Intellectual Property Rights: Profitization of Knowledge in Canada

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Between 2015 and 2019, Canadian universities spent over $400 million CAD in subscription fees and Article Processing Charges. However, the University of Calgary had to cancel subscriptions to hundreds of online journals to save $1.5 million (Fletcher). This is just one example of Canadians being blocked from accessing the very information they have helped fund. In 2024-25, the Canadian Institute of Health Research (CIHR), the Natural Sciences and Engineering Research Council of Canada (NSERC), and the Social Sciences and Humanities Research Council (SSHRC), the Tri-Agency, invested over $4 billion in research, training, grants, and awards (CIHR; NSERC; SSHRC). This funding is through Canadian taxpayers, yet the information it helps create remains inaccessible to Canadians. Using Canadian intellectual property laws, publishers can profit from government funded research. Specifically, Canada's Copyright Act allows publishers to gain ownership through copyright transfer, and weak open access policies fail to ensure public access. Through the perspective of critical political economy, this essay highlights how limitations in Canada's Copyright Act, research funding and open access policies have turned research into a for-profit industry while presenting actionable reforms that would benefit all Canadians.

As of 2015, all three Tri-Agency councils (CIHR, NSERC and SSHRC) had implemented open access policies. "Open access" refers to making scholarly work freely available without paywalls. The policy required grant recipients to make their peer reviewed articles freely accessible within 12 months of their publication date (CIHR). However, due to issues with compliance with this policy and loopholes found by corporations, it wasn't effective. Compliance with

open access policies ranged from 23% to 39% across the three agencies. In 2024, a report found that there was virtually no monitoring or consequences for non-compliance, resulting in researchers and organizations not taking policy seriously (What We Heard Report). The 12 month timeframe was also behind international standards. Moreover, when researchers wanted to make their research freely accessible, they would have to pay Article Processing Charges (APCs) to publish in open-access platforms, often from their existing grants, as there was no dedicated funding (Haustein). The APCs can be anywhere from hundreds to several thousand dollars, making it unaffordable for those who may want to make their work open access. The policy also failed to address the publishers' extortion of profit. A 2018 report found that from 2011 to 2015, the price of academic journals rose about 5-7%, all while the top five publishers controlled over 50% of the market and had profit margins ranging from 28-38.9% (Shearer). In 2024, Elsevier, one of the biggest publishers, reported profit margins of around 37% despite the rising costs (Zul M). This structure creates a system where public investment is generating profit for companies. Access to credible articles and research is behind paywalls costing upward of $15 to $80 each, while misinformation can spread freely online (University of British Columbia). The effects don't just impact students and researchers; they have repercussions across Canada. One problem that is very prevalent today is health literacy. A large reason for the virality of misinformation in such topics is a lack of health literacy, which can be attributed to the availability of research and studies. What's more is that smaller communities that look to reduce misinformation through sharing knowledge may not be able to afford the subscription rates required for access. A study from Shahid et.al showed that low health literacy rates have a direct impact on patients' health outcomes and higher rates of emergency room revisits. Another research found that low health literacy results in a lowered ability to evaluate health information online and is more likely to trust misleading information (Diviani et al.). This system, where public investment creates private profit while restricting public access, is precisely what the critical political economy critiques.

Critical political economy analyzes how media systems are shaped through ownership, profit motives, and capitalism (Lee). Specifically, it looks to analyze who owns, profits and is excluded while helping break down why media operates the way it does. As it applies to intellectual property law, the perspective can show how legal structures are used to take advantage of intellectual property. Within this essay, that means analyzing how publicly funded research is being profited from. Universities were founded on the principle that higher education and access to information serve society (Johnson). However, by the 1980s economic downturn had begun, and governments focused on competition rather than the public good (Goldman). Elsevier, Springer and Wiley entered the market, and through mergers and acquisitions, gained monopolistic control over the market and by 2020 controlled over 50% percent (Pedersen). This created a neoliberal market model which, as discussed in class, supports capitalism and privatization over easy access for the public. Copyright laws, which were originally made to protect authors, became something for publishers to abuse. The researchers and authors were forced to sign away ownership because their career development, notoriety and many other career factors depend on publishing, which publishers control (Aubert Bonn and Pinxten). This is an example of market failure. One where a handful of publishers have gained control over a public good, allowing them to set high prices. Such a system excludes people, inflates costs and limits access, which are all hallmarks of market failure (Investopedia). This has created the cycle that we are in today. Where the public funds the research, university researchers carry it out and write the articles, peers review articles, and publishers claim copyright while adding little to no value.

Addressing this problem in Canada requires reforming copyright laws and implementing more effective open access policies. The approach includes eliminating publisher control over publicly funded research, learning from and aligning with international standards and building pathways of success through sustainable scholarly communication. The first three components for improvement include faster access, rigid policy enforcement and funding for APC. All research funded through the Tri-Agency must be available through the open

repository within 6 months of its publication date. This would include peer-reviewed articles, conference information, research findings and all associated data. This would enable those seeking information to have access to the most recent version at all times. The shorter time period directly aligns Canada with international standards. To ensure compliance, this policy must also be continuously monitored and should have consequences if not followed. Not complying with open access should lead to inaccessibility to any future Tri-Agency grants. Furthermore, this process should be tracked through an annual report carried out by a third-party organization. Regarding APC funding, there should be an annual fund to help support authors and researchers. One of the biggest barriers to making information open access is the need to pay APCs to ensure the quality of the information. This aspect of the reform should fall under the umbrella of universities and other organizations where authors and researchers work. As universities begin to spend less on subscriptions, the money can instead be redirected to provide funding without burdening taxpayers. Lastly, one of the most important parts is to have enforcement with real consequences. As part of this initiative, non-compliance with open access should lead to ineligibility for any future Tri-Agency grants. This should include an annual report on compliance rates that directly affect funding. We must also consider changes to the Copyright Act's shortcomings in supporting publicly funded research. Currently, the Canadian Copyright Law Section 13(1) automatically makes the author the default owner of their work. However, Section 13(4) allows authors to transfer ownership to the publisher, which publishers demand as a condition for publication. Although suggesting changes to the Copyright Law requires a lot of time and effort, in the meantime, the Tri-Agency can do its part. One way is to make funding contingent on grant recipients having their work accessible through open access. This works because if the researcher accepts Tri-Agency money, they are legally obligated to the contract. When the author later signs copyright over to a publisher, the work is already under the author's prior agreement with the Tri-Agency. The publisher cannot then prevent the author from fulfilling their contract, even if they own the copyright. This would especially bypass a lengthy process of changing

the Copyright Act, while still meeting the objective.

These changes all play their part in addressing gaps in the Intellectual Property Rights policy as it relates to research. From the perspective of the critical political economy, this would transform the way knowledge is privatized in Canada. We can also look globally for examples of similar reforms. For instance, in 2018 from support by the European Commission cOAlition S, a group of research funders including the European Research Council (ERC), UK Research and Innovation (UKRI) and numerous national research councils across Europe implemented something called Plan S. This plan required that from 2021 onward, all cOAlition S funded scholarly publications must be made immediately open access with no paywalls and embargoes (cOAlition S, "Part I: The Plan S Principles"). Studies examining the impact of Plan S found that it increased the open-access rate from around 50% to over 80% within the participating organizations (cOAlition S, *Plan S Annual Report*). Importantly, it brought attention to equity through globally fair pricing and brought publishers to the negotiation table with institutions to establish reform (de Castro et al.). Canadian institutions can learn from this example and use it as a case study.

Open access would even encourage participation in the democratic process and the pursuit of knowledge across Canada. An Ontario Science Centre survey found that 83% of people surveyed wanted to learn more about science and how it affects the world around them (Ontario Science Centre). This is especially important when the Canadian parliament discusses its policies and economic affairs and references research studies that help make decisions. Canadians, especially young Canadians, may feel uneducated surrounding such policies and may not feel confident in challenging policymakers. An article by Day et al. talks about this, stating, "By limiting access to research outputs, the current publishing system makes it more difficult for research to be held accountable to the public" (Day et al.). Referenced studies remain inaccessible to Canadians who must put their trust in claims via sources and experts that can't verify themselves. Open access would help change this and allow Canadians to

be more involved in the processes that govern their lives. There are also benefits within the growing Canadian economy. Availability of research would help small businesses and startups have access to domain knowledge crucial for growth. Many such organizations don't have funds or the means to access up-to-date research. This would level the playing field for large corporations and smaller, ambitious ones supporting innovation in Canada and market competitiveness across the board.

As with any reform, there come pitfalls and drawbacks that we must discuss. Critics, especially within the publishing industry, argue that open access is not sustainable. They point out that forcing open access directly impacts the funding related to peer review, which in turn reduces quality across. However, there is nothing sustainable about upwards of 37% profit margins that publishers charge. This is primarily a means of extorting public investments. Peer review is performed by unpaid researchers and does not depend on publisher business models. Moreover, some argue that Plan S threatens non-profit journals in less developed countries, creating a bigger divide globally. The plan overlooks small national journals, neglecting entire research communities and their work. However, Plan S directly considered this during implementation. The policies required transparent pricing, having journals publish their pricing models to prevent exploitation. They also provided support in terms of funding and resources to communities with a lack of open access infrastructure and directly supported diamond open access, which is directly valuable for smaller, less resourceful communities (cOAlition S).

Canada's research publishing system has allowed publishers to take advantage for far too long. They have been able to restrict access to knowledge while extracting profits. This is not just a market failure but an inequality within Intellectual Property Rights made possible through weak copyright laws and poor open access policies. Mandatory open access with enforcement, APC funding and new infrastructure would help reclaim the knowledge that belongs to the public. By using initiatives that have been tested by our global partners, Canada can fight

back against a system that looks to profit from knowledge rather than spread it.

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