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MULTI-LEVEL GOVERNANCE AND CLIMATE CHANGE ADAPTATION PLANNING

The Intricacies of Indigenous State Governance Relations in Canada

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Abstract

Settler-colonial governance structures play a critical role in how climate change impacts are experienced by Indigenous Peoples, and can limit their ability to effectively respond to those impacts. Indigenous–state multi-level governance (MLG) regimes offer some promise in furthering Indigenous self-determination in processes of environmental governance. To enhance the effectiveness of MLG regimes while avoiding the reinforcement of colonial relations, institutions at both local and state levels must demonstrate responsibility, flexibility and responsiveness, and contextualization in their approaches to climate change adaptation. An analysis of Canada's recent federal climate plan reveals that Canadian state governance structures display significant room for improvement in enabling effective and durable MLG regimes that support Indigenous self-determination in climate change decision-making.

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1.0 Introduction

The impacts of climate change are already being observed and felt around the world, prompting extensive consideration in scholarship and practice of how to best adapt to, rather than solely mitigate, the effects of a changing climate. Existing research unequivocally concludes that Indigenous Peoples globally and in Canada specifically experience the brunt of climate change, as they are disproportionately burdened with its negative impacts and tend to lack access to the political power and resources required to effectively respond and adapt (Indigenous Climate Action, 2021). Legacies and present-day forms of colonization play critical roles in limiting adaptive capacity in Indigenous communities, with settler-colonial governance systems acting as a major mechanism through which colonial policies are entrenched and enforced (Indigenous Climate Action, 2021). Multi-level governance (MLG), a concept which describes specific forms of shared political power and decision-making between state and non-state actors, has been used to understand and advance Indigenous self-determination and self-governance in settler-colonial nations (Alcantara & Spicer, 2016; Papillon, 2012). It has also proved useful for conceptualizing processes through which climate change adaptation and other types of environmental governance occur, due to the inherently multi-scalar nature of environmental issues (e.g., DiGregorio et al., 2019; Gonzales-Iwanciw et al., 2020). However, little is known about the extent to which MLG regimes offer opportunities for the advancement of Indigenous self-determination in planning for climate change adaptation specifically. Canada offers a useful context in which to explore this question due to a history of formal and informal Indigenous–state MLG practices (e.g. Alcantara & Spicer, 2016;

Papillon, 2012; Persaud, 2020; Spitzer, 2018; Spitzer, 2019). The Government of Canada has also recently published an updated federal climate plan (Environment and Climate Change Canada, 2020), which proposes several adaptation policies and strategies at the national level, including a promise to develop a national adaptation plan in the future. To build knowledge around the potential for MLG to support Indigenous self-determination in climate change decision making in Canada, in this paper I aim to accomplish four things: (1) describe and discuss major themes present in Indigenous Peoples' experiences of climate change decision-making in settler-colonial contexts generally, and in Canada in particular; (2) describe and categorize alternative approaches to MLG in settler-colonial contexts; (3) propose three principles that can be applied in MLG contexts to facilitate Indigenous-led climate change adaptation planning; and (4) apply the three principles to assess the extent to which Canada's most recent climate plan (see Environment and Climate Change Canada, 2020) facilitates Indigenous-state MLG for climate change adaptation in Canada.

As a white settler Canadian, I do not claim to understand or represent the knowledges and worldviews held by Indigenous Peoples around the world or in what is now Canada. Nor do I claim to represent individual or collective Indigenous experiences of colonization and its associated impacts and legacies, including social marginalization, systemic racism, white supremacy, patriarchy, and paternalism, among others. The claims and recommendations made in this work are solely informed by existing literature (cited throughout) and are thus reflective of the knowledge, as well as biases and assumptions, that have been produced, reinforced, and challenged by Indigenous and non-Indigenous scholars who come before me. Undoubtedly, however, biases and assumptions of my own are present throughout this work as well, stemming from my whiteness, my settler status,

and my educational background, which is rooted in western empiricism and informed by critical and feminist scholarship. To minimize the influence of my own assumptions (or at least to render them visible), I have chosen to present and discuss Indigenous histories, experiences, worldviews, and governance structures throughout this work in contrast to western perspectives and approaches, the latter of which I do claim to know intimately and experientially.

2.0 Climate Change Adaptation and Indigenous–State Relations

Colonization has been the single most disastrously destructive and violent practice inflicted upon Indigenous lives, languages, cultures, and governance systems worldwide for centuries and up to the present day. In recent decades, however, Indigenous Peoples and scientists have identified an emerging threat that promises calamity of comparable proportions, both geographically and in terms of its scale of destruction: climate change. Indeed, climate change impacts are already directly affecting Indigenous communities around the globe (Petheram et al., 2010; Rathwell, 2020; Whitney et al., 2020), and these impacts are universally exacerbated by legacies and ongoing forms of colonialism that continue to plague Indigenous Peoples and communities despite consistent, active, and organized efforts by Indigenous communities to subvert these systems (Chisholm Hatfield et al., 2018; Indigenous Climate Action, 2021; Perkins, 2019).

Global efforts toward mitigating the effects of climate change have been largely too little and too late; the Intergovernmental Panel on Climate Change's (IPCC) sixth Assessment Report states that even in the best-case emissions reduction scenario, the global mean temperature will continue to rise at least until 2050 (Masson-Delmotte et al.,

2021). As such, many scholars have turned their attention towards questions of how to maximize human resilience and adaptive capacity in the face of rapid environmental change. Adaptive capacity, which encapsulates the concept of adaptation, is defined by the IPCC as "the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences" (McCarthy et al., 2001, p. 6). Unsurprisingly, governance systems play critical roles in climate change adaptation by both facilitating and hindering adaptation processes, sometimes simultaneously (Baker et al., 2012; DiGregorio et al., 2019; Reeder et al., 2020). Indigenous populations living in settler-colonial countries are uniquely positioned in this context; traditional Indigenous systems of governance have been subsumed under settler governance structures, while at the same time Indigenous Peoples are often systematically excluded from meaningful participation in governance processes (Cameron, 2012; Indigenous Climate Action, 2021; McCreary & Milligan, 2021; Papillon, 2012; Petheram et al., 2010). Thus, Indigenous-state relations are defined by ongoing power struggles through which Indigenous Peoples work towards recognition of their rights (often to land and resources), self-determination, and decolonization (e.g., Roburn, 2018; Stewart-Harawira, 2020; Witter et al., 2015). These relations colour Indigenous Peoples' experiences of climate change impacts, both subtle and conspicuous, and affect their ability to effectively respond to climate-related events and hazards.

2.1 Indigenous Experiences of Climate Change in Settler-Colonial Countries

In settler-colonial governance systems, Indigenous Peoples' experiences of climate change cannot be understood as homogenous; naturally, these experiences can differ greatly depending on geographic location, socio-political context, and numerous other

factors. However, when contrasted with the experiences of non-Indigenous groups, and how those experiences are conceptualized, some common elements of Indigenous experience consistently emerge. Here I will discuss four of these themes, each of which is informed by and builds upon the previous one: connection to land; seeing beyond the local; linkages to social, political, and historical context; and the necessity of Indigenous self-determination. I will discuss each theme in the context of the Indigenous principle of relationality: an ethical framework to make sense of the world and guide behaviour, which emphasizes interconnectedness among all living and non-living beings (Stewart-Harawira, 2020; Wilson, 2001).

The first theme that emerges in literature that documents Indigenous experiences of climate change in settler-colonial contexts regards the importance of connection to land. In contrast to western worldviews, in a paradigm founded on relationality land is not conceptualized as a resource for human exploitation nor as something that can be "owned" (Perkins, 2019). Rather, traditional lands or territories (what some Indigenous groups in Australia refer to as "country") are spaces within which connections to culture, tradition, and personal identity are founded, strengthened, and maintained (Nursey-Bray & Palmer, 2018; Petheram et al., 2010; Rathwell, 2020). When it comes to climate change adaptation, the Arabana people (Indigenous to what is now south-central Australia) identified traditional practices of natural resource management and environmental stewardship as a prerequisite for effective climate change adaptation, both for people *and* for country (Nursey-Bray & Palmer, 2018). The researchers stated that "[t]he cultural value and centrality of traditional country to Arabana identity, was so influential that the Arabana differentiated between place and people in the adaptation planning process" (Nursey-Bray

& Palmer, 2018, p. 11). Similarly, Petheram et al. (2010) observed that Yolngu communities in northeastern Australia understood the health of their people as intimately tied to the health of their traditional territory, and emphasized that building adaptive capacity in their communities would require support from government to relocate back to lands that had undergone fragmentation, dispossession, and degradation under colonial rule.

The second theme, seeing beyond the local, addresses a common misconception about Indigenous ways of knowing. In a critique of tendencies to frame Inuit as uniformly vulnerable, Cameron (2012) demonstrates how settler governance structures depict Indigenous knowledge as relevant exclusively at "local" scales and in "traditional" contexts. They argue that this framing is used to perpetuate and justify colonial state intervention by placing strict limitations on Indigenous agency and knowledge. In a climate change context, the state uses this framing to localize and depoliticize climate change impacts by construing them as technical problems that can be solved locally with technical solutions (Cameron, 2012). For example, melting sea ice is construed as a local vulnerability because it threatens traditional land use and hunting practices, while the very real risks that it poses by creating opportunities for increased natural resource extraction go unaddressed and unacknowledged (Cameron, 2012). But Inuit and other Indigenous Peoples are acutely aware of cross-scale implications of climate change impacts and vulnerabilities. With respect to the impacts of climate change, Kusugak (2002, p. vi) has stated that "[l]ike acupuncture, [Inuit] know that the pain is much in their homelands but the needles have to be inserted in the south, since that is where the disease really is".

Cross-scale connections in Indigenous experiences of climate change are made not only in a geographical sense, but also via linkages to social, political, and historical context,

and colonialism in particular (e.g., Belfer et al., 2017; Cameron, 2012; Chisholm Hatfield et al., 2018; McCreary & Milligan, 2021; Nursey-Bray et al., 2019; Nursey-Bray & Palmer, 2018; Petheram et al., 2010; Stewart-Harawira, 2020). For example, Yolngu communities in Australia prioritized addressing immediate social issues of Indigenous marginalization and poverty as primary adaptive measures (Petheram et al., 2010). In western worldviews, such interventions would typically "not count" as climate change adaptation, but would be understood as serving categorically distinct goals of improved wellbeing and quality of life. Chisholm Hatfield and colleagues (2018) have demonstrated that culturally specific understandings of time (i.e., as non-linear and relational) significantly influence the experiences of Indigenous tribes across the continental United States with climate change. Further, Nursey-Bray and colleagues (2019) identified that Indigenous Peoples in Australia recognize climate-related changes in their immediate environment across both pre- and post-colonial time scales. Through these and many other examples, scholars have demonstrated time and time again the dire need to recognize Indigenous experiences of climate change as socially, politically, and historically embedded in colonialism (which in turn is inextricably tied to capitalism, consumerism, racism, and patriarchy) in order to treat the causes, rather than merely alleviate the symptoms, of climate change (see Cameron, 2012; Indigenous Climate Action, 2021; Nursey-Bray et al., 2019; Nursey-Bray & Palmer, 2018; Perkins, 2019).

Following from the reframing of climate change as a product of colonialism, the fourth and final theme addresses the necessity of Indigenous self-determination in climate change decision-making. In a study of fishery adaptation in coastal British Columbia, four Indigenous communities identified "strengthening of Indigenous governance autonomy

and authority" as the number one requirement for increasing adaptive capacity in fishery management (Whitney et al., 2020, p. 33). Notably, none of the adaptation measures prioritized by the Indigenous research participants in this study overlapped with adaptation strategies prioritized by the Canadian state (Whitney et al., 2020). Differences between Indigenous and settler-state adaptation priorities also contribute to the effectiveness of strategic localism in Indigenous climate change responses: an approach to adaptation planning which emphasizes local relevance and customizability, as opposed to one-size-fits-all approaches (Nursey-Bray et al., 2019). While highly effective, strategic localism is uncommon and difficult to implement due to "the expectation that local initiatives and outcomes need to find ways to import their outputs upwards into wider governance structures or find ways to 'fit in' with other Western institutions", illustrating the necessity of self-determination in climate change decision-making (Nursey-Bray et al., 2019). Finally, researchers have demonstrated a certain irony in portraying Indigenous Peoples as universally vulnerable with little agency and limited adaptive capacity, when Indigenous Peoples around the world have been successfully adapting to environmental change since time immemorial (Nursey-Bray et al., 2019; Rathwell, 2020; Stewart-Harawira, 2020). This is evident, for example, in the finding that Indigenous groups across Australia tend to think of climate change adaptation not as a distinct activity, but as a generic part of day-to-day life through which responses to change in general are mediated and executed (Nursey-Bray et al., 2019). Similarly, Inuit artists demonstrate hopefulness in the face of climate change due to an understanding of their People and culture as inherently adaptable (Rathwell, 2020). Thus, climate change is not perceived as a new problem that requires new responses by Indigenous Peoples living in settler-colonial states. Rather,

colonization presents a new problem that challenges Indigenous Peoples' ability to practice everyday adaptation, underlining the necessity of self-determination and decolonization as prerequisites for effective adaptation.

2.2 The Canadian Context

2.2.1 Historical Context

Joseph and Joseph (2017) name and dispel the myth that before European contact, Indigenous Peoples of Turtle Island (what is now called North America) used unsophisticated governance systems. Rather, the governance models of Indigenous groups varied according to lifestyle and population density; groups with many people residing long-term in a small land area tended to require and use more formal modes of collective decision-making than other Indigenous groups (Joseph & Joseph, 2017). In fact, the participatory democracy model adopted by the Iroquois confederacy (a confederation of six Indigenous tribes) two hundred years before the arrival of Christopher Columbus has been recognized as directly influencing the design and content of the United States Constitution (Perkins, 2019). Prior to confederation, the rights of Indigenous Peoples *as nations* were recognized and protected by law in what is now Canada, under the *Royal Proclamation* of 1763 (Joseph & Joseph, 2017). After confederation, not only was a colonial system of governance imposed onto Indigenous Peoples through the Canadian Constitution (at that time called the *British North America Act*), it was through this colonial governance system that policies of starvation, assimilation, and genocide were adopted and enforced on Indigenous Peoples and their cultures, languages, and livelihoods (Daschuk, 2013). Confederation and the consolidation of state power through treaty negotiation together contributed to a shift in Indigenous–state relations in Canada: over a period of about a

century, Indigenous Peoples went from being viewed and treated as independent nations to wards of the Canadian state (Joseph & Joseph, 2017). In 1982, Canada patriated the *Constitution Act*, marking its own sovereignty from the British Crown, and formally recognizing "existing aboriginal and treaty rights of the aboriginal people in Canada" (*Canadian Charter of Rights and Freedoms*, 1982, c. 11). The recognition of these rights, however, does not constitute the recognition of Indigenous Peoples as sovereign nations, and various interpretations of what "aboriginal and treaty rights" actually consist of have been debated over the past three decades in the Supreme Court of Canada (see Joseph & Joseph, 2017 or Persaud, 2020, p. 1606 for an overview of precedent-setting court cases on this topic). This reliance on the court system to affirm and delimit Indigenous rights to self-determination has resulted in a shift of responsibility wherein Indigenous groups must initiate judicial procedures when they believe their rights to be violated, a process which is riddled with procedural and financial barriers (Miljan, 2012). Miljan (2012, p. 56) has also noted a tangible gap between Indigenous representation and participation in the Canadian governance system, visible in "Ottawa's integration of the symbols of [Indigenous] culture into public celebrations and even the structure of the state" combined with a distinct lack of mechanisms for meaningful Indigenous participation in Canadian political and economic systems.

2.2.2   Where Are We Now

As the complex and contested history of Indigenous–state relations in Canada would suggest, questions about how Indigenous and Canadian state governance structures "fit" together (or do not) remain far from resolved, fueled by controversy around the intent behind historical treaties signed between the state and Indigenous groups across the

country (Spitzer, 2018). Alcantara & Spicer (2016) identify two competing understandings of the relationship between Indigenous Peoples and the Canadian governance model: traditional federalism (wherein Indigenous Peoples are stakeholders in decision-making processes) and treaty federalism (wherein Indigenous groups are full and equal nations). Past and ongoing negotiation of treaties between the Canadian state and Indigenous groups gives credence to the latter conceptualization, but traditional federalism remains deeply entrenched and instances of governmental decision-making wherein Indigenous groups are merely consulted as stakeholders (or not at all) abound (Alcantara & Spicer, 2016; Roburn, 2018; Indigenous Climate Action, 2021).

Aligning with Miljan's (2012) observation of the divide between Indigenous representation and participation in Canadian governance processes (and reflective of a perspective of traditional federalism), others have demonstrated how the power of the settler state is maintained through politics of recognition: by acknowledging the presence of racialized environmental injustices in a narrow, politically and historically decontextualized manner, the Canadian state is able to legitimize continued intervention in and control over the lives of the marginalized (Cameron, 2012; Coulthard, 2007; Grey & Kuokkanen, 2020; McCreary & Milligan, 2021). For example, in a community consultation process with the Tsleil-Waututh people in Vancouver around the placement of a natural gas pipeline, concerns of the Tsleil-Waututh community were "addressed" by routing the pipeline through areas of the territory where heavy industrial development was already occurring. Though the Tsleil-Waututh's interests laid in improving their environment rather than merely protecting their traditional lands from further degradation, British Columbia's provincial environmental assessment requirements recognized their rights only

insofar as to ensure that no *new* areas would be degraded (McCreary & Milligan, 2021). By refusing to acknowledge and contend with the colonial legacies of dispossession that fragmented and degraded Tsleil-Waututh territory in the first place, the state purported to recognize and affirm the rights of the Tsleil-Waututh while simultaneously reinforcing its position of power over the Tsleil-Waututh and their traditional territory (McCreary and Milligan, 2021). From a perspective of Canadian governance better aligned with treaty federalism, scholars have emphasized the importance of acknowledging the active and powerful ways in which Indigenous Peoples living in what is now Canada challenge colonial governance systems and practice self-determination in day-to-day interactions with the state (e.g., Borrows, 1992; Borrows, 1995; Roburn, 2018). For example, Roburn (2018) discusses how the Inuit shaped telecommunications infrastructure throughout the Canadian Arctic by creatively leveraging their own social networks and frameworks of governance. This influence, they demonstrate, served to unify and strengthen the Inuit politically, granting them greater autonomy and self-governing power in decision-making even decades into the future (Roburn, 2018). As an alternative to conceptualizing traditional and treaty federalism as dual and competing modes of governance, Alcantara and Spicer (2016) propose that MLG be adopted as a framework for understanding and reconciling Indigenous–state relations in Canada.

3.0 Multi-Level Governance and Climate Change Adaptation

3.1 What is Multi-Level Governance?

MLG has been defined as "a process of political decision making in which governments engage with a broad range of actors embedded in different territorial scales

to pursue collaborative solutions to complex problems" (Alcantara & Nelles, 2014, p. 185).

Like most theoretical terminology, the concept of MLG has been criticized for being difficult

to define and identify, especially when compared to the similar concept of federalism

(Alcantara & Spicer, 2016). To provide greater clarity around the concept, Alcantara and

Nelles (2014) have delineated three criteria that must be met in order for MLG to occur: (1)

one or more of the governance systems is constitutionally recognized, while the other(s)

involved are not; (2) one or more of the main actors represent a different political or

territorial scale than the other(s); and (3) decision-making occurs through negotiation

rather than from the top down (see Figure 1). In this framework, interactions between

Indigenous governance systems and the Canadian state (arguably automatically) satisfy the

first and second of these criteria. With respect to the first criterion, despite ongoing debate

around whether Indigenous sovereignty is acknowledged within the Canadian constitution,

Indigenous Peoples living within Canada indisputably are not treated as sovereign nations

by the Canadian state in day-to-day interactions (Joseph & Joseph, 2017; Miljan, 2012;

Spitzer, 2018). With respect to the second, Indigenous traditional territories are not

aligned with provincial, territorial, or federal political boundaries. Importantly, scholars

also emphasize that MLG need not exist formally or consistently as a system of governance

of its own. Rather, it can emerge spontaneously and exist fluidly alongside formal systems

of governance like Canadian federalism (Alcantara & Nelles, 2014; Alcantara & Spicer,

2016; Papillon, 2012). Together, these factors imply that the Canadian state and Indigenous

Peoples living within Canada's colonial boundaries are well-positioned to adopt MLG

approaches to environmental and other types of decision-making. In fact, some suggest that

instances of MLG have already been taking place in Canada for many years (e.g., Alcantara & Spicer, 2016; Krupa et al., 2015; Papillon, 2012).

Characteristic	Criteria
Actors	Involves at least one constitutionally recognized government in partnership with nongovernmental and/or quasi-governmental actors
Scales	At least one actor is embedded at a different political/territorial scale from the others in the partnership
Decision-making processes	Decision-making is the result of bargaining and negotiation between actors rather than top-down or hierarchical determined relationships. We refer to this criterion also as "negotiated order" and "governance"

Figure 1. Alcantara and Nelles' three criteria for multi-level governance (image extracted from Alcantara & Nelles, 2014, p. 186).

3.2 Approaches to Multi-Level Governance

In the mid-2000s, the Canadian federal, provincial, and territorial governments collaborated with five national Indigenous bodies to draft the Kelowna Accord: a policy document that sought to address issues in the areas of Indigenous health, education, housing, economy, and governmental accountability (Alcantara & Spicer, 2016). Though it was never implemented due to a transfer of federal government power, the Kelowna Accord has been cited as a "textbook example of multilevel governance" (Alcantara & Spicer, 2016, p. 185). While the Kelowna Accord was developed over many months of formal collaboration and included broad participation from Indigenous leaders and their constituents across the country, research suggests that these characteristics need not be present for MLG to occur. Rather, instances of MLG can emerge in diverse contexts and occur through highly variable processes (Alcantara & Spicer, 2016; Papillon, 2012). This section presents three alternative approaches to understanding and executing processes of MLG for environmental decision-making: co-management, nested federalism, and

spontaneous MLG. This section also explores the extent to which Indigenous self-determination, identified in Section 2.1 as critical to effective climate change adaptation planning, is either enabled or obstructed within each approach.

Co-management is likely the most widely adopted form of MLG, typically initiated by settler states in response to Indigenous claims to land title and other forms of resistance toward top-down resource management policies (Grey & Kuokkanen, 2020). Most often employed in conservation and natural resource management contexts, co-management arrangements emerged as a way to link increased democratic participation with the devolution of state authority, and they seek to facilitate the sharing of decision-making powers "between the state (as a resource 'owner') and the local community (as a resource 'user')" in a defined policy field and a delimited geographic area (Grey & Kuokkanen, 2020, p 923). While Indigenous groups may seek co-management agreements to secure greater control over their traditional territories (e.g., Whitney et al., 2020), Grey and Kuokkanen (2020) suggest that, like treaty negotiation, the motivation to engage in co-management for Indigenous communities is more often spurred by a lack of preferable alternatives than by any virtue of the governance regime itself. In fact, while acknowledging that Indigenous groups can wield varying levels of power and control in co-management schemes, researchers have characterized co-management as necessarily precluding any meaningful progress towards Indigenous self-determination (Grey and Kuokkanen, 2020). This is due to co-management resulting from and reproducing processes of culturalization, wherein "cultural identity and cultural difference [are emphasized] over legal and political status, which essentialises Indigenous peoples and reduces Indigenous rights to minority rights" (Grey and Kuokkanen, 2020, p. 919). Co-management, in this view, serves to formalize and

legitimize processes of environmental governance wherein social, political, and historical context (i.e., colonialism) is neither acknowledged nor addressed. As discussed in Section 2.1, Indigenous Peoples are acutely aware of such oversights, which both affect their experiences of environmental changes and limit their ability to respond and adapt to them.

Following the terminology used by Wilson (2020), nested federalism refers to a system of MLG in which regional governance systems are both recognized by and operate within a predefined federal system. These regional structures typically emerge to represent the interest of specific Peoples with shared cultures and histories and whose population is significant in a particular area (Wilson, 2020). Nested federalism can support self-determination by allowing for various levels of self-governance (control over institutions outside of the formal system of government that influence regional decision-making) or self-government (formal regional government systems that are run by and serve a specific cultural group) (Wilson, 2020). Examples of nested federalism can be found throughout the Canadian Arctic, where Inuit groups in various regions have been successful in demanding recognition not only of their rights to land use, but also of their rights to self-determination, resulting in the establishment of formal Inuit institutions of self-governance (e.g., Nunavik's Makivik Corporation, which operates in northern Quebec) and self-government (e.g., Nunatsiavut, which encompasses the northern tip of Labrador) (Wilson, 2020). However, challenges to self-determination in these contexts can and do occur, typically in two ways. First, self-determination is limited by the need for the "new" regional governance systems to fit and work within the pre-existing federal regime (Wilson, 2020). Second, self-determination can be challenged by resistance to these "new" regional governance systems from the dominant (i.e., settler) society. For example, Spitzer (2019, p. 529) has

demonstrated how, in response to the Inuit's pursuit of self-government through the creation of Nunavut, settlers were partially successful in resisting this process of Inuit self-determination by "[condemning] as illiberal those arrangements that guard minority autonomy". In other words, by claiming prepotency of individual rights over group-based rights, settlers in the north were able to reframe the political narrative from "us versus them" to "we", thereby blocking progress towards the decolonization of Inuit traditional territories.

I refer to the third approach to MLG as spontaneous due to an emphasis throughout the literature on a lack of endurance or formality in the structure of these types of MLG systems (e.g., Alcantara & Spicer, 2016; Papillon, 2012). This approach conceptualizes MLG as an event or phenomenon that occurs in bursts, emerging and operating alongside pre-established governance structures for various lengths of time. This conceptualization of MLG opposes discourses that portray Indigenous Peoples as passive victims who are powerless to shape or capitalize on their position within colonial governance regimes. For example, Persaud et al. (2020) maintain that Indigenous groups have advanced self-determination in contexts of spontaneous MLG through tactics of counter-institutionalization: the appropriation of state-sanctioned processes and leveraging of state-granted powers to forward self-determination without overturning or overtly challenging the fundamental elements of the existing system of governance. Furthermore, in an analysis of two renewable energy projects in Ontario and British Columbia, Krupa et al. (2015) have demonstrated that when Indigenous communities and state actors work together to co-develop land-based projects, spontaneous MLG systems can be (often unintentionally) co-produced in parallel. Though questions remain about the extent to

which self-determination can be pursued or attained from within colonial governance regimes, Papillon (2012) has suggested that because constitutional recognition of Indigenous sovereignty is anchored strictly within the existing federal jurisdictional framework, spontaneous MLG is able to support Indigenous self-determination without threatening Canadian federalism. The spontaneous MLG approach is well-aligned with Borrows' problematization of a dominant western conceptualization of Canadian history wherein Indigenous Peoples are seen as having been stripped of all political agency and ability to self-govern by the Canadian state (Borrows, 1992). In reframing significant events in Canada's history from an Indigenous perspective, Borrows (1992) demonstrates how self-determination has been and continues to be actively pursued within the existing governance regime, and thus makes a compelling case for the significance of spontaneous MLG in Canada's political system.

3.3 Principles for Indigenous Adaptation Planning in a Multi-Level Governance Context

In the preceding sections, I have put forth two main propositions: first, that Indigenous self-determination is a prerequisite for effective climate change adaptation; and second, that MLG can offer a promising route to Indigenous self-determination (despite a coincident potential to reinforce the dominance of colonial systems of governance). Regardless of how MLG is approached or conceptualized, trust must be established among actors in a MLG context early on in order to ensure mutual benefit for all involved parties (Whitney et al., 2020). Importantly, adaptation scholars have emphasized that although adaptation literature tends to promote and prescribe bottom-up adaptation initiatives, it

can be counterproductive to focus exclusively on local-level strengths and limitations

(Dodman & Mitlin, 2013). Due to the necessarily multi-scalar nature of MLG (see Alcantara

& Nelles, 2014), pursuing adaptation within an Indigenous–state MLG structure

necessitates attention to requirements that are specifically relevant at both local (i.e.,

pertinent to Indigenous groups) and non-local (i.e., pertinent to the state) scales. Further,

attention to cross-scale dynamics and interactions is also necessary due to the multi-scale

implications of both MLG systems and environmental issues (Adger, 2003; Adger, 2005;

Dodman & Mitlin, 2013). In this section, I will introduce three principles for effective

Indigenous–state MLG: responsibility, flexibility and responsiveness, and contextualization.

These principles can be used to guide processes of Indigenous–state MLG for climate

change adaptation that aim to support both Indigenous self-determination within the MLG

regime and trust building among Indigenous and state MLG actors. I will also address how

each principle applies at local and state scales, and in multi-scale or cross-scale contexts.

Table 1, presented at the end of Section 3.3, offers a summary of the three principles

proposed as well as the scale-specific considerations that accompany each.

The first principle for effective adaptation planning in Indigenous–state MLG

contexts addresses **responsibility**. At the local level, responsibility requires that local

leaders involved in cross-scale adaptation planning are held accountable to their

community in order to maximize the equitable distribution of adaptation costs and benefits

(Agarwal et al., 2012). Responsible MLG for adaptation requires that interactions among

actors at all scales promote rather than restrict ongoing collaboration and power sharing

among actors, including an ability and willingness to negotiate non-hierarchical resource

management regimes, to co-produce adaptation plans, and to support plan implementation

(Perkins, 2019; Krupa et al., 2015). To enable and maintain these types of cross-scale processes, strong leadership and political agency are required by all actors involved in the MLG (Alcantara & Spicer, 2016; Gupta et al., 2010). At the state level, actors are responsible for providing clear and prescriptive adaptation requirements, while also devolving power to increase autonomy at local levels in working towards adaptation standards (Agarwal et al., 2012; Baker et al., 2012; Reeder et al., 2020; Whitney et al., 2020). Importantly, local actors are unable to effectively leverage state-sanctioned powers without sufficient technical, financial, and information-based resources (Agarwal et al., 2012), requiring the state to provide the resources necessary for local actors to act autonomously and wield new powers appropriately. Finally, to both support Indigenous self-determination and establish trust among actors within an MLG regime, state-affiliated actors must commit to decolonization and demonstrate meaningful reconciliatory action (Petheram et al., 2020).

Baker et al. (2012) have identified a lack of adaptation mainstreaming as a primary barrier to effective adaptation at the local level, suggesting that institutional silos within local governance structures prevent the coordination necessary to enable meaningful change. Similarly, due to the inherent complexity of environmental issues, Adger et al. (2003) have argued that there is a need for environmental governance systems to promote interdisciplinary analysis and decision-making while also attending to multiple contextual factors, something they refer to as "thick" analysis. When considered in the context of Indigenous Peoples' experiences in pursuing adaptation (as discussed in Section 2), this requirement can be understood in terms of a need for local institutions to accommodate and promote engagement with relational perspectives. These requirements are encompassed within the second principle of effective Indigenous–state MLG for adaptation

planning: **flexibility and responsiveness**. Notably, Walker et al. (2013) have emphasized

that adaptation plans themselves must exhibit resilience and robustness to minimize the

likelihood of failure. Institutions at all levels must therefore ensure that flexibility and

responsiveness are built into both adaptation *processes* and *products*, a process which can

be facilitated through support for social and institutional learning (Gonzales-Iwanciw et al.,

2020). Gupta et al. (2010) have developed a framework to assess the extent to which

institutions are able to support adaptive capacity building in society (see Figure 2). Based

on their results, at the non-local (or state-level) scale, the principle of flexibility and

responsiveness requires that resources and information are made available based on local

need, and that diverse approaches to and solutions for adaptation are accommodated

(Gupta et al., 2010). The latter requirement suggests that a balance must be struck between

establishing clear and prescriptive guidelines for adaptation at the state level on the one

hand (as addressed under the principle of responsibility) and allowing for flexibility and

creativity in how those guidelines are followed on the other (Baker et al., 2012; Reeder et

al., 2020). Finally, Baker et al. (2012) have observed that barriers to effective local

adaptation are often created and entrenched through policy at higher levels, suggesting

that state-level institutions must commit to identifying and removing such barriers to

promote effective MLG for adaptation.

Figure 2. Gupta et al.'s Adaptive Capacity Wheel displays characteristics that institutions must exhibit in order to maximize adaptive capacity at multiple scales (extracted from Gupta et al., 2010, p. 464).

Unsurprisingly, historical and ongoing forms of colonization have in many cases produced a sense of distrust among Indigenous Peoples toward settler-colonial institutions and structures of governance (Krupa et al., 2015; Whitney et al., 2020). To rebuild trust between Indigenous and state actors in pursuing MLG for adaptation, research clearly demonstrates the importance of social, political, and historical contextualization, and a recognition of colonialism as a particularly significant contextual feature (see Section 2.1).

The third principle, **contextualization**, is thus central to both building trust and supporting Indigenous self-determination within MLG regimes. At the local scale, contextualization can involve situating adaptation processes and measures within local/community-based value systems (Nursey-Bray & Palmer, 2018). Beyond the local scale, contextualization requires attention to how interactions between actors at different scales unfold and how the distribution of power changes (or does not) through those interactions (Cameron, 2012; DiGregorio et al., 2019). Social and institutional learning can also be facilitated via contextualization, by engaging in regular reflexive practice, either individually or collectively (Gonzales-Iwanciw et al., 2020). At both local and state levels, contextualization can be achieved by engaging with Indigenous history (both pre- and post-colonization) in what is now Canada, and by recognizing Indigenous law as a valid, relevant, and applicable legal framework in the context of climate change adaptation (Borrows, 1995). Finally, contextualization requires that state actors acknowledge and explicitly address legacies and ongoing forms of colonization that are entrenched within settler institutions and reinforced through institutional and individual behaviours and decision-making (Belfer et al., 2017; Cameron, 2012; Chisholm Hatfield et al., 2018; McCreary & Milligan, 2021; Nursey-Bray et al., 2019; Nursey-Bray & Palmer, 2018; Petheram et al., 2010; Stewart-Harawira, 2020).

Table 1. Summary of three principles for effective adaptation planning in Indigenous–state MLG contexts, including how each principle applies at various governance scales.

Principle		Responsibility	Flexibility and responsiveness	Contextualization
Scale-Specific Considerations	Local Scale	Emphasize accountability to local constituents (Agarwal et al., 2012); Facilitate broad and meaningful participation in adaptation planning processes (Baker et al., 2012)	Accommodate and promote relational perspectives (Petheram et al., 2010; Rathwell, 2020)	Anchor adaptation measures in local/ community values (Nursey-Bray & Palmer, 2018)
	Both Scales or Cross-Scale	Accommodate nested spheres of authority to facilitate shared, *non-hierarchical* resource management regimes and co-production of adaptation plans (Perkins, 2019; Krupa et al., 2015); Strong leadership/political agency in support of cross-scale collaboration (Alcantara & Spicer, 2016; Gupta et al., 2010)	Design adaptation processes and products that are robust, dynamic, and adaptable (Walker et al., 2013); Learn and adjust in response to new information (Gonzales-Iwanciw et al., 2020); Communicate, learn collectively, and share information among actors at all levels (Agarwal et al., 2012; Gonzales-Iwanciw et al., 2020; Whitney et al., 2020)	Explore how interactions between scales facilitate or hinder adaptation (Cameron, 2012); Attend to power dynamics and distribution among actors at all levels (DiGregorio et al., 2019); Practice collective and individual reflexivity (Gonzales-Iwanciw et al., 2020); Recognize Indigenous law as a valid and useful legal framework for environmental governance (Borrows, 1995)
	State Scale	Devolve power and autonomy to local levels (Agarwal et al., 2012; Whitney et al., 2020); Establish clear adaptation requirements (Baker et al., 2012; Reeder et al., 2020); Ensure access to resources at local levels (Agarwal et al., 2012); Commit to decolonization and reconciliatory action (Petheram et al., 2020)	Provide access to resources and information based on local need (Gupta et al., 2010); Accommodate diverse approaches to meeting adaptation requirements (Gupta et al., 2010); Identify and remove barriers to local adaptation entrenched in state-level policy (Baker et al., 2012)	Acknowledge and attend to social, political, and historical context, including legacies and ongoing forms of colonialism (Belfer et al., 2017; Cameron, 2012; Chisholm Hatfield et al., 2018; McCreary & Milligan, 2021; Nursey-Bray et al., 2019; Nursey-Bray & Palmer, 2018; Petheram et al., 2010; Stewart-Harawira, 2020)

4.0 Canada's 2020 Federal Climate Plan

4.1 Summary and Critique

Canada's most recent federal climate plan, *A Healthy Environment and a Healthy Economy* (henceforth referred to as "the Plan") builds upon the federal government's first climate action plan, *The Pan-Canadian Framework on Clean Growth and Climate Change*,

published in 2016 (Environment and Climate Change Canada, 2016; Environment and Climate Change Canada, 2020). The Plan has already received strong criticism for its unambitious climate goals, as well as a lack of engagement with Indigenous Peoples throughout the development process, despite the fact that Indigenous leadership and collaboration is emphasized throughout the Plan as critical to effective climate change adaptation in Canada (Indigenous Climate Action, 2021). The Plan has also received criticism for a tendency to emphasize Indigenous knowledge only when it does not threaten existing systems. For example, Indigenous Climate Action (2021) has pointed out that the Plan's much stronger focus on Indigenous-led adaptation than on Indigenous-led mitigation processes conveniently serves to ensure that responsibility for change can be devolved to vulnerable groups themselves, such as remote communities that currently rely on energy transported via truck or ship. On the other hand, an equivalent emphasis on the role of Indigenous knowledge in climate change mitigation would lead to solutions that involve interrogating and deconstructing capitalism, colonialism, and other systems that rely on environmental and human exploitation (Indigenous Climate Action, 2021; Perkins, 2019). An emphasis on adaptation is not inherently problematic; indeed, adaptation has been emphasized over mitigation throughout this work. However, any effort to respond to climate change in a comprehensive manner requires that adaptation and mitigation are addressed simultaneously, and the importance of Indigenous knowledge in informing both processes cannot be understated (Indigenous Climate Action, 2021). The Plan also leaves something to be desired in its specificity. For example, the Plan states that, "to respond to Indigenous Peoples' climate priorities…the Government of Canada will: [e]xplore opportunities to strengthen federal adaptation programs for Indigenous communities"

(Environment and Climate Change Canada, 2020, p. 70-71). Vague goals such as this led

Indigenous Climate Action (2021, p. 16) to describe the Plan as "clearly more of a proposal

than a definite plan". Overall, the lack of Indigenous engagement in the Plan's development

calls into question the integrity of the Plan's purported intentions of forwarding Indigenous

self-determination and leadership in combatting climate change in Canada. Of particular

interest in this analysis, however, is whether the plan supports the emergence of formal or

informal MLG regimes involving Indigenous Peoples and the Canadian state in responding

to climate change. Because the Plan applies at the national level, considerations for

demonstrating responsibility, flexibility and responsiveness, and contextualization at the

state level (outlined in Table 1 above) can provide insight into whether the Plan is

supportive of, or is likely to hinder, MLG for climate change adaptation in Canada.

4.2 Does the Plan Support Multi-Level Governance for Adaptation?

To explore the extent to which the Plan supports MLG for adaptation, I here assess

the extent to which the Plan provides evidence of responsibility, flexibility and

responsiveness, and contextualization within the Canadian state's approach to climate

change governance. Because the Plan applies at the national level, not all scale-specific

considerations for the three principles are applicable. Therefore, the focus of this analysis

is on the state level considerations identified in Table 1, as well as those considerations

which are applicable at both local and state scales. Some, but not all, of the cross-scale

considerations are also included in this analysis based on whether they could be expected

to be addressed explicitly within the Plan. For example, the requirement of learning and

adjusting in response to new information is not included as a criterion because the Plan, as

a static policy document, cannot be expected to convey whether institutional learning is

occurring within state-level processes of environmental governance. However, attending to power dynamics and distribution among actors at all levels is included as a criterion because it can be reasonably expected that the Plan would address power imbalances between Indigenous Peoples and the state, especially given that the Plan explicitly states that "[t]he Government of Canada…supports without qualification the United Nations Declaration on the Rights of Indigenous Peoples, including free, prior, and informed consent" (Environment and Climate Change Canada, 2020, p. 68). Importantly, this assessment applies only to the content of the Plan, and thus assumes that the Canadian government intends to fulfill all commitments laid out within the Plan. Table 2 summarizes the results of this analysis, with considerations that are included within the Plan displayed using green text, and those that are absent from the Plan displayed in red text.

With respect to the principle of responsibility, the Plan suggests that the Canadian State fulfills some responsibilities required to support Indigenous–state MLG for adaptation, while other important aspects of state responsibility are not present. The Plan commits to developing nation-to-nation partnerships with Indigenous groups in working towards adaptation goals, and support for Indigenous self-determination in climate change decision-making is expressed seven times throughout the document. The Plan also commits to providing resources to Indigenous communities through various pre-existing and newly proposed channels and programs in order to support adaptation initiatives. For example, the government has pledged $300 million to assist remote northern communities in transitioning away from a reliance on diesel fuel toward more sustainable and reliable sources of energy (Environment and Climate Change Canada, 2020, p. 70). As mentioned previously, however, the plan lacks specificity overall in terms of how its goals will be

achieved. Adaptation requirements at various jurisdictional levels are not clearly identified. Lastly, the Plan does not recognize a need for decolonization, and reconciliation with Indigenous Peoples is mentioned only once throughout the document.

With respect to flexibility and responsiveness, the Plan itself does not include a mechanism that necessitates ongoing revisitation and revision, nor does it identify mechanisms for enhancing channels of communication and collective learning among levels of governance. It does not address existing policy that may serve to entrench unsustainable behaviours or constrain bottom-up adaptation initiatives. For example, Indigenous Climate Action (2021, p. 11) makes the powerful observation that "[t]he Federal climate plans egregiously fail to address the fossil fuel industry as a driver of climate change, a violator of Indigenous rights, and a major contributor to the vulnerabilization of Indigenous communities and Nations by way of impacts on waters, lands, livelihoods, and food systems". The Plan does address the need to accommodate differences in local need by recognizing Indigenous Peoples and their communities as non-homogenous in knowledge and experience. It also acknowledges the importance of place-specific solutions, suggesting an openness to diverse modes and manifestations of adaptation in practice.

The principle of contextualization is informed by the most prominent theme throughout Indigenous climate change adaptation literature: the need to recognize and address linkages between systems of oppression and exploitation (especially colonialism) and climate change. Unfortunately, but perhaps unsurprisingly, the Plan suggests that the Canadian state is not willing to acknowledge or address these linkages. Despite the recognition of vulnerabilities that are specific to Indigenous Peoples, the Plan does not

situate those vulnerabilities within the historical context of colonization. In fact, a search of the document's content reveals that there is not a single mention of the words colonization, colonialism, or colonial within the entire 79-page document. The Plan also lacks social and political contextualization. The deeply entrenched power imbalances that influence every aspect of Indigenous–state relations in Canada and are constantly challenged through the Canadian justice system are blatantly ignored, as the Plan contains frequent and unironic claims that the Canadian state is committed to working with Indigenous Peoples on a nation-to-nation basis when it comes to climate change decision-making. At the same time, the value of Indigenous engagement in climate change decision-making is narrowly portrayed as stemming from its usefulness as an alternative and complementary knowledge source to Western knowledge, while the existence, integrity, and value of Indigenous governance structures, legal frameworks, and worldviews are not acknowledged (Indigenous Climate Action, 2021). Ironically, this supposedly valuable Indigenous knowledge was not sought during the development of the Plan itself (Indigenous Climate Action, 2021). If the Canadian government as an institution is truly interested in developing trusting and productive relationships with Indigenous Peoples, it must first learn to situate the collective realities of settler Canadians and Indigenous Peoples within the colonial past and present that it shaped and upholds.

Table 2 provides a succinct picture of the Canadian state's current status regarding its ability to support or inhibit Indigenous–state MLG for climate change decision-making. Overall, the Plan suggests that there is room for significant improvement. The federal governance system is better at meeting formal expectations associated with federal statehood (as evidenced by the greater proportion of green in the responsibility column)

than it is at fulfilling other requirements for engaging in effective and mutually beneficial MLG regimes. As has been observed extensively in state governance structures around the world, the Canadian government performs very poorly when it comes to situating the climate crisis, and Indigenous Peoples' experiences of the climate crisis, within its own colonial history. In efforts to support meaningful trust- and relationship-building with the Indigenous Peoples who reside within its borders, the Canadian state must first acknowledge and assess its own role in ongoing social and environmental injustices.

Table 2. An assessment of the extent to which Canada's most recent federal climate plan (Environment and Climate Change Canada, 2020) displays the responsibility, flexibility and responsiveness, and contextualization required at the state level to support effective multi-level governance for climate change adaptation. Green text represents items that are explicitly addressed or considered within the plan, while red text represents those that are absent.

Principle		Responsibility	Flexibility and responsiveness	Contextualization
Scale-Specific Considerations	Both Scales or Cross-Scale	Accommodate nested spheres of authority to facilitate shared, *non-hierarchical* resource management regimes and co-production of adaptation plans	Design adaptation processes and products that are robust, dynamic, and adaptable Communicate, learn collectively, and share information among actors at all levels	Explore how interactions between scales facilitate or hinder adaptation Attend to power dynamics and distribution among actors at all levels Practice collective and individual reflexivity Recognize Indigenous law as a valid and useful legal framework for environmental governance
	State Scale	Devolve power and autonomy to local levels Establish clear adaptation requirements Ensure access to resources at local levels Commit to decolonization and reconciliatory action	Provide access to resources and information based on local need Accommodate diverse approaches to meeting adaptation requirements Identify and remove barriers to local adaptation entrenched in state-level policy	Acknowledge and attend to social, political, and historical context, including legacies and ongoing forms of colonialism

5.0 Conclusion

Tensions in Indigenous–state relations in Canada are created and maintained by fundamental differences between Western and Indigenous worldviews combined with deeply entrenched power imbalances that privilege Western over Indigenous institutions, modes of governance, and forms of knowledge. These tensions, and the systems from which they emerge, affect Indigenous Peoples' experiences of climate change while simultaneously restricting the avenues through which they can mitigate or adapt to climate change. In the face of drastic and rapid environmental change, governance processes in Canada and elsewhere must be able to support those who reside within their borders in responding to climate change in effective and culturally-appropriate ways: namely, by supporting self-determination in climate change adaptation. MLG regimes offer one avenue for advancing Indigenous self-determination in environmental governance without threatening the fundamental elements of the current federal governance system. In fact, MLG arrangements can build adaptive capacity within both local and state-level governance structures simultaneously by facilitating mutual support in the achievement of shared goals and playing to the strengths of both local and state-level actors. By demonstrating responsibility, flexibility and responsiveness, and contextualization in their adaptation efforts, local and state-level institutions and actors can create favourable conditions for effective and mutually beneficial MLG. While Canada offers an ideal context for the emergence of Indigenous–state MLG regimes, the Canadian government does not demonstrate adequate responsibility, flexibility and responsiveness, or contextualization to maximize the benefits of MLG for climate change adaptation. Based on an analysis of the federal government's most recent climate plan (see Environment and Climate Change

Canada, 2020), the Canadian state performs particularly badly when it comes to contextualizing the climate crisis within Canada's colonial history. Although the Canadian government espouses the importance of Indigenous self-determination throughout the Plan, there is little evidence that self-determination is being supported in meaningful ways through the country's response to climate change. This research suggests that in order to demonstrate their stated commitment to supporting Indigenous self-determination in climate change decision-making, the Canadian state must demonstrate greater responsibility, flexibility and responsiveness, and most importantly, social, political, and historical contextualization in its efforts to mitigate and adapt to climate change. While Indigenous self-determination will undoubtedly continue to be pursued in Canada even without change at the state level, by acting on these principles the Canadian state could facilitate the emergence and maintenance of more effective and enduring MLG regimes that could operate in parallel to, rather than in competition with, Canada's current federal governance system.

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