

# iSchools, Legitimacy, and the Contribution of Archival Studies to the iSchool Movement

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Abstract: To what degree are iSchools fitting and gaining acceptance into their larger university environments? Their legitimacy rests upon the degree of acceptance within academia. Over time, isomorphic pressures such as coercion and normativity will lead iSchools to more resemble similar units on campus. The iSchools face many challenges, in part to a relative immaturity of research conducted in the field including pretensions of scientific status and a loss of identity through an overly interdisciplinary program of research. The quest for legitimacy will depend on the ability of iSchool participants to articulate what is unique about their field. The subfield of archival studies is examined in light of the possibility of serving, in part, as a body of research originating within iSchools. The area of archival studies is commended for its development of sui generis conceptual apparatus, a commitment to the full cultural record, expanding notions of use, and its own contributions to interdisciplinarity.

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### Introduction

The Schools, Departments and Colleges of Information—the iSchools—are relatively new phenomena in universities. Most iSchools, whether they acknowledge it or not, are the outgrowth of two sources: many started as professional training programs for librarians, and later, archivists; and the embracing of information and communication technologies (ICTs), especially those such as the Web that integrated itself into, and to some extent transformed, social and academic life, with the period of most rapid change occurring in the 1990s. How digital ICTs grew from their academic and military roots and were taken up by the general population is familiar to us, as is their re-entering the academy, especially in the fields of computer science, communication, media studies, business, medicine, law and others. In fact the wide-scale adoption of ICTs—in the academy and in society at-large provided impetus to the creation of the new iSchools that could pull together these interdisciplinary threads and weave them together into something new. iSchools were not interdisciplinary just because every discipline had a shared thread of "information" but also because the eponymous phenomenon under investigation is generally felt to be the interdisciplinary combination of multiple concepts, such as "technology, people and institutions" (iSchools.org, 2015, though similar constructs appear elsewhere, including Bates 1999, 2006, 2010). comprehensive review of the uses of the term "information" reveals the complexity arriving at a unifying definition or even a set of discrete properties (Machlup 1984). In fact, Furner (2004a, 2015) disputes whether the term is even necessary for describing the focus or contribution of iSchools; others like Frohmann (2004) and Day (2001, 2014) have also attempted to decenter the concept, and advocated for investigations and critiques of practices around

One question we can ask is how these two sources combined, or failed to combine. Understanding an iSchool's commitment to these foundational professional education programs is quickly and fairly accurately assessed as whether a school sought and/or continues to seek accreditation of a master's degree program by the American Library Association (ALA). Despite general frustration by iSchool leadership with the accreditation process, accreditation is fairly easy to achieve and its not particularly restrictive regarding the curriculum and instruction of a professional degree program. The most likely limiting factor in achieving ALA accreditation is not cost or effort—many iSchools could qualify by adding a few courses—but simply whether an iSchool wishes to associate itself with the professional training of librarians.

In the case of some iSchools, the library, archival, and auxiliary professional training programs never existed or were subsequently deprecated to such a degree that the programs gave up on ALA accreditation, and the Masters in Library and Information Science (MLIS) degree no longer exists. On the other end of the spectrum are iSchools whose degree programs and instruction are dominated by the MLIS program. In between we have a variety of options on how traditional professional training programs have mixed with the new and aspirational interdisciplinary study of information. Some universities maintain separate programs, albeit with some leveraging of faculty with joint appointments. Most have combined these programs into a single school, but with separate degree programs, though again, leveraged with intermingled course offerings. In some schools and departments, faculty members have intermingled; others keep a fairly strict social and intellectual separation. It is unfortunate for all that in some of these iSchools—some quite distinguished—that faculty members separate themselves physically by maintaining

separate office spaces on different floors. In schools where the camps are exclusive and sometimes antagonistic, one camp can have a larger number of faculty members and thereby thwart the smaller group's efforts to make appointments or make curricular changes. In such instances, it's almost always the group associated with traditional professional degree programs that suffer at the hands of those associated with technology, with larger amounts of extramural funding.

A second question we can ask of iSchools is to what degree are they fitting and gaining acceptance into their larger university environments? Walpole (2000) investigated one iSchool that was formed by the merger of a fairly traditional (yet academically sophisticated) professional training school with a graduate school of education in a large research university. In this case, the resulting iSchool is actually a department within the university. Walpole (p. 426) defined the integration, or lack of integration, of that new department along the axes of *success* and *legitimacy*:

[S]uccess is defined as the ability to secure the resources necessary for continued or expanded operations, and legitimacy means to be accepted and respected within the organizational field. These two concepts of resources and legitimacy are mutually reinforcing, resulting in legitimated organizations securing more resources and in organizations with high resource levels being defined as legitimate.

Furthermore, the conferring of success and legitimacy may originate within the broader organization (i.e. the non-iSchool members of one's university), or externally, such as the field of academics located extramurally within or outside of an iSchool.

# The Quest for Legitimacy

Membership in the iSchool caucus used to be predicated on a certain level of extramural research funding, thereby guaranteeing some measure of success, at least in the initial stages of the formal iSchool movement. If success is the ability to garner resources, and membership requires a certain level of funding, than the iSchools that comprise the movement will already have some measure of success by excluding the unsuccessful. The iSchool caucus has since broadened its membership, and less successful schools have joined the caucus. However, for even the largest and most successful iSchools, located in larger research universities, iSchools remain relatively modest affairs, and their continued success will depend, axiomatically, on their ability to garner resources either from the university, or extramurally through philanthropy or research funding.

The ability of iSchools to maintain success will also rest, less directly, on their ability to be perceived as legitimate. The remainder of this paper focuses solely on the issue of legitimacy of iSchools and disregards other (financial) measures of success. Legitimacy rests upon the degree of acceptance within the organizational field, and depends on measures such as the ability to attract students (though this could also be viewed as a resource), the perceived effectiveness of the degree program (as potentially viewed by employers or administrators), and the quality of the scholarship produced by the students and faculty within the iSchool, amongst other potential indicators of legitimacy. Audiences both external and internal to the larger university setting play a role in determining legitimacy.

### Isomorphism

So, how do schools fit in, particularly by being perceived as legitimate? "[O]ver time, units in a university, facing similar environmental conditions, begin to resemble each other, a process known as *isomorphism*. Specifically, the unit with fewer resources and less acceptance or legitimacy within an environment begins to resemble the unit with more resources and greater acceptance" (Walpole, p. 425):

Isomorphism is a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions... the number of organizations in a population is a function of environmental carrying capacity; and the diversity of organizational forms isomorphic to environmental diversity. (DiMaggio & Powell, 1983, p. 149)

I note that universities are notorious for their capacity to carry a large number of smaller organizations within it, such as schools, colleges, departments, research units, degree programs as well as administrative structures such as those reflected by the number of vice chancellors and other kinds of managers and executives. However, universities do not allow for a large amount of diverse organizational forms. And it is generally a loser's game for a smaller unit—such as an iSchool—to beg for leeway in organizational form and legitimacy, as opposed to a well-heeled unit, such as a business or medical school. At UCLA, the Anderson Graduate School of Management was able, in essence, to rewrite its charter so that it would be removed from state funding, and therefore be relieved of state and some university regulations, allowing it organizational diversity. Amongst other things, Anderson is now able to increase tuition, expand the number of nontraditional degree programs (including executive and potentially

online degree programs), and raise faculty pay. The Geffen School of Medicine, also at UCLA, has a separate faculty compensation plan that allows faculty to receive more pay, even though their work is very similar to the work of their colleagues in the Division of Life Sciences located within the College. These are not options available to smaller units, such as iSchools, absent a substantial and enduring change in something like philanthropic revenue. There is a political dimension to isomorphism: smaller, weaker units change to resemble larger, stronger units, and not vice versa:

We identify three mechanisms through which institutional isomorphic change occurs, each with its own antecedents: 1) *coercive* isomorphism that stems from political influence and the problem of legitimacy; 2) *mimetic* isomorphism resulting from standard responses to uncertainty; and 3) *normative* isomorphism, associated with professionalization. This typology is an analytic one: the types are not always empirically distinct. (DiMaggio & Powell, 1983, p. 150).

Of the three mechanisms, coercive isomorphism is explicitly identified as political and attached to legitimacy, though clearly normative isomorphism—the organizational equivalent of the psychological concept of peer reference group normalization (Hyman 1945; 1960)—plays a role too.

Coercive isomorphism. Coercive isomorphism results from both formal and informal 'pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function. Such pressures may be felt as force, as persuasion, or as invitations to join in collusion. (DiMaggio & Powell, 1983, p. 150).

Normative pressures. A third source of isomorphic organizational change is normative and stems primarily from professionalization.... we interpret professionalization as the collective struggle of members of an occupation to define the conditions and methods of their work. (DiMaggio & Powell, 1983, p. 152).

A general theory of isomorphism says that smaller units, over time, will come to resemble larger units. DiMaggio & Powell provide several hypotheses on how isomorphism leads to organizational homogenization; the reader is referred to their excellent article. A reasonable corollary states that isomorphic pressures will cause iSchools to resemble larger, more established units, whether those are other schools and departments on campus, or potentially iSchools at other universities. Coercive pressures are perhaps best observed in state regulatory mechanisms such as professional training and certification requirements, and also ALA accreditation. On-campus sources of coercive pressure include similar degree regulations (though enforced by academic senates and graduate deans) and the awarding of budgetary and human resources. Also included here is the increasing utilization of campus performance measures such as time to degree, student contact hours, student-teacher ratios, and the amount of extramural research funding generated per faculty member, whether those are used to assess units or individuals. Such data analytics enable books such as Lane (2014), though the essays there focus more on the surveillance of students (not just performance on exams, but also the extent to which they access online resources or academic advisors). The use of performance measures can be used to not only understand but also observe and monitor various units and members of a campus for purposes of coercion. Such data may be used to assess, for example, whether students are making good use of academic resources, but could also lead to a panoptic online university consistent with the benign yet chilling vision of Gelerntner (1992).

Coercive pressures are real and present, and yet faculty members probably respond more to normative expectations. They will model themselves and their programs after perceived successful prototypes. Professors are shaped by their professional cultures, first by their educational programs as undergraduate and graduate students, and by their apprenticeships as research and teaching assistants. A significant part of this acculturation is the internalization of epistemological standards and criteria: not just the knowledge of the field, but also the various ways of knowing such as adherence to scientific methods. After graduation, faculty members are subsequently shaped by their formal and informal professional networks, whether those are colleagues near and far; group projects both disciplinary and interdisciplinary; peer review during hiring, promotion, the refereeing of conference and journal submissions, and simply reading and listening to work produced by one's peers.

Professionalization is a primary source of isomorphic pressure—primarily normative, but coercive pressures are also significant—that pushes an iSchool to behave like similar organizations, both within its university and elsewhere. These pressures spur iSchools in their quest for legitimacy. The theory of isomorphism says why academic units may resemble each other over time, and acknowledges the particular pressures that smaller units face. The theory of isomorphism emphasizes the organizational structure of various units and provides a framework for the various elements that constitute similarity and difference amongst units.

# Assessing iSchools

A theory of isomorphism is not particularly good at identifying the specific strategies that smaller units need to develop to obtain legitimacy. In her study, Walpole (p. 441) found:

Faculty presented themselves [and] constructed their identity in ways that were isomorphic with whatever audience they spoke [and] was contextual in nature. It was important for the LIS faculty to have legitimacy in two distinct and conflicting arenas.... When speaking with school or university administrators and ... faculty, they presented themselves as being like [other units on campus]: they mimicked the important issues of research funding, productivity, relevance, and vitality. Addressing audiences within the LIS field, they carefully explained that the merger had not affected them negatively, that they remained the same highly ranked program they had always been. Furthermore, the LIS faculty carefully addressed the division within the field, attending to the concerns of practitioners and researchers, information scientists and librarians, as the need arose. In other words, they constructed themselves in alignment with the best LIS programs, addressing the prominent issues within the field....

Responding to the pressures of multiple constituencies, the iSchool in Walpole's study tailored their strategies for legitimacy to their particular audience. To professionals in the field of library and information science, graduates and prospective students, the faculty emphasized the quality of the educational programs. Alumni were both evidence of program quality and could also confer legitimacy. To academic insiders, measures of success and legitimacy were important, for example, the ability to attract external research funding. To both, scholarly productivity and quality of research were predominant factors, though demonstrating the relevance of the research might be achieved differently for each audience.

## Research quality

Clearly the iSchool community has chosen the production of academic research as a key way to advance themselves and the field. Boyer, in his highly cited 1990 report, states that there are four types of scholarship: "the scholarship of discovery; the scholarship of integration; the scholarship of application; and the scholarship of teaching" (p. 16). The scholarship of discovery includes original research leading to advancement of knowledge. Boyer's primary examples are research in the sciences, especially physics, chemistry and medicine. The scholarship of integration gives "meaning to isolated facts... making connections across the disciplines..." (p. 18), and is "interdisciplinary, interpretive and integrative" (p. 21). The scholarship of application is about engagement and the application of knowledge. The scholarship of teaching is about effective communication, not limited to the classroom.

Of particular interest is the role of theory in iSchool research. Boyer does not identify theory in his classification, but it likely fits most into the scholarship of integration. The winnowing of basic observations leads to conceptual developments, including models and theories, and is particularly the focus of social scientific research. Concepts and theory are our way of seeing the abstract world, and give significance and meaning to the buzz of everyday social experience. Scholars who develop significant concepts allow us to see the world in new ways by highlighting important features of it; examples include Freud's work on sexuality, Marx's theory of class conflict, Riesman's work on the American social types (1950). In these examples, the scholars had the same access to the phenomena that led to their development of concepts. Freud's initial work was built up on inferences made from dreams and parapraxes, everyday phenomena that we experience almost every day without notice. Such observations are not limited to the social, but occur in the hard sciences as well. Profet (1990) provides an analysis of the function of menstruation as a defense against pathogens, a wholly more satisfying theory than the previous theory that described it the failure of a woman to become pregnant. To speak of the discovery of the phenomena is absurd; the development of concepts, models and theories is a primary contribution of good academic work.

The problem is that the iSchools their field as "information science" or the "information sciences", and the orientation toward empiricism and discovery is obvious. iSchool research in the social scientific mode is oriented toward empiricism, and opposed to interpretive or critical work. As a social science, we have witnessed relatively simplistic behavioral models that often appear in user-based research associated with iSchools (Keilty and Leazer, 2014). "With some commendable exceptions... the so-called cognitive turn has tended instead to be a rather narrowly based cognitive science turn" (Buckland, 2012, p. 3). Of course these are broad characterizations, and excellent work is coming out of Irvine (Nardi's use of activity theory in Nardi, 1995; Kaptelinin & Nardi, 2006; Nardi, 2010), Toronto (Hartel's work on affect in Hartel, 2011), and Finland (for example, Talja's work on context in Talja, Keso, & Pietiläinen, 1999). This list is far from indicative, but one can still ask "where are the theories that originate with iSchools?" Much of the work done in iSchools is conceptually timid, and under-theorized, with an over-reliance on naïve or non-critical social scientific paradigms. Citing Foucault is *de rigueur* in the knowledge organization section of the iSchool community, but such citation is often detrimentally simplistic. Such sources are cited often as authority, not in the spirit of inquiry; if Foucault provides the concepts that generate a research project, then, in the discussion, how did Foucault's concepts fail? How do they need to change to reflect contemporary

concerns? Freud, for all his conceptual development, is rarely nowadays cited as authority—he provides concepts that then get challenged, changed and sometimes discarded. Such work occurs rather infrequently in the iSchools. The grand framers—Nietsche, Marx, Freud—appear relatively infrequently in iSchool research. Post-war scholars of the social appear—Bourdieu, Foucault, Habermas, and Geertz amongst them—but too often are cited as authority, rather than challenged, interrogated, or substantially expanded.

Researchers in iSchools can also feel slow to respond to research fronts and issues under current investigation in other social fields of investigation. Foremost amongst these are issues of race and ethnicity. Honma (2005) wrote "Despite a long legacy of race-based scholarship in many fields of the academy, as well as the ever-diversifying user population in the United States, the field of library and information studies (LIS) has failed to keep up with the on-going discussions and debates about race, and instead functions in a race-blind vacuum while failing to recognize the disfiguring implications such blindness embodies.... Both scholars and students in the field of LIS have echoed these sentiments numerous times, yet a sustained critical discussion surrounding the issue of race within LIS remains disturbingly absent." The new field associated with iSchools has not responded substantively in the decade since Honma wrote his original critique, according to a panel at the 2014 iSchool conference (Sweeney and others, 2014). Similar claims could be made around issues of gender, sexuality, immigration, colonialism and globalization. What can we say in defense of a field that claims, in part, to be an investigation of the social, and yet fails substantially to engage with the current theories and topics in the fields of anthropology, communication or sociology, amongst others?

The quest for legitimacy has led to confusion regarding the scientific status of the field. We will not fault the influx of physicists that entered the field in the 1950s and 60s, with new computational tools and scientific modes of research. That American political science was responding to positivist critiques at that point, such as Crick's 1959 book *The American Science of Politics*, should not have immediately inoculated the small but established field of library and information science. Nor will we criticize too much Goldhor in 1972, when he advocated for a scientific model for the field in his book *An Introduction to Scientific Research in Librarianship*. There Goldhor stated that the field is relatively immature. Science progresses, he claimed, from simple description in the early stage to the eventual discovery of invariant scientific law. Positivist, empirical models were still the aspiration. Even popular books such as Gleick's *The Information* (2011) begin their history with the work of Claude Shannon on information theory.

However, with the embracing of the social, the field has still been slow to give up empiricist and scientific presumptions. The social sciences are so-called for historic reasons, ditto "library science" and "political science." "Information science" is also established historically, but a school of information often calls itself the "School of Information Sciences" less so for historical reasons than for aspirations of being accepted as a field of science, with a concomitant embracing of the technical. Such a name reveals at best an indifference, and at most a contempt for contemporary epistemologies associated with the social sciences. There is a strong empirical tradition within the social sciences, especially around the issues of research design, measurement, observation, sampling and making inferences. Within the iSchools, the field of citation analysis and bibliometrics, for example, also exhibit regular behaviors that may be best observed statistically. But their meaning lies in interpretation. The discovery of invariant social law is an aspiration of past modes of social investigation (see, for example, Giddens 1974, as one of many sources on the topic). Claiming and failing to deliver on scientific promises will eventually harm the iSchools. And our naivety harms us with contemporary social scientists whom, amongst other things, may evaluate iSchool research as part of a personnel or program review process.

A topic that reveals our scientific pretensions and reveals a naked attempt at legitimacy is demonstrated by the advocacy for a program of study on Big Data by the leadership of the iSchool community. This is witnessed in part by the number of keynote addresses selected on this topic at conferences such as the iConference. Big Data certainly has gained purchase in the social sciences, but primarily in a mode that is critical of surveillance and data cultures. This critical mode is weaker within the iSchool community. Much more present are researchers who have pursued the Big Data research paradigm as endorsed by the National Science Foundation, along with claims that we are in the midst of a revolution in the conduct of science. The generative theories and technologies that enable the collection and analysis of big data originate in commerce and schools of engineering, medicine, as well as departments of astronomy and physics; the iSchools are along for the ride. That they primarily concentrate on the issues of Big Data as a technical rather than a social issue again demonstrates a basic confusion in the iSchool community regarding the scientific status of the field.

# Interdisciplinarity and Identity

iSchools have broadly embraced interdisciplinary research as part of their organizational strategy. What theories of isomorphic pressure fail to account for is how iSchools can and must develop their own unique identities and demonstrate value. Theories of organizational isomorphism do not account for how subunits within universities must also be unique. Isomorphic pressures make organizations similar; in academic environments we also need an

organizational theory analogous to concepts of adaptation and ecological specialization, niche construction and fitness landscape that come from the fields of ecology, evolution and biogeography.

The concept of interdisciplinarity itself suggests a few different approaches, and the iSchools themselves are unclear which approach is being adopted. Said of individual research projects, a theory of interdisciplinarity suggests that certain kinds of projects and research programs require the contributions of multiple disciplines. Classic examples include the Apollo moon missions, which required the successful collaboration of chemists, medical doctors, physicists, aeronautical engineers and others. What is important to note is that while the project was interdisciplinary, the contributions were disciplinary.

Perhaps by interdisciplinary we mean the problems of information and the development of information services are interstitial, that is, in a gap not addressed by any of the disciplines. But this cannot be the case because of the presence of the traditional and foundational fields, including, for example, library science and archival studies. The iSchools may at times be accused of ignoring their foundational fields, but to claim to be moving into a previously unoccupied area is too bold of an erasure to be plausible.

Interdisciplinarity could also refer to the variety of methods utilized within the field: critical, empirical, ethnographic, computational, engineering, etc. This could explain the preponderance of panels and workshops on "qualitative vs. quantitative" methods that filled iConferences and similar meetings in the last couple of decades and now seems to be receding. The problem with this view of interdisciplinarity is that every discipline uses a variety of research methods to accomplish its work; and any one method will appear in multiple disciplines.

Perhaps the model of interdisciplinarity that works best here is the first: the iSchool movement is interdisciplinary because of the contribution of many fields, but the nature of this research project is to establish a new discipline, rather than putting a person on the moon. This leads to two observations. First, at least at the beginning, the disciplinary contributions will still be judged according to their originating disciplinary contexts, e.g., the engineers for the Apollo missions still had to be good engineers, and so on. The engineers were also not expected to do great biology work, at least typically. Particularly in the areas of technology and computation, which dominate at some iSchools, programs risk of being viewed as "computer science-lite" and hence, always "second-best" (Buckland, 2015). Similar risks are posed in the other areas of emphasis within iSchools.

Secondly, if we are creating a field, then we need to eventually transcend the "interdisciplinary" label and become a discipline. This may be difficult to achieve for something like "information" that is nearly universally present as a concept in so many fields. Like "cultural studies" and "communication studies", "information studies" may be too widely dispersed through the academy to ever congeal as a discipline, though information studies does have stronger association with various professions and occupations than these two counter-examples.

Too much interdisciplinarity can lead to a loss of identity. Senior members of diverse research teams can be confused about the contributions of iSchool faculty, assigning them professional, rather than research, tasks, including assigning metadata to public datasets, or performing standard evaluations of experimental software. The contributions of iSchool faculty can also be diluted in group work, and even senior iSchool professors can be relegated to a constant role of serving as a "co-PI", and never get to serve as the Principal Investigator.

To date, and with notable exceptions, iSchools have been insufficient in developing the unique, *sui generis*, areas of research that define a discipline. Defining the field around the phenomenon of "information" has failed because the term is so promiscuous and context-dependent that it has been difficult to gain disciplinary leverage around it. Interdisciplinarity has also failed us because it is a sword that cuts both ways; it can be a vehicle by which iSchool researchers can demonstrate their value to diverse groups, but it can also lead a loss of identity. The sales pitch for iSchools is that we exist in the nexus of information, technologies and people, but our field shows disturbing tendencies to be a little behind the times in both areas.

# The Archival Contribution

But all is not lost. First, iSchools are still a relatively new phenomenon; identity, derived from foundational theory, takes time to develop. But even more importantly, and perhaps under-appreciated, are the contributions of the foundational fields that led to the creation of the iSchool movement. Areas such as information retrieval, knowledge organization, information seeking and use, bibliometrics, amongst others, have made significant contributions, and can be sources of excellence. These fields have achievements, and are also not immune to the problems that challenge iSchools generally. One fear is that they are viewed as too traditional, not in keeping with new technological directions, and that criticism can be real. I would like to look at the area of archival studies—as a professional training program and as a research front—as a source of identity and excellence in the iSchool quest for legitimacy.

This is not the first attempt to assess the connection between archival studies and iSchools. Cox and Larsen (2008) give an account of archival studies prior to the iSchool movement; ultimately their discussion is how the iSchool setting will provide opportunities for archival researchers to study digital environments and to develop new professional identities. White and Gilliland (2010) focus more on what archival studies can do for iSchools,

particularly to sensitizing iSchool members to different kinds of cultural work, especially around issues of pluralization, identity and memory. These are important contributions, and raise the question of what are the other contributions of archival studies?

### A Commitment to a Fuller Cultural Record

Researchers in iSchools claim to investigate *information*, and we have a strong history of analysis of the term. Highlights of that work include Briet (1951; 2006) and Buckland (1997). At their best, and at its best, iSchool researchers appreciate the full range of documentary forms, and understand their role in scientific, scholarly and literary cultures. Sometimes, however, we slide into tacit definitions of information; information retrieval has, to a surprising large degree, focused on the retrieval of Web-based documents. Yet this is just a fraction of our cultural production. We forget about the full range of media, published and unpublished, from different cultural contexts. Librarianship and information science both have presumptive models of information types, particularly books in the former, and scholarly or professional resources in the latter. By broadening our understanding of information resources, archival studies gives further definition to the basic phenomena that is the presumptive focus of a field dedicated to information.

Archivists may generally have a better understanding of the diverse types of documents to be found in a fuller range of cultural expression. Archival studies concentrates on records, which, according to the Society for American Archivists (SAA, 2015) definition in their glossary,

1. A written or printed work of a legal or official nature that may be used as evidence or proof; a document.

3. Data or information in a fixed form that is created... in the course of individual or institutional activity and ... preserved as evidence of that activity for future reference.

Even this traditional definition of *record* hearteningly expands our scope to a wider range of phenomena, beyond the online or the commercial realm, to include the various kinds of tracings (Harris, 2012) humans leave behind in the conduct of their lives.

And yet researchers and practitioners in archival studies do not stop there. The concept of *record* is under active investigation, to include expanded definitions created in part to respond to challenges posed by forms of knowledge and cultural practices associated with Australian Indigenous peoples (Faulkhead, 2009; Faulkhead and others, 2010). Yeo (2007) examines the concept of the record from the perspective of *representation* and redefines the record as a "persistent representation of activities." Iacovino (2010), McKemmish and others (2011), and Janke and Iacovino (2012) all investigate the challenges that Indigenous concepts of records pose to other related concepts, such as ownership, property, access, representation, and the relationship and responsibilities of the record collector to the record generator.

Researchers in archival studies have also demonstrated a commitment to the full lifecycle of the archival record, from contexts of creation to preservation and eventual use. Archivists are interested in how activities shape documentary forms, and vice versa, in a way that is compatible with Frohmann's 2004 call to investigate the full range of documentary practices and activities. Archivists have also demonstrated a commitment to understand how records change though their context of creation, collection, appraisal, arrangement and preservation. The concept of provenance is without analog in most other areas of research within iSchools. And similar to the concept of the record, this basic concept is also under investigation. Wurl (2005), for example, extends the concept to include different kinds of ethnic communities, challenging traditional notions of ownership and custody, advocating instead for a concept of stewardship. Iacovino (2004) investigates the juridical aspects of records and record-keeping. In a series of papers that should be of interest to the knowledge organization community, Hurley (2005a, 2005b) connects expanded notions of provenance to how archival records should be represented. Douglas (2010) gives a good analytic overview of provenance, and states "we need to find more and better ways to analyze and explain to users the often long and complicated stories of how the records they see in front of them have come to exist in their current state" (p. 38).

Finally, a willingness to challenge, interrogate, and revise the central concepts of one fields of study suggests an appropriate anti-orthodoxical academic attitude. The production, exploration, expansion, and destruction of concepts is a primary component of inquiry, and suggests an active research front. It stands in contrast to the slavish use of late 20th Century social theorists who may play an important generative role in the conduct of research but are too often cited as authoritative sources.

## **Expanding Notions of Information Use**

Researchers and practitioners in archival studies have been interested in new kinds of use of archival records. This has meant moving beyond the traditional institution settings, such as university special collections and large-scale national and state archives. Archivists have been actively engaged in documenting communities not traditionally served by archives committed to grand national narratives, particularly communities of cultural minorities. Three

examples are the ONE National Gay & Lesbian Archives, the Mayme A. Clayton Library & Museum, and the South Asian American Digital Library. Sometimes these archives partner with traditional special collections, such as the ONE archives partnership with the University of Southern California, for the sustainability and structure that an institutional partner can provide.

Archivists are actively exploring the use of archives in establishing cultural identity. A complaint of cultural minorities is a lack of representation in national, and increasingly globalized, media systems. This is a notion familiar to people who study children's literature, in an attempt to find appropriate representations for children who are seeking themselves in books. However, this is not an issue that affects children only: finding material about one's community, in a language they speak, of, by and about themselves, remains an important concern for nearly every cultural minority. Kellner notes "wherever there is globalization from above—globalization as the imposition of capitalist logic—there can be resistance and struggle. The possibilities of globalization-from-below result from transnational alliances between groups fighting for better wages and working conditions, social and political justice, environmental protection, and more democracy and freedom worldwide" (p. 299). However, before there can be transnational alliance, local groups need to first form and appreciate their own identity. Caswell (2014a) is an excellent discussion of how archivists can be of instrumental to local cultures in the articulation and construction of their identities.

One more recent development in archival use is in the development of archival theories and practice related to the documentation of human rights. Harris' previously cited work (2012) is related to his work as the director of the Nelson Mandela Foundation's Centre of Memory. Caswell's work (2014b) on the uses of Cambodian police and military archives is an additional excellent demonstration in this area.

# Contributions to Interdisciplinarity and to Academic Scholarship

Phrases like the "archival moment" and the "archival turn" indicate a general trend toward archives within the humanities and social sciences. These include investigations of memory practices, representation of invisible cultural groups in the historical record, the role of curatorial voice, human rights, access to documentation, affect, colonialism, and issues related to language and meaning. Derrida's (1996) essay *Archive Fever* is a famous touchstone in this area, solidifying the archival moment (Steedman 2001a, 2001b, 2011), but also a sore point amongst archivists who don't find themselves inscribed in the area delineated by Derrida's characterization of cultural practice.

Despite this problem, there are still many points of contact between archival studies and the broader academic community. The archival topics identified above originate with scholars working primarily in iSchools, or with strong connections to professional archival practice. Some other work connecting to archives includes the topic of affect (Cvetkovich 2003, Steedman's aforementioned work, and Farge 2013). The use of archives in the formulation of identity and the document of small and local cultures can be found in Cvetkovich again on her work on lesbian culture, Muñoz (1996) work on the queer, and the Nobel laureate Pamuk's work (2010, 2012) on resisting grand national narratives. Furner (2004b) has connected archival notions of evidence to the field of social epistemology. Stoler (2009) works in the area of archives, colonialism and language, and this last thread has received attention from Wendy Duff at Toronto's iSchool. In addition to Caswell's work on Cambodia, the intersection on human rights, police record-keeping, and archives has received attention from Weld's (2014) work on Guatemala, and Verdury's (2014) work on Romania. This is the briefest description of connections, and is not a comprehensive list of areas of overlap between archival studies and academia at-large, nor of the scholars working in any particular area. What this list does suggest is that archival studies has made a successful and meaningful contribution to the interdisciplinary aspirations of iSchools and yet remains *sui generis*.

# Conclusion

Establishing the iSchool in the contemporary university remains a work in progress. Isomorphic pressures have pushed iSchools to look and behave like other units on campus, but key to their success will be their ability to articulate their unique contributions to scholarship. One method for accomplishing this is to successfully develop the nexus between information technology and people, and it must be accomplished in such a way that it is not derivative of work done in more established areas of technology, media or social science. Another method would be to develop and/or recognize the areas of research associated with the older (and to some degree rejected) programs of library and information science that helped lead to the creation of the iSchool movement.

I have briefly assessed the contribution of archival studies to this effort. This has not been a comprehensive review; I could have written such a review article, but wanted to make clear the connection between the excellent and generative work being done in archival studies and the quest for iSchool legitimacy. To this end, I feel an indicative review, rather than a comprehensive one, is sufficient.

Finally, archival studies is a particularly useful contribution to the iSchool movement, and many iSchools have a small and significant archival presence amongst their faculty. However, there are other areas from traditional

programs of library and information science that could be identified for their contribution, including librarianship, bibliometrics, knowledge organization, and information-seeking amongst them. These areas, like archival studies, do not suffer to the same degree as areas related to computation and information technology in their perception of being done bigger and better elsewhere in the university. Recognizing their contributions to iSchools will lead us to a fuller articulation of the identity of iSchools and setting them on surer conceptual footing.

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## References

- Bates, M. J. (1999). The invisible substrate of information science. *Journal of the American Society for Information Science*, 50(12), 1043–1050.
- Bates, M. J. (2006). Fundamental forms of information. *Journal of the American Society for Information Science and Technology*, 57(8), 1033–1045.
- Bates, M. J. (2010). Information. In: M. Bates & M. Maack, (Eds.), *Encyclopedia of library and information sciences*, 3rd ed. (vol. 3, pp. 2347-2360). New York: CRC Press.
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. Carnegie Foundation for the Advancement of Teaching.
- Briet, S. (1951; 2006). What is documentation? (Trans. and ed.) R. Day. Lanham, MD: Scarecrow.
- Buckland, M. (1997). What is a "document"? *Journal of the American Society for Information Science*, 48(9), 804–809.
- Buckland, M. (2012). What kind of science can information science be? *Journal of the American Society for Information Science and Technology*, 63(1), 1–7.
- Buckland, Michael. (2015). "Alternative futures for schools of information." Lecture presented at UCLA Dept. of Information Studies, Jan. 15.
- Caswell, M. (2014a). Inventing new archival imaginaries: theoretical foundations for identity-based community archives. In: D. Daniel and A. Levi (Eds.), *Identity palimpsests: Archiving ethnicity in the US and Canada*. Sacramento: Litwin Books.
- Caswell, Michelle. (2014b). Archiving the unspeakable: Silence, memory, and the photographic record in Cambodia. Madison, WI: University of Wisconsin Press.
- Cox, R. J., & Larsen, R. L. (2008). iSchools and archival studies. Archival Science, 8(4), 307-326.
- Crick, B. (1959). The American science of politics. London: Routledge & Kegan Paul.
- Cvetkovich, Ann. (2003). *An archive of feelings: Trauma, sexuality, and lesbian public cultures.* Durham, NC: Duke University Press.
- Day, R. E. (2001). *The modern invention of information: Discourse, history, and power*. Carbondale: Southern Illinois University Press.
- Day, R. (2014). *Indexing it all: The subject in the age of documentation, information and data*. Cambridge, MA: MIT Press.
- Derrida, J. (1996). Archive fever: A Freudian impression. University of Chicago Press.
- 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.
- Douglas, J. (2010). Origins: Evolving ideas about the principle of provenance. *Currents in Archival Thinking*, 23-43. Farge, A. (2013). *Allure of archives*. New Haven, CT: Yale University Press.
- Faulkhead, S. (2009). Connecting through records: Narratives of Koorie Victoria. *Archives and Manuscripts*, 37(2), 60-88.
- Faulkhead, S., Iacovino, L., McKemmish, S., & Thorpe, K. (2010). Australian Indigenous knowledge and the archives: Embracing multiple ways of knowing and keeping. *Archives and Manuscripts*, 38(1), 27-50.
- Frohmann, B. (2004). *Deflating information: From science studies to documentation*. Toronto; Buffalo: University of Toronto Press, Scholarly Publishing Division.
- Furner, J. (2004a). Information studies without information. Library Trends, 52(3), 427–446.
- Furner, J. (2004b). Conceptual analysis: A method for understanding information as evidence, and evidence as information. *Archival Science*, 4(3-4), 233-265.
- Furner, J. (2015). Information science is neither. Library Trends, 63(3), 362–377.
- Gelernter, D. (1992). Mirror worlds: Or the day software puts the universe in a shoebox...how it will happen and what it will mean. Oxford: Oxford University Press.
- Giddens, A. (Ed.). (1974). Positivism and sociology. London: Heinemann Educational Publishers.

Giddens, A. (1984). *The Constitution of society: Outline of the theory of structuration*. Los Angeles: University of California Press.

- Gleick, J. (2011). The information: A history, a theory, a flood. New York: Pantheon.
- Goldhor, H. (1972). *Introduction to scientific research in librarianship*. Urbana, IL: University of Illinois, Graduate School of Library Science.
- Harris, V. (2012). Genres of the trace: memory, archives and trouble. Archives and Manuscripts, 40(3), 147–157.
- Hartel, J. K. (2011). Information in the hobby of gourmet cooking: Four contexts. In *Everyday Life Information*. Cambridge, MA: MIT Press. Retrieved May 4, 2014, from http://works.bepress.com/jenna\_hartel/7/
- Honma, T. (2005). Trippin' over the color line: The invisibility of race in library and information studies. *InterActions: UCLA Journal of Education and Information Studies*, 1(2). Available from http://escholarship.org/uc/item/4nj0w1mp
- Hurley, C. (2005a). Parallel provenance: Part 1: What, if anything, is archival description? *Archives and Manuscripts*, 33(1), 110-145.
- Hurley, C. (2005b). Parallel provenance, Part 2: When something is not related to everything else. *Archives and Manuscripts*, 33(2), 52-91.
- Hyman, H. H. (1942). The psychology of status. *Archives of Psychology* (Columbia University). Retrieved September 10, 2015, from http://psycnet.apa.org/psycinfo/1943-00205-001
- Hyman, H. H. (1960). Reflections on reference groups. Public Opinion Quarterly, 24(3), 383-396.
- Iacovino, L. (2004). Multi-method interdisciplinary research in archival science: The case of recordkeeping, ethics and law. *Archival Science*, 4(3-4), 267-286.
- Iacovino, L. (2010). Rethinking archival, ethical and legal frameworks for records of Indigenous Australian communities: A participant relationship model of rights and responsibilities. *Archival Science*, 10(4), 353-372.
- Janke, T., & Iacovino, L. (2012). Keeping cultures alive: archives and Indigenous cultural and intellectual property rights. *Archival Science*, 12(2), 151-171.
- Kaptelinin, V., & Nardi, B. A. (2006). *Acting with technology: Activity theory and interaction design*. Cambridge, Mass: The MIT Press.
- Keilty, P., & Leazer, G. (2014). What porn says to information studies: The affective value of documents, and the body in information behavior. *Proceedings of the American Society for Information Science and Technology*, 51(1), 1–11.
- Kellner, D. (2002). Theorizing globalization. Sociological Theory, 20(3), 285–305.
- Lane, J. E. (Ed.). (2014). Building a smarter university: Big data, innovation, and analytics. Albany: SUNY Press.
- Machlup, F. & Mansfield, U. (Eds.). (1984). *The Study of Information: Interdisciplinary messages*. New York: Wiley-Interscience.
- McKemmish, S., Iacovino, L., Ketelaar, E., Castan, M., & Russell, L. (2011). Resetting relationships: Archives and Indigenous human rights in Australia. *Archives and Manuscripts*, 39(1), 107.
- Muñoz, J. E. (1996). Ephemera as evidence: Introductory notes to queer acts. *Women & Performance: A Journal of Feminist Theory*, 8(2), 5–16.
- Nardi, B. (Ed.). (1995). Context and consciousness: Activity theory and human-computer interaction. Cambridge, Mass: MIT Press.
- Nardi, B. (2010). *My life as a night elf priest: An anthropological account of World of Warcraft*. Ann Arbor: University of Michigan Press.
- Pamuk, O. (2010). The Museum of Innocence. Knopf Canada.
- Pamuk, O. (2012). The Innocence of Objects (trans. Ekin Oklap) New York: Abrams.
- Profet, M. (1993). Menstruation as a defense against pathogens transported by sperm. *Quarterly Review of Biology* 68: 335-386.
- Riesman, D., Glazer, N. & Denny, R. (1950). *The lonely crowd: A study of the changing American character*. New Haven: Yale University Press.
- Society for American Archivists. (2015). Record. Retrieved September 10, 2015, from http://www2.archivists.org/glossary/terms/r/record
- Steedman, C. (2001a). Dust: The archive and cultural history. New Brunswick, NJ: Rutgers University Press.
- Steedman, C. (2001b). Something she called a fever: Michelet, Derrida, and dust. *American Historical Review*, 1159-1180.
- Steedman, C. (2011). After the archive. *Comparative Critical Studies*, 8(2-3), 321–340.
- Stoler, A. (2009). Along the archival grain: Epistemic anxieties and colonial common sense. Princeton, NJ: Princeton University Press.

Sweeney, M., N. Cooke, M. Villa-Nicholas, K. Roberto & S. Noble. (2014). Social justice in library and information science. In *iConference Berlin*, 2014: Breaking down walls, culture context, computing (pp. 1202-1203). Retrieved September 10, 2015, from https://www.ideals.illinois.edu/handle/2142/47390

- Talja, S., Keso, H., & Pietiläinen, T. (1999). The production of "context" in information seeking research: a metatheoretical view. *Information Processing & Management*, 35(6), 751–763.
- Verdury, K. (2014). Secrets and truths: Ethnography in the archive of Romania's secret police. Budapest, New York: Central European University Press.
- Walpole, M. (2000). Under construction: Identity and isomorphism in the merger of a library and information science school and an education school. *Library Quarterly*, 70(4), 423–445.
- Weld, Kirsten. (2014). *Paper cadavers: The archives of the dictatorship in Guatemala*. Durham, NC: Duke University Press.
- White, K. L., & Gilliland, A. J. (2010). Promoting reflexivity and inclusivity in archival education, research, and practice. *Library Quarterly*, 80(3), 231–248.
- Wurl, J. (2005). Ethnicity as provenance: In search of values and principles for documenting the immigrant experience. *Archival Issues*, 29(1), 65–76.
- Yeo, G. (2007). Concepts of record (1): Evidence, information, and persistent representations. *American Archivist*, 70(2), 315–343.