Movements toward an Open Research Culture
By Anne Larrivee

As scholars begin their tenure-track position, so too begins the expectation that they will publish within all the traditional channels. However, many of these publication channels often restrict access to who will read and learn from these works. The academic culture has traditionally focused on where scholars should publish, and less frequently on how to make these works open and public. Open access publishers and institutional repositories are influencing academic culture, but there are still many reservations, anxieties, and lack of awareness. Marcel Mauss (1990) is well known for his gift theory, human exchange is expected to be reciprocal. The question then becomes, what’s in it for the authors, why should they give their scholarship away for free? This paper will explore how the norms of open access are influencing repository behavior.

INTRODUCTION

In my role as a librarian who manages Binghamton University’s institutional repository (IR), I have observed a range of responses to the introduction of IR. The most frequent responses are lack of familiarity with repositories, questions of how this platform differs from other digital storage platforms, and the occasional acceptance and approval. The approval response often comes from those scholars who are aware of open access and its benefits. There are always many caveats to any kind of cultural shift, but my attempt is to capture some of the trends on the literature and use my own experience to account for scholars’ reaction to IRs.

The term open access speaks for itself, but one of the popularized descriptions of open access comes from Peter Suber (2010) in his work titled, “A Very Brief Introduction to Open Access.” He describes open access as “digital, online, free of charge, and free of most copyright and licensing restrictions” (Suber, 2010, para.1). Ethnographies, such as Christopher Kelty’s (2008) focusing on free software producers, and Gabriella Coleman (2013) on free software and hackers have researched the culture that surrounds this movement. Kelty (2008) describes culture as “an unspecified but finely articulated set of given, evolved, designed, informal, practiced, habitual, local, social, civil, or historical norms that are expected to govern the behavior of individuals” (p.298). With this definition in mind, it's important to focus on the influential moments that have shaped these norms.

There is no clear way to construct the timeline that has shaped these open access cultural norms but certain moments have been documented in the literature. Kelty (2008) compared this shift in access to the way print was made available through the printing press. Elizabeth Eisenstein (1979) describes how the fifteenth century brought about a shift. Script could not compete with the trade of print books and this availability of print affected the transfer of knowledge and access. In the same way, open, online availability of scholarly works is making it easier for a larger global public to access this new knowledge. But when did scholars begin to make their works available within a digital realm? Stevan Harnad (2001) has studied the phenomenon of self-archiving and cites that physicists have been using the physics ‘eprint archive’ since 1991 to make their preprints and postprints open to the public (p.1025). Once the trend of self-archiving had taken hold, other repositories started to emerge. Denise Roll Convey (2009) cites that IR infrastructure began to emerge in 2002 with institutional use of DSpace and e-prints. Foster and Gibbons (2005) define IR as “an electronic system that captures, preserves, and provides access to the digital works and products of a community” (para. 1). This expanded digital options for those scholars that might have been using personal websites or larger subject-based repositories in the past. The IR promoted the scholar as well as the affiliated academic
institution. These digital availability options led the way for policy changes. In 2010, the National Science Foundation (NSF) required all proposals to add a data management plan (Borgman, 2011). With so much data being lost or hidden from public consumption, NSF grant-seekers were now being mandated to explain how they would take preventative measure to protect their data and provide access. The emergence of new technologies, behaviors, and policies have all been influential in developing ‘open’ cultural shifts but there are certainly those who have yet to adopt this behavior.

**LITERATURE REVIEW: CATALYSTS & CONCERNS**

Behaviors such as self-archiving and opting to participate with open access does raise questions of why. Why has this movement taken hold? Much of the literature has turned to surveying academics, analyzing the cited benefits, rationale, and attitudes. Jihyun Kim (2007; 2010; 2011) has written several articles tracking factors of faculty motivations toward self-archiving and repository use. The primary factors are intrinsic and extrinsic benefits, cost, context, and individual traits (Kim, 2011). Out of all these factors, the major motivational factors cited are preservation and copyright; with copyright serving as a possible deterrent (Kim, 2011). Kim (2011) noted that many professors just want a trustworthy place where they can store their works and when IR copyright policies are in place this may alleviate some concerns. Similar to Kim’s extrinsic factors, several studies have noted that making works openly available through IRs could increase a scholar’s citation count (Bernius, Hanauske, Dugall, König, 2013; Swan & Brown, 2004; Xia, Myers, Wilhoite, 2011). Although citation count is hard to prove, if faculty have the perception that it increases their citation count this would serve as motivator to upload. In addition to citation counts, faculty may also see the value in using other repository metrics for evaluation of themselves and others (Kyriaki-Manessi, Kouloris, Giannakopoulos & Zervos, 2013). Scholars all have their own reasons for their behaviors but there are also convincing arguments about why scholars should participate. Peterson-Kemp, Van House & Buttenfield (2004) describes the rationale to share research through four succinct points: 1. To reproduce or to verify research 2. To make the results of publicly funded research available to the public 3. To enable others to ask new questions of extant data 4. To advance the state of research and innovation (Peterson-Kemp, Van House & Buttenfield, 2004, p.1072).

The literature has also examined the motivational roles of institutions and publishers. With journal inflation costs, the rising prices of monographs, and shrinking budgets, libraries are under intense pressure to sustain their collections (Bernius et al., 2013; Fitzpatrick, 2012). In her article, “Planned Obsolescence: Publishing, Technology, and the Future of the Academy,” Kathleen Fitzpatrick (2012) describes some of the financial pressures placed on shrinking library budgets and asserts that within scholarly publishing ideas should matter more than money. Repositories and other open access platforms are a source of relief to library budgets that can no longer afford rising costs. Harnad (2001) cites three specific ways that self-archiving can benefit the institution, it maximizes visibility and researcher’s access to refereed research, and it reduces serial expenditures. Bernius et al. (2013) note that publishers should also feel invested in open access; if their journal can be accessed it may increase its usage.

Though there are obvious reasons for open access adoption, several studies have uncovered resistance or hesitation to participate. In one study focused on open access publishing, Swan and Brown (2004) found that authors were less likely to publish with open access journals when they were unfamiliar with them, believed it could affect their research grants, had perceptions that the journal had low impact in their field, or had a smaller readership. Convey’s (2009) study found hesitations based on faculty notions about open access. Over 50% of faculty
in Convey’s (2009) study wanted control, change or delete their work, include it only with other peer-reviewed works, had fear that an upload could prevent them from publishing elsewhere, had concerns for their journal publishers, had fears about others altering their work, had questions about the quality and secure maintenance of the IR, concerns about the long-term repository feasibility, and preservation concerns. In other words, the faculty voiced concern over scholarly control and uncertainties surrounding the IR. Kim (2007) found that faculty’s two main deterrents were questions about copyright and the time it might take to participate. While some of these factors, such as the ones cited in Kim’s study, can be resolved with the help of library staff, many of these reservations will continue unless there are cultural shifts. According to Xia (2008), “disciplinary culture theory emphasizes how the tradition of information acquisitions and disseminations of a discipline has shaped the behavior of its scholars for joining the adventure of the new publishing system” (p.491). The norms of the community will influence and shape the behaviors of others.

**THE ROLE OF COMMUNITY**

When people share a common interest, it brings them together in a community. Lave and Wenger (1991) studied how communities of practice allow for situated learning to take place; one person learns from another more experienced person in the community. Kelty (2008) introduces the term of ‘recursive publics’ these publics become their own form of community, setting up an infrastructure that allows for their existence. Kelty (2008) stresses the value of community in the open textbook software, Connexions, and quotes their slogan, “Sharing Knowledge and Building Communities” (p.281). Although the creators of the Connexions software setup the infrastructure to allow free and open textbooks, it cannot exist without the backing of a supportive and contributive community. The culture of a community helps determine contextual factors. For example, if a untenured faculty member wants to gain tenure, that faculty member will look to their peers in their department and their profession for advice on where to publish. Kim (2011) lists academic culture as one of the contextual factors that motivate faculty to self-archive within their IR. According to Jason Baird Jackson (2014), of the Open Folklore Project, the OA community also includes librarians. He notes, “librarians are striving to develop the most reliable preservation frameworks that they can, and they have a history of success as long-term stewards of the scholarly record” (Jackson, 2014, p.246). Although it makes sense to work with librarians, studies such as Xia’s (2008) highlight faculty’s reluctance to participate in the IR despite the librarians’ efforts.

In my own work as a librarian, I have had meetings with some faculty who mentioned they did not want to deposit their accepted manuscript version because it would not be a perfect copy, another said the word ‘open’ did not indicate status, but most of the time faculty had trouble locating the publisher-allowable version. Since I started managing the repository, I have had three faculty, outside of the library, self-archive, and nine faculty reach out to me without my initial prompting. Librarians serve as partners in this shift but unfortunately, the cultural shift is likely to come from peers within their field. One of my most successful partnerships I have had stemmed from project proposed by a philosophy professor who was scheduled for sabbatical leave over the 2017 fall semester. He wanted to digitize the all the print copies of the *Society of Ancient Greek Philosophy (SAGP) Newsletter* dating back to 1953 (Open Repository @Binghamton, 2017). With the assistance of work study students in the Philosophy department, assistance from one of the University’s IT staff, guidance from a librarian, and the professor’s dedication to the project the *SAGP Newsletter* is now becoming digitally and publicly available through the Open Repository @Binghamton (The ORB). During his sabbatical leave in the Fall
2017 semester, this professor has reached out to over 470 Newsletter contributors and has uploaded over 200 submissions. The SAGP Newsletter is a great example of effective community practice. The faculty member’s participation has been instrumental in the advancement of this repository project, and out of all of the emails he has sent only three newsletter contributors have declined permission.

ANTHROPOLOGY’S APPROACH TOWARD OA

Anthropology has its roots in a global approach, going out and learning more about the behaviors and norms of others. It is reasonable to assume that anthropologists would want to make their research globally available. There are anthropologists setting the stage for this conversation. In 2008, the journal, Cultural Anthropology, released an article titled, “Anthropology of/in circulation: The future of open access and scholarly societies,” the article was presented through a conversation style with seven anthropologists who have studied or participated with open culture. Kelty suggests that the force behind structural change depends on the governance of scholarly societies and the changing conditions of publishing, going on to say the new distribution tools and the internet are part of these changing conditions (Kelty, Fisher, Golub, Jackson, Christen, Brown, & Boellstorff, 2008, p. 561). Anthropologists are keen to the fact that distribution of information and research has become easier with the internet but they are also aware of the influence of the current publishing system. And repositories are making it easier to centralize this information. On the University of Minnesota Library’s (2017) “Anthropology: Open Access Repositories for Data & Research” page over 30 anthropology subject-related repositories are listed. This is in addition to all of the institutional repositories that house scholarly and creative works linked to a specific institution. There are many open outlets to present research data and scholarly works but there may still be some reluctance if it does not become a norm among those in the discipline.

In his ethnography, Kelty (2008) mentions that transformations to a practice endanger what might have seemed like a long-standing stable practice. Many new academics are driven by a desperation to conform to the standards of their discipline. Jason Baird Jackson (2014) notes, “Upon graduation (and often much before these days), new PhDs are expected to publish or literally perish in the academic ecosystem. Young scholars need to publish articles and books to maintain their (tenuous) positions in the academy” (257). Unfortunately, Jackson (2014) comments very few will be able to access these works. This is also stressed by Daniel Miller (2012) noting that so many academics have felt the need to associate themselves with an academic ‘commercial brand’ (p. 389). In an effort to affiliate with top name publishers, scholars may also steer away from possibly lesser-known open access journals. Despite whether scholars choose to go with top-name publishers, they often still have an opportunity to self-archive their works within an IR. This type of behavior requires a type of ‘universalistic ethos’ (Miller, 2012, p. 389). Miller (2012) states, “Digital Anthropology should rather rethink the very nature of anthropology itself in light of our contemporary world and its consequences for the welfare of populations across the globe” (p.389). This reflective, altruistic undertaking may not resonate for all scholars but creating a broader sense of norms will certainly influence those who might have resisted in the past. Coleman (2004) describes the persuasive force on property rights as a ‘habituated ethos’ (p.509). It’s important to note, these persuasive forces can easily lean toward open access.

EVIDENCE OF A SHIFT

It might seem discouraging to when faculty do not necessarily mention open access as a top priority but the increased awareness is taking hold. According to a 2015 Ithaka S+R US
Faculty Survey, when asked to rank the journal characteristics that are most important to them, faculty assigned “accessible to readers not only in developed nations, but also in developing nations and that the journal makes its articles freely available on the internet” as one of their lowest priorities (Wolff, Rod, Schonfeld, p. 43). This trend is consistent with Ithaka S+R’s 2012 Faculty Survey but the percentage number of faculty considering this a high priority rose from 27% in 2012 to 37% in 2015 (Wolff, Rod, Schonfeld, p. 43). Cultural, academic norms are shifting but it takes time.

Another way to track this phenomenon is through the increase in institutional repositories. OpenDOAR is a directory of academic open access repositories and is maintained for verified by the University of Nottingham, UK. In one of their measurement charts, tracking the growth of the OpenDOAR database, there is a steady linear progression going from a little over 300 repositories in 2006 to over 3,300 in 2017 (University of Nottingham, 2017). The Directory of Open Access Journals (DOAJ) is another sign of a shift toward open behavior. As of 2017, their site listed over 9,400 journals, compare that to ten years ago in 2007 when there was only around 2,500 open access journals registered (Directory of Open Access Journals, 2017; Wayback Machine, 2007). Moreover, there are scholars that are pushing open practices among journals. Within the sciences with an effort to “translate scientific norms and values into concrete actions and change” a Transparency and Openness Promotion Committee has developed eight standards as open practices for journals (para. 4).

**CONCLUSION**

Repository use among academics has been heavily studied; researchers have surveyed faculty’s attitudes, rationale, and current practices. There is now an awareness of the reasons why some faculty may feel reluctance or resistance to participate in a shift toward open access, but what can be done to convince faculty? My argument is that change must come with a cultural shift; as norms within the discipline change so too will faculty behavior. The contextual understanding that peers are participating and the publishing system is changing will cause academics to evaluate their practices. Community plays a major role; Kelty’s (2008) ethnography, *Two Bits*, emphasizes that open digital systems cannot exist without a system of people. Anthropologists have played a major role in analyzing why and how this open exchange can exist. Librarians are there to collaborate with academics and provide a connection to repositories. Jackson (2014) notes, “librarians remain our greatest partner and allies in this work…give them a moment, they will also passionately explain why OA matters so much to the future of the library and its public service mission” (p. 250-251). Although librarians can influence some of these academic cultural norms, the real change must come from within. The IR is a tool, how academics choose to use it is up to them and their community.
References


