This chapter provides a history of the scholarly publishing system, and explains how it has evolved to benefit corporate publishers to the detriment of faculty, universities, and the public. It offers the open access movement as a potential remedy for the publishing crisis, and the policy environment surrounding these new forms of communication.

Faculty Rights to Scholarly Research

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The publication of peer-reviewed research is one of the cornerstones of scholarly work (Blackburn & Lawrence, 1995). Throughout academia, faculty must publish their research in order to participate in the “Great Conversation” of scholarship, which occurs across space and time and includes their living peers, as well as with the researchers that came before and those that will come after (Guédon, 2014). The basic forms in which researchers communicate their findings to colleagues—peer-reviewed journal articles and monographs—have remained largely unchanged over the past century, even though the economics of the system changed dramatically with the rise of the Internet (T. C. Bergstrom, 2001).

For better or worse, the design of copyright law, the legal system that governs the scholarly publishing system, and by extension, the Great Conversation does not consider the norms and needs of academics (Willinsky, 2002). Meanwhile, control over most scholarly work, in the form of copyright ownership, has migrated from scholars and nonprofit journals into the hands of a few large publishing corporations. There is research to suggest that this has resulted in reduced access to scholarship even for researchers at the wealthiest institutions, causing what has become known as “the scholarly communications crisis” (C. T. Bergstrom & Bergstrom, 2006; Yiotis, 2005).

As awareness of the flaws in the existing system has grown, some faculty members have begun attempting to retain their copyrights and provide broader access to their work, by renegotiating terms with established publishers, organizing to implement institutional policies in favor of faculty rights, or circumventing conventional paths to publication in favor of online open access journals. These approaches offer a number of advantages, such as allowing faculty members to maintain control of their copyrights,
promoting greater visibility for research, and improving public access to scholarship. These shifts in the management of faculty rights to scholarly research have produced a new politics of scholarly publishing, one that has proven to be surprisingly controversial.

This chapter provides a basic overview of recent changes in both rules governing scholarly copyright, the economics of scholarly publishing, and an introduction to the open access movement, along with its various attempts to help faculty and universities regain control of their academic publications.

Brief Copyright Overview

Faculty rights to scholarly research are governed by layers of institutional policy, federal law, and social convention. Several surveys have suggested that most faculty possess a very limited understanding of copyright laws and policies, and misconceptions about it persist across disciplines and institution types (Rowlands, Nicholas, & Huntingdon, 2004; Sims, 2011). Therefore, in order to discuss some of the intricacies of the system, it helps to begin with a very brief review of the basics. These basic facts provide a snapshot of both the strengths and weaknesses in the current copyright system as it applies to academic research.

The Purpose of Copyright. The Constitutional purpose of copyright is to promote the progress of science and art (U.S. Const. art. 1, §8, cl. 8). Its original purpose was not for the government to provide incentives to creators, offer rewards for hard work, or enable complete control over a given creation. The authors of early copyright law believed that creators and inventors did not require incentives; they would create and invent regardless of the surrounding legal regime (Boyle, 2008). Recent debates about copyright law and policy often focus on incentives and control, but the intellectual property clause in the U.S. Constitution, and indeed copyright law itself for the first 200 years, sought a balance between the needs of the public to benefit from creative work and the needs of the creator to reap some reward from her or his work (Litman, 2001). This balancing between public and private interests is intrinsic to most kinds of academic labor, from teaching to research, and scholarly publishing was once no different (Kezar, 2004). In the past few decades, copyright laws have shifted strongly in favor of private ownership interests over the needs and desires of the public, raising challenges for creators whose copyrights are unlikely to earn them millions of dollars, which is to say, the vast majority of people who have ever assembled a syllabus or written an email.

Where Copyright Comes From and How Long it Lasts. Copyright happens automatically the moment a work is created, and in most cases, it lasts for the entire lifetime of the creator, plus an additional 70 years after the creator has died (Leaffer, 2010). For a journal article by a 45-year-old mid-career scholar who lives to the entirely plausible age of 85, that would
be a 110-year copyright term. Few academics realize that they hold copyrights in nearly all of their creations, from published articles to syllabi to listserv emails, or that these rights will persist long after they die (Sims, 2011).

Like the emphasis on “incentives” that dominates the present copyright debates, this automatic and lengthy enclosure happened only recently. Prior to 1978, the law required creators or publishers to register their works with the U.S. Copyright Office in order to gain copyright protection. Unregistered works entered immediately into the public domain, which meant that anyone could use the works for any reason, without paying a license fee and without the permission of the creator (Boyle, 2008). Until 1989, protection also required proper notice of copyright protection, in the form of the familiar © symbol and the year of publication; lack of proper notice was sufficient for a work to enter the public domain (Smith, 2014).

Furthermore, the duration of the first copyrights lasted for 14 years, with the option to renew for another 14 years. After the term expired, those works also entered the public domain (Leaffer, 2010). In the past 40 years, Congress has extended copyright terms 11 times, thanks mostly to intensive lobbying efforts by the entertainment industry (Lessig, 2004). Because those repeated term extensions came just as a new wave of older works were about to enter the public domain, we have entered a period in which copyright terms are “the functional equivalent of perpetual,” and very few older works become available for free public reuse (Eric Eldred et al., Petitioners v. John D. Ashcroft, Attorney General, 2003, Stevens, J., dissenting, p. 21).

Rights Associated With Copyright. Copyright is a set of five limited rights. It includes the rights to reproduce, distribute, prepare derivative works such as translations or film adaptations, perform, and display a given work (17 U.S.C. §106). Within the scope of those limited rights, copyright holders essentially have a monopoly on the use of a particular work. Copyright holders can transfer those rights in a single bundle, or license some rights while retaining others (Leaffer, 2010). In scholarly publishing, the tradition has generally been that authors transfer the entire bundle of rights over to publishers, often for free (Smith, 2014). Many academic authors do not realize that once they sign the contract, or check the “accept” box on the web form, they no longer have the right to additional uses of their work such as translations, reprinting in an anthology, or even posting the articles online, to a personal website or a repository like the Social Science Research Network (Rowlands et al., 2004).

This divisibility of copyright into separate rights can be of great benefit to academics who want to preserve their own rights and the rights of others to use and build upon their work. It means an author can grant a nonexclusive license to a journal to publish an article, while simultaneously retaining the right to post it on his or her website, permit colleagues to
distribute it in course packs, or even allow translations. Although this rarely happens in practice, the potential to unbundle copyrights, keeping some rights while giving away others, enables the changes currently happening across the scholarly publishing system.

The Changing Economics of Scholarly Publishing

Eternal, automatic, and monopolistic copyright protection may have value for the owners of Mickey Mouse, but in an academic context, it has proven highly problematic, clashing both with traditional approaches to managing ownership of scholarly work, and with the freedom and flexibility inherent in the networked age (Benkler, 2006). In the days of print, making and distributing copies of scholarly articles was expensive. Most journal publishers were scholarly societies and university presses that earned little in the way of profits, often while receiving subsidies from parent institutions (Velterop, 2003). Journals managed copyright licensing on behalf of authors, and in return, authors transferred copyrights for free, with the confidence that the journal was the best possible mechanism to provide broad access to their published articles (Smith, 2014).

However, starting in the 1980s with the early days of the Internet and rise of electronic journals and databases, the economics of scholarly publishing changed dramatically. A few big corporate publishers started buying the rights to publish and distribute large numbers of scholarly journals, and learned that especially in the STEM fields, they could charge high access fees to businesses and universities for access to those journals (Montgomery & Sparks, 2000). Authors continued transferring their copyrights to publishers for free, but now publishers were earning increasingly large profits for that free labor, and had become principally committed to shareholder profits instead of the scholarly community (T. C. Bergstrom, 2001).

An outcome of the industry-wide change in ownership is that the cost of access to scholarly journals has risen at roughly four times the cost of inflation for over the past 30 years (Kyrillidou, Morris, & Roebuck, 2013). It has also had disastrous effects on access to academic journals. One important study found that comparing both price per page and price per recent citation, for-profit journal subscriptions cost 5 times as much as nonprofit journals in the same field (C. T. Bergstrom & Bergstrom, 2006). This is true even when controlling for the quality of the journal, using citation rates as a proxy.

The authors go on to demonstrate that high prices lead to decreased access, because a journal’s circulation is closely connected to its price. The higher the cost of a journal, the fewer libraries subscribe to it, and therefore fewer scholars are able to access it through their institutional affiliations. However, faculty remain largely unaware of these inefficiencies, and continue to publish in expensive, for-profit journals, likely because that is where their colleagues publish, and also what their colleagues read. In
short, even though for-profit journals are incurring significant strain on the scholarly communication system as a whole by increasing costs and limiting access, there have been few incentives for faculty to change their publishing behavior (Schonfeld & Housewright, 2010).

This difference in the costs of for-profit and nonprofit journals highlights the disconnect between the practices of the old scholarly publishing system, which was run by and for scholars, and the economic realities of the new scholarly publishing system, run largely by corporations and for the benefit of shareholders. Under the old system, it was accepted that much of the labor was uncompensated, in part because after the expenses of printing, binding, and shipping journal issues, there was very little money to go around (Givler, 2002). Publishers did not pay scholars for the articles they wrote, or for the time they spent peer reviewing others’ articles. Instead, the benefits of publishing accrued to scholars in other ways, largely through the tenure and promotion system.

Today’s for-profit publishers benefit from the free writing and reviewing customs of the old system, in an environment where the Internet has reduced the marginal cost of making and distributing a copy to zero (Benkler, 2006). Although managing peer review and maintaining online article databases are not free, those expenses do not come close to explaining the astronomical rise in subscription fees. Rather, the maintenance of publishers’ marketing departments, sales forces, executive salaries, and positive annual profit reports consumes those excess dollars, none of which benefit the scholarly community that sustains them (C. T. Bergstrom & Bergstrom, 2006).

This system squeezes faculty from all sides. As researchers, many struggle to access relevant articles because university libraries have spent the past 20 years cutting journal subscriptions in the face of flat or declining budgets and rising prices (Bosch & Henderson, 2013). The increase in journal costs has even encroached on monograph budgets; reduced book buying has so damaged university presses that many have shuttered, while many more have attempted to shift their focus toward books with more commercial appeal (Sherman, 2014). This drop in academic book publishing has disproportionately affected faculty authors in the humanities, who find it harder to publish the monographs required for tenure, just as the competition for tenure-track positions has risen (Townsend, 2003). Faculty continue to write and review for free, even though the benefits of tenure and promotion are becoming harder to achieve.

For-profit scholarly publishing has permanently altered the ecosystem of scholarly communication, reducing access to published work on the one hand, while constraining opportunities to publish on the other. In response, a growing assortment of faculty, administrators, funders, librarians, patient advocates, and policy makers have been taking action to bring the system back into balance.
Retaining Rights to Expand Access

Although technology transfer offices to manage faculty-produced patents have been around for decades, most universities have taken a hands-off approach to copyrights in scholarly research (Slaughter & Rhoades, 2010). Formal policies and informal customs permitted faculty to retain control over their copyrights, which in practice meant that most faculty promptly gave up control of their copyrights the moment the opportunity to publish arose. Likewise, government agencies and foundations rarely asserted any rights in the peer-reviewed articles resulting from their funding. As awareness of the crisis in scholarly communication has grown, a range of responses has sprung up, from the individual level, to institutional and federal policies, all seeking to assert more control over faculty articles in order to limit publisher monopolies and improve future access.

The Open Access Movement. The main impetus for these policies arose from the open access movement, which defines acceptable levels of free access to scholarly literature, as well as promoting paths to achieve that access (Suber, 2012). The open access movement advocates for free, online access to peer reviewed scholarship. It is grounded in two basic arguments: (1) the Internet makes possible free and instantaneous distribution of knowledge, and so academia should avail itself of the efficiencies afforded by the network; and (2) the scholarly communication system is broken; faculty write scholarly articles for free, based on research that was often funded by taxpayers, and those articles should be freely available to the public (Wellen, 2004; Willinsky, 2002).

The movement has coalesced around two ways for a work to be open access: self-archiving and open access publishing. With self-archiving, the author publishes an article in a traditional journal and posts a copy on a publicly available online repository or website. Self-archiving has the advantage of permitting faculty to continue publishing in whichever journals they choose, while enabling broader access to their work, and it is the path that most institutional and governmental policies have taken. It is an option for all scholars, regardless of discipline, as long as they have access to the Internet.

In open access publishing, an author chooses to publish in one of the growing number of open access journals, which are made freely available online from the moment of publication (Bailey, 2006). Open access journals serve as direct competition for traditional for-profit publishers, but a respected open access journal must exist in the author's field in order for open access publishing to be a viable option (Park & Qin, 2007). Many open access journals charge a fee for publication as a replacement for subscription income; while some grant funders are beginning to cover those costs, access to money to pay publication fees vary widely by discipline (Solomon & Björk, 2012). There are some established, high-impact open
access journals, particularly in the sciences, but it has taken time for them to build their reputations (Tenopir et al., 2013).

Both self-archiving and open access publishing are relatively young concepts, only as old as the Internet. It has experienced rapid growth in the past 15 years, as the web has become more widely available and network speeds have increased (Suber, 2012). As a result, the study of open access practices among faculty is quite new, and methodologies and conceptual frameworks for understanding them are still nascent. We know that open access publishing has grown tremendously, and that open access appears to increase an article's download and citation rates, but we do not know yet why some high-quality open access journals succeed while others do not (Davis, Lewenstein, Simon, Booth, & Connolly, 2008; Gargouri et al., 2010; Laakso et al., 2011). Researchers are just starting to uncover the incentives and influences affecting faculty self-archiving and open access publishing behavior (e.g., Kim, 2010; Park & Qin, 2007; Xia, 2011), let alone a comprehensive understanding of what impact the open access movement is having on the scholarly communications system as a whole.

**Open Access Mandates.** One clear trend that has arisen from the open access movement is the proliferation of open access mandates (Joseph, 2008; Suber, 2012). Universities, research institutes, and funding bodies have begun to require that faculty make their published research freely available online, usually through some version of self-archiving, often after an embargo period of 6 months to a year, during which publishers preserve a temporary monopoly on the right to sell access to the work. By placing this requirement on faculty before they sign their copyrights over to publishers, mandates circumvent any need to negotiate for these rights on a case-by-case basis.

Many universities offer their own archive services, called institutional repositories, where faculty can deposit all of their published work (Shreeves & Cragin, 2008). Some funders are following suit, including the NIH and the Bill and Melinda Gates Foundation (Bill & Melinda Gates Foundation, 2014; NIH, 2008). The National Institutes of Health (NIH) Public Access Policy enacted in 2008 requires that all peer reviewed articles resulting from NIH funding be made freely available in the PubMed Central online repository within 12 months of publication (NIH, 2008). The Gates Foundation requires that both published articles and underlying data be freely available online; it currently permits an embargo, but will require immediate free access beginning in 2017.

University open access mandates generally emerge from faculty senates or other self-governing bodies. Rather than top-down policies imposed by administrators, institutional open access mandates appear to arise from a growing awareness among the faculty themselves that the scholarly publishing system is not working for them anymore (Suber, 2010). More than 100 colleges and universities in the United States have now enacted open
access mandates, including Harvard, Stanford, and the University of California (Registry of Open Access Repository Mandates and Policies, 2014). These mandates offer a number of advantages for faculty, putting institutional support behind faculty members who wish to maintain control of their copyrights while also promoting greater visibility for their research, and better serving the mission of higher education by improving public access to scholarship (Joseph, 2008).

Despite this burgeoning faculty consensus, funder mandates have met with great controversy, especially at the federal level. Before Congress passed the NIH policy in 2008, the Association for American Publishers (AAP) argued that the policy would kill the subscription revenues of for-profit scientific publishers, rendering them unable to recoup the costs of publication (PRISM Coalition, 2007). Members of Congress have made multiple attempts to pass legislation, such as Federal Research Public Access Act (FRPAA) and the Fair Access to Science and Technology Research Act (FASTR), which would expand the NIH Policy to include several of the largest federal funding agencies, but the AAP has led opposition to these bills as well, and as yet none have left committee.

The AAP argues that mandating free access to publicly funded research would violate publishers’ copyrights, destroy the peer-review system, and decimate the for-profit publishing industry (Adler & Frank, 2012; Howard, 2012; Sporkin, 2011). While evidence to support these assertions is scant, they have thus far been successful in staving off further attempts to enshrine open access in the law. In 2013, the Office of Science and Technology Policy released a memorandum requiring Federal agencies with more than $100 million in research and development expenditures to devise plans to implement public access policies similar to the NIH. At present, there is no process in place to implement these plans (Stebbins, 2013). However, for-profit publishers are clearly feeling the pressure to offer more open publishing models. Companies like Springer and Elsevier have started offering “open choice” options, which aim to split the difference between traditional publishing and open access. Authors may publish in their traditional journals and pay a fee, usually in the range of $2,500 to $3,000, for the publisher to make the article freely available from the moment of publication (e.g., Elsevier, 2015; Springer, n.d.). The questions of who should pay for this fee, and whether it accurately reflects the revenue that the publisher loses by making the article freely available online, remain unresolved.

Looking Ahead

The advancement of the open access movement in recent years is a promising sign that the crisis in scholarly communication may one day end. Peer-reviewed articles are how scholars communicate with each other across space and time, they tell researchers what has worked and what has not, and
they document what we as a society know and what we are still learning. And they are becoming so expensive that even Harvard can no longer afford their subscriptions (Rosen, 2012). Diminished access to published scholarship threatens the public service mission of higher education by keeping the results of research locked away in subscription journals to which few have access.

Open access publishing, open access mandates, and author self-archiving have the potential to bring scholarly publishing back into alignment with the mission and goals of academia. Journals that have in recent years provided a profit engine for private corporations may once again serve the individuals and institutions that created them. Democratizing access to the knowledge that universities produce will have benefits far outside the confines of the ivory tower, and provide an opportunity to serve the public in a way that has been largely overlooked in the existing higher education literature on public service.

Indeed, although the study of faculty patent ownership is well established in the field, faculty rights to their publications have been almost entirely overlooked. As the open access movement enters the mainstream and its effects emerge, perhaps there will become a place in the higher education literature for the study of access not just to a college degree, but to the publications that are one of the primary outputs of academic research.

References


U.S. Code, Title 17, Section 106.


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