A recent investigation by the ***Globe and Mail*** cast a critical eye on the growing number of university-industry partnerships between the telecom giant, Huawei, and leading research-based universities in Canada, including McGill and Waterloo.

Huawei itself advertises its Huawei Innovation Research Program (HIRP) as a joint initiative between governments, universities, and the corporation[8]

Chinese Transnational ICT Corporations: The Case of Huawei, current literature about Huawei is focused on functional organizational analysis, highlighting internal marketing strategies, business management, and technological innovation. “These accounts lack critical insights into the nature of capital accumulation and abstract away from the structural analysis such as evolving social relationships that are embedded in corporate power.” (Wen, 2017: 16). Consequently, this paper will not focus on the social relationships between intellectual labourers and neoliberalism. Instead, it will examine how global forces like economic neoliberalism and IP regulations shape interactions and between corporations, universities, and nation-states.

The first section of this paper historicizes the rise of neoliberalism and its role in bridging the gap between free-market ideologies and protectionist intellectual property regulations. The U.S. is shown to play a dominant role in shaping those systems. Applying a Marxist analysis to these global power forces establishes the nation-state as inseparable from capitalist interests; the nation-state plays an important role in producing and reproducing power relations within capitalism, but its involvement also produces contradictions.

his book, ***The Global Political Economy of Intellectual Property Rights: The New Enclosures***, Christopher May argues that IP laws are a protectionist measure enacted by the nation-state to rescue capitalist interests and sustain temporary monopolies. Michael Perelman makes a similar argument, noting that while advocates of free-market economics praise open competition and increasingly borderless trade, these competitive pressures "will cause the market economy to self-destruct unless it has external supports—such as intellectual property regulations—to limit competition" (Perelman, 2014). State legislature, therefore, has an important role in constructing current understandings of IP to benefit capitalist interests (May, 2015). Professor Walter Hamilton also referenced the socially constructed nature of IP, noting, "it is 'incorrect to say that the judiciary [of the nation-state] protected property; rather they called that property to which they accorded protection.'" (quoted in May, 2015). The knowledge produced by intellectual labourers is not intuitively (or inherently) 'property,' but it can be given the same legal protections through an intentional social construction carried out by the nation-state legislature and negotiating bodies.

U.S. Domination of IP as a Protectionist Measure

When it comes to protecting economic interests through IPRs, The U.S. is an international champion. From the 1980s onward, the U.S. has increasingly used its economic and military prowess to restructure the international market of telecommunications — partially by strengthening international regulatory laws that benefit 'national' companies. Using its economic and political power to influence IPRs allowed the U.S. to expand its control over foreign governments while simultaneously

promoted so long as they do not jeopardize U.S.-based corporate monopolies. When threatened by international competitors, the U.S. becomes distinctly protectionist.

Even before TRIPs, domestic laws in the U.S. were shifting as a protectionist measure against international competition. Before the U.S. became a global superpower in its own right, the young nation was notorious for not respecting the copyrights of other countries. American publishers would “rush across the sea” to England, get their hands on patents and then re-print them in the U.S. without having to pay royalties. The nation’s early economic success was built, in part, on the unrestrained flow of information and new technology (Perelman, 2014). As other countries began to catch up to the U.S., however, the 1960s was marked by a flood of imports that washed away millions of domestic manufacturing jobs. Whereas patents had historically been viewed in the U.S. as a barrier to free-market economics, the loss of millions of jobs during that time period quickly changed attitudes. The argument was no longer about blocking competition between domestic corporations; it was about protecting domestic corporations and jobs from international competition. At this time, both the administrative and judicial branches of U.S. government became more sympathetic to the rights of IP (Perelman, 2014): “The interests of industry and labour coalesced in the search for viable weapons in the fight against foreign competition.” (Warshofsky, 1994). Nationalizing the success of private corporations became a top priority.

By the end of the 1970’s, the “Volcker shock” in the U.S. massively hiked interest rates and tightened credit limits, ending the rising inflation and opening the door for a new phase of capitalist expansion. From that time period onwards, neoliberalism

emerged as the definitive model of global capitalism (McNally, 2011). IPRs since the 1960s and 70s have also been directly influenced by this larger trend of global neoliberalism. Essentially, the shift to neoliberalism solidified the inherent contradiction between protectionism and free market ideologies that was already being

tariffs. China responded with a similar threat of tariff impositions, leading the Bush administration to discourage further investment in China. Not wanting to set back the successes Chinese TNCs were beginning to see, Bf]

By promoting university-industry partnerships, Canada hopes to derive national economic benefits that help it compete in the global marketplace. These partnerships also promote a form of centralized or industry control of IP and patenting rights.

restructuring”

with nationally funded institutions, giving them closer access to policy makers. In return, Canadian universities receive funding, hands on training for their students, and the chance to work on telecommunications projects that would otherwise be beyond the scope of the university's limited funding (Bruneel et al., 2010).

Huawei's organizational structure and focus on joint innovation make it appealing to potential Western partners. Manuel Hensmans has written extensively on Huawei and its innovation partnership strategies in Europe. He notes there are three stages to the company's market integration plans to move from epiphery, 'niche,' customers all the way to the center - universities, governments, and major national stakeholders. First, Huawei offers customized technologies that meet practical needs and overcome resource restraints for customers who have been ignored by the dominant telecom companies in the region. Second, Huawei builds customer loyalty by launching longer-term joint innovation centers that are owned equally between Huawei and the partner. The focus on equal ownership is key to the partnership's success. Third, Huawei enlists the support of governments, universities, and other industry stakeholders by customizing their innovation investments to their priorities. This allows them to be viewed as a "model citizen." In France, for example, Huawei decided to forego its tax benefits and pay full taxes to the French government. In an even greater show of trust, Huawei responded to France's national security concerns by divulging its source codes to the French and European governments in 2012. (Hensmans, 2017). These symbolic acts of building trust set it apart from Western companies like Google and Facebook who are notorious for evading taxes whenever possible (Srnicek, 2017: 30). Its "model

Huawei to benefit its own nationalist economic interests but are acutely aware of the company's other interests.

Canada

For Canada, insecurity surrounding Huawei is compounded by the company's claim to the IP produced by Canadian researchers. Unlike traditional foreign direct investment, Huawei is not owning a piece of land or a Canadian company, it is claiming a share of Canadian brain power. Huawei is, in a sense, owning part of the 'national' intellectual labour power. This is exactly the opposite of what Canada wants to achieve in the long-term with its funding-based promotion U-I partnerships that will ideally spawn local Canadian tech 'spin-off' companies to benefit the national economy (Rasmussen, 2008). However, continuing to support university partnerships with Huawei opens the door for participation in the much larger global race to implement 5G telecommunications infrastructure (Silcoff et al., 2018). As it now stands, much of Huawei's alpha testing of 5G technology is being done at Canadian university research labs, so even if the IP for those technologies is transferred to Huawei, the Canadian inventors and potentially some of the infrastructure will remain in Canada. This, it is hoped, will make it easier for Canada to be among the first to open these new networks to the public (Silcoff et al., 2018). Even so, because the ownership of the relevant IP will likely remain with Huawei, insecurities about Canada's position in the global telecom and IP race persist.

These insecurities are not new to Canada's relationship with Huawei; Canada is no stranger to foreign direct investment and IP transfer. Nearly 90% of all patents in

networks. However, despite these findings, Canada's general policy and the opinion of the general public is that engagement with China is better than non-engagement (Canada, n.d.; Public Policy Forum, 2018). Essentially, by funding the commercialization of university research, Canada is making a compromise and a bet; value prod

(Backaler, 2014b; Silcoff et al., 2018). Clearly, what is good for China is not necessarily good for Chinese TNCs like Huawei.

Huawei has been trying to shed the image of Chinese government puppet for years. Despite its private ownership structure, the company is often cited by Western media and foreign intelligence agencies as having ties to the Chinese state because of its CEO, Ren Zhengfei's, past working for the People's Liberation Army (PLA). In September of 2012, both Huawei and ZTE were both brought in for questioning by the U.S. House Intelligence Committee to rule on the threat these TNCs posed to U.S. cyber security. Huawei spent thousands of dollars on cybersecurity consultants and government lobbying, and the chief U.S. representative for Huawei, Charles Ding, directly denied any connection with the Chinese state: "Huawei has not and will not jeopardize our global commercial success nor the integrity of our customers' networks for any third party, government or otherwise. Ever." ("China Telecom Firms Defend Record," 2012; Backaler, 2014c). Despite the company's best efforts, however, the Committee report listed both companies as a threat to U.S. cybersecurity, noting that even if these companies act as private enterprises now, there is a close enough connection to the Chinese government to merit concern (2014c). Huawei is caught in a conflict of interest because although the CCP's economic liberalization initiatives in the 80s are what allowed then to develop in the first place, the continued political uncertainty between China and the U.S. are a market barrier for penetration into Western markets.

The conflict of interest between Huawei and the CCP is also a source of ongoing insecurity for Chinese government. Even though the state incentivizes TNCs and has liberalized the economy to better facilitate foreign direct investment, Huawei and other