Access, ethics, and piracy

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Open access has been progressively making more scholarship openly available. But a majority of journal articles are still behind paywalls so some people have turned to piracy to access them. While some regard this practice as criminal and unethical,[1] for others 'liberating' research is a justified act of civil disobedience.[2] This article considers both the efficacy and ethics of piracy, placing 'guerilla open access' within a longer history of piracy and access to knowledge. By doing so, we can see that since piracy is not only an inevitable part of the intellectual landscape but can potentially drive progressive developments in communication practices, open access emerges as a contender for moving beyond proprietary forms of commodifying scholarly knowledge.

Ownership of knowledge?

Intellectual property is a relatively recent (mid-nineteenth century) invention[3] that in the twentieth century became aggressively adopted by corporations in order to drive profit creation. In the realm of scholarly knowledge, ownership of the copyright in scholarly texts is often held by publishers rather than authors. For example, when an article is accepted for publication in a closed-access journal, the copyright is often (though not always) transferred by the author to the publisher through signing a copyright transfer agreement.[4] But since the notion that scholarly knowledge is something that can be *owned* is an invented idea, rather than a necessary or inevitable part of the way we collectively generate scholarship, it is important to question the validity and utility of the idea.

The fact that the intellectual property rights of a large proportion of the scholarly record are held by publishers is linked to the current funding mechanisms that support the scholarly communication system. We are in the midst of a transition from a subscription-based model of funding journal publishing towards an open access environment where the labour of publishing is funded by other means, such as library consortial funding, article processing charges, etc. The open licensing – generally Creative Commons licenses – used for open access publications changes the 'ownership' of works to allow for a more commons-based approach. However, for the time being, a majority of books and journal articles are only available under copyright and for a fee (by one estimate over 50% of *recent* articles are available by either green or gold open access,[5] but when factoring in the amount of articles published in the past, paywalled articles still make up a majority). The cost of accessing research is a barrier that prevents many people from reading and using it in their own work. One way in which this barrier can be circumvented is by piracy.

Copyright as a response to piracy

Copyright and piracy are two concepts which came into existence together, and in some ways rely on each other. According to Johns, the notion that authors have moral and legal rights of ownership over their words – and that publishers are essential intermediaries to provide those rights – was invented in the seventeenth century as a reaction against piracy. Booksellers argued that pirates were an affront to civilization and only they were able to guard against this.[6] So the invention of authorial propriety was a politically and economically useful response to piracy. More recently, copyright has been grouped together with other intangible authorship rights such as patents and trademarks under the term 'intellectual property'.

Piracy, authorial property, copyright, and the academic journal itself are all ideas with roots in early Modern Europe following the introduction of the printing press. And while these concepts may have developed somewhat over time to adapt to contemporary conditions, there is no reason to assume that their current forms need to be maintained. In the digital era, the ability to create infinite perfect copies of works at near-zero marginal cost has led to an explosion in media piracy. Correspondingly, copyright violation – which until recently was dealt with as a predominantly civil offence – has been heavily criminalised from the late 1980s onwards through various laws and trade agreements.[7] However, the digital technologies that facilitate media piracy also make possible wholly new forms of legal dissemination of information. So rather than resorting to enforcement of criminal law, rightsholders could instead choose to adapt in other ways.

In fact, piracy has frequently been a driver of innovation and the furthering of knowledge. In post-independence United States, a deliberate refusal by book publishers to acknowledge British copyright 'fueled the development of a deliberative public sphere ... and the transfer of knowledge between more and less privileged social groups and regions'.[8] Media companies themselves have on occasion benefited greatly from violating intellectual property law, whether through the early film industry moving to Hollywood in order to evade patent restrictions or by the huge profits that music publishers have generated from genres like hip-hop which were created in part through illegal sampling. Could scholarly publishing similarly benefit from opportunities that arise through the actions of pirates?

Academic piracy today

There are a number of academic piracy websites that provide access to scholarly works by ignoring or circumventing copyright restrictions, such as Aaaaarg and Library Genesis.[9] The most of notorious of these sites is now Sci-Hub, founded by Alexandra Elbakyan in 2011.[10] Using a simple Google-style search interface, a user can input a DOI and be taken directly to a copy of the article without needing to provide authentication. The precise methods used by Sci-Hub to do this are somewhat murky but are certainly undertaken without permission from publishers.[11]

Websites such as Sci-Hub are effective because they solve multiple access problems. Pirate sites are heavily used in some developing nations,[12] particularly among countries which are not part of the global publisher Research4Life access initiatives[13] such as Indonesia, India, China, or Iran. Another reason Sci-Hub has become popular is its ease of use – even for those with legal institutional access, it can be a lot quicker and simpler to retrieve an article on Sci-Hub than on the publisher's website. And from the reader's perspective, since digital piracy results in an exact copy it makes no difference at all to the end use whether the article is pirated or not. So aside from the question of legality, piracy definitely works well for many users' immediate needs – and the distributed nature of the web means that it is probably impossible to stop.

Despite what the anti-piracy adverts before films may claim, there is a distinct difference between piracy, which is the infringement of copyright law, and theft, which is the taking of property with the intent to permanently deprive the rightful owner of it.[14] Digitally reproducing a computer file containing scholarly work does not deprive the original owner of the file. It may be argued that piracy is closer to fraud than theft, if a pirated good is passed off as an original, but this does not apply in cases such as academic piracy in which media files are freely given away – the copy and the original are identical. And law is not the same as ethics – throughout history there have been many laws that are distinctly unethical, and on occasion acting against unjust laws can be the most ethical position to take. The legal departments of commercial publishers are not commonly prone to such philosophical speculation, however, and in 2015 Elsevier took out a lawsuit against Sci-Hub.[15] As a result of this, the original sci-hub.org domain has been shut down. However, numerous mirrors exist outside of US jurisdiction such as sci-hub.ac and the site can also be accessed via Tor at scihub22266oqcxt.onion, so there is little chance of it being removed from the web entirely.

Limitations of piracy

If the preceding discussion appears to take a wholly favourable view of piracy, it is worth now exploring some of the potential negative implications. Let us skip the standard arguments that piracy deprives rightsholders of earned income. It is clear that many users of academic pirate websites cannot afford to purchase access legally so are not lowering the amount of money paid to rightsholders. And since the rightsholders (publishers) do not create the works themselves – they may contribute labour and add value in the production process, but they do not generate the copyrighted intellectual content – copyright's supposed role as an incentive to creativity is null and void. Instead, it is more productive to highlight the effect of piracy on economies in the global South, and consider the possible effect on scholarly publishing as a whole were institutions to cancel subscriptions en mass and rely entirely on piratical access.

Due to its illegal status, there are links between piracy and other black market activities. According to Aguiar, the 'political economy of corruption' that accompanies such activities

undermines political authority and legitimacy, and therefore piracy contributes to a normalisation of corruption.[16] On the other hand, high rates of media piracy in some emerging economies occur because the price for licit media is set too high to be affordable to most people.[17] Since pirated works tend to be those produced by corporations based in the global North, Karaganis argues that piracy in fact creates a net economic *gain* for emerging economies because money that would have gone to multinationals is instead spent within the local economy.[18] For further postcolonial critique of piracy see Schwarz and Eckstein's work on piracy in the global South,[19] which examines what happens when cultural practices of copying come into conflict with particular legal notions of authorship and property. Sundaram suggests that piracy 'destabilizes contemporary media property … while simultaneously radicalizing media access for subaltern groups'.[20]

It is clear that the social and economic effects of piracy are complex. But to what extent does pirated *academic* work fit in to the broader pattern? Perhaps it is a special case because there are no known links between academic pirates and other illegal activity. Another area in which piracy can cause harm is pharmaceuticals – pirated medicines pose extreme health risks. This is clearly not the case with pirated journal articles. However, the issue of provenance is also relevant here – obtaining a scholarly work directly from the official publisher (or through a library-purchased copy) makes it clearer to the end user that the work is a reliable copy. Another way in which the library and publishing communities work together is on long-term preservation; Martin[21] has examined preservation potential of pirated media content finds current practices insufficient. Although the instability Martin describes for torrents is less pronounced for academic piracy since Sci-Hub has multiple mirrors in place, long-term preservation challenges still remain. If academic piracy bypasses prior efforts by librarians and publishers to maintain the scholarly record – such as archiving in perpetuity and guaranteeing provenance – this could undermine the stability of those efforts.

Piratical access to *new* works requires that publishers continue to publish. If all subscribers cancelled their payments in the expectation they could access content through Sci-Hub, the publisher's income would cease and content would stop being produced (or rather, the production would shift elsewhere). Assuming that researchers still value the role of publishers beyond distribution – and evidence indicates that they do[22] – a total sudden collapse of the publishing industry and reliance on preprints is not something that would be tolerated by much of the academic community. If the labour of publishing must continue but the subscription model is not fit for purpose, then alternative funding arrangements are necessary.

Open access as a progressive alternative

Piracy is not open access. It fulfils an immediate need and unquestionably increases access to scholarship for some but it does not build the infrastructure required to maintain a sustainable scholarly communication system for the long term. Pirated articles are also not openly licensed, thus limiting their re-use in some contexts.[23] However, whatever your opinion on the

ethics of piracy, in a digitally-connected world with ready access to pirated scholarship, focusing effort on maintaining exclusionary systems of access based on ability to pay appears increasingly futile.

If publishers wish to continue to position themselves as essential stakeholders in the process of scholarly communication, they would be better off demonstrating this through constructive actions rather than engaging in Sisyphean attempts to end academic piracy. There is one clear avenue available for those publishers, librarians, and researchers who wish to make the results of scholarship as widely available as possible but without resorting to breaking copyright law, and that is open access. It has taken 20 years of continuous work by innumerable people to get open access to the stage it has now reached; millions of openly-licensed articles and a broad consensus at the policy level did not come about by chance but by the labour of people dedicated to furthering scholarship. This is proper route to ending piracy – not by enforcement, but by ending the conditions that make it necessary.

Conclusion

If we want to move beyond thinking of scholarship in terms of ownership and property, and have a scholarly communication system that acts in the best interest of researchers and of the whole enterprise of furthering human knowledge, then we need to think more creatively and radically about what we want to see and what actions we can take to get there. Sci-Hub is not the answer, but it *is* a wake-up call. It is one way of showing that the current intellectual property regime can be made irrelevant. If we want to actively construct a true scholarly commons, and bypass irrelevant legacy processes while also working within an ethical framework that is true to the values of librarianship and of scholarship, then let us work together to focus efforts on creating an open scholarly communication system that is fit for purpose.

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