CHAPTER 1

Decolonizing Digital Spaces

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Abstract

Power without purpose. Aspiration without intention. Ubiquity without diversity. For too long, we have been enraptured by the promise of the digital age, failing to critically examine the roots, intentions, and impact of an increasingly small number of for-profit firms. In a world where digital spaces play such an integral role in all aspects of our lives, this accumulation of reach, power, and influence poses critical questions and concerns relating to citizenship in a digital context, and in particular within the context of Canada as a colonial state articulating a commitment to reconciliation. In this chapter, I will provide a brief overview of the history of digital spaces through a decolonized lens, a critical step toward grounding ourselves in the current realities and complexities around citizenship in a digital context. Focus will then shift with an eye to the future, identifying potential next steps for researchers and policy-makers so that the private and public sectors can begin to mobilize around a more robust definition of citizenship in a digital context in Canada, one that will serve and support the emergence of decolonized digital spaces.

From Alexa to Siri, we are asking more questions of our devices than ever before. Their soothing mechanical voices are a far cry

from the jarring tones of dial-up modems, revealing how seamlessly ubiquitous technology has become in the ensuing decades. We now exist in an era in which an entire digital world is being integrated into our physical spaces.

Yet as we ask more of our devices, the time has come to also ask more of our governing and regulatory bodies regarding digital access, agency, equity, and rights. For too long, for-profit corporations have dictated the terms by which we engage with digital spaces, and have enjoyed largely unfettered reign over these spaces, which have become so foundational to our lives as hubs of commerce, connection, and knowledge exchange. An emphasis on consumers over citizens carries with it considerable implications, particularly for those for whom capitalist-colonial systems were engineered to marginalize or exclude.

While privacy breaches and the spread of misinformation are forcing governments around the world to grapple with such realities, these conversations carry particular weight here in Canada, a colonial construct built forcibly atop the many Indigenous Nations of Turtle Island.[1] In an age of commitments to Nation-to-Nation relationships (Wilson-Raybould, 2017), what does it mean to have such a small set of corporations—whose reach and influence are beginning to transcend that of the colonial nation-state—able to exert such unfettered control and influence? It is clear that we cannot discuss citizenship in a digital age without discussing the ways in which the privatization of the web, data sovereignty, lack of regulatory oversight, and the demographics of the sector itself relate to reconciliation in Canada. How can we begin to meaningfully decolonize digital spaces? And what is the role of policy-makers in these efforts?

We are at a critical juncture in regard to these conversations. If we move forward rooted in recognition and respect of Indigenous rights and in a shared spirit of reconciliation, we can amplify the work of Indigenous innovators across Turtle Island, and, in turn, craft a vibrant digital domain for all. To realize this promise, policy-makers must become more actively engaged in the digital domain, countering market forces that claim neutrality in a complex and unequal world.

In this chapter, I provide a brief overview of the history of digital spaces that decentres its dominant narrative—a critical step toward grounding ourselves in the current realities and complexities around citizenship in a digital context. Focus then shifts to the future,

and I identify potential next steps for researchers and policy-makers to take to private and public sectors to mobilize them around a more robust definition of citizenship in a digital context[2] in Canada. This will serve and support the emergence of decolonized digital spaces.

From Defence to Dominance

Technology is never a neutral force. Behind the sleek glass and metal enclosures of our lithium-charged lifelines are *people*: the technology sector's evolution (from its militarized roots to today's growing surveillance state) reflects the values and beliefs of those people who craft the code that powers our digital age. Meaningfully assessing our current context and potential paths forward requires us to first re-examine the dominant narrative of our electronic evolution with a more critical lens, exposing how the forces of colonialism, patriarchy, and Whiteness have shaped the sector and its offerings.

While Canadian firms have played a key role in the development of what is now the technology sector—from the companies that would become Nortel Networks Corporation (commonly known as Nortel) to the dominance of Research in Motion (RIM) in smartphone development—a more comprehensive understanding of the patterns and trends in tech development comes from an exploration of what's commonly called Silicon Valley, a small geographic area in Northern California with a disproportionate impact as the home of the world's largest and most influential technology firms.

How have the specific roots and current realities of Silicon Valley shaped the approach to an general engagement with digital spaces? And what do these trends reveal about the role of policy-makers in ensuring digital spaces are equitable for all?

Silicon Valley: A Case Study

The lands now known as Silicon Valley (loosely defined as the San Francisco Bay area) knew innovation long before the emergence of electronics. The Ohlone Peoples (a modern grouping of a number of distinct Indigenous tribes and language groups) had a deep relationship with the lands and waters of the region prior to the arrival of the Spanish (Spencer, 2018). With colonization came measles and missions—Keith Spencer (2019) notes a drop in the Indigenous population of what is now California from 310,000 to 100,000 people.

This disruption and destruction set the tone for the technological "progress" that would follow in future generations. As Spencer (2019) notes:

> The differences between the Ohlone and the Spanish ways of life reveal the contradictions inherent to our present-day idea of "technology." To borrow the Silicon Valley business-speak of today, who possessed more advanced technology? The Ohlone or the Spanish? Who was more innovative? The deep knowledge of the maintenance of the landscape, and the communal lifestyles enjoyed by the Ohlone, meant that the Bay Area remained in a relatively stable ecological state for a thousand years. The incursion of the colonizers disrupted this; they imposed their technological whims and their agricultural logic on the landscape and enslaved and exploited the Ohlone. (para. 11)

European agricultural practices were forcibly imposed upon the region and its peoples at the turn of the eighteenth century, stripping the region of its abundance of plant and animal life and replacing it with farmland and orchards (Spencer, 2018). A second ecological disruption would come as the region shifted from apple orchards to Apples of a different variety, a concrete densification that came in part through military-defence spending in the mid 1950s—ARPANET (the forerunner of today's Internet) was supported by the Defense Advanced Research Projects Agency (Balachander, 2017; Dembosky, 2013; O'Mara, 2018; Tarnoff, 2016). The first transistors produced by Fairchild Semiconductor (one of the earliest and most prominent semiconductor companies in Silicon Valley) were used in the computer of the B-70 bomber, with others used to form the guidance system for the Minuteman II ballistic missile (Laws, 2017; *1958: Silicon Mesa Transistors*, n.d.). And the first tenant of the technology park Stanford Research Park was Varian Associates (Findlay, 1992, p. 136), a company whose roots were tied to creating military radar components, including the development of the fuse for the atomic bomb (Lécuyer, 2006, p. 102).

Whether it focuses on Steve Jobs's garage or Mark Zuckerberg's dorm room, the mainstream narrative about technological development emphasizes human ingenuity, creativity, and innovation as its roots. But without active investment from military institutions for imperialistic purposes (aggravating colonial tensions and solidifying

colonial borders abroad), what we now know as our digital age would look markedly different. We cannot extricate the online spaces of today from these troubling roots, and instead must recognize both the harm caused by these efforts as well as the precedent it set for the future of the technology sector.

For as the pace of technological progress in Silicon Valley steadily increased, perceptions around technology began to shift. No longer a niche product for military or academic applications, young upstarts such as Bill Gates had high aspirations for the sector's potential. It became about more than the mere selling of keyboards and mice; there was a belief that technology had the power to fundamentally transform all aspects of our lives, far beyond the reach of the first Netscape computer browser (Beaumont, 2008). These early aspirations (which have now solidified into a pervasive ideology in Silicon Valley) were evidenced by Apple's "Here's to the crazy ones" ad, which posited that "the ones who are crazy enough to think they can change the world are the ones who do" (Dormehl, 2018). But lost in this clever catchphrase is a deeper truth: that despite a utopian dream of borderless and democratized digital spaces, social inequities and injustices continue to inexplicably determine whether your crazy, world-changing idea will even be heard or resourced. The sector continues to disproportionately attract, promote, and follow the leadership of the most privileged segments of our society. Of its five dominant firms (Amazon, Apple, Facebook, Microsoft, and Google) over 70 percent of their senior leadership teams identify as white, over 73 percent of all staff (in the case of Microsoft) are male, and none have more than 1 percent of their workforce who identify as Indigenous, Native American, Native Hawaiian, or Pacific Islander (Brown & Parker, 2019; Apple, 2019; Microsoft, 2018; Facebook, 2018; Our workforce data, 2018).[3] As noted by Harris (2018) of Code2040 (a non-profit dedicated to increasing Black and Latinx representation and leadership in the technology sector), this is more than mere under-representation; it is systematic exclusion.

This systematic exclusion and the homogeneity of the sector have critical implications for the digital landscape. The fact that so many Indigenous communities continue to face the effects of the digital divide, which is "the division between those who are able to access and use the internet and those who are not" (Cañares et al., 2018, p. 6) is the type of reality that often exists outside of the lived

experiences of those most actively involved in shaping the tools and technologies of our digital age.

Within the context of rights and citizenship in the digital environment, governments must come to play a more active and central role in the technology sector's continued growth and evolution, as "self-regulation" has proven insufficient to ensure equitable and just access and engagement with digital tools and platforms. Policy-makers can and must begin to address structural inequities, support the emergence of new digital spaces, and establish a form of citizenship in a digital context that is rooted in the realities of the Canadian colonial state. Such shifts will help to facilitate broader changes within a sector whose roots and history have largely failed to represent, reflect, or respect the diversity of its user base.

Decolonizing Citizenship in a Digital Context

The critical conversation on decolonizing citizenship in a digital context comes at a time of increasing complexity and change in the policy landscape as it relates to issues of technology. From rapid e-commerce growth (soon to account for 10 percent of Canadian retail purchases) to the ubiquity of social media platforms (with 94 percent of Canadians who use the Internet on at least one platform), the implications of the rapidly evolving digital landscape are inescapable (Gruzd et al., 2018; Mohammad, 2018). As the pervasiveness of digital technologies has grown, so too has the power and influence of the technology sector, placing policy-makers in the position of a seeming need to choose between the economic growth of the future and citizens' rights. To date, the pendulum has swung in favour of tech monopolies—whether in the types of government incentives offered for Amazon's second headquarters,[4] the wish to embrace Sidewalk Labs in Toronto, or the lack of a proportional response to the revelations of the Cambridge Analytica scandal, governments appear reluctant to take on a sector with such vast reach and influence (Dayen, 2018; Gruzd et al., 2018; Wylie, 2018).

The crucial questions are worth repeating: How can policy-makers support the emergence of a form of decolonized digital spaces? And what is the role of citizenship in a digital context in ensuring such spaces are able to thrive?

As we explore tangible steps that can be undertaken at the federal level to support such efforts, it is critical to reaffirm that all steps

forward must be rooted in recognition, respect, and embodiment of Nation-to-Nation relationships. Only through such relationships and partnerships can progress be made in a way which addresses issues of sovereignty and jurisdiction, rights and oversight, and regulation. Such dialogue and collaboration must take differing forms in recognition of the diversity of Indigenous Nations and Peoples.

A Continued Commitment

A strong foundation for a decolonized digital landscape demands broader societal shifts. As the result of a fundamentally human endeavour, digital spaces mirror, replicate, and at times exacerbate the real and pressing realities faced by Indigenous Peoples and other racialized communities in physical spaces. Eliminating the digital divide faced by rural and remote Indigenous communities (Howard et al., 2010; McMahon, 2014) demands an examination of the historic and continued underfunding of Indigenous Nations. At the same time, levels of hate speech experienced by Indigenous voices online (Chapin, 2015; Kassam, 2017) require reflection on the intentional marginalization and minimization of Indigenous world views and perspectives across school curricula, mainstream media, and social media. Growing awareness, advocacy, and action across these tangible and material fronts is critical to crafting digital spaces that are equitable for all. While potential policy interventions to support these shifts are too numerous to note exhaustively in this chapter, they include sustained investments in Indigenous communities to counter a decade-long 2 percent funding cap (Fontaine, 2015), and concrete commitments to the realization of the Calls to Action of the Truth and Reconciliation Commission (2015) and the Calls to Justice of the National Inquiry into Missing and Murdered Indigenous Women and Girls (2019).

Eliminating the Digital Divide

As long advocated for by the First Nations Technology Council and other digital rights groups (Williams, 2018), decolonized digital rights begin with addressing basic issues of access. Despite a 2016 ruling by the Canadian Radio-television and Telecommunications Commission that access to broadband Internet was a basic service for all Canadians, far too many Indigenous Nations are grappling with

a complete lack of connectivity, or connectivity far below the speeds which so many of us take for granted (Kupfer, 2016; Williams, 2018).

Investments in the necessary connectivity infrastructure is critical to ensuring full and equitable access to digital spaces. How this work is undertaken (and by whom) represents a tangible opportunity to engage in economic reconciliation by working in partnership with Indigenous-led broadband initiatives and continuing efforts to increase the number of federal procurement opportunities awarded to Indigenous-led businesses.

UNDRIP Implementation

Strengthened digital rights are dependent upon strengthened rights overall, which gives increased urgency to the full implementation of legislation incorporating the articles of the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP 2017) into federal law.

In the absence of action on easing the digital divide, the enshrinement of these rights and protections in federal jurisdiction would provide another avenue (via Articles 5, 21, and 23) with which to advocate for the necessary investments to eliminate the digital divide faced by remote communities.[5] Such advocacy efforts are already underway within the province of British Columbia following the passage of Bill 41 in November 2019 (Jang, 2019; Khelsilem, 2019).

Sustained Investments

Countering current trends across the technology sector requires sustained investments in the service of the emergence of a decolonized digital future. From the provision of digital skills training opportunities in remote communities to supporting Indigenous innovators leveraging digital tools for cultural revitalization and resurgence, meaningful, long-term resources will accelerate the transformative work that is already taking place across Indigenous communities.

A Digital Bill of Rights

Amid data breaches, privacy violations, and manipulative practices by technology firms, there has been a renewed interest and attention in the crafting of a "digital bills of rights" for citizens (Swisher, 2018; Tisne, 2018). The *Canadian Bill of Rights* (1960) and the *Canadian Charter*

of Rights and Freedoms (1982) reflect an understanding of government as the protector of citizenship rights that transcended all other (e.g., market) pressures or incentives. We need the same now within the digital realm.

While of critical importance for all Canadians, such a framework would carry particular weight and significance for marginalized communities, who are disproportionately targeted by digital surveillance, biases in algorithms, and online hate crime (Buolamwini, 2019; Massey, 2018; Small, 2019; Tahir, 2019). The European Union's *General Data Protection Regulation* (GDPR) represented a tangible advancement toward more robust data privacy protections for citizens, but a broader scope needs to be considered (Shull, 2018). The Digital Rights Now coalition has called for the federal government to establish a strategy that includes a focus upon "data collection, ownership, use, and rights; privacy as a public good; consent; equitable internet access; fair competition and future prosperity"[6] (Tech Reset Canada, the Digital Justice Lab, and the Centre for Digital Rights, 2018).

Canada's *Digital Charter*, first introduced in 2019, represents a first step within the Canadian context. It remains to be seen how these principles will translate into legislation and oversight, including whether (and how) such efforts will be grounded in a commitment to reconciliation and Indigenous rights.

Establishing New Regulatory Bodies

Such concerns raise another critical area of focus for policy-makers. Election interference and the spread of extremist content online has raised serious questions around the "self-regulation" approach the technology sector currently enjoys as it pertains to their platforms—a privileged position of low accountability to users or to governments. Furthermore, these platforms are ill-equipped to self-regulate. Reporting by Angwin and Grassegger (2017), Hopkins (2017), and Koebler and Cox (2018) based upon leaked content moderation guides revealed these platforms' acceptance of white nationalist and separatist sentiments, as well as a reliance upon Wikipedia to articulate the distinction between them and white supremacy.

Tisne (2018, para. 2) notes that "a new set of institutions and legal instruments to safeguard the rights it lays out" will be required to strengthen and support a digital bill of rights, which could take

the form of a series of robust, sector-wide regulatory frameworks, as well as enforcement mechanisms. These will need to go considerably further than Canada's current *Privacy Act*, *Access to Information Act*, and *Personal Information Protection and Electronic Documents Act*, which are largely "premised on informed consent" (Shull, 2018, para. 6) The recent Public Policy Forum report "Poisoning Democracy: How Canada Can Address Harmful Speech Online" (Tenove et al., 2018), included a recommendation to create a "Moderation Standards Council" (which would establish a digital equivalent to the Canadian Broadcast Standards Council), while Change the Terms (Center for American Progress et al., 2019), a coalition of organizations committed to the online rights of marginalized communities, is advocating for more stringent efforts to combat hate in digital spaces.

Breaking Up Tech Monopolies

Staltz (2017) suggests that we are moving rapidly from an Internet to a Trinet—in essence, a trio of companies (Amazon, Facebook, and Google) complicit in the carving up of cyberspace into domains of power and influence. Amid this e-imperialism have arisen growing calls to splinter the tech monopolies, curbing the influence of their respective CEOs, Jeff Bezos, Mark Zuckerberg, and Sundar Pichai, as we did at the turn of the twentieth century with the Carnegies and Rockefellers. These calls may begin to be answered—the US Federal Trade Commission and Justice Department are each launching antitrust and anti-competitive investigations into Facebook, Amazon, Apple, and Google, while a number of 2020 presidential candidates (Elizabeth Warren, Bernie Sanders, and Amy Klobuchar) expressed a desire to break up the largest firms in part through a re-examination of recent mergers and acquisitions (Herndon, 2019). While Canadian policy-makers clearly cannot play a direct role in breaking up American firms, they can play a much more active role in influencing and advocating for such changes in response to recent developments.

Conclusion

The commodification and corporatization of digital spaces have a significant impact upon the real and urgent decolonization efforts we have committed to as a country. In this chapter, I have sought to

outline the ways in which patterns of power, influence, and ideology in physical spaces have manifested in the digital realm, and offer some reflections as to potential paths forward for policy-makers to help counter these trends. Companies are not governments—they are driven not by public good nor public accountability but by profit and market dominance. Market demands and citizen rights are two very different calculations, producing markedly different outcomes. Technology companies have no obligation toward diverse or historically marginalized communities outside of those that are provided to its entire (paying) user base. In the absence of more concerted leadership of governments in these conversations, we run the risk of replicating the failings of our current conceptualizations of citizenship in this new, uncharted domain.

Advancing the decolonization of digital spaces will require a thoughtful and significant shift in how we approach efforts to democratize and decolonize digital spaces. The value of "nothing about us without us" must be respected and upheld by policy-makers by centring the voices of Indigenous Peoples in these conversations. This can—and should—take many forms, but must include representation and resources. The federal commitment to Nation-to-Nation relationships must be reflected in who is at the table in a leadership capacity as a digital rights framework takes shape, and investments must be made in Indigenous-led initiatives and in spaces that are already actively exploring the questions raised by this work. Truly decolonizing digital spaces demands that Indigenous Nations and Peoples are able to determine, on their own terms, what their visions are around their own digital futures, providing a counterpoint to the dominant voices currently amplified in the digital technology sector.

Citizenship in a digital context, like all forms of citizenship, is only as strong as the rights, protections, and agency contained within it that are accessible to *all its people*. From the *Indian Act* to ongoing acts of genocide against Indigenous Peoples across these unceded territories, it is clear that Canadian citizenship continues to fail in this regard. As Canada begins to reckon more meaningfully with its past and current realities (most recently in the form of the final report of the National Inquiry into Missing and Murdered Indigenous Women and Girls [2019]), there is an opportunity to articulate a form of citizenship in a digital context that reflects a deepened understanding and commitment to inherent Indigenous rights.

Digital spaces hold such incredible promise—an opportunity to reimagine, with each line of code, a different way of engaging with each other and with the world around us. Yet while current constraints, barriers, and inequities have been unable to halt Indigenous innovation, creativity, resiliency, or resistance in digital spaces, they continue to perpetuate patterns of power and dominance. Thus, as we work to decolonize our physical spaces, we must also turn our attention to digital spaces, decolonizing current platforms and products while ensuring that Indigenous voices actively lead those that are just beginning or have yet to emerge. In doing so, we can begin to realize a digital future and citizenship in a digital context for Canada that is just and equitable for all.

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Notes

1. Turtle Island is used in this work to refer to the unceded territories of Indigenous Nations that transcend colonial borders. More on its origins and significance can be explored here: https://www.thecanadianencyclopedia.ca/en/article/turtle-island.
2. In discussing a more robust definition of citizenship in a digital context, I wish to acknowledge the inherent tensions, complexities, and challenges posed by the concept of citizenship within a settler-colonial state. I also wish to acknowledge those for whom citizenship refers to membership within their Indigenous Nation and not to citizenship in a Canadian context.
3. Data has been sourced from the five firms' most recent diversity and inclusion reports, which are included in the references list for this chapter.
4. While much of the coverage of Amazon's "HQ2" focused on the bids of American cities, Toronto's bid proposal opened with a letter from Prime

Minister Trudeau, pledging that "the full support of our government stands behind" those submitting the proposal (Toronto Global, 2017.)

5. Of 292 communities identified as remote in Canada, 170 are Indigenous: https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/canmetenergy/files/pubs/2013-118_en.pdf.
6. This direct quote appeared in the online petition, which is no longer accessible online.

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