

Advancing Indigenous Research Sovereignty: Public Administration Trends and the Opportunity for Meaningful Conversations in Canadian Research Governance

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Article abstract

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Advancing Indigenous Research Sovereignty: Public Administration Trends and the Opportunity for Meaningful Conversations in Canadian Research Governance

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Abstract

Federally funded research in Canada is of significant scope and scale. The implications of research in the colonial project has resulted in a fraught relationship between Indigenous Peoples and Western research. Research governance, as an aspect of public administration, is evolving. The relationality inherent in new public governance (NPG)—a nascent public governance regime—may align with Indigenous relationality concepts. Recent societal advances, such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Truth and Reconciliation Commission of Canada (TRC), and the Indigenous Institutes Act in Ontario, provide further impetus for Indigenous self-determination in multiple domains including research. This article advocates for Indigenous research sovereignty and concludes with suggestions for ways in which federal funding agencies, specifically the Social Sciences and Humanities Research Council (SSHRC), could contribute to the advancement of Indigenous research sovereignty.

Keywords

Indigenous research, Indigenous research sovereignty, new public governance, the Kaswenta, self-determination, decolonization, Social Sciences and Humanities Research Centre (SSHRC)

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Advancing Indigenous Research Sovereignty: Public Administration Trends and the Opportunity for Meaningful Conversations in Canadian Research Governance

We are looking ahead, as if one of the first mandates given to us as Chiefs, to make sure and to make every decision that we make relate to the welfare and well-being of the seventh generation to come, and that is the basis by which we make decisions in council. We consider: will this be to the benefit of the seventh generation? That is a guideline. (Lyons, 1980, p.173)

Ongoing discussions regarding relationships, processes, boundaries, and content in Indigenous research contexts have influenced policy considerations at the global and national levels. Globally, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and the World Intellectual Property Organization (WIPO) support Indigenous self-governance and the protection of Indigenous intellectual property (United Nations, 2007; WIPO, 2015). At the national level, the Royal Commission on Aboriginal Peoples (RCAP, 1996) and the Truth and Reconciliation Commission (TRC, 2015) advocate educational equity for community-based initiatives and the inclusion of Indigenous ways of knowing as a foundational element of mainstream education.

We believe that Indigenous research sovereignty is the only way to effectively address historical and contemporary injustices associated with Western research. Indigenous research sovereignty requires both adjustments to funding programs for researchers in mainstream universities and the formation of distinct “in-community” research administration bodies that would perform functions analogous to federal research bodies (e.g., Canada’s Tri-Council agencies¹), but would be based on Indigenous principles and intellectual traditions, accountable to community, and responsive to the contemporary needs and aspirations of Indigenous Peoples. Indigenous research sovereignty builds on and encompasses the Indigenous data sovereignty movement, which insists on Indigenous collection, ownership, and application of data related to Indigenous Peoples, their knowledges, experiences, or territories (Rainie, Schultz, Briggs, Riggs, & Palmanteer-Holder, 2017). Recent developments regarding Indigenous self-determination in the public policy arena, such as UNDRIP (United Nations, 2007), the TRC (2015), and the Government of Ontario’s Indigenous Institute’s Act (2017), all support Indigenous research sovereignty. This article discusses each of the aforementioned policy instruments in light of Indigenous research sovereignty, with a focus on Canada’s Tri-Council agencies—specifically, the Social Sciences and Humanities Research Council (SSHRC).

SSHRC was formed by an Act of Parliament in 1977 and is mandated to support research and research training at the post-secondary level in the humanities and social sciences. SSHRC funding is organized into three programs that focus on developing talent, investing in research that leads to insight, and fostering connections between researchers and research stakeholders. These are, respectively, the Talent, Insight, and Connections programs, each consisting of multiple funding opportunities. SSHRC (2017) is broadly concerned with improving the lives of Canadians and ensuring a better future both domestically and globally by supporting independent thinking and creativity to address 21st century challenges.

¹ Canada’s Tri-Council agencies include the Natural Sciences and Engineering Research Council of Canada (NSERC), the Canadian Institutes of Health Research (CIHR), and the Social Sciences and Humanities Research Council of Canada (SSHRC).

The harmful legacy of research on Indigenous Peoples is one rationale for Indigenous research sovereignty. Part of that legacy is what Spivak (1988) refers to as epistemic violence, which is the delegitimation—and even erasure—of other ways of knowing. We feel that the best way to avoid reproducing the structural discrimination associated with epistemic violence is to construct research policy in mainstream and Indigenous contexts based on Indigenous principles and intellectual traditions—Indigenous onto-ethico-epistemologies (Kuby & Christ, 2018). McGregor (2004) suggests that “. . . to understand where TEK [traditional ecological knowledge] comes from one must start with Indigenous people and our own understanding of the world” (p. 386). Developing the pathway for further dialogue around Indigenous community aspirations and the very nature of research originating from Indigenous communities—including its philosophical underpinnings, multiple manifestations, and wholistic systems—is an important next step towards equity in Indigenous research contexts.

This article articulates a rationale for Indigenous research sovereignty, or Indigenous control of Indigenous research. The final paragraphs of this section and the last section of this article offer some suggestions for actualizing Indigenous research sovereignty in both mainstream academic institutions and Indigenous institutes and research organizations. While we focus on the Canadian context, the ideas presented here could be applied in other countries in which Indigenous Peoples aspire to research sovereignty.

The views expressed in this article are influenced by our positionality. This article’s three authors identify as either Indigenous or as having Indigenous ancestry. We all work at First Nations Technical Institute, an Indigenous governed post-secondary institution on Tyendinaga Mohawk Territory, near Deseronto, Ontario.

Indigenous Research and Intellectual Traditions

Indigenous Peoples have been conducting research—systematically advancing human knowledge and understanding—for millennia (Luarkie, 2017; Tuhiwai Smith, 1999). Indigenous intellectual traditions are diverse, profound, and foundationally different from mainstream research paradigms (Warrior, 1999). Indigenous research recognizes relational responsibility between the researcher and creation, can be empirical, draws on traditional teachings, and may include explicit spiritual or revelatory elements (Brant Castellano, 2000; Luarkie, 2017; Wilson, 2001). Warrior (1999) provocatively suggests that Indigenous thought is fundamentally based on *topos* (place or territory), whereas Western research paradigms are predicated on *logos* (reason). The centrality of territory to Indigenous thought is also emphasized by Sheridan and Longboat (2006) who specify that imagination is not an abstract concept but rather emerges from, and is inextricably connected to, place.

Western Research as Colonial Instrument

Western research is deeply implicated in the colonial project. Western science, and its imperial sponsors, have long construed Indigenous Peoples as sub-human or not even human at all (Tuhiwai Smith, 1999), which justified the dispossession, assimilation, and extermination of Indigenous Peoples (Culhane, 1998; Rotz & Kepkiewicz, 2018). This colonial mentality influenced, and continues to influence, research on Indigenous Peoples. For example, between 1942 and 1952 almost one thousand Indigenous youth interred in Canadian residential schools were purposely malnourished as unknowing participants in state-sanctioned nutritional research (Mosby, 2013). Sensational and fabricated anthropological

research conducted in the early 20th century that described human sacrifice in Pueblo communities was used by New Mexico state legislators to bolster laws limiting freedom of religious expression, furthering the assimilation agenda (Suina, 2017). Policies resulting from Western research have been used to justify other aspects of colonialization such as the dispossession of Indigenous Peoples from their territories, murder (Namaste & Jauffret, 2006), and the forced sterilization of Indigenous women (Pegoraro, 2015).

Epistemic violence, mentioned earlier in this article, is that which constructs other knowledge systems as inferior and is exemplified by the colonial “palimpsestic narrative” (Spivak, 1988, p. 25). This narrative, employed in mainstream Western research paradigms, overwrites and in some cases subsumes or even erases Indigenous knowledge systems and consequently invalidates Indigenous Peoples whose identities are constructed according to those knowledge systems (Spivak, 1988; Teo, 2010; Vázquez, 2011).

Mainstream narratives about Indigenous Peoples embedded in research culture also damagingly construct Indigenous Peoples as “other.” One manifestation of this is the “saviour narrative,” with its implicit Christian influences. On one hand, Indigenous Peoples are constructed as damaged, broken, deficient, and in need of “saving” (by research, enlightened public policy interventions, etc.). Tuck (2009) described this as a damage-centered research. Suina (2017) explained how this deficit narrative, which does not always reflect the self-perception of the Indigenous community, is often necessary to secure funding for Indigenous initiatives. On the other hand, Indigenous Peoples are sometimes fetishized as the primitive and vanishing keepers of ancient lore, which construes them as the saviours of the modern world. The publication of the Brundtland Report (World Commission on Environment and Development [WCED], 1987)—at the time, a high-water mark for the inclusion of environmental issues at the global policy level—includes a statement on Indigenous knowledge that casts it as ancient and capable of teaching the mainstream how to solve environmental problems. According to the report:

[Indigenous communities] are the repositories of vast accumulations of traditional knowledge and experience that links humanity with its ancient origins. Their disappearance is a loss for the larger society, which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems. (pp. 114–115)

A recently published paper that details Indigenous Andoque interactions with the more-than-human in the context of exploitative gold mining in the Amazon concludes with “maybe the Andoque can help us save ourselves?” (Torres & Verschoor, 2017, p. 58). As Luarkie (2017) points out:

... in our [Puebloan] communities, there are people that are providing for their families, paying bills, holding jobs, caring for aging parents, helping their children with homework, continually teaching our Indigenous customs and traditions, and living decent lives. However, when data collected and analyzed by primarily non-Indigenous social and natural scientists tell the story of Pueblo people, it is often that of deficit and deprivation, low levels of education attainment, health disparities, and impoverishment. (p. 132)

The saviour narrative impacts how members of the mainstream community view Indigenous Peoples, and how Indigenous people view themselves (Walter & Anderson, 2013). It leaves little room for authentic expression of Indigenous aspirations in the research world.

The Public Research Context

Publicly funded research furthers understandings of the world and our place in it, informs public policy decisions, and addresses non-profit and private sector concerns (Anderson & O'Grady, 1999; Carr, Loucks & Blöschl, 2018; McNie, Parris & Sarewitz, 2016; Smith, 2015). In Canada, post-secondary-based research is primarily funded through the Tri-Council agencies: SSHRC, CIHR, and NSERC. Canada's 2018 budget reveals a heavy investment in research, with a \$3 billion allocation to fundamental research (Government of Canada, 2018).

Research is situated, globally and nationally, as a commodity of consequence commanding significant interest and resources from government and industry and conferring status on those that successfully conduct research (Cheek, 2017a; Macdonald & Martinez-Uribe, 2010). Alejandro Adem, the CEO of MITACS—a research and training non-profit organization based in Vancouver—was recently cited in *University Affairs* echoing a common sentiment: “Science is a global endeavour . . . ideas transcend borders, no country controls the marketplace of ideas” (cited in Owens, 2018, p. 18). Spulber (2008) suggested that the primary source of global gain derives from trade in ideas and innovations rather than products and services. The neoliberal research marketplace can be characterized by the accumulation of capital in the form of, for example, peer-reviewed publications. Research capital is then used as currency to invest in collaborative opportunities, grants, and tenure promotion (Cheek, 2017a; Cheek, 2017b; Foskett, 2011). As a neoliberal manifestation of advanced capitalism (Sassen, 2010), the research enterprise yields winners and losers. Is this the best model for society to benefit from our collective intellectual capacity?

The globalized neoliberal research model threatens Indigenous intellectual property, exploits Indigenous knowledge keepers and other Indigenous people, and reproduces damaging narratives about Indigenous knowledge and people (Moore, Castleden, Tirone & Martin, 2017; Suina, 2017; Tuck & Yang, 2014). We suggest that Indigenous research sovereignty—an equitable governance arrangement based on Indigenous principles and intellectual traditions that is accountable to community and responsive to the contemporary needs and aspirations of Indigenous Peoples—is a better model for research with, and by, Indigenous Peoples in pluralist nations or nations aspiring to pluralism. In the remainder of this article, we describe governance trends in public administration. We then explore the contours of Indigenous research sovereignty in light of the emergence of *new public governance* as an administrative model. Finally, we suggest several shifts in mainstream research governance towards Indigenous research sovereignty that would create a more equitable environment for Indigenous research and researchers.

Public Governance Trends

The past several decades witnessed successive public sector reform movements (Ferlie, Lynn & Pollitt, 2007). The public research context, described in the preceding section, is situated on a continuum of public sector administrative approaches. Understanding the history of public sector governance illuminates the potential for meaningful research governance in Indigenous contexts under the emerging model. The following paragraphs detail the three most prominent regimes governing public policy construction and the provision of public services: classical public administration, new public management, and new public governance.

Classical public administration. Classical public administration (CPA), in which policy formulation and implementation are vertically integrated in a hierarchical system, was “confidently expected to meet all the social and economic needs of the citizenry, ‘from the cradle to the grave’” (Osborne, 2006, p. 378). CPA was based on the primacy of representational government and associated democratic institutions (Torring & Triantafillou, 2013) and the assumption that scientific approaches could reveal objective knowledge to shape and control the social and material environment (Gruening, 2001). Various permutations of CPA dominated public administration until the early 1980s (McDavid & Hawthorne, 2006).

New public management. The economic recession of the early 1980s focused attention on what was perceived as a bloated and inefficient public sector. New public management (NPM), a manifestation of neoliberalism (Brown, 2015), inaugurated a wave of governmental reforms across the Western world, notably in the United Kingdom’s Thatcher government and under the Reagan administration in the United States (Gruening, 2001; Kisner & Vigoda-Gadot, 2017). NPM describes the trend in public sector reform in which new initiatives draw on methods and experiences from the business world to ostensibly enhance effectiveness, efficiency, and performance of the public sector (Kisner & Vigoda-Gadot, 2017). Manifestations of NPM include reduction in government, privatization of public services, production of the citizen as customer, regulation and performance evaluation as the primary means of ensuring program quality, reformulation of funding packages based on outputs and outcomes rather than inputs, and more (Bleiklie, 2018; Osborne, 2006). Critiques of NPM are myriad including, but not limited to, the “distortion, the deformation and ultimately the delegitimation” (Doughty, 2016, p. 3) of public sector institutions, like education and health-care, the effective democratic functioning of which depends on a more complex calculus than the economic bottom line (Hefetz & Warner, 2004).

Another important criticism of NPM is that it fails to adequately govern in the face of increasing competing norms and values, interorganizational and trans-boundary contexts, and governance fragmentation (Koppenjan & Koliba, 2013; Osborne, 2010; Rhodes, 1997). The identification of “wicked” social problems—those that are unbounded, intractable, and/or unpredictable (Head & Alford, 2015)—signals a recognition of the complexity of many issues faced by society, such as food insecurity, poverty, and addiction (Candel, 2014; Daley & Feit, 2013; Head, 2018).

New public governance. A suite of programs and policy initiatives, referred to as NPG, is emerging from both the shortcomings of NPM and an obligation by the public sector to effectively govern in the current dynamic environment (Koppenjan & Koliba, 2013). NPG is based on the acknowledgement of a plural and pluralist society—one in which multiple actors and processes ideally influence both the construction of policy and the production of public services (Evans & Sapeha, 2015; Osborne, 2010). Organizational sociology, particularly sub-disciplines with constructivist epistemological leanings (e.g., social network theory), informs conceptions of plurality in NPG (Osborne, 2010; Ouchi, 1979; Powell, Koput, & Smith-Doerr, 1996). NPG focuses on processes associated with building public–private interorganizational relationships and the resulting relational contracts and capital are situated as the core governing mechanisms (Hilmer Pedersen & Johannsen, 2018; Osborne, 2010).

In emphasizing relationality, NPG promises to unpack the “black box” of context that languished under the CPA and NPM regimes (Osborne, 2010). The emphasis on relationality suggests a compatibility with Indigenous forms of governance. Relationality is a fundamental aspect of Indigenous worldviews

that reflects the profound and dynamic relationships within human communities and between humans and the more-than-human (Weber-Pillwax, 2001; Whatmore, 2004). Indigenous Peoples are longstanding experts on this essential aspect of NPG. We suggest that mainstream governments and governance researchers could productively engage with Indigenous researchers and knowledge keepers to refine understandings of relationality and governance.

Public administration scholars note that successive trends in public sector reform (CPA, NPM, and NPG) do not represent discrete phases in governance regimes but may co-exist in various hybrid forms that may include the juxtaposition of conflicting theoretical approaches, processes, and institutional structures (Christensen & Læg Reid, 2011; Wiesel & Modell, 2014). The following section describes several key policy developments and outlines the concept of Indigenous research sovereignty considering the emergence of NPG as a guiding approach in public sector governance.

Indigenous Research Sovereignty and the New Public Governance

OCAP®, SSHRC, and Indigenous Research

In 1998, the First Nations Information Governance Centre (FNIGC, 2014) established the Ownership, Control, Access, and Possession, or OCAP® principles for conducting research in Indigenous communities and more broadly with Indigenous information. Schnarch (2014) enumerates the many benefits associated with OCAP®: For example, following OCAP® principles can lead to greater Indigenous self-determination, meaningful capacity development, greater participation in research, and consequently more meaningful research outcomes. As Schnarch (2014) points out, OCAP® is adaptive and is best seen as an evolving process. We wonder if the next steps in the development of OCAP® might include processes for better liaising with traditional governance structures and non-research affiliated (but research-impacted) people in Indigenous communities. Together with the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2)*, described below, these two instruments have shifted the ways in which academic researchers interact with Indigenous Peoples and data from what was an extractive and colonial relationship to one that emphasizes equity and relationality (Ninomiya & Pollock, 2017).

SSHRC's (2016) current strategic plan (2016 to 2022) describes an intent to develop “an integrated strategy to support research by and with First Nations, Métis, Inuit and other Indigenous Peoples, to ensure that research rooted in Indigenous knowledge systems can be reviewed and supported across all of SSHRC's funding opportunities” (p. 7). In the same strategic plan, SSHRC identifies three objectives that cut across each of the aforementioned three programs. Two of the three objectives specify SSHRC's commitments to Indigenous research, researchers, and community aspirations (SSHRC, 2016):

- a. *Enable excellence in a changing research landscape*—under this objective, SSHRC will “support and advance research conducted by and with Canada's Aboriginal communities.” (p. 12)
- b. *Connect social sciences and humanities research with Canadians*—SSHRC poses the question: “How do we restore and maintain positive relations between Indigenous and non-Indigenous Canadians, in support of a shared successful future?” (p. 16)

SSHRC and the other members of the Tri-Council have taken steps towards respectful engagement with Indigenous Peoples through an emphasis on Indigenous research by and with Indigenous Peoples, and the inclusion of the chapter Research Involving the First Nations, Inuit and Métis Peoples of Canada in the revised version of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2)*, released in 2010 (Government of Canada—Panel of Research Ethics, 2018). The provisions outlined in this revised version of the TCPS2 have, in some cases, led to more collaborative relationships between researchers and the Indigenous community and more active involvement in the research process by Indigenous partners (Moore et al., 2017). However, the same study identified constraints to the ethical operationalization of TCPS2 including lack of research capacity and time to devote to the research process at the community level, and limited understanding of the realities of community-based participatory Indigenous research by university Research Ethics Board (REB) members and financial service administrators. This article was prepared with support from SSHRC's Indigenous Research Capacity and Reconciliation—Connection Grant, a purpose of which is to co-develop with Indigenous communities an interdisciplinary research and training model grounded in Indigenous aspirations and methodologies (SSHRC, 2018).

Indigenous Perspectives on Public Research

Current legislation insufficiently protects Indigenous intellectual property. For example, the language of Article 9.18 in TCPS2 leaves room for interpretation: “In collaborative research, intellectual property rights *should* [emphasis added] be discussed by researchers, communities and institutions.” Who decides what research is collaborative and how is that determined? What about research that is not deemed collaborative? Also, the word “should” suggests that intellectual property discussions are non-mandatory.

University-based researchers are typically compensated for their expertise, knowledge, and research work in the form of salaries, stipends, or publications (Cheek, 2017a, Cheek, 2017b). Based on our observations, compensation for Indigenous community members—whether they are informants, research assistants, translators, or otherwise involved in the research endeavor—is not consistent with the levels of compensation enjoyed by university researchers. The current research compensation model discriminates against non-academic Indigenous knowledge and expertise resulting in an inequitable distribution of benefits associated with the researcher–community relationship.

Finally, the notion of a global marketplace of ideas effectively ignores, at best, the legacy of exploitation of Indigenous knowledge and people by Western researchers. Certain cultural expressions, ceremonial practices, and other Indigenous knowledges already have a place in the corpus of teachings that are protected (and evolve) through inter-generational knowledge transfer. Refusal research, an emerging approach, posits that certain knowledge should not be colonized by the academy, such as painful or demeaning experiences that humiliate the research subject(s) every time that research is cited or otherwise repeated (Tuck & Yang, 2014). Refusal research serves to productively refocus the colonial gaze from constructions of the Indigenous-as-deficient to structural power imbalances. Refusal research can employ arts-informed methodologies to illuminate the contours of Indigenous knowledges and perspectives without constructing damaging “othering” narratives (Simpson, 2016) and may be applied to both damage-centered inquiry and research that attempts to intrude on private spaces.

United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)

UNDRIP is an international policy instrument, which Canada has adopted, that explicitly commits to the protection of individual and collective Indigenous rights (United Nations, 2007). Several UNDRIP articles support our conception of Indigenous research sovereignty. For example, Article 4 states that “Indigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions” (p. 8). Article 13 asserts the right of Indigenous Peoples to “revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures . . .” (pp. 12-13). Article 14 states, “Indigenous peoples have the right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning” (p. 13). Article 15 commits that “Indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information” (p. 14). The right to make decisions, “in accordance with their own procedures, as well as to maintain and develop their own Indigenous decision-making institutions” is described in Article 18 (pp. 15-16). Article 31 also relates to Indigenous research sovereignty:

Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions. (p. 22)

Finally, UNDRIP Article 39 states that “Indigenous peoples have the right to have access to financial and technical assistance from States and through international cooperation, for the enjoyment of the rights contained in this Declaration” (p. 26). Champagne (2013) criticized UNDRIP for enshrining civil rights, individual rights, and collective rights but not Indigenous rights. Specifically, the author maintains that UNDRIP situates Indigenous Peoples as minority subjects within nation states but does not recognize the right to self-governance as a sovereign nation. Despite this, Champagne (2013) noted that “only the United States and Canada have an unofficial form of plural citizenship for Indigenous peoples, while most nation-states recognize Indigenous peoples solely as national citizens” (p. 15). We believe that framing Indigenous-settler relations from a nation-to-nation standpoint reflects the intent of self-determination explicit in UNDRIP and that the articles of UNDRIP support our vision for the co-production and co-construction of Indigenous research policy.

The Truth and Reconciliation Commission of Canada (TRC)

The TRC was established in 2008 to document the historical and ongoing impacts of the Canadian Indian residential school system on former students and their families. The TRC (2015) released 95 Calls to Action with the expressed purpose of “redress(ing) the legacy of residential schools and advanc(ing) the process of Canadian reconciliation” (p. 319). Reconciliation, a term that has elicited significant critique (Rice & Snyder, 2012), is intended to repair the fraught relations between settler

Canadians and Indigenous Peoples. Call to Action Number 65 calls upon SSHRC to “establish a national research program with multi-year funding to advance understanding of reconciliation” (TRC, 2015, p. 331). SSHRC’s Indigenous Research Capacity and Reconciliation—Connection Grants program, which funded the project leading to this article, is a response to Call Number 65. We believe that working towards Indigenous research sovereignty represents an important step in the reconciliation process.

Indigenous Institutes Act, Province of Ontario

The Indigenous Institutes Act (hereafter referred to as the Act) was recently passed by the Province of Ontario, Canada (Indigenous Institutes Act, 2017). There are currently nine Indigenous governed and operated post-secondary institutes in Ontario that serve the education and training needs of the communities in which they are based. Up to this point, Indigenous institutes primarily offered technical and vocational training and brokered degree-level programs from accredited universities (Province of Ontario, 2017). The Act supports Indigenous self-determination through Indigenous control of Indigenous post-secondary education and notably confers the right to grant post-secondary level degrees to recognized Indigenous institutes (Indigenous Institutes Act, 2017). Research is of critical importance to undergraduate-level education. It can enhance the learning experience in multiple ways, such as providing experiential learning opportunities for students; developing students’ skills to effectively ask and answer research questions that may help them in further studies, their communities, or the workforce; and finally an active faculty research program can enrich the curriculum (Hernandez, Woodcock, Estrada & Schultz, 2018; Kinkead, 2003; Linn, Palmer, Baranger, Gerard & Stone, 2015). The Act reinforces Indigenous self-determination in the field of higher education. Given the interconnectedness between degree level post-secondary education and research, a similar self-determined approach to in-community Indigenous research should be supported.

The Kaswenta (Two Row Wampum) as a Model for Indigenous Research Sovereignty

NPG, as a relational approach to public sector administration, is compatible with our notion of Indigenous research sovereignty. SSHRC solicited input for the development of a new interdisciplinary Indigenous research and research training model from the Indigenous Research Capacity and Reconciliation—Connection Grant holders through position papers that each grant holder was required to prepare and through an in-person national dialogue event. This example of policy co-construction seems to be consistent with the relational aspects of NPG. Despite its emphasis on relationality, one shortcoming of NPG is asymmetrical power dynamics (Osborne, 2010), which are almost inevitable when state institutions engage with non-state actors, especially Indigenous Peoples and their knowledges as subaltern (see for example Spivak, 1988).

Given the history of inequality between settler and Indigenous nations, and the risk of unequal power arrangements in NPG approaches, it is worth considering ways to mitigate the risk of inequality in these shared or transitional governance structures. We suggest that the Two Row Wampum, or the Kaswenta, represents the best process to align our thinking around respectful research relationships. The Kaswenta represents the original treaty, from the early 17th century, between the Haudenosaunee people and the Dutch in what is now New York state. It is often depicted as a beaded belt, consisting of two purple rows separated by white wampum beads. The purple rows symbolize boats, one row is for the Dutch and their

ship or sailboat, the other is for the Haudenosaunee and their canoe. Both vessels are depicted travelling down the river (or way) of life together, but apart (Parmenter, 2013; Ransom & Ettenger, 2001). This seeming contradiction describes the respective sovereignty of both Indigenous and settler communities but with an obligation to work together to address issues of significant mutual consequence (Hill, 2013).

Onondaga Chief Irving Powless Jr. provides a particularly relational perspective on the Kaswenta:

As we travel down the road of life together in peace and harmony, not only with each other, but with the whole circle of life—the animals, the birds, the fish, the water, the plants, the grass, the trees, the stars, the moon, and the thunder—we shall live together in peace and harmony, respecting all those elements . . .” (cited in Hansen & Rossen 2017, p. 34)

Several researchers have suggested the Two Row Wampum as a model for respectful Indigenous–settler relations (Kent, Loppie, Carriere, MacDonald, & Pauly, 2017; Latulippe, 2015; McGregor, 2009; Ransom & Ettenger, 2001). We advocate the use of the Kaswenta for framing the relationship between mainstream research governance and Indigenous research sovereignty, not because it represents a novel approach to Indigenous–settler relations, but because it is one of the best models that we have encountered for a culturally appropriate approach to respectful research relationships that include all of creation. Each of the recommendations in the following section are based on a model of research relationality, informed by the Kaswenta, in which research infrastructure is housed in Indigenous communities and all aspects of the research process (involving Indigenous Peoples or data) are governed by Indigenous people and principles. This does not exclude research collaboration with mainstream researchers in areas of mutual significance. The suggestions presented in the following section, if implemented, would be a step towards Indigenous research sovereignty consistent with the Kaswenta.

Suggestions for Supporting Indigenous Research Sovereignty

While Canada’s Tri-Council agencies, SSHRC, NSERC, and CIHR, have taken steps toward more ethical research with Indigenous Peoples, the research governance approach does not allow for the authentic expression of Indigenous research aspirations. Indigenous research sovereignty, as a guiding principle, is an important next step in decolonizing research administration in Canada and beyond. The final section of this article outlines nine suggestions to advance Indigenous research sovereignty, specifically to the Canadian context but with potential applications for Indigenous Peoples worldwide. These suggestions are linked to a number of the TRC’s recommendations, discussed earlier, that advocate for increased and authentic engagement with Indigenous knowledge holders.

We divided the recommendations into two broad categories, one that deals with enhancing the capacity of community-based research organizations to govern federally funded Indigenous research and the other that details ways of ensuring that Indigenous research sovereignty is supported in mainstream research institutions.

A. Enhance the Ability of Community-Based Research Organizations to Govern Indigenous Research

A.1. Commit to working with Indigenous community-based organizations, such as Indigenous institutes, and Indigenous academics and knowledge keepers to articulate in-community Indigenous research sovereignty models for specific cultural contexts. Conversations about the co-creation and co-production of research governance policy with community-based Indigenous research organizations and jurisdictional authority (e.g., which project types are funded by which body) are important first steps towards actualizing Indigenous research sovereignty as an Indigenous right in the spirit of the UNDRIP articles and the TRC recommendations.

A.2. Refine existing and further develop protocols for intellectual property rights associated with Indigenous knowledge, traditional ecological knowledge, and Indigenous language, culture, and perspectives. Marie Battiste (2007) and the updated TCPS2 (Government of Canada—Panel on Research Ethics, 2018) both point out that current legislation insufficiently protects Indigenous intellectual property, specifically regarding the latitude in interpretation and application of the TCPS2 (as discussed earlier). Another concern is that once Indigenous intellectual property has been commodified and enters the research marketplace, it can be freely used for purposes beyond original intellectual property agreements. For example, ethnopharmacological researchers at the University of New Brunswick published a paper about the antimicrobial properties of *Sarracenia purpurea* L., a carnivorous bog plant used traditionally by the Mi'kmaq and Wolastoqiyik peoples to treat tuberculosis and other ailments (Morrison, Li, Webster, Johnson, & Gray, 2016). The traditional use of this plant, reported in a review text by Daniel Moerman (1998), led the researchers to assess its antimicrobial activity against the bacterium that causes tuberculosis and to identify several bio-active compounds. It is doubtful that appropriate permissions were received to use the intellectual property at the time the knowledge was originally collected. Even if permission was granted by the Mi'kmaq, should it still apply many years after the initial agreement? We suggest that considering a system that extends rights beyond single use may help to protect Indigenous intellectual property. Both copyright laws and plant breeders' rights are specific about the types of use allowed and provide protection beyond single use (Jondle, Hill, & Sanny, 2015), and these may serve as starting points for this conversation. Finally, following Marie Battiste (2007), we venture that strengthened in-community research ethics organizations, perhaps modelled after successful groups like Mi'kmaw Ethics Watch could result in more effective protection of Indigenous knowledge, culture, language, and perspectives. SSHRC and the other Tri-Council agencies in conjunction with in-community organizations could play a role in establishing dialogue towards greater protection of Indigenous intellectual property.

B. Funding Mechanisms for Indigenous Research at Mainstream Institutions Should Advance Indigenous Research Sovereignty

B.1. Adjust research funding programs that support Indigenous research to account for the additional time needed to build relational accountability between researcher and community. Relational accountability in research acknowledges that all ideas are context-bound, and researchers must respect various positionalities and attendant responsibilities associated with all elements of the research project which could include people, territory, plants, animals, rivers, the cosmos, and more (Wilson, 2008).

Nicholls (2009) stresses that building the trust necessary for relational accountability in Indigenous research contexts takes significant time, which may not correspond to Tri-Council funding cycles.

B.2. Partnerships between mainstream universities and Indigenous research organizations (e.g., Indigenous institutes) could facilitate knowledge sharing on equal terms. A joint Canada Research Chair program—in which chairs are cross-appointed to Indigenous research organizations and mainstream universities—would increase the likelihood that benefits from this program would extend to Indigenous communities. Visiting professorships and similar arrangements for research administrators would create opportunities for dialogue between similarly tasked personnel at universities and Indigenous research organizations. A recent study determined that researchers who leave their home countries do not represent a “brain drain” as commonly believed but maintain active ties to researchers in their home countries, in what the authors refer to as “brain circulation” (Sugimoto, Robinson-Garcia, Murray, Yegros-Yegros, Costas, & Larivière, 2017). There are an increasing number of Indigenous researchers in the academy (Castleden, Sloan Morgan & Lamb, 2012; Stonechild, 2006). Formalizing research ties between them and in-community research organizations—such as Indigenous institutes in Ontario—could ameliorate the isolation felt by Indigenous academics in mainstream universities (Battiste, 2018) and facilitate the extension of their expertise back to community.

B.3. An additional funding envelope designated to hire Elders, knowledge keepers, and/or other community members to provide research project guidance at all project stages (including conceptualization) would contribute to Indigenous control of Indigenous research. This funding needs to provide living wages for Indigenous Peoples, rather than honoraria or limited part-time salaries, to recognize and compensate for their expertise, and to help correct the power differential between specialists from the academy and specialists from community. Some of this funding should be used to support capacity development for community-based research personnel so that the “professional development” opportunities afforded institution-based researchers are also available to their community counterparts.

B.4. Resolve ethical tensions regarding privacy considerations in Chapter 9 of *the Tri-Council Policy Statement of Research Ethics: Research Involving the First Nations, Inuit and Métis Peoples of Canada* so that Indigenous research sovereignty is strengthened rather than eroded. Días Ríos, Dion, and Leonard (2018) pointed to a conflict between Tri-Council Indigenous ethnics protocols and community-based research ethics protocols dealing with privacy. Tri-Council policy focuses more on individual privacy, whereas community-based policy emphasizes collective privacy and intellectual rights. This discrepancy undermines Indigenous intellectual and research sovereignty (Días Ríos et al., 2018).

B.5. Continue building the capacity of SSHRC’s adjudication committees around respectful and equitable assessment of research conducted in Indigenous contexts or by Indigenous scholars. As mentioned earlier, Indigenous research methodologies are fundamentally different from Western research paradigms. The illegibility of Indigenous methodology-based research proposals to Western-paradigm-oriented adjudication committees can yield epistemic violence (Spivak, 1988)—the delegitimization of other ways of knowing—in the form of proposal rejection. Refusal research, an emerging approach, posits that certain knowledge should not be colonized by the academy, such as painful or demeaning experiences that humiliate the research subject(s) every time that research is cited


or otherwise repeated (Tuck & Yang, 2014). Refusal research serves to productively refocus the colonial gaze from constructions of the Indigenous-as-deficient to structural power imbalances. Refusal research can employ arts-informed methodologies to illuminate the contours of Indigenous knowledges and perspectives without constructing damaging “othering” narratives (Simpson, 2016). Thick description, now a standard for ethnographic research, involves a detailed description of both behavior and context, typically with illuminating explanations or insights provided by the research subjects (Geertz, 1973; Kincheloe & McLaren, 2005). The potential incompatibility between refusal research, which evades the colonial gaze and thick description may result in refusal research suffering epistemic violence from adjudication committees steeped in Western cultural mores. We suggest that understandings of equitable Indigenous–settler research relationships are dynamic and evolving and that proposal adjudication committee members should be engaged in this process.

B.6. Implement a culturally appropriate program evaluation framework for assessing Indigenous research at SSHRC. This could involve employing participatory approaches to evaluation that include Indigenous researchers and community members in the evaluative process (Potvin, Cargo, McComber, Delormier, & Macaulay, 2003), an emphasis on narrative rather than statistical data (National Collaborating Centre for Aboriginal Health [NCCA], 2013), and using Indigenous principles to guide logic model outcome formulation (Chouinard & Cousins, 2007). Designing indicators that align with Indigenous principles and community aspirations which, ideally, have been used to formulate funding program objectives and the funded research projects would help to ensure that the evaluation of funding programs for Indigenous research exhibit internal consistency, increasing the credibility of the results (Lincoln & Guba, 1985; Patton, 2002).

B.7. Canada Council for the Arts (CCA) requires that applicants working with “Indigenous traditional knowledge, linguistic or cultural intellectual property . . . describe (their) relationship to this content” (Item 11). A similar question asking applicants to describe their relational accountability (Wilson, 2008) on all proposals submitted to Tri-Council agencies that are identified as Indigenous research would allow for a more fine-grained assessment of the appropriateness of a submitted proposal.

References

- Anderson, G. J., & O'Grady, R. T. (1999). Demonstrating the importance of basic research. *BioScience*, 49(10), 846-848. doi: <https://doi.org/10.1525/bisi.1999.49.10.846>
- Battiste, M. (2007). Research ethics for protecting Indigenous knowledge and heritage: Institutional and researcher responsibilities. In N. K. Denzin & M. D. Giardina (Eds.), *Ethical futures in qualitative research: Decolonizing the politics of knowledge* (pp. 111-132). Walnut Creek, USA: Left Coast Press.
- Battiste, M. (2018, May). *Indigenizing the academy: Roots of cognitive assimilation or routes to cognitive justice?* Paper presented at the ANSUT Indigenizing the Academy Conference, Membertou, NS, Canada. Retrieved from <https://ansut.caut.ca/wp-content/uploads/2018/05/Battiste-Indigenizing-the-Academy-ANSUT.pdf>

- Bleiklie, I. (2018). New public management or neoliberalism, higher education. In J. C. Shin & P. Teixeira (Eds.), *Encyclopaedia of international higher education systems and institutions* (pp. 1-6). Dordrecht, Canada: Springer Science and Business Media. doi: https://doi.org/10.1007/978-94-017-9553-1_143-1
- Brant Castellano, M. (2000). Updating Aboriginal traditions of knowledge. In G. J. Sefa Dei, B. L. Hall, & D. G. Rosenberg (Eds.), *Indigenous knowledges in global contexts* (pp. 22-26). Toronto, Canada: University of Toronto Press.
- Brown, W. (2015). *Undoing the demos: Neoliberalism's stealth revolution*. Brooklyn, USA: Zone Books.
- Canadian Council for the Arts (CCA). (2018). *Explore and create: Research creation program guidelines and application form*. Ottawa, Canada: Government of Canada. Retrieved from https://apply.canadacouncil.ca/Configuration/Application_Forms/P1/en-CA/CCA_1002.docx?_ga=2.22420987.199210108.1582313671-36055548.1582313671
- Candel, J. J. (2014). Food security governance: A systematic literature review. *Food Security*, 6, 585-601. doi: <https://doi.org/10.1007/s12571-014-0364-2>
- Carr, G., Loucks, D. P., & Blöschl, G. (2018). Gaining insight into interdisciplinary research and education programmes: A framework for evaluation, *Research Policy*, 47, 35-48. doi: <https://doi.org/10.1016/j.respol.2017.09.010>
- Castleden, H., Sloan Morgan, V., & Lamb, C. (2012). "I spent the first year drinking tea": Exploring Canadian university researchers' perspectives on community-based participatory research involving Indigenous Peoples. *Canadian Geographer*, 56(2), 160-179. doi: <https://doi.org/10.1111/j.1541-0064.2012.00432.x>
- Champagne, D. (2013). UNDRIP (United Nations Declaration on the Rights of Indigenous Peoples): Human, civil, and Indigenous rights. *Wicazo Sa Review*, 28(1), 9-22. doi: <https://doi.org/10.5749/wicazosareview.28.1.0009>
- Cheek, J. (2017a). Qualitative inquiry and the research marketplace: Putting some +s (pluses) in our thinking, and why this matters. *Cultural Studies*  *Critical Methodologies*, 17(3), 221-226. doi: <https://doi.org/10.1177/1532708616669528>
- Cheek, J. (2017b). The marketization of research: Implications for qualitative inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *SAGE handbook of qualitative research* (5th ed., pp. 322-340). Thousand Oaks, USA: Sage.
- Chouinard, J. A., & Cousins, J. B. (2007). Culturally competent evaluation for Aboriginal communities: A review of the empirical literature. *Journal of Multi-Disciplinary Evaluations*, 4(8), 40-57.

- Christensen, T., & Lægreid, P. (2011). Complexity and hybrid public administration: Theoretical and empirical challenges. *Public Organization Review*, 11(4), 407-423. doi: <https://doi.org/10.1007/s11115-010-0141-4>
- Culhane, D. (1998). *The pleasure of the Crown: Anthropology, law, and First Nations*. Vancouver, Canada: BCL Talon.
- Daley, D. C. & Feit, M. D. (2013). The many roles of social workers in the prevention and treatment of alcohol and drug addiction: A major health and social problem affecting individuals, families, and society. *Social Work in Public Health*, 28(3-4), 159-164. doi: <https://doi.org/10.1080/19371918.2013.758960>
- Días Ríos, C., Dion, M. L., & Leonard, K. (2018). Institutional logics and Indigenous research sovereignty in Canada, the United States, Australia, and New Zealand. *Studies in Higher Education*, 45(2), 403-415. doi: <https://doi.org/10.1080/03075079.2018.1534228>
- Doughty, H. A. (2016). *Enhancing public innovation by transforming public governance* [Book review]. *The Innovation Journal*, 21(3). Retrieved from <https://www.questia.com/library/journal/1P3-4312848721/enhancing-public-innovation-by-transforming-public>
- Evans, B., & Sapeha, H. (2015). Are non-governmental policy actors being heard? Assessing new public governance in three Canadian provinces. *Canadian Public Administration*, 58(2), 249-270. doi: <https://doi.org/10.1111/capa.12115>
- Ferlie, E., Lynn, L. E., & Pollitt, C. (2007). Introductory remarks. In E. Ferlie, L. E. Lynn, & C. Pollitt (Eds.), *The Oxford handbook of public management* (pp. 1-6). New York, USA: Oxford University Press. doi: <https://doi.org/10.1093/oxfordhb/9780199226443.003.0001>
- First Nations Information Governance Centre (FNIGC). (2014). *Ownership, control, access, and possession (OCAPTM): The path to First Nations information governance*. Retrieved from <https://fnigc.inilibro.net/cgi-bin/koha/opac-retrieve-file.pl?id=5776c4ee9387f966e6771aa93a04f389>
- Foskett, N. (2011). Markets, government, funding and the marketisation of UK higher education. In M. Molesworth, R. Scullion, & E. Nixon (Eds.), *The marketisation of higher education and the student as consumer* (pp. 25-38). Abingdon, UK: Routledge.
- Geertz, C. (1973). *The interpretation of cultures*. New York, USA: Basic Books.
- Government of Canada (2018). *Equality + growth, a strong middle class*. Retrieved from <https://www.budget.gc.ca/2018/docs/plan/overview-apercu-en.html>
- Government of Canada—Panel on Research Ethics (2018). *TCPS2 (2018)—Research involving the First Nations, Inuit and Métis peoples of Canada* (Chapter 9). Retrieved from https://ethics.gc.ca/eng/tcps2-eptc2_2018_chapter9-chapitre9.html

- Gruening, G. (2001). Origin and theoretical basis of new public management. *International Public Management Journal*, 4, 1-25. doi: [https://doi.org/10.1016/S1096-7494\(01\)00041-1](https://doi.org/10.1016/S1096-7494(01)00041-1)
- Hansen, B., & Rossen, J. (2017). Activist anthropology with the Haudenosaunee: Theoretical and practical insights from the Two Row Wampum Renewal Campaign. *Anthropology in Action*, 24(3), 32-44. doi: <https://doi.org/10.3167/aia.2017.240304>
- Head, B. W. (2018). Forty years of wicked problems literature: Forging closer links to policy studies. *Policy and Society*, 38(2), 180-197. doi: <https://doi.org/10.1080/14494035.2018.1488797>
- Head, B. W., & Alford, J. (2015). Wicked problems: Implications for public policy and management. *Administration and Society*, 47(6), 711-739. doi: <https://doi.org/10.1177/0095399713481601>
- Hefetz, A., & Warner, M. (2004). Privatization and its reverse: Explaining the dynamics of the government contracting process. *Journal of Public Administration Research and Theory*, 14(2), 171-190. doi: <https://doi.org/10.1093/jopart/muh012>
- Hernandez, P. R., Woodcock, A., Estrada, M., & Shultz, P. (2018). Undergraduate research experiences broaden diversity in the workforce. *Bioscience*, 68(3), 204-211. doi: <https://doi.org/10.1093/biosci/bix163>
- Hill, R. W. (2013). *Two row history: Talking points on history and meaning of the Two Row Wampum belt*. Retrieved from <http://honorthetworow.org/wp-content/uploads/2013/03/TwoRowTalkingPoints-Rick-Hill.pdf>
- Hilmer Pedersen, K., & Johannsen, L. (2018). New public governance in the Baltic states: Flexible administration and rule bending. *Public Performance & Management Review*, 41(3), 648-667. doi: <https://doi.org/10.1080/15309576.2018.1465828>
- Indigenous Institutes Act, 2017, S.O. 2017, c. 34, Sched. 20.
- Jondle R. J., Hill K. K., & Sanny T. (2015). Current legal issues in intellectual property rights and protection for crop plants. *Crop Science*, 55(6), 496-503. doi: <https://doi.org/10.2135/cropsci2014.10.0693>
- Kent, A., Loppie, C., Carriere, J., MacDonald, M., & Pauly, B. (2017). Xpey' relational environments: An analytic framework for conceptualizing Indigenous health equity. *Health Promotion and Chronic Disease Prevention in Canada*, 37(12), 395-402. doi: <https://doi.org/10.24095/hpcdp.37.12.01>
- Kincheloe, J. & McLaren, P. (2005). Rethinking critical theory and qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 303-342). Thousand Oaks, USA: Sage.
- Kinkead, J. (2003). Learning through inquiry: An overview of undergraduate research. *New Directions for Teaching and Learning*, 93, 5-18. doi: <https://doi.org/10.1002/tl.85>

- Kisner, M., & Vigoda-Gadot, E. (2017). The provenance of public management and its future: Is public management here to stay? *International Journal of Public Sector Management*, 30(6/7), 532-546. doi: <https://doi.org/10.1108/IJPSM-05-2017-0143>
- Koppenjan, J., & Koliba, C. (2013). Transformations towards new public governance: Can the new paradigm handle complexity? *International Review of Public Administration*, 18(2), 1-8. doi: <https://doi.org/10.1080/12294659.2013.10805249>
- Kuby, C. R., & Christ, R. C. (2018). An ethico-onto-epistemological pedagogy of qualitative research: Knowing/being/doing in the neoliberal academy. In V. Bozalek, R. Braidotti, M. Zembylas, & T. Shefer (Eds.), *Socially just pedagogies: Posthumanist, feminist and materialist perspectives in higher education* (pp. 131-147). London, UK: Bloomsbury Academic.
- Latulippe, N. (2015). Bridging parallel rows: Epistemic difference and relational accountability in cross-cultural research. *The International Indigenous Policy Journal*, 6(2). doi: <https://doi.org/10.18584/iipj.2015.6.2.7>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, USA: Sage.
- Linn, M. C., Palmer, A., Baranger, A., Gerard, E., & Stone, E. (2015). Undergraduate research experiences: Impacts and opportunities. *Science*, 347(62222), 627-634. doi: <https://doi.org/10.1126/science.1261757>
- Luarkie, R. (2017). Research is a pebble in my shoe. In E. S. Huaman & B. J. Brayboy (Eds.), *Indigenous innovations in higher education* (pp. 125-141). Rotterdam, NL: Sense Publishers. doi: https://doi.org/10.1007/978-94-6351-014-1_7
- Lyons, O. (1980). An Iroquois perspective. In C. Vecsey & R. W. Venables (Eds.), *American Indian environments: Ecological issues in Native American history* (pp. 171-174.). Syracuse, USA: Syracuse University Press.
- Macdonald, S. & Martinez-Urbe, L. (2010). Collaboration to data curation: Harnessing institutional expertise. *New Review of Academic Librarianship*, 16(S1), 4-16. doi: <https://doi.org/10.1080/13614533.2010.505823>
- McDavid, J. C., & Hawthorn, L. R. L. (2006). *Program evaluation and performance measurement: An introduction to practice*. Thousand Oaks, USA: Sage.
- McGregor, D. (2004). Coming full circle: Indigenous knowledge, environment, and our future. *The American Indian Quarterly*, 28(3), 385-410. doi: <https://doi.org/10.1353/aiq.2004.0101>
- McGregor, D. (2009). Linking traditional knowledge and environmental practice in Ontario. *Journal of Canadian Studies*, 43(3), 69-100. doi: <https://doi.org/10.3138/jcs.43.3.69>
- McNie, E. C., Parris, A., & Sarewitz, D. (2016). Improving the public value of science: A typology to inform discussion, design and implementation of research. *Research Policy*, 45(4), 884-895. doi: <https://doi.org/10.1016/j.respol.2016.01.004>

- Moermann, D. (1998). *Native American ethnobotany*. Portland, USA: Timber Press.
- Moore, C., Castleden, H. E., Tirone, S., & Martin, D. (2017). Implementing the Tri-Council Policy on ethical research involving Indigenous Peoples in Canada: So, how's that going in Mi'kma'ki? *The International Indigenous Policy Journal*, 8(2). doi: <https://doi.org/10.18584/iipj.2017.8.2.4>
- Morrison, S. A., Li, H., Webster, D., Johnson, J. A., & Gray, C. A. (2016). Antimycobacterial triterpenes from the Canadian medicinal plant *Sarracenia purpurea*. *Journal of Ethnopharmacology*, 188, 200-203. doi: <https://doi.org/10.1016/j.jep.2016.04.052>
- Mosby, I. (2013). Administering colonial science: Nutrition research and human biomedical experimentation in Aboriginal communities and residential schools, 1942-1952. *Histoire sociale/Social History*, 46(1), 145-172.
- Namaste, V., & Jauffret, P. (2006). Negotiating partnership and ownership in community-based research: Lessons from a needle exchange in Montréal. *Canadian Journal of Aboriginal Community-Based HIV/AIDS Research*, 1, 65-74.
- National Collaborating Centre for Aboriginal Health (NCCAHA). (2013). *Indigenous approaches to program evaluation*. Prince George, Canada: National Collaborating Centre for Aboriginal Health. Retrieved from <https://www.cnsa-nccah.ca/docs/context/FS-IndigenousApproachesProgramEvaluation-EN.pdf>
- Nicholls, R. (2009). Research and Indigenous participation: Critical reflexive methods. *International Journal of Social Research Methodology*, 12(2), 117-26. doi: <https://doi.org/10.1080/13645570902727698>
- Ninomiya, M. E. M., & Pollock, N. J. (2017). Reconciling community-based Indigenous research and academic practices: Knowing principles is not always enough. *Social Science & Medicine*, 172, 28-36. doi: <https://doi.org/10.1016/j.socscimed.2016.11.007>
- Osborne, S. P. (2006). Editorial: The new public governance. *Public Management Review*, 8(3), 377-387. doi: <https://doi.org/10.1080/14719030600853022>
- Osborne, S. P. (2010). Introduction: The (new) public governance—A suitable case for treatment. In S. P. Osborne (Ed.), *The new public governance: Emerging perspectives on the theory and practice of public governance* (pp. 1-16). New York, USA: Routledge. doi: <https://doi.org/10.4324/9780203861684>
- Ouchi, W. (1979) Markets, bureaucracies and clans. *Administrative Science Quarterly*, 25, 129-141. doi: <https://doi.org/10.2307/2392231>
- Owens, B. (2018). The benefits and challenges of international research collaboration. *University Affairs*, 12(18), 18-23. Retrieved from <https://www.universityaffairs.ca/features/feature/article/the-benefits-and-challenges-of-international-research-collaboration/>

- Parmenter, J. (2013). The meaning of Kaswentha and the Two Row Wampum belt in Haudenosaunee (Iroquois) history: Can Indigenous oral tradition be reconciled with the documentary record? *Journal of Early American History*, 3, 82-109. doi: <https://doi.org/10.1163/18770703-00301005>
- Patton, M. Q. (2002). *Qualitative research & evaluation methods*. Thousand Oaks, USA: Sage.
- Pegoraro, L. (2015) Second-rate victims: The forced sterilization of Indigenous Peoples in the USA and Canada. *Settler Colonial Studies*, 5(2), 161-173. doi: <https://doi.org/10.1080/2201473X.2014.955947>
- Potvin, L., Cargo, M., McComber, A. M., Delormier, T., & Macaulay, A.C. (2003). Implementing participatory intervention and research in communities: Lessons from the Kahnawake School's diabetes prevention project in Canada. *Social Science & Medicine*, 56, 1295 - 1305. doi: [https://doi.org/10.1016/S0277-9536\(02\)00129-6](https://doi.org/10.1016/S0277-9536(02)00129-6)
- Powell, W.W., Koput, K.W., & and Smith-Doerr, L. (1996). Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology. *Administrative Science Quarterly*, 41(1), 116-145. doi: <https://doi.org/10.2307/2393988>
- Province of Ontario. (2017). *Indigenous students—Find out about Indigenous institutes, colleges and universities, and money to study in Ontario*. Retrieved from <https://www.ontario.ca/page/indigenous-students>
- Rainie, S. C., Schultz, J. L., Briggs, E., Riggs, P., & Palmanteer-Holder, N. L. (2017). Data as a strategic resource: Self-determination, governance, and the data challenge for Indigenous nations in the United States. *The International Indigenous Policy Journal*, 8(2). doi: <https://doi.org/10.18584/iipj.2017.8.2.1>
- Ransom, J. W., & Ettenger, K. T. (2001). “Polishing the Kaswentha”: A Haudenosaunee view of environmental cooperation. *Environmental Science & Policy*, 4, 219-228. doi: [https://doi.org/10.1016/S1462-9011\(01\)00027-2](https://doi.org/10.1016/S1462-9011(01)00027-2)
- Royal Commission on Aboriginal Peoples (RCAP). (1996). *Report of the Royal Commission on Aboriginal Peoples*. Ottawa, Canada: Canada Communications Group.
- Rhodes, R. (1997). *Understanding governance*. Buckingham, UK: Open University Press.
- Rice, B., & Snyder, A. (2008). Reconciliation in the context of a settler society: Healing the legacy of colonialism in Canada. In M. B. Castellano, L. Archibald, & M. DeGagné (Eds.), *From truth to reconciliation: Transforming the legacy of residential schools* (pp. 43–68). Ottawa, Canada: Aboriginal Healing Foundation Research Series.
- Rotz, S. & Kepkiewicz, L. (2018). Settler colonialism and the (im)possibilities of a national food policy. *Canadian Food Studies*, 5(3), 248-258. doi: <https://doi.org/10.15353/cfs-rcea.v5i3.275>

- Sassen, S. (2010) A savage sorting of winners and losers: Contemporary versions of primitive accumulation. *Globalizations*, 7(1-2), 23-50. doi: <https://doi.org/10.1080/14747731003593091>
- Schnarch, B. (2014). Ownership, control, access, and possession (OCAP) or self-determination applied to research: A critical analysis of contemporary First Nations research and some options for First Nations communities. *Journal of Aboriginal Health*, 1(1), 80-95.
- Sheridan, J., & Longboat, D. (2006). The Haudenosaunee imagination and the ecology of the sacred. *Space and Culture*, 9(4), 365-381. doi: <https://doi.org/10.1177/1206331206292503>
- Simpson, A. (2016). Consent's revenge. *Cultural Anthropology*, 31(3), 326-333. doi: <https://doi.org/10.14506/ca31.3.02>
- Smith, R. (2015). Educational research: The importance of the humanities. *Educational Theory*, 65(6), 739-754. doi: <https://doi.org/10.1111/edth.12145>
- Spivak, G. (1988). Can the subaltern speak? In C. Nelson & L. Grossberg (Eds.), *Marxism and the interpretation of culture* (pp. 271-313). Urbana: University of Illinois Press. doi: https://doi.org/10.1007/978-1-349-19059-1_20
- Spulber, D. F. (2008). Innovation and international trade in technology. *Journal of Economic Theory*, 138(1), 1-20. doi: <https://doi.org/10.1016/j.jet.2007.06.002>
- Social Sciences and Humanities Research Council (SSHRC). (2016). *Advancing knowledge for Canada's future—Enabling excellence, building partnerships, connecting research to Canadians. SSHRC's Strategic Plan to 2020*. Ottawa, Canada: Government of Canada. Retrieved from https://www.sshrc-crsh.gc.ca/about-au_sujet/publications/strategic-plan-strategique-2016-eng.pdf
- Social Sciences and Humanities Research Council (SSHRC). (2017). *About SSHRC*. Ottawa, Canada: Government of Canada. Retrieved from http://www.sshrc-crsh.gc.ca/about-au_sujet/index-eng.aspx
- Social Sciences and Humanities Research Council (SSHRC). (2018). *Special call: Indigenous research capacity and reconciliation—Connection grants*. Ottawa, Canada: Government of Canada. Retrieved from https://www.sshrc-crsh.gc.ca/results-resultats/recipient-recipientaires/2018/indigenous_research_capacity_reconciliation-capacity_recherche_autochtone_reconciliation-eng.aspx
- Stonechild, B. (2006). *The new buffalo: The struggle for First Nations higher education*. Winnipeg, Canada: University of Manitoba Press.
- Sugimoto, C., Robinson-Garcia, N., Murray, D. S., Yegros-Yegros, A., Costas, R., & Larivière, V. (2017). Scientists have most impact when they're free to move. *Nature*, 550(7674), 29-31. doi: <https://doi.org/10.1038/550029a>

- Suina, M. (2017). Research is a pebble in my shoe. In E. S. Huaman & B. J. Brayboy (Eds.), *Indigenous innovations in higher education* (pp. 83-100). Rotterdam, NL: Sense Publishers. doi: https://doi.org/10.1007/978-94-6351-014-1_5
- Teo, T. (2010). What is epistemological violence? *Social and Personality Psychology Compass*, 4(5), 295-303. doi: <https://doi.org/10.1111/j.1751-9004.2010.00265.x>
- Torring, J., & Triantafyllou, P. (2013). What's in a name? Grasping new public governance as a political administrative system. *International Review of Public Administration*, 18(2), 9-25. doi: <https://doi.org/10.1080/12294659.2013.10805250>
- Torres, C., & Verschoor, G. (2017). Finding the food by hiding the gold: Andoque abundance, mining, and food in the Colombian Amazon. In S. Sherwood, A. Arce, & M. Paredes (Eds.), *Food, agriculture, and social change* (pp. 48-59). New York, USA: Routledge. doi: <https://doi.org/10.4324/9781315440088-4>
- Truth and Reconciliation Commission of Canada (TRC). (2015). *Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconciliation Commission of Canada*. Retrieved from http://nctr.ca/assets/reports/Final%20Reports/Executive_Summary_English_Web.pdf
- Tuck, E. (2009). Suspending damage: A letter to communities. *Harvard Educational Review*, 79(3), 409-428. doi: <https://doi.org/10.17763/haer.79.3.n0016675661t3n15>
- Tuck, E., & Yang, K. W. (2014). Unbecoming claims: Pedagogies of refusal in qualitative research. *Qualitative Inquiry*, 20(6) 811-818. doi: <https://doi.org/10.1177/1077800414530265>
- Tuhiwai Smith, L. (1999). *Decolonizing methodologies: Research and Indigenous Peoples*. London, UK: Zed Books.
- United Nations (2007). *Declaration on the Rights of Indigenous Peoples*. Retrieved from <http://www.un.org/esa/socdev/unpfii/en/declaration.html>
- Vázquez, R. (2011). Translation as erasure: Thoughts on modernity's epistemic violence. *Journal of Historical Sociology*, 24(1), 27-44. doi: <https://doi.org/10.1111/j.1467-6443.2011.01387.x>
- Walter, M., & Andersen, C. (2013). *Indigenous statistics: A quantitative research methodology*. Walnut Creek, USA: Left Coast Press.
- Warrior, R. (1999). The Native American scholar: Toward a new intellectual agenda. *Wicazo Sa Review*, 14(2), 46-54. doi: <https://doi.org/10.2307/1409550>
- Weber-Pillwax, C. (2001). What is Indigenous research? *Canadian Journal of Native Education*, 25(2), 166-174.
- Whatmore, S. (2004). Humanism's excess: Some thoughts on the 'post-human/ist' agenda. *Environment and Planning*, 36, 1360-63.

- Wiesel, F., & Modell, S. (2014). From new public management to new public governance? Hybridization and implications for public sector consumerism. *Financial Accountability & Management*, 30(2), 175-205. doi: <https://doi.org/10.1111/faam.12033>
- Wilson, S. (2001). What is an Indigenous research methodology? *Canadian Journal of Native Education*, 25(2), 175-179.
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Black Point, Canada: Fernwood.
- World Commission on Environment and Development (WCED). (1987). *Our common future: Report of the World Commission on Environment and Development*. Oxford, UK: Oxford University Press.
- World Intellectual Property Organization (WIPO). (2015). *Intellectual property and genetic resources, traditional knowledge and traditional cultural expressions*. Retrieved from https://www.wipo.int/edocs/pubdocs/en/tk/933/wipo_pub_933.pdf