Chapter 4

DRM and Libraries

Library Challenges

Like consumers who purchase e-books directly from online stores, libraries, too, encounter DRM when building their digital collections. Unlike individual consumers, however, libraries involve institutional approaches and require a special set of usage restrictions and limitations, which depend on the types of deals libraries negotiate with vendors (i.e., companies that license e-books to them so that libraries may make them available for free to users). There are, of course, significant differences in the way DRM is used in public and academic libraries.

If users borrow e-books from public libraries, for example, DRM coding embedded into e-books helps control access to a title, how long a patron can read an e-book before it disappears from their device, and how many users can read an e-book at the same time. DRM can also be used to enforce various other business models that do not replicate the traditional way of loaning materials for a certain amount of time, such as pay-per-use models, which allow libraries to make large amounts of content available to patrons but to pay only for the titles accessed or read by patrons. It is precisely the use of DRM that helps vendors track usage, which in turn helps them determine how to bill libraries based on patrons' usage.

When library patrons check out an e-book using an e-book distributor such as, for example, OverDrive, the e-book will disappear from the patron's account after a certain period of time (usually about three weeks), and that same user cannot read that title again unless they renew access to it. Vendors can also use DRM to delete files from a patron's reading device after a loan period has ended. In other words, DRM allows e-books to self-destruct. Major trade publishers such as Penguin Random, HarperCollins, and Macmillan use DRM to enforce their fifty-two-loan cap for two years. This means that, owing to DRM, the publisher knows when a library has loaned a title fifty-two times within a two-year period (the imposed limit), after which the library will no longer be able to loan that title to its patrons unless it renews its license with the publisher (i.e., pays more).

In the world of academic and university libraries, where e-books and other digital materials are used for research and advancement of knowledge—particularly in the areas of science, technology, and business—DRM is present to limit what researchers can do with the content they usually access via large databases or via digital resources supplied to libraries by various aggregators and publishers. DRM can, for example, limit downloading, sharing, and printing options for students and researchers.

An *ALA DCWG Tip Sheet*, "Digital Rights Management," first issued by the American Library Association (ALA) in 2012, was written to help librarians in the United States navigate the intricacies of DRM and digital content, stating: "DRM systems are designed both to enable access and use of digital materials and to restrict copying, sharing, reformatting or otherwise changing electronic media. These restrictions can range from 'active' DRM, which marries ebooks to a brand of e-reader to more 'passive' DRM, like watermarking a digital file with the purchaser's name and email address. A familiar example of DRM employed in libraries is the patron library card that uniquely identifies a library user authorized to check out a book [or e-book]."[1] The *Tip Sheet* goes on to add that DRM can be used to enforce various pay-per-use models of access or limit libraries' ability to archive or access items.

However, the *Tip Sheet* also points to disadvantages of DRM: "Fair use and other exceptions to copyright law that libraries have relied on could be blocked by DRM. For example, people with print disabilities may be unable to use the text-to-speech (TTS) function of their e-reader if that function is disabled or the ebook is coded to prevent TTS."[2] The *Tip Sheet* also warns that adding identifying marks to an electronic loan could potentially violate patron privacy, which the library profession has a long history of protecting and defending.

In fact, researchers have pointed to DRM as the main reason why libraries have trailed behind the rest of the web in moving to a more mobile-friendly model for search and discovery of information, arguing that DRM has not only made e-books difficult to use but also has devalued e-books.[3]

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ALA and digital civil liberties advocacy group Electronic Frontier Foundation have advocated against DRM for several key reasons. They include the following:

- fair use (which makes it legally acceptable to quote from copyrighted works and use excerpts for the sake of the advancement of knowledge, education, and science)
- limited user options (Students and researchers get frustrated when draconian DRM does not allow them to use works freely.)
- cumbersome user experience (The more e-books are coated with DRM, the more difficult they are to use and navigate.)
- lack of real ownership (DRM prevents users from every really owning a copy of what they purchased, as they would if the object was physical. This includes libraries.)[4]

Public and academic librarians have in recent years been very vocal about their concerns over the negative effects of DRM and its use in libraries, drawing attention to their own challenging role of middlemen in the process, as they must figure out how to meet the demands of the patrons on the one end while obeying copyright laws that protect publishers and authors on the other. Karen Coyle has pointed to three significant challenges that DRM poses for libraries:

- local control (DRM systems are not always affordable to libraries, and the control remains in the hands of the vendors that supply content to libraries, which track activities to ensure the library regularly renews its license.)
- contracts (Libraries may need to negotiate rights for each publisher, and in some cases on a title-by-title basis. This is both time-consuming and complex.)
- archiving (How will books be archived and made available for use by future generations?)[5]

If DRM must be used in libraries, according to Coyle, different materials may need different levels of controls (e.g., popular materials may need more protection than research materials, as research materials simply must allow for more flexibility in how they are used). Coyle's conclusions echo the sentiments of many librarians: "The most strict control of rights management should only be applied to those materials that absolutely need it. And this means that there may not be a single rights management solution that is appropriate for all materials."[6] Indeed, DRM can in some cases be used productively in libraries. A good example is the British Library, which has used DRM "in its secure electronic delivery service to permit worldwide access to substantial numbers of rare documents which, for legal reasons, were previously only available to authorized individuals actually visiting the Library's document centre."[7]

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Although most scholarly e-books continue to be distributed to libraries with DRM encryption, publishers including Oxford University Press, Cambridge University Press, SAGE, Springer/Palgrave, Elsevier, Wiley, De Gruyter, Brill, and Emerald have been providing DRM-free titles to libraries via their own platforms. Even aggregators like EBSCO, ProQuest, JSTOR, and Project MUSE now provide DRM-free titles on their own platforms, which amass and provide access to large amounts of content by a wide range of publishers.

Academic publishers are starting to pay closer attention to the feedback provided to librarians by end users, including students and faculty, who have expressed their concerns over DRM in various surveys. A 2018 *Library Journal* survey—whose goal was to investigate academic student e-book experience in four-year colleges, universities, and graduate programs, as well as two-year or community colleges—found that 74 percent of students accessing e-books through libraries believe there should be no restrictions placed on how e-books are used; 66 percent prefer to use e-books with no restrictions; and, perhaps the most interesting and revealing part of the survey, the revelation that 37 percent of students have taken a principled stand and use only e-books that have no restrictions when conducting research. In other words, if over one-third of students do not want to even use e-books with DRM encryption, a large percentage of literature available in academic libraries is not consumed by researchers at all.[8]

On the public library side, mainstream publishers (i.e., those that usually cater to public libraries and that license e-book and other digital content to libraries) have gone in the opposite direction, imposing more, rather than fewer, restrictions on e-book lending. In the summer of 2019, Macmillan announced that it would impose an eight-week embargo on

library e-books across all its imprints. This means that libraries that want to lend Macmillan's brand-new titles to patrons (and this applies only to new titles) may buy perpetual access to a single e-book during the first eight weeks of publication at half price. After the eight-week period, additional copies may be purchased at full library price (which is usually $60 for a new release). In other words, eight weeks after the release of a new title, libraries may be able to buy as many copies as they want, but not before. And, of course, those purchased copies would allow them to lend e-books to patrons for two years on a fifty-two-loan cap (as explained above). After two years, the license must be renewed.[9]

In its public statement, Macmillan claims in defense of its new embargo experiment: "What we were seeing was really reaching a tipping point, where we'd have to explain to our authors that while your readership is growing, your royalty statement will be getting smaller and smaller."[10] Pitting authors against libraries is always a questionable tactic, especially when lacking data to support claims of sales cannibalization—data that's almost impossible to gather without serious inquiry and research. The Macmillan statement offered no concrete evidence to support such a claim. ALA immediately showed concern about this decision, calling on publishers to reconsider and warning them that the embargo will set a problematic new standard for the rest of publishing. Any embargo policy has, in fact, been contradictory to what libraries want to achieve: equitable access to knowledge and information.

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The story of DRM in libraries can best be described as a two steps forward, one step back process. Progress has certainly been made on both public and academic library fronts, but not without controversy and challenges, and not without some pushback by the publishing industry. In public libraries, the user experience has improved tremendously over the years, which is precisely why Macmillan has decided to reinforce its embargo policies (fearing, yet again, that users will not buy books if they can access them through libraries without hassle). On the academic library side, most of the publishing industry has been steadily embracing the idea of DRM-free, led in part by the advent of the open access movement and the libraries' willingness to fund it.

The open access movement, along with pressures put on publishers by librarians, can certainly be credited with having positive influence. What once began as an initiative of nonprofit organizations like Knowledge Unlatched and Unglue.it has spread across academic publishing and led to major players now embracing the concept of open access and DRM-free e-books (first with e-journals, then e-books). A white paper published by Springer Nature in November 2017 revealed, among other findings, that open access books enjoyed, on average, seven times more downloads, 50 percent more citations, and ten times more online mentions than paywalled titles.[11] Such findings have been just the encouragement the publishing industry needed to reconsider its draconian DRM policies. Major academic publishers (including the big three: Elsevier, Wiley, and Springer) all have thriving OA programs, and OA is now widely considered to be the fastest growing segment of academic publishing.

Although faced with their daily challenges, libraries can exert great influence on how the story of DRM unfolds. Library information scientists have proposed several recommendations for librarians:

- Embrace DRM technology with an open mind. ("The number one recommendation for library managers: embrace the technology. Digital rights management technology is a friend to libraries and the communities they serve." [12])
- Protect privacy as vehemently as before. ("Bricks and mortar transactions allow individuals to purchase media with cash without leaving any personally identifiable record. . . . Similarly, many libraries have developed circulation systems that retain no transaction record once the borrowed media is returned."[13])
- Educate users about what is available to them and how. (One effective way in which libraries can discourage use of illegal pirate sites like Sci-Hub is to actively help with compliance with funders' open access policies and educate users in the discovery of freely available research materials in open access repositories.[14])
- Support open access actively rather than passively. ("How do we [libraries] reconcile our belief in equitable access with our own self-interests and our sympathy with the Robin Hood hackers of the world?" asked Sanchez and Russell.[15] One clear way has been the support of the open access movement. By providing financial support for various open access initiatives worldwide—which only continue to grow and expand—libraries are helping to make more content open access legally and, most important, they are helping to accelerate the sharing and advancement of knowledge and science, which hits at the core of their purpose.)

The Role of Open Access

The story of open access (OA) in academic and scholarly publishing begins at the turn of the century. With the support from Open Society Foundations (formerly Open Society Institute), an international grant-making network founded by George Soros, a group of advocates met in Budapest in 2001 to write the Budapest Open Access Initiative (BOAI), which helped define OA publishing. That same year, science writer Lawrence Lessig established the Creative Commons organization, which provides licenses to books and other literature that facilitate open sharing. This encouraged institutions worldwide, including libraries, to promote the importance of OA institutional repositories to their faculty and to encourage researchers to self-archive works in those repositories.[16]

Peter Suber has given a good definition of "open access," describing it as content that is "digital, online, free of charge, and free of most copyright and licensing restrictions."[17] OA works generally fall into two categories: gratis and libre. Suber describes "gratis" as "free of charge, but not more free than that." It removes price barriers, but not permission barriers. We can access the work and read it, and that's all we can do with it. For all else, we must seek the permission of the copyright holder. Readers may read a gratis OA work, but not reproduce, redistribute, or repurpose it in any way. "Libre," on the other hand, means that the work is "free of charge and also free of some copyright and licensing restrictions."[18] Libre OA gives the user permission to do more than just access the work, including the right to republish it on a public site. Users may even be allowed to alter parts of content. Libre OA is less common than gratis OA.

Open access first made strides with scholarly journals, but it has in recent years spread to monograph and book publishing, not only academic, but also, although to a much lesser extent, popular and trade literature. Two types of OA emerge in journal publishing: gold and green open access. "Gold" refers to content published by an author in an online open access journal. This can be described as 'born open access content.' In contrast, "green open access" refers to content published by an author in a journal and then self-archived in his or her institution's OA repository.

To better understand libre OA, it helps to understand the types of Creative Commons (CC) licenses available for such works. CC licenses allow authors and copyright holders to grant a range of permissions to users. Most CC licenses have an attribution (BY) requirement, which ensures the work's author gets proper credit. CC licenses range from the most open (CC0—Creative Commons Zero—Public Domain Declaration) to the most restrictive (BY-NC-ND; "NC" stands for "noncommercial" and "ND" for "no derivatives allowed").[19] This is where DRM comes in.

Open access and DRM may at first seem contradictory in nature and purpose, but after examining each closely, we can see how the two, in fact, complement rather than compete with one another. It is, in fact, DRM technology that can ensure that the various Creative Commons licenses are easy to understand and that it is clear to users what they may do with free content beyond reading it. As Keele and Odell see it, OA is really about the appropriate DRM, not necessarily no DRM (although some advocates believe it should also be the latter).[20] In some cases, DRM does make sense and should be adopted (for attribution perhaps above all else), and in others, one is led to conclude, it should be resisted (particularly when limiting basic user rights like the ability to print, copy, share, etc.).

Keele and Odell see libraries as playing a crucial role in the complex OA-DRM relationship. According to Keele and Odell, librarians need to use DRM to better manage rights in OA works. Their ongoing role should be to persuade authors and publishers to make a work OA with appropriate DRM (turning librarians into license advisors) as well as to recognize when DRM may negate access to an OA work (turning them into DRM-free advocates). "The author of a work published OA could select a CC license, register that license in blockchain, embed rights information in the file's metadata and apply a watermark with rights info or a link to that info. . . . Through these uses DRM is furthering OA and open licenses by making rights information about OA works more available and facilitating proper use and attribution."[21] Sanchez and Russell urged librarians to "promote efforts to fix or replace the current scholarly publishing system by supporting and promoting open access at the local, regional, and national levels."[22]

In other words, DRM can make an OA work freely readable but prevent uses such as downloading, copying and pasting text, or breaking the work into pieces. This is where some OA advocates find DRM to be the enemy of OA, arguing that it goes against the idea of open research, which should include freedom and flexibility to share knowledge without restriction. This brings us back to the key questions libraries must answer: How do they honor the limitations imposed by authors or publishers in order to protect the integrity of their works, while at the same time providing patrons with a satisfactory reading and research experience? How do they respect copyright laws while fully embracing their mission to promote literacy and spread knowledge with no barriers? This, in turn, also brings us to the key question publishers must answer: How do they move forward in a way that meets their ambitious business goals while allowing libraries to fulfill their missions and build sustainable and affordable collections for their students, researchers, and patrons?

In conclusion, the idea of DRM runs counter to the idea of open access because DRM is all about

limiting access and what users may do with published content. On the other hand, DRM helps manage CC licenses. As Suber puts it, "the most widely used DRM approach in OA publishing is the Creative Commons license."[23] In other words, the CC license is an actual DRM approach. It could be convincingly argued that when it comes to open access, DRM shows how useful it can be for authors and publishers, despite its major flaws and its apparent failure to combat piracy.

Notes

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