In December 2018, Tumblr banned “pornographic images” and media outlets declared the death of Tumblr, comparing it to LiveJournal’s decrease in popularity in the United States after it had made the same move. A friend of mine phrased her feelings on this ban in a telling manner, while sharing the Jezebel article: “This is why I don't do much social media anymore. Third time my internet home has been bulldozed.” This cycle is familiar—an online space regarded as “an internet home,” makes a change that is unexpected and unwanted in its community of users for business purposes and this community reacts with outrage. We see it in the ongoing reaction to the Cambridge Analytica and Internet Research Agency scandals on Facebook. And we see the same dynamic in Twitter's response to its users continued calls to make changes that limit harassment and hate speech.

A “feeling of home” is one of the motivations behind users’ expression of psychological ownership—the feeling that a concept, idea, object, or space belongs to an individual and they thus have certain rights over it. Other motivations include a need for personal control, the expression and development of self-identity, and self-understanding. Social Media is well-designed to encourage these feelings and thus to encourage a feeling of psychological ownership over the networks and digital content that users produce on their platforms. However, what the example of Tumblr highlights is that conflicts are likely to arise when the psychological ownership feelings of users are at odds with their material rights of control. Users may feel threatened when the material corporate control manifests itself leading to feelings of betrayal or even anger.

This anger may be righteous. After all, these digital spaces operate as if they were public spaces and use the guise of neutrality to position themselves as platforms through which public communication must flow. Habermas refers to the encroachment of corporate control into public space as “re-feuedalization of the public sphere,” by carving out niches that encourage public discourse in private spaces platforms such as Google and Facebook have enclosed any digital commons which may have existed. Possession is increasingly being replaced by access, meaning that platforms can control content usage and sharing in ways that would never have been possible before through technologies such as end user license agreements. The rights of ownership are increasingly being replaced with psychological ownership in both private and common properties surrounding information goods. Further, the corporations that librarians work with to provide access to the scholarly commons have learned how operating the infrastructure can be more profitable than producing or even selling services and materials.

How do we teach students to operate in this information environment? What strategies and tendencies do we need to help students develop in order to navigate institutions—both scholarly and non-scholarly—that seek to pivot the creation and use of information away from common needs and toward corporate profit? The information literature student must recognize that infrastructure determines what we can and cannot do with information and that these infrastructures are, by and large, not governed by users, but rather by profit-mot-
vated organizations. It is vital that we bring an understanding of the role of corporate power in information use, development, and sharing into our information literacy instruction if we are to help our students think critically about the information they use and create. To do this we must be explicit about how psychological ownership is employed to encourage participation in the infrastructures of organizations such as Twitter and Elsevier while these organizations maintain deciding control over how their infrastructures develop and thus what users are able to share and how they are able to do it.

The Myths of Ownership and the Commons

It is beneficial to corporations to encourage feelings of ownership among their consumers and in turn to support the continued myth of the digital commons. Individuals who feel higher psychological ownership toward a target, value that target higher and are more likely to engage in stewardship behaviors over it. In cases of collective ownership, psychological ownership is both developed and maintained through participation in the development of rules and governance over space. The desire of the open source community to exchange knowledge is one example. Development of psychological ownership is instrumental to the desire to participate in open source communities and participation cyclically leads to increased psychological ownership. However these spaces are always threatened with enclosure—the mechanism through which institutions held in collective ownership are privatized. In a space that has already experienced enclosure or has always been privately controlled, psychological ownership can be manipulated to encourage stewardship behaviors over resources that are not, in fact, held in common. Take “crowdsourcing” as an example, Yuksel, Darmody, and Venkatraman found that consumer participation through crowdsourced materials engendered feelings of psychological ownership—despite the fact that the labor of the consumer was not remunerated financially and that the consumer had no legal rights over that material. The authors suggest this dynamic called “co-creation” has the capability to increase user satisfaction with services and further, their loyalty.

While users may be happier with the end product, it is important to remember that they are also providing labor to private organizations paid only by the usage of the product itself. This is not collective ownership, but it feels like collective ownership. This dynamic is a byproduct of what Nick Srnicek refers to in his book of the same name as “platform capitalism.” A platform is privately developed infrastructure designed to encourage interactions between content producers and consumers and through which the platform is solely or primarily responsible for governance. They are, by definition, rent-seeking institutions which seek to make profit not through competition with like corporations nor by creating a product to be consumed, but rather by entrenching the importance of their infrastructure to the ways that people live.

Platforms have developed in tandem with the whittling down of consumers’ and creators’ intellectual property rights. Intellectual property, the rights associated with ownership are determined not by possession, but rather by law. On the one hand is the creator who may be required to give up some degree of ownership rights in order that material be published—in scholarly communication, for example, it is common for journals to demand that authors relinquish copyright claims over their articles. On the other hand, the principle of “exhaustion”—that a copyright holder relinquishes some rights to govern use once a user acquires an item—has all but disappeared in the digital realm as publishers and other corporations involved in intellectual property have developed methods, such as End-User License Agreements, and products, such as streaming services, that have curtailed the rights of intellectual property users once granted through exhaustion.

In this environment, the power to govern usage lies with the intermediary, with the platform. Platforms of knowledge distribution are ideal environments for encouraging the development of psychological ownership.
with the end goal of using free labor to “cocreate” product. If the platform is alluring enough, a corporation only needs to provide the infrastructure, and individuals will populate it with “content.” While it may be questionable to call social interactions labor, it is necessarily true that without these interactions, these platforms would not be profitable. Indeed, Terranova critiques exactly this dynamic nearly 20 years ago in spaces such as America Online. She notes that because individuals use spaces and care about them, they work to make them better regardless of the final destination of any material profits. Further she suggests that this labor dynamic is integral to the way that the internet functions.

Furthermore, platforms position themselves as neutral spaces that are only providing the infrastructure to make user creativity possible, but in doing so, they constrain activity toward that which makes a profit for the owners of the infrastructure. This tension—between presenting a space as democratic or neutral while constraining its use to extract profit—leads to what Smith, Hulland, and Thompson refer to as “the dark side of psychological ownership.” That is to say that when corporations succeed in developing feelings of psychological ownership in their users in order to push them toward content creation and stewardship—they often inadvertently cause users to feel that they should have rights in determining decisions made to the platform, particularly if that corporation acts toward profit rather than what a user determines to be the best interest of the community. Any feelings of ownership or feelings of a commons engendered in these circumstances are nothing more than myths to encourage specific behaviors.

**Twitter & Elsevier**

That power flows not from the creator or user, but rather from the intermediary is an important lesson we can teach in information literacy instruction. In order to do so—especially through consultations and guest teaching sessions—it is best to understand the instrumentality of psychological ownership through concrete examples. While I specifically choose Twitter and Elsevier here, any information-centered corporation that operates as a platform will likely yield similar results.

In 2009, twitter founder Jack Dorsey offered that “Twitter is a success for us when people stop talking about it […] people just use it as a utility, use it like electricity.” Indeed, in its beginning the corporate team behind Twitter thought of it as a “social utility.” However, by 2018 this view had changed—Twitter was less like a neutral utility, but more like “Washington Square Park.” In an interview Dorsey described this metaphor more fully: “In that public square, there’s all these things that happen and some are amazing, and some are stupid, and some are silly, and some are really terrible.” Further, in a pinned tweet dated March 1, 2018, he tweets “We’re committing Twitter to help increase the collective health, openness, and civility of public conversation, and to hold ourselves publicly accountable towards progress.” What the electrical grid, Washington Square Park, and amorphously defined “public conversation” have in common with Twitter is that they are shared spaces held in common. Dorsesy and Twitter use these metaphors to create a specific vision of Twitter as a public and shared civic space. However, “public conversation” is not a tangible corporation in the way that Twitter is and electrical utilities and Washington Square Park are both publicly owned and publicly operated.

Despite rhetoric intended to suggest a shared space, Twitter ignores repeated calls to make changes to limit harassment asked for by the users of that shared space. Instead, Twitter actively engages in rhetoric to develop a feeling of community and ownership among users while also maintaining policies that favor its shareholders and profit motives. The continued invocation of the public sphere and of corporate accountability is intended to maintain the psychological ownership of the users while holding regulatory power and the rights associated with material ownership back. In their “Doing well by doing good? Normative tensions underlying Twitter’s corporate social responsibility ethos,” Busch and Shepherd deconstruct the rhetoric of corporate responsibility.
Through analyzing Twitter’s rhetoric, its terms of service, and other documents it uses to communicate with users, Busch and Shepherd argue “Twitter’s seeming benevolence has played a significant role in rendering the site hugely successful in terms of accumulating the critical mass of users necessary to contribute their free labor toward the site’s growing value.” They go on to make clear that Twitter has maintained its use of corporate social responsibility rhetoric while also undermining the social responsibility aspects by favoring its shareholders; that they are, with other platforms like it, "businesses that adhere to the logic of economic self-interest.” The ways that Twitter has developed since Busch & Shepherd’s article was published in 2014 suggest that Twitter has found its business needs and its civic intentions at odds. To admit that the very way that the platform is designed and managed enables harassment or the spread of misinformation, rather than blaming bad actors, would be problematic to the end goal of producing revenue through promoted and marketed tweets and collecting user data. If users had public control of the platform, it is quite likely that they would target the mechanisms that make Twitter profitable.

Similarly, Elsevier is on a continued mission to encourage scholars to act in ways that benefit its profits in addition to or instead of ways that benefit any semblance of a scholarly commons. Taking its cue from other information platforms, Elsevier has used acquisitions to bolster its ability to collect data and integrate into as many aspects of scholarship as it can. In 2013 when Elsevier acquired Mendeley in 2009, a business developed by scholars with the needs of scholars in mind, the community of users worried about what Elsevier would do with it. Open Access advocate Peter Suber suggested Mendeley as a repository solution for those without institutional repository access, but rescinded this suggestion, deleted his account, and expressed his concern for what an organization that had been so detrimental to the open access movement would do to this service. The former head of Research & Development at Mendeley, similarly expressed his concern in a blogpost citing three moves that the organization made in favor of making the product more useful to scholars that Elsevier then pushed back on.

Since then, Elsevier has acquired many more open projects and businesses that scholars developed to make their work as scholars easier. In doing so, Elsevier has involved itself in every aspect of the scholarly process from citation collection to article reading to data storage to journal evaluation. They have recognized the necessity of the platform approach—that the key to profitability as a corporation working with information is to own and control the infrastructure that allows the creation and sharing of that information. In an examination of Elsevier’s “vertical integration,” what Elsevier is now terming a “connected galaxy of knowledge,” Chen and Posada highlight the dangers of this all-encompassing approach to the scholarly community: “Specifically, the vertical integration increases dependence by consumers (universities, lecturers & researchers) on Elsevier and Wiley, as well as transforms the institutional/individual decision-making process, ceding increasing control to the two.” The dependence on these corporations for doing scholarly research is the goal, it is how platforms operate. Scholars produce the content, review the content, edit the content, produce the data about these efforts and are sometimes even allowed to freely share the content. As long as Elsevier only has to pay for the development of infrastructure, it can sustain the business model in which the universities pay both the scholars and Elsevier for the same research. Further, it can maintain control over what is and is not allowed to occur in their “galaxy,” nudging scholars in the direction of services and products that make the platform profitable.

Despite this, Elsevier sells this platform under the guise of psychological ownership. In their “privacy principles” Elsevier prioritizes the value that they get from data and can then give back to users: “To continue to add value for our users and maintain their trust and confidence, we need to collaborate with them. We are talking with libraries and other publishers about how best to provide useful products and services and continue to protect data privacy.” The determination of what data is collected, how, and why is presented here as a choice.
for those working in the Elsevier ecosystem. While Elsevier allows some individual determination over data collection, value is created not through collaboration with users, but by rentiership over the scholarly commons. In their “vision for the information system supporting research,” Dominic Feltham, President for Research at Elsevier, suggests that “We see ourselves in a supporting role, working jointly with researchers, research institutions and funders to develop tools together that put researchers at the center and help them do their important work.” In this same document, and the Scholarly Kitchen article also drawing attention to this new initiative, Elsevier specifically employs the term “co-create” to describe the new initiative. The terms “collaboration,” “supporting role,” and “partnership” all suggest that Elsevier is working with scholars to create a product that scholars want. This very well may be true, but the economic reality of it is that they are hoping to operationalize the scholarly community’s devotion to the knowledge commons to have scholars develop their product—without pay—for Elsevier to then use for profit. As for-profit journals, which take the copyright of scholars and use the volunteer labor of peer reviewers, have done for decades.

Moving the Conversation to the Classroom

The framework for information literacy offers the frame “Information has value” as a way to help students wrestle with the commodification of information. Among the dispositions offered in this frame is that students will “see themselves as contributors to the information marketplace rather than only consumers of it.” However, the actual infrastructures that students will have to contend with to create, share, and use information are not neutral platforms—they are not utilities nor are they a fictional marketplace in which they have the power (or even the desire) to broker information exchange.

If we want students to think critically about information, want them to have the power to push back against misinformation, and want them to develop into people that value what information and research can do for their communities, then it is part of our job as information teachers to help students learn that information platforms themselves have value. We need to teach the ways that platforms are designed to invoke a feeling of commons and a feeling of ownership without gifting the benefits of governance and control. Infrastructure necessarily determines the type of information that is shared, how it is shared, how often it is shared, and who shares it. These are all questions that information literacy education traditionally wrestles with—it is not a stretch to see the relevance.

Peekhaus argues, “commercial control of academic publishing through strategies and practices such as industry consolidation and forced assignment of copyright represents an appropriation and enclosure of the knowledge commons that otherwise would emerge from the unrestricted flow of academic research.” How do we help students imagine what “otherwise would emerge” and work toward making what we imagine would emerge a reality? How do we help them interrogate the ways the open access—intended to open up the scholarly commons—has been rhetorically coopted by Elsevier toward a “hybrid” version that benefits no one but them?

The power that organizations like Elsevier have over the knowledge commons is not natural, but is a result of shrewd business decisions to enclose the knowledge commons toward profit and this must be crystal clear in our instruction. Organizations like Elsevier use psychological ownership and the devotion of the scholar to their craft to maintain this enclosure. If the work of our colleagues pushing to create an open access environment for the benefit of scholars and libraries is going to succeed, then it requires the work of information literacy and teaching librarians to denaturalize the way that information platforms enclose and commodify spaces that feel as if they are owned in common.

Undergraduate students are both capable of understanding this and are likely to care when confronted with the realization that their tuition money is being used—in part—to feed the development of platforms such as
Elsevier's at the detriment of knowledge access. The ways that Internet platforms such as Twitter, Facebook, and Google operationalize the labor of its users through creating privately owned public spaces are relevant to most of our students and are the direct antecedent of the ways that corporate publishers are commodifying open access. In these platforms we have a ready metaphor for discussing scholarly communication with students, and also an immediate non-academic relevance for these issues. When approached through the lens of more familiar information platforms, such as Twitter, there is potential in changing how students think of themselves in relationship to the material owners of information infrastructures. If we value what open access can do for libraries and we concur with arguments such as Safiya Noble's, for example, that corporate ownership of information infrastructure incentivizes the replication of racist ideologies in this infrastructure,45 then we cannot afford to allow these conversations to remain in the realm of scholarly communications and digital scholarship librarians.

In their work on undergraduate student knowledge of scholarly communications, Riehle and Hensley found that undergraduates “could not address copyright and author's rights as applied to their scholarship” and “were overwhelmingly unclear about who owns the copyright of their work.”46 Many of the students they interviewed either assumed that their information would become part of a knowledge commons or did not consider issues of ownership in the first place.47 These base assumptions are what allow nominal psychological ownership to thrive in concert with corporate enclosure and reifies a scholarly ecosystem in which copyright ownership is irrelevant.

In our instruction, we must be explicit about the economic realities that shape the conduits through which we get our information. As Tewell states: “By failing to explicitly recognize the ideological functions of commercial content providers, librarians lose the ability to show to students the current information landscape as what it is: dominated by search engines and other corporate-owned media that operate under a veneer of neutrality.”48 The most useful skill that we can help students to cultivate—both students that are going to remain in academia and those that will not—is the ability to determine who benefits from the information that students produce and how do those individuals benefit?

This is not to say that Twitter, Elsevier or any other platform is diabolical in its creation of platforms for information creation, use, and sharing. As for-profit corporations making decisions with profit in mind is to be expected. However, these corporate entities benefit from pretending that their users have more power in decisions than they have. It is this dynamic that we need to explicitly bring into our classrooms in order to help students, users, and scholars maintain control over the way information is exchanged. By being explicit we can help students understand why an organization such as Elsevier seems to be everywhere in their research process. By being explicit we can help students understand why Twitter will not “ban the Nazis,” if it Twitter does not believe it is in its best interest.

Endnotes


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