electronic resources, what is universally available must be considered in relation to what should be available on the University of Maryland campus" (para. 1). Digital library policies echo this position, favoring "unique materials" (NIU, para. 1) that are "not well-documented by other collections. . .beyond the Library" (GU, para. 7).

The collection development policies also attempt to reduce scope ambiguity by addressing the tightly coupled questions of intended audience and substantive scope. Predictably, electronic resource policies tend to promote collections that "meet current academic and research needs" (FAU, para. 4) while digital library policies are more likely to encourage the development of collections that appeal to the "general public" (NIU, para. 4) and "outside

		Media	Audience	Selection priorities	Interorganizational considerations	Technical considerations	Quality Considerations
Electronic Resources	VCSU	•	•	•	•	•	•
	IC	•	•	•		•	•
	FAU	•		•	•	•	•
	Columbia		•	•	•	•	•
	Colgate	•	•	•	•	•	•
	BU	•	•	•	•	•	•
	UR	•		•	•	•	•
	DU	•	•	•	•	•	
	UMD	•	•	•	•	•	•
	ULL	•	•	•		•	
Digital Library	NIU	•	•	•	•	•	
	UWS	•	•			•	
	WC	•	•	•	•	•	
	UWM	•		•		•	
	GU	•	•	•	•	•	
	PU	•	•	•		•	

Source(s): Table by authors

Table 1.
Substantive areas addressed in electronic resources and digital library collection development policies

researchers" (PU, para. 9). But *within* each type of policy—electronic resource and digital library—the data reveal homogenous stances regarding audience and selection priorities.

In addition to substantive overlap, the data demonstrate significant rhetorical uniformity. The electronic resource collection policies employ comparable language to specify media appropriate for collection, an intended audience, and technical and quality considerations for collection managers. VCSU and FAU, for example, similarly define electronic resources as materials "that require computer access" (both, para. 2). Additionally, five electronic resource collection policies—Columbia, Colgate, DU, UMD, and ULL—furnish nearly verbatim descriptions of the audience served. The digital library collection policies demonstrate similar degrees of rhetorical convergence, particularly throughout the sections concerning audience, selection priorities, and interorganizational considerations. For example, all five of the digital library policies—GU, NIU, PU, UWS, and WC—that specify an intended audience emphasize in strikingly similar terms the importance of courting external users.

Despite variations in the size, location, public/private status, and research priorities of the institutions they serve, the academic libraries considered here furnish remarkably homogenous digital collection policies. In fact, notwithstanding relatively insignificant substantive and rhetorical variation, this study seems to betray a hegemonic digital collection model. It is doubtful that this model yields comparable practical benefits for all academic libraries that employ it. Isomorphic processes, DiMaggio and Powell remind, "can be expected to proceed in the absence of evidence that they increase. . .efficiency" (p. 153). The authors continue: "The very fact that [dominant models] are normatively sanctioned increases the likelihood of their adoption" (p. 148). It should be acknowledged, however, that the dominant model of digital collection management effectively restrains resource sprawl and reduces scope ambiguity.

As this study presupposed, digital collection managers do appear less constrained than their print counterparts by physical limitations and local service obligations. The data suggest, however, that digital collections are subject to an unanticipated set of environmental constraints.

While managers may weigh consortia and interlibrary loan arrangements when developing print collections, the nature of digital materials seems to amplify these considerations. Unlike the traditional print collection, which tends to be bound in space and incurs transaction costs only when circulated amongst an organizational network (e.g. retrieving, transporting, etc.), the digital collection exists principally in a networked environment and incurs transaction costs when materialized (e.g. printing, binding, etc.). Digital collection management therefore appears more favorable than print collection management to collaboration, and interorganizational considerations may assume greater significance in the former than in the latter. The data seem to support this likelihood, indicating that interorganizational relationships—library consortia, co-development partnerships, interlibrary loan arrangements, etc.— represent for the digital collection manager significant environmental constraints.

Like interorganizational considerations, the data suggest that technical considerations represent a constraint that assumes greater significance in digital than in print collection management. Relative to the traditional print collection, which presents for the manager few format variables and a standardized set of accessibility affordances (e.g. large print, braille, audio books, etc.), digital collections introduce concerns of interoperability and compatibility, and a far wider range of accessibility obstacles and solutions. Moreover, because digital materials are more easily retrieved, shared, and manipulated than print materials, rights and permissions tend to assume greater import. All collection policies reviewed for this study—electronic resource and digital library— address these and other technical issues. No less than the interorganizational considerations discussed above, data suggest that technical considerations constrain digital collection activities.

Limitations and future directions

As an exploratory study, this work was limited in two important ways. First, the present work engaged with academic libraries' digital collection management policies as proxies for their street-level collection activities. It is possible, however, that institutional isomorphism affects academic libraries' *de jure* collection management policies but not (or at least more than) their *de facto* collection management practices. Resource limitations precluded direct observation of digital collection practices. To advance knowledge in this area, future studies should investigate the relationship between digital collection management policy and practice and, assuming significant divergence, retest this study's hypotheses on the latter.

Second, this work utilized cross-sectional data. Given the limited resources available to the author and the humble aims of this exploratory study, these data proved sufficient. Institutional isomorphism, however, is an historical process. Longitudinal data is better suited than cross-sectional data to demonstrate inductively the phenomena that this work deduces. Surveys distributed to or in-depth interviews with longtime digital collection managers may yield illustrative longitudinal data. In any case, longitudinal studies would contribute significantly to our understanding of the social structures of digital collection management.

The insight that isomorphic processes structure digital collection management suggests other, more direct, implications for future research. The adoption of dominant collection management models confers both practical and social benefits. But the dominance of these models also "constrains [organizations'] ability to change further in later years" (DiMaggio and Powell, p. 148). Future research in this area may explore the potential for consequential lag between shifts in the digital landscape and corresponding changes in collection policy.

DiMaggio and Powell also warn that when adopted *en masse*, otherwise expedient organizational practices may prove adverse to the organization's goals. "Strategies that are rational for individual organizations," the authors explain, "may not be rational if adopted by large numbers" (p. 148). In addition to the unanticipated constraints reviewed in the previous section, organizational homogeneity itself may come to represent an environmental variable to which individual organizations must adapt. This possibility further complicates digital collection management and represents another dimension ripe for investigation.

Conclusions

Print collection management unfolds dialectically between the library's physical limitations and the evolving needs of its local users. This dynamic tends to yield expedient collections. Given its engagement with immaterial objects and a diffused user population, however, the digital collection appears less constrained by physical space and local interests. While this suggests digital collection managers may enjoy more freedoms than their print counterparts, it also increases the risks of resource sprawl and scope ambiguity.

Drawing on DiMaggio and Powell's (1983) concept of institutional isomorphism, this exploratory study considered the possibility that normative intra-field logics help to mitigate these risks by structuring digital collection management. Institutional isomorphism suggests that rational actors who operate in highly professionalized fields and who face uncertain tasks will adopt from proximal organizations apparently successful models. Over time, the adoption of these dominant models affords social legitimacy, regardless of practical benefit. This process culminates in organizational homogeneity.

Unburdened by the constraints to which print collection management is subject, digital collection management is more likely to reflect idiosyncratic institutional interests. Formalized digital collection policies therefore should demonstrate wide variation. By contrast, evidence of uniformity may suggest latent isomorphic processes.

This study analyzed ten electronic resource and six digital library collection development policies. To reinforce the likelihood of substantive and rhetorical variation, the author selected policies from academic libraries serving both public and private colleges of different sizes, locations, and research activities. Following Altheide's (1996) content analysis specifications, the collection development policies were coded inductively and then examined for evidence of homogeneity.

A set of shared themes emerged across the sixteen collection development policies. The electronic resource and digital library policies similarly addressed *media*, *audience*, *selection priorities*, *interorganizational considerations*, *technical considerations*, and, unique to the electronic resource policies, *quality considerations*. In addition to substantive overlap, the study also revealed notable rhetorical convergence; the policies not only addressed many of the same things, but often addressed them in similar ways. These data betray a dominant model of digital collection management and indicate the presence of normative interorganizational pressures. While its modest sample size precludes broad generalization, this study suggests that latent social structures help to reduce the uncertainties inherent to digital collection management.

Elsewhere, data indicate that digital collection management may not be as free from environmental constraints as this study presupposed. While they are unlikely to face their print counterparts' spatial restrictions and local responsibilities, digital collection managers appear doubly constrained by interorganizational relationships and technical requirements. These unanticipated constraints may account for some portion of the demonstrated substantive convergence but likely fail to explain rhetorical coincidence. To better understand the dynamics of digital collection management, future research should attempt to isolate the independent effects of these environmental constraints and determine if and how they interact with the social forces to which this work draws attention.

References

Altheide, D. L. (1996). *Qualitative media analysis*. Thousand Oaks, CA: Sage.

American Library Association (2022). Conferences & events. Available from: https://www.ala.org/conferencesevents (accessed 9 September 2022).

American Library Association (2022). Directory of institutions offering ALA-accredited master's programs in library and information studies. Available from: http://www.ala.org/accreditedprograms/directory (accessed 9 September 2022).

Arms, W. Y. (2012). The 1990s: The formative years of digital libraries. *Library Hi Tech*, *30*(4), 579–591. doi: 10.1108/07378831211285068.

Arms, W. Y., Hillmann, D., Lagoze, C., Krafft, D., Marisa, R., Saylor, J., … Van de Sompel, H. (2002). A spectrum of interoperability: The site for science prototype for the NSDL. *D-Lib Magazine*, *8*(1). Available from: https://www.dlib.org/dlib/january02/arms/01arms.html

Association of College & Research Libraries (2022). Conferences and online learning. Available from: https://www.ala.org/acrl/conferences (accessed 8 September 2022).

Association of Research Libraries (2022). Upcoming events. Available from: https://www.arl.org/event (accessed 8 September 2022).

Bekaert, J., De Kooning, E., & Van de Walle, R. (2005). Packaging models for the storage and distribution of complex digital objects in archival information systems: A review of MPEG-21 DID principles. *Multimedia Systems*, *10*(4), 286–301. doi: 10.1007/s00530-005-0163-x.

Berelson, B. (1952). *Content analysis in communication research*. Glencoe, IL: Free Press.

Bishop, A. P., Van House, N. A., & Buttenfield, B. P. (Eds) (2003). *Digital library use: social policy in design and evaluation*. Cambridge, MA: MIT Press.

Borgatti, S. P., & Everett, M. G. (2000). Models of core/periphery structures. *Social Networks*, *21*(4), 375–395. doi: 10.1016/S0378-8733(99)00019-2.

Branin, J. J. (1998). Shifting boundaries: Managing research library collections at the beginning of the twenty-first century. *Collection Management*, *23*(4), 1–17. doi: 10.1300/J105v23n04_01.

Branin, J. J., Groen, F., & Thorin, S. (2000). The changing nature of collection management in research libraries. *Library Resources & Technical Services*, *44*(1), 23–32. doi: 10.5860/lrts.44n1.23.

Campbell, J. D. (2003). Access in a networked world: Scholars portal in context. *Library Trends*, *52*(2), 247–255.

Casserly, M. (2002), Developing a concept of collection for the digital age. *Portal: Libraries and the Academy*, *2*(4), 577–587. doi: 10.1353/pla.2002.0073.

Cervone, H. F. (2007). The effect of professional advice networks on receptivity to innovation in academic librarians. (Publication No. 3267755) [Doctoral Dissertation, Northcentral University], ProQuest Dissertation Publishing.

Corrigan, A. (2005). The collection policy reborn: A practical application of web-based documentation. *Collection Building*, *24*(2), 65–69. doi: 10.1108/01604950510592689.

Dempsey, L., Malpas, C. and Lavoie, B. (2014), "Collection directions: The evolution of library collections and collecting", *Portal: Libraries and the Academy*, *14*(3), 393–423. doi: 10.1353/pla.2014.0013.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2), 147–160. Available from: https://www.jstor.org/stable/2095101

Donovan, J. M. (2012). A library is not the books: An ethical obstacle to the digital library. *Journal of Information, Communication and Ethics in Society*, *10*(2), 93–106. doi: 10.1108/14779961211227001.

Dorner, D. G. (2004). The impact of digital information resources on the roles of collection managers in research libraries. *Library Collections, Acquisitions, and Technical Services*, *28*(3), 249–274. doi: 10.1016/j.lcats.2004.05.002.

Gertzog, A. (1989). An investigation into the relationship between the structure of leadership and the social structure of the library profession. (Publication No. 8928596) [Doctoral Dissertation, Rutgers The State University of New Jersey], ProQuest Dissertation Publishing.

Jacoby, J., & Laskowski, M. S. (2004). Measurement and analysis of electronic reserve usage: Toward a new path in online library service assessment. *Portal: Libraries and the Academy*, *4*(2), 219–232. doi: 10.1353/pla.2004.0028.

Kelly, M. (2015). Collection development policies in public libraries in Australia: A qualitative content analysis. *Public Library Quarterly*, *34*(1), 44–62. doi: 10.1080/01616846.2015.1000783.

Kent, A., & Lancour, H. (Eds) (1971). *Encyclopedia of Library and Information Science* (Vol. 5). New York, NY: Marcel Dekker.

Kiszl, P., & Fodor, J. (2021). Remaining futureproof: Lasting librarian roles in managing digital collections. *The Reference Librarian*, *62*(1), 165–192. doi: 10.1080/02763877.2021.1979164.

Koehler, W. (2004). Digital libraries, digital containers, 'library patrons', and visions for the future. *The Electronic Library*, *22*(5), 401–407. doi: 10.1108/02640470410561910.

Krippendorff, K. (2013). *Content analysis: An introduction to its methodology* (3rd ed.). Los Angeles, CA: Sage.

Lee, H. (2000). What is a collection?. *Journal of the American Society for Information Science*, *51*(12), 1106–1113. doi: 10.1002/1097-4571(2000)9999:99993.0.CO;2-T.

Miller, R. H. (2000). Electronic resources and academic libraries, 1980-2000: A historical perspective. *Library Trends*, *48*(4), 645–670.

Nelson, M. L. (2001). Buckets: A new digital library technology for preserving NASA research. *Journal of Government Information*, *28*(4), 369–394. doi: 10.1016/S1352-0237(01)00322-7.

Palinka, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services*, *42*(5), 533–544. doi:10.1007/s10488-013-0528-y.

Phillips, M. E., Andrews, P., & Krahmer, A. (2019). Understanding connections: Examining digital library and institutional repository use overlap. *Publications, MDPI*, *7*(2), 1–10. doi: 10.3390/publications7020042.

Pitman, R. (1995). Welcome to Jurassic library. *American Libraries*, *26*(4), 352–354, available from: https://www.jstor.org/stable/25633569

Pomerantz, J., & Marchionini, G. (2007). The digital library as place. *Journal of Documentation*, *63*(4), 505–533. doi: 10.1108/00220410710758995.

Rapp, D. N., Taylor, H. A., & Crane, G. R. (2003). The impact of digital libraries on cognitive processes: Psychological issues of hypermedia. *Computers in Human Behavior*, *19*(5), 609–628. doi: 10.1016/S0747-5632(02)00085-7.

Rutherford, E. M. (2022). A content analysis of collection development policies in American art museum libraries. *Art Documentation*, *41*(1), 97–119. doi: 10.1086/719379.

Wallace, K. (2004). Digital libraries, digital containers, "library patrons," and visions for the future. *Electronic Library*, *22*(5), 401–407. doi: 10.1108/02640470410561910.

Witten, I. H., Bainbridge, D., & Nichols, D. M. (2009). *How to build a digital library*. Amsterdam: Morgan Kaufmann.

Youngman, A. (2021). A content analysis of public library and academic library special collections collection development policies. working paper, UNC Digital Repository, University of North Carolina, 16 September. doi: 10.17615/vnhm-mt24.

Further reading

Boston University Libraries (n.d). Electronic resources. Available from: https://www.bu.edu/library/research/collections/collection-development/cderes/ (accessed 22 September 2022).

Colgate University Libraries (n.d.). Collection development policy for e-resources. Available from: https://cul.colgate.edu/e-resources-collection-development-policy (accessed 22 September 2022).

Columbia University Libraries (2019). Collection development policies & strategies Columbia University Available from: https://library.columbia.edu/about/policies/collection-development-policies-strategies.html (accessed 24 September 2022).

Duquesne University (2021). Collection development policies. Available from: https://guides.library.duq.edu/c.php?g=815321&p=5818426 (accessed 24 September 2022).

Florida Atlantic University Libraries (2018). Collection development policy: Electronic resources. Available from: https://library.fau.edu/policy/collection-development-policy-electronic-resources (accessed 24 September 2022).

Georgetown University Library (n.d.). Digital collections development policy. Available from: https://library.georgetown.edu/digital-project-policy (accessed 22 September 2022).

Indiana University School of Education (2021). The Carnegie classification of institutions of higher education. Available from: https://carnegieclassifications.iu.edu/index.php (accessed 20 May 2023).

Ithaca College Library (2021). Collection development policy. Available from: https://library.ithaca.edu/policies/CDP.pdf (accessed 24 September 2022).

Northern Illinois University Digital Library (n.d.). NIUDL collection development policy. Available from: https://digital.lib.niu.edu/policy/collection-development-policy (accessed 24 September 2022).

Pepperdine Libraries (n.d.). Digital collections. Available from: https://library.pepperdine.edu/collections/policies/digital-collections-policy.htm (accessed 22 September 2022).

University of Louisiana at Lafayette, University Libraries (2019). E-resources & serials collection development policy. Available from: https://library.louisiana.edu/about-us/policies-procedures/e-resources-serials-management (accessed 22 September 2022).

University of Maryland Libraries (2018). Collection development policy statement: Electronic resources. Available from: https://www.lib.umd.edu/collections/policies/electronic-resources (accessed 24 September 2022).

University of Richmond Libraries (2022). Collection development policy: Electronic resources selection. Available from: https://libguides.richmond.edu/c.php?g=154264&p=1012703 (accessed 22 September 2022).

University of Washington, University Libraries (n.d.). ResearchWorks collection policy. Available from: https://lib.washington.edu/scholpub/scholarly-publishing-services/researchworks/researchworks-collection-policy (accessed 24 September 2022).

University of Wisconsin-Madison Libraries (n.d.). Web and born digital collections policy and procedures. Available from: https://www.library.wisc.edu/archives/archives/our-collections-2/online-collections/web-and-born-digital-policy-and-procedures/ (accessed 24 September 2022).

Valley City State University (2021). Allen memorial library policies and procedures manual: Electronic resources collection development. Available from: https://libguides.library.vcsu.edu/AMLpolicies/eresources (accessed 24 September 2022).

Williams College (n.d.). Digital collections. Available from: https://specialcollections.williams.edu/collection-development-policies/digital-collections/ (accessed 24 September 2022).

Corresponding author
Paul Rosenstein can be contacted at: paul.eric.rosenstein@gmail.com

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: **permissions@emeraldinsight.com**