

Learning Disabilities and Methodologies of Harm: Indigeneity, Pathologization, and  
Ambiguity in the Psychological Disciplines

by

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A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Education  
in  
Psychological Studies in Education

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University of Alberta

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## Abstract

In response to the Truth and Reconciliation Commission of Canada, the Canadian Psychological Association (CPA) and the Psychological Foundation of Canada (PFC) issued a joint statement identifying the harms that psychological research and intervention have caused Indigenous communities, while also stating their commitment to address these harms. Though this report focused on the implications of ethnocentric epistemologies and unethical practices in psychological research and interventions, in this thesis I argue that the source of this harm is in fact found in the ontological commitments of disciplines such as psychology, psychiatry, and education. More specifically, I argue that it is the commitment of these disciplines to the concept of disability as both a pathological and detrimental reality of certain bodies and minds that is the underlying factor causing the harms discussed by the CPA and PFC. In this thesis, I focus on the case of learning disability and intelligence as co-constitutive concepts. Rather than understanding such topics as intelligence and learning disability through the lens of disability, I argue it is more appropriate to analyze these topics through the lens of whiteness and the dispossession of Indigenous peoples from lands and resources. It is for the purpose of understanding the function of psychological disciplines in the continued theft of Indigenous lands and resources that I develop a research methodology I call Indigenous critical disability studies (I-CDS), drawing on current Indigenous scholarship and disability studies to do so. Using the I-CDS framework, I argue that a possessive logic intelligence acts directly as a means of justifying the dispossession of Indigenous peoples from lands and resources by settler colonial nations through appeal to the mental superiority of whites. However, the concept of intelligence risks falsification through being conceptualized as positively associated with learning potential. The concept of learning disabilities derives from a process of pathologization and the need to protect intelligence from

this potential falsification. However, learning disabilities are also threatened by the possibility of falsification. Where intelligence is protected through pathologization, the concept of learning disability is protected by a method I term “ambiguity.” I conclude this thesis with the assertion that in order for psychological disciplines to address the harm they cause Indigenous communities, psychological researchers and practitioners will need to radically alter the methodologies they employ, their understandings of mental phenomena, and the role they play in the continued colonization of Indigenous lands and bodies. I also contend that Indigenous peoples should work to replace psychological disciplines with disciplines informed by Indigenous peoples own worldviews and research methodologies.

Dedicated to, and in loving memory of  
Mrs. Anne Peirce and Mr. Colin Staveley

## Acknowledgments

I would like to thank my co-supervisors Dr. André P. Grace and Dr. Nancy Van Styvendale for their support and sage advice throughout my Master's program: I am very glad to have had you both be a part of this journey.

Thank you to my parents and my sister. I have no words to describe how grateful I am to you, and how proud it makes me to be family. None of this was as difficult as those years in elementary when you helped me do my work from the moment I got home to the time I went to bed. Thank you for setting me up so well to chase the dream.

Thank you to my friends, communities, elders, and grandparents who helped me get here today. In no particular order, and to name only a few of you: Ronald and Donna Scott, Harald and Annabelle Schiefelbein, David Parent and Merissa Daborn (thanks for the meals, the coffees, institutional navigation, and the chats!), Shaina Humble, Rob Hancock, Blake Desjarlais, Q'aa Kwiit (Grace-Anne Thunder), Richel Donaldson, Madelynn and Heather Slade, May and Skip Sam, Skip Dick, Victor Underwood, Samantha Sansregret, Barbara Hulme, Deborah and Ronald George, everyone from the First Peoples House at the University of Victoria, Chelsea Vowel, Molly Swain, Mahbod (Mo) Tayeban, Amaya Black, Arianna Sholinder, Hamish Frayne, Helen Burger, Dennis Saw, Kento Kanazawa, Tony Cruz, Alex Komorowsky, and of course, Tami Schiefelbein (again!). Each of you have taught me much about the world and what is important to me.

Finally, I would also like to acknowledge the material support of the Tri Council Agency for helping fund my schooling with the Joseph-Armand Bombardier Canadian Graduate Scholarship – Master's. As well, I am grateful for the support I received through the University of Alberta and the Government of Alberta through the Walter H. Johns Graduate Fellowship, the

Indigenous Graduate Student Award, and the Alberta Graduate Excellence Scholarship. I deeply appreciate the support and aid which is provided by these opportunities, as well as the confidence they represent in my scholarship.

Kinanâskomitinawâw, I am thankful to you all!

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1. Figure 1. Psychology Today Profiles Offering Psychoeducational Assessment Services in Alberta, Canada.

## Chapter 1: Introduction

The present thesis presents a carefully employed mix of methods to illuminate the functioning of learning disabilities (LD) as a possessive logic. In this first chapter I discuss the prevailing approaches to the study of LD and the worldviews that underlie these approaches. Then, at the end of the chapter, I discuss the details of an Indigenous critical disability research methodology that I then use to frame the rest of this research.

In Chapter Two, *Extending the I-CDS Frame*, I explicate an Indigenous critical disability studies (I-CDS) theory of intelligence by drawing on the work of Aileen Moreton-Robinson (2015), from the Goenpul tribe of the Quandamooka Nation, regarding the place of anti-Indigenous racism in settler psychological disciplines. I argue that the concept of the intelligent, able-bodied subject is itself a white possession that maintains the façade of patriarchal white sovereignty at the expense of Indigenous sovereignties.

In Chapter Three, *Weaponizing Ambiguity in the Service of Patriarchal White Sovereignty*, I begin with a brief overview of the ways in which LDs are conceptualized and discussed in psychological disciplines. Here, I argue that the lack of clear etiology needs to be understood as an indication that this concept's referent cannot be physiological. I argue using an I-CDS lens that LD in fact gains meaning in its justificatory relationship to the more fundamental concepts of intelligence and intellectual disability, where all three concepts rely on one another conceptually to maintain settler colonial dispossession of Indigenous lands, working in tandem to justify the accumulation of resources in the hands of settlers generally. The diagnosis of LD is the direct application of pathologization of Indigenous body logics (see Hokowhitu, 2014) that would otherwise prove intelligence a falsehood. *Ambiguity*, then, arises from the lack of a clear etiology for these pathological kinds. Uncertainty as to the object of one's study creates a

productive means with which criticisms can be rejected through appealing to the claim that eventually, with more scientific research, proof of the actuality of one's conceptions and theories will be found. The fact that such evidence is not found is painted as primarily an issue which will be ameliorated with more research rather than evidence that one's object of study does not exist. Ambiguity refers to the various ways this uncertainty is maintained in order to operationalize and preserve the problematic assumptions which underly the research of white disciplines. In LD studies, the reality of LD is given the benefit of the ever-present doubt, and such ambiguity favours the ableist settler.

In the conclusion of this thesis, I discuss possible next steps in I-CDS research on LD, considering how these insights can be mobilized at the community level hopefully to improve the living conditions of Indigenous peoples and communities globally.

### **Research Problem**

In 2018 the Canadian Psychological Association (CPA) and the Psychology Foundation of Canada (PFC) issued a joint statement, *Psychology's Response to the Truth and Reconciliation Commission of Canada's Report*, which acknowledges the harm that the discipline of psychology has caused in Indigenous<sup>1</sup> communities. In the report, the CPA and PFC specifically discuss their complicity in cultural genocide and a general failure to ensure their own standards of ethical conduct with regards to Indigenous peoples (CPA & PFC, 2018, pp. 8–9). Importantly, the CPA and PFC recognize that one of the ways in which psychological research has negatively affected Indigenous peoples in Canada has been through its reliance on “methods and epistemologies that are foreign, less than useful, and potentially harmful to Indigenous Peoples in Canada” (p. 8). As fundamental aspects of psychological research to date, these

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<sup>1</sup> See glossary for my use of “Indigenous” here.

methods and epistemologies underpin the traumatic interventions in Indigenous communities that CPA and PFC condemn (2018, p. 8). In short, European ethnocentrism is both a unifying characteristic of psychology's various epistemic and methodical commitments, and also a serious problem in psychology as it is applied in Indigenous contexts. Such ethnocentrism in research and intervention has similarly been identified as problematic in the related disciplines of psychiatry (Murphy, 2015) and education (Harrington & CHiXapkaid, 2013). For the purposes of this thesis, I refer to all three disciplines—psychology, psychiatry, and education—collectively as the “psychological disciplines,” and its practitioners/academics as “psychologists.”

Of the many concerns discussed in their report, the CPA and PFC point to the ethnocentric approaches to the assessment and treatment of disability as causing harm in Indigenous communities (CPA & PFC, 2018, p. 9). More specifically, harm has been caused by these practices in Indigenous communities by the fact that “Western assessments often centre on standardized quantitative tools, grounded in Western theory, normed on non-Indigenous populations and yield categories that do not resonate with Indigenous world-views” (CPA & PFC, 2018, p. 15). This would include assessments and treatments for recognized disabilities such as Learning Disability (LD) and Intellectual Disability (ID). The ethical questions surrounding Euro-centric assessment and treatment strategies in psychology have particular relevance to the processes of psychoeducational assessments for LD as applied to Indigenous peoples—who have been reported as experiencing high rates of LD. For example, in one study, as many as 53% of Indigenous respondents reporting a disability were identified as having a LD (Kenney & Thierry, 2014). To mitigate the harmful impact Euro-centric epistemic and methodical approaches to psychology have had in Indigenous communities the CPA and PFC

call on psychologists to make space for Indigenous epistemic commitments in their practice (CPA & PFC, 2018, p. 10). The question which remains, then, is how does this call to action apply to the research and intervention strategies of psychologists working with Indigenous peoples with disabilities such as LD?

While the report by the CPA and PFC certainly marks the beginnings of meaningful change in the discipline of psychology to better address a history of harm, what is missing from this call for change is an explicit recognition of the need to address ethnocentrism in the entirety of Western<sup>2</sup> research methodologies, not just epistemology and methods. Where a research methodology consists of epistemological commitments and ensuing research methods, it also consists of commitments to an ontological perspective (see Wilson, 2008). I use “epistemology” here to refer to assumptions made in research endeavours regarding the nature of knowledge and how we come to know, while I use “ontology” to refer instead to our assumption about the nature of reality, what exists, and how (Wilson, 2008). In much the same way that the epistemic commitments characteristic of Western research methodologies in psychology have contributed to the marginalization of Indigenous peoples (CPA & PFC, 2018), I argue here that psychology’s ontological commitments do so as well.

In this thesis, I take up the task of addressing these methodological issues by extending the purview of the report issued by the CPA and PFC to the realm of ontology. In so doing, a primary question guiding this research is as follows:

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<sup>2</sup> The use of “Western” is not clearly defined in the CPA and PFC’s *Response*, except in its difference from the concept of Indigenous and its being indicative of settler cultural forms. For this reason, I will continue to use this term as a means of discussing settler methodological frames and worldviews as informed through European and Euro-settler cultures.

Q: How do ethnocentric commitments to the reality of “disability” and “learning disability” function to harm Indigenous peoples?

I am concerned with understanding this question in the context of settler colonialism and patriarchal white sovereignty as they function through the application of research and intervention in the psychological disciplines. In developing a response to the research question above, I aim to meet two objectives:

- Re-theorize the phenomena of disabilities, with a focus on LD, through a critical lens in order to further explore how ableism influences conceptions of Indigeneity in a settler colonial context.
- Provide a potential means with which Indigenous scholarship can frame those phenomena which underlie what psychologists call “disability” and “learning disability” within methodological commitments more appropriate to Indigenous worldviews.

Of particular concern for this thesis is the mobilization of the able-bodied subject as a white possession through, as the CPA and PFC (2018) put it, the treatment of non-Indigenous populations as the “norm” against which psychological assessments compare and rate bodies in their relative lack—here, of whiteness. In this myopic process, the Indigenous body will always be found lacking. In the psychological disciplines, the idea that disability and impairment are realities which can be assumed to exist outside the causative influence of settler cultures, histories, and socio-political contexts is not only ethnocentric in its operationalization of settler bodily-ontologies as ideal, but is in fact untenable.

It is my hope that in exploring this topic in more detail those academics and practitioners working in psychological disciplines will be better able to identify the sources of harm

recognized by the CPA and PFC, and then position research and interventions involving Indigenous peoples more appropriately to provide support from which Indigenous peoples may benefit. I also hope that this thesis can aid in a move away from framing problems which face our communities in terms of deficiency and disabled psychological processes. In this introduction I briefly introduce myself in the tradition of many Indigenous and non-Indigenous academics, through self-location. I then present the extant literature on the subject of disability broadly, and how it relates to Indigenous scholarship on the subject specifically, in order to situate the present research in larger academic discourses.

The overall argument of this thesis is that if we are to take seriously the kind of call for change in psychology proffered by the CPA and the PFC, we *must* accept that the valuation of particular bodily kinds is both problematic in its reliance on discourses of ableism, and it is also explicitly anti-Indigenous as it currently exists in the psychological disciplines. Amalgamating the disciplines of psychology, psychiatry, and education is a strategic decision I have made, as these disciplines collectively influence the field of LD studies, determining how conceptions of LDs are perceived and acted on despite longstanding definitional issues (Fiedorowicz et al., 2015). Goodey (2011a) argues that the definitions of such diagnostic categories as ID (and arguably LD)

come, ostensibly, from a theoretical base in the academy, proceeding from there to applied psychology or the genetics laboratory for their evidence base, and thence to the social institutions such as health, education, human and social services, employment, etc.; their final destination is the everyday mind-set, which closes the cycle by feeding back into the academy and providing a covert rationale for the latter's hypotheses. (p. 5)

Therefore, I discuss the separate disciplines of psychology, psychiatry, and education as complementary entities based on the way these disciplines function together to maintain the concept of LD in this cyclical definitional process.

### **Self Location**

*wyatt nitis̄iyihkâson. âpihtawikosisân êkwa sâsîw ôma niya. otôskwanihk ohci niya, êkwa amiskwacîwâskahikanihk ê-wikiyân mêkwâc. ninêkikhikwak êkî-ohpikihikoyâhkik niya êkwa nisîmis okimâskwêw-otaskîhk, mîna sisonê nile-sîpîhk*

My name is Wyatt. I was born in Calgary, and now I live in Edmonton. I am of the Métis Nation and am currently reconnecting to the Tsuut'ina Nation. I was raised in Europe, and in Cairo, Egypt. My family names include Hodgeson, Bruneau, and Dumont.

When I was young, I had a lot of trouble in school. I had a very hard time writing, and spelling did not come naturally for me. When I was ten I was diagnosed with a learning disability called “dyslexia.” In a lot of ways, I was very fortunate. My family was in a position where I could have access to the resources I needed to do well in my academic pursuits, and my school and the expatriate community I grew up in at that time were very supportive. Not everybody understood what was happening, but everyone was open to helping in whatever way they knew best. I think this is what helped me in the end. I remember how some folks thought of my disability as an obstacle, and I remember how some just accepted me for who I am while acknowledging that I would need to work hard to make it through school. Some people focused on my strengths, and some people, including my psychologist, treated me as if I had a “condition.” It was my psychologist whom everybody listened to, and I remember being mad about that. I knew myself better, after all, but people would listen to him first, and maybe me



sometime after that. He provided a framework for others to understand my experiences, and then they would slot what I said into his framework.

When we moved to Illinois, things were different. I saw what it is like to have grown up without the resources one needs to succeed as a disabled person in a school system. The talk at the time was that the local school district was critically underfunded, and I believe this. Walking into school was like going back in time; nothing had been changed since the 70's or 80's (or so it felt). Some of the teachers' mentalities and conceptions of various disabilities were so antiquated, so hurtful, I am saddened to think of the people whom they helped raise—and thankful I didn't grow up around them.

I loved the town where we lived in Illinois, and for the most part I still love the people there. They are my friends and I miss them. But some of those teachers, man, even when they had the best of intentions, they could really flatten you.

So here I am, fulfilling a promise I made to myself a little after my diagnosis, one which I reiterated to myself again after living in Illinois, that I would become an Educational Psychologist. I wanted people to understand what it is that really limits people—the frames we use to understand and discriminate. “Conditions,” and “biology” had very little to do with my hardships and the hardships of those I saw around me, but the ways that people understood me and my peers, treated us, and the systems we had to navigate created by other people had everything to do with our hardships. In my case, dyslexia is never the problem. So here I am, on the cusp of defending my thesis for a Master of Education in Interdisciplinary Studies with the Department of Educational Psychology and the Faculty of Native Studies. While I think there is plenty of room to critique the concepts of disability and LD in any context in which they can be found, I focus here on Indigenous contexts.

## Literature Review

When discussing the ways in which ableism impacts Indigenous peoples through the work of psychological disciplines, it is important to note the variety of approaches that researchers adopt when understanding what ‘disability’ *is*. Starting with some of the more (post)positivist framings, and moving into constructionist, post-modernist, and Global South/Indigenous framings, we can see that the disabled body is a site of intense debate. Here, questions are raised about not only the value of human life and what it means to be human, but also about what constitutes the precise nature—if there can be said to be one—of these worlds that we each inhabit and call our bodies. Fundamental to this debate is querying the nature and appropriateness of “normalcy” as a social construct.

Some research traditions equate a universal sense of normalcy to human bodily kinds, and frame disability as general state of deviancy from the ideal of the bodily norm. In other words, disability is synonymous with abnormalcy in these research traditions when discussing human bodies (e.g., Boorse, 1975, 1997, 2010). While some research framings (i.e., “models”) take normalcy to be the standard from which data is analyzed and interpreted, other framings seek to undermine such approaches. For example, constructionist and post-modernist framings question the legitimacy of normalcy, often by noting its historical recency. Davis (1999) notes that the framing of bodies as either normal or abnormal (atypical, neurotypical, etc.) had its historical roots in the late 1800s, coinciding with the advent of modern statistics and the eugenics movement. The socio-political and historical origins of the concept of (ab)normalcy in the 19<sup>th</sup> century is generally understood. As Wasserman and Putnam (2016) relate, the concept of normalcy developed in this time specifically with the rise of a particular brand of scientific thought. Thus the normal human body became the preferred kind in scientific thinking, often

regarded as the statistical mean of any physiological measure (e.g., Boorse, 1997), defining what it means to be human. Abnormality, then, became understood primarily in its deficiency from the ideal/mean human type (Hutcheon & Wolbring, 2013). Despite the claims to objectivity espoused by disciplines that are committed to the normative body type as universal, natural, and generally positive (see Amundson, 2000), such historical analyses suggest that the construct of normalcy is itself a historical oddity resulting from specific sociopolitical motivations (Davis, 1999; Goodey, 2011b).

Indigenous and Global South framings of disability stand in stark contrast to these understanding of bodies, as they do not, necessarily, extend from academic traditions and Western cultures in which normalcy is defined within, for example, (post)positivist, constructionist, and post-modern approaches. While Indigenous frames certainly draw on these traditions as well given the imposition of Western modes of thought and governing systems on Indigenous peoples and lands, Indigenous conceptions of disability are also informed by other worldviews not founded on Western cultural assumptions. For example, King, Brough, and Knox (2014) discuss how in their research on the perceptions of disability held by Indigenous peoples living in Brisbane, Australia, participants framed disability in terms of one's capacity to engage with community, and not in terms of a universalistic sense of normalcy. Similarly, Adelson (2000) discusses how the James Bay Cree view health and well-being, *miyupimaatisiun*, in terms of one's capacity to navigate life as a member of the community, and not necessarily in terms of the absence of disease or bodily deviance<sup>3</sup>.

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<sup>3</sup> While this was a finding of Adelson's work published in 2000, her subsequent research has indicated a shift in understandings of health in this community since then (see Adelson, 2009). I make this note here because

Recognizing that Indigenous approaches to disability do not necessarily rely or map cleanly onto Western framings, I identify two characteristics of the growing field of what I call Indigenous-Critical Disability Studies (I-CDS). First, there is the need to utilize the concept of disability, as it is understood in the West, to communicate the harmful impacts that colonization and imperialism have had in Indigenous communities and the Global South in order to leverage needed resource allocation and interventions (see Meekosha, 2011). However, it is also important to recognize that at least some Indigenous peoples have constructed and continue to construct “disability” without reference to normalcy as defined above (King et al., 2014; Kress, 2017). Thus, a major question that faces the growing field of I-CDS will be to which worldviews do we give precedence, when, and how? Is it enough simply to lean into framings adopted by scholars from Western traditions, including the conceptions of normality and impairment? Or can we assert antagonistic framings of disability to these, albeit in ways that are amenable to our contemporary sociopolitical and techno-scientific state-of-affairs? I argue that if Indigenous people are to truly move past the harms which colonization and imperialism have caused us, it is because we have adopted the latter approach to disability, and eschewed the former approaches based in normalcy. This is because, as I outline in this thesis, indigeneity will always be understood in its deviance and abnormality from the Western ideal type. We are and will always be found lacking within Western frames of normality.

In this literature review I look to some of the more impactful conceptions of disability by discussing the models in which they are operationalized. The models which I discuss here,

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convention dictates I should write about Adelson’s 2000 findings in the present tense though the community has changed since that time and this should also be acknowledged and respected.

respectively, are the medical model, social model, biopsychosocial model, CDS and DisCrit models, and the beginnings of what I call an Indigenous Critical Disabilities (I-CDS) model.

### **Research on the Disabled: The Medical Model**

In what I refer to here as a deficiency approach to disability, researchers presume that disability is a deviance from a normal bodily kind, and that this deviance is fundamentally adverse and undesirable. Such a view is espoused by what many call the medical model of disability (hereafter referred to as simply “the medical model”), which conceptualizes disabilities as pathologies (a.k.a., syndromes, disorders, deficiencies, abnormalities, divergencies, illnesses)—problematic deviations from an ideal kind (Kavanagh, 2018; Llewellyn & Hogan, 2000). In other words, the medical model posits that disability primarily reflects one’s biologically realized impairments (Wasserman et al., 2016), treating disability as part of the broader category of pathology. Kavanagh (2018, p. 64) identifies three assumptions of the medical model:

1. that there exists a valuable “normative” bodily type, which all bodies would reflect if not for the presence of one or more disabilities;
2. that, as a medical problem, disability requires a medical solution; and
3. that medical solutions to disability are reserved to the scope of the individual.<sup>4</sup>

Thus, a major motivation of the medical model is the drive for a cure for disability as it impacts the individual (Clare, 2017, p. 8; Davis, 1999; Llewellyn & Hogan, 2000). In identifying

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<sup>4</sup> As an aside, there are models which can be used to demarcate these points separately: the second point is sometimes referred to as the rehabilitation model, which seeks to ‘ease’ disability through cure, intervention, amelioration, concealment, etc. (Davis, 1999); and the third point is elsewhere identified separately as the individual model of disability (Goodley, 1998, p. 440).

disability as pathology, the medical model treats disability as inherently negative, assuming that there exists a valuable ‘normal’ function for any physiological trait from which disability deviates (Amundson, 2000).

### ***Critiques of the Medical Model***

There are many criticisms of the medical model of disability. Here I discuss only a few. While the medical model may presume that disabilities have always existed as presented today by medical and psychological disciplines, historical and ethnographic analyses suggest that this is not the case. The nature of recognized “mental” pathologies differs across historical and cultural contexts (Goodey, 2011b; Murphy, 2015). Thus, historical and ethnographic critiques of the medical model can be understood as critiques of its claims to universal applicability.

#### **Critiques of Universality: Evidence Against the Medical Model.**

In the case of IDs, Goodey’s (2011a) analysis of relevant historically recognized “pathologies” in Europe demonstrates that the concept of ID as characterized in psychological disciplines is a very recent phenomenon. For most of European history, no category matched perfectly the current conceptualization of ID as presented in psychological disciplines (Goodey, 2011a). As Goodey argues, this would suggest that the classification of ID does not reflect natural bodily kinds, so much as the recent socio-political, cultural, and historical contexts which have produced ID. Some proponents of the medical model may argue that our current understandings of such a phenomenon are much clearer and more accurate than in the past given advances in scientific empiricism and technology. However, such an appeal to presentist ideals of progress, and the presumption of an a-historic universality of pathological kinds, creates a sense of certainty about their supposed reality which is unwarranted (Goodey, 2011a).

With regards to ethnographic literature, Murphy (2015) points out that the globalised adoption of American models of mental disorders and disabilities is ill-considered, as these diagnoses have repeatedly been shown to apply cleanly to bodies only within Euro-American society. For example, Murphy (2015) discusses how both diagnoses of Avoidant/Restrictive Food Intake Disorder and Depression, while they are assumed by the psychiatric community to be universal pathologies of the mind, nevertheless seem to have little grounding cross-culturally. In the case of the former, these diagnoses only occur in the Canada, the USA, Europe, and Australia, but are assumed to be applicable in any cultural or national context. In the case of depression, Murphy cites Arthur Kleinman's (1987) finding that symptoms of depression in Chinese and American patients is so different that it should warrant different diagnoses (reflecting different conditions) (2015, p. 98). These examples illustrate what Murphy describes as assimilatory practices in psychiatry, whereby culturally specific expressions of ill-health or suffering become assimilated into Western categorizations based in normative discourses privileging WEIRD (Western, Educated, Industrial, Rich, and Democratic) bodies and life-ways.

Murphy (2015) argues that the category of "Cultural Bound Syndromes" in the American Psychiatric Association's (2013) *Diagnostic and Statistics Manual of Mental Disorders (5<sup>th</sup> ed.)* (DSM-5) constitutes a second means through which psychiatry minimizes the impact of culture on mental life. In his argument, Murphy discusses the case of *Wacinko*, identified in the DSM-5 as a cultural bound syndrome characterized as a specific formulation of depression in the communities of the Oglala Sioux. *Wacinko*, however, is nothing like depression except in its correlations with suicide ideation, as it is primarily associated with anger towards another person as opposed to feelings of worthlessness or lethargy which characterize depression in Euro-American cultures (Murphy, 2015, p. 98). Murphy argues that, in addition to the recognized

impacts of culture on low-level mental processes such as sense perception, such culturally specific phenomena present empirical evidence that there may in fact be no human universal bodily kind (Murphy, 2015). If the discipline of psychiatry were to accept that these seeming pathologies differ according to cultural context, “whether we call these [apparent pathologies] ‘mental illness’ will then be up for grabs; perhaps they are just local forms of life that occur when people suffer, without indicating that their minds are damaged in pathological ways” (Murphy, 2015, p. 109). In a similar manner, Poland (2015) points out that to recognize what is normal is primarily a valuation based on culture and worldview (the “norms, values, or interests” of a group (p. 27)) with little or no bearing on whichever realities might be said to lie outside such an understanding.

Beyond a cross-cultural critique of the WEIRDness of normality in medical models, Amundson (2000) argues that simply because there is naturally occurring variability in the ways that bodies present themselves does not, in itself, lend support to the notion that any of these should be given preference over the other through designations of normal and abnormal (Amundson, 2000). While some have argued that such variance takes away from an individual’s capacity for a good quality of life, or the opportunities which are afforded them, Amundson (2000) points out that the only limiting factor for those living life in variance is imposed at the societal level, which largely favours the mean. Giving examples from evolutionary biology, developmental biology, physiology, and anatomy, Amundson (2000) shows that the normal body as a valuable entity in itself has not been empirically validated as a concept in any of these fields. For example, Amundson (2000) argues that in the case of Slipjer’s lamb—who, having been born without forelimbs, nonetheless thrived as it learned and physiologically adapted to a bipedal lifeway—extreme anatomical deviance from the norm did not necessitate a poor quality of life.



This is significant as it shows that while this lamb lived in an unquestionable pathological variance from what is considered the norm of the bodies of lambs, they were nonetheless extremely successful. To argue that such a bodily kind constitutes a disability in the lamb is primarily a cosmetic claim, as it cannot rely on impaired functionality as its basis (Amundson, 2000). With this case study, Amundson (2000) argues that the marginalization and demarcation of bodies deviating from prototypical bodily forms has little to do with the lived experience of those ‘disabled’ bodies, and everything to do with the prejudices of those who hold strongly to normative reasoning.

In the human context, Amundson (2000) points out that the idea of ‘disability’ as inferiority has been supported through appeal to the assumed low quality of life experienced by people labeled with a disability (see Brock 1993, as cited in Amundson 2000). According to this logic, since the norm has intrinsic value, a person’s reflection of normalcy is also positively associated with their quality of life. However, Amundson (2000) points out that patients labeled with a disability have regularly been found to rate their quality of life only somewhat lower than those who are not so labeled. To account for this, and rather than admit that perhaps normality is not linked to one’s experience of quality of life, proponents of the medical model argue that subjective well-being and happiness are irrelevant to measures of quality of life (Amundson, 2000). This stance is primarily adopted to maintain the idea that the norm has intrinsic value despite contradicting evidence (Amundson, 2000).

In another vein of criticisms aimed at the medical model of disability, critics have analyzed how it operated within capitalist state structures to dispossess the working class and increase socio-economic hardship by the end of the 19<sup>th</sup> century. For example, Robert Nye (2003, p. 122) argues that the medical model became widely adopted in the late 1800s as a direct

result of both social scientists and other authorities holding scientific medicine in high esteem, which was paired with a desire for “greater national efficiency and productivity” (Nye, 2003, p. 122). Indeed, the ‘normal’ bodily type against which disability is so often defined has been identified elsewhere as arising from the needs for productive laborers within an increasingly capitalist society (Davis, 1995, p. 49). The concept of a disability as a medical condition, in this sense, legitimizes state intervention into the lives of citizens to increase their general productivity, eroding the integrity of human and civil rights in the process (Nye, 2003). This is also discussed by Erevelles (2000), who points out that the democratic aims of “common” schools threatened the needs of a capitalist society to maintain unequal division of labour. Disability as an ideology provided the means with which to maintain such division, especially through pre-existing prejudices along the axes of race, sex, and gender, while also espousing the democratic ideals of integration of civil rights discourses (Erevelles, 2000; Reid & Knight, 2006).

### **Disability Studies: The Social Model and Research by and for Disabled People**

Of the most widely referenced definitions of disability in law and social commentary are what Wasserman and colleagues (2016) refer to as “interactive” definitions that frame disabilities as physical/mental limitations caused by both environmental and biological conditions. Adopting this approach are the social model(s) of disability (or, alternatively, the constructionist model(s)), which grew directly out of a dissatisfaction with the hard-lined biological determinism of the medical model in the 1970’s (Davis, 1999; Goodley, 1998; Kavanagh, 2018; Meekosha & Shuttleworth, 2009). The adoption of the social model constitutes what Campbell (2009, p. 99) calls the first wave of disability studies. This approach to disability studies is characterized by a recognition that disabilities rely to some non-insignificant degree on cultural constructs and

worldviews applied to the lived realities of human bodies (Campbell, 2009, p. 99; Davis, 1995, pp. 506–507; Meekosha & Shuttleworth, 2009, p. 50). Largely in their moderate form, the social model(s) approach to disability studies constitutes the primary model(s) of disability in the social sciences and the humanities (Wasserman et al., 2016).

Wasserman and colleagues (2016) argue that there is a myriad of ways in which the social model is taken up in the literature. Contributing to the diversity of social model perspectives is a disagreement about the degree to which social factors influence disability. There are at least two, by no means antithetical, ways in which the social model conceptualizes disability (Wasserman et al., 2016). In the *minority group model*, disabled people are understood to be a minority group within Western society alongside other groups, especially those identified through concepts of race. Proponents of this model identify a need for anti-discrimination laws and civil rights protections for disabled people (Wasserman et al., 2016). In the *human variation model*, disability is understood simply as an expression of human variation, where some variations pose problems in certain scenarios and not others. In this model, all people can be understood to be either disabled or able within the context of the direct environment within which they may find themselves at any given moment. Wasserman and colleagues (2016) discuss these two streams of the social model as differentiating the ways in which the model is used, not in their fundamental conception of disability. In some scenarios one or the other sub-model will be more appropriate than the other, and proponents do not always commit to just one (Wasserman et al., 2016).

Meekosha and Shuttleworth (2009) discuss how the social model has historically been closely allied to Marxist analyses of the ways in which disabled people have become marginalized economically, and that this is the primary factor underlying the discursive

productions of disablement (p. 50). In this way, the minority group model can be understood as focusing on engaging and discrediting what Fiona Campbell (2009) describes as discourses of disableism, where disableism is “a set of assumptions (conscious or unconscious) and practices that promote differential or unequal treatment of people because of actual or presumed disabilities” (p. 4).

### ***Co-optation of the Language of Disability Studies and the Minority Model***

Disability studies generally began with the aim of liberating disabled people from discourses of disableism and the confines of oppressive capitalist power structures. However, Meekosha and Shuttleworth (2009) argue that the use of “disability studies” as adopted in certain fields, such as special education, is in fact more reflective of a medical model approach to disability, as it does not seek the emancipation of disabled people from discourses of disableism. For example, rather than adopt a true disability studies emancipatory approach (as discussed here), special education seeks to cure, ameliorate, intervene, and conceal disability (Davis, 1999). As discussed by Erevelles (2000), disabled students “have been banished to special education classrooms to be (re)habilitated in an effort to enable them to (re)turn to ‘normal’ life” (p. 42). In this way, special education has mobilized the language of disability studies while maintaining the normalizing ambitions of the medical model.

Such co-optation of the language of disability studies by proponents of the medical model is not limited to special education; such a co-optation also occurs in psychology through what is called the biopsychosocial model of disability (BPS). Despite its intention to understand the complex interactions which underlie disability, the BPS originally proposed by George Engel in 1977, and then again in 1980, has been co-opted by proponents of the medical model (Shakespeare et al., 2017). Engel’s BPS drew attention away from explaining mental distress in

terms of purely biological factors and towards a more holistic, multi-faceted approach that takes into account the biological with the societal and personal (psychological) factors associated with mental distress (Shakespeare et al., 2017, p. 28). However, Engel's BPS model has been criticized for being insufficiently explicated for the purposes of application in research or intervention (Cromby et al., 2013; Van Oudenhove and Cuypers, 2014). The subsequent adoption of the language of BPS by Gordon Waddell and Mansel Aylward constituted a move towards deficiency models, in that they explicitly extended the BPS from the medical model and denied the merits of the social model (Shakespeare et al., 2017, p. 29). While purporting to take into account a multi-factorial approach to understanding illness, Waddell and Aylward's (2009) BPS model nonetheless put the emphasis of non-chronic illness and disability on the individual, citing personal responsibility and motivation as major factors causing physical illnesses as psycho-somatic phenomena. The Waddell and Aylward BPS model was officially adopted by the Government of the United Kingdom in 2008 in order to guide welfare spending reform, effectively denying resources to those considered 'undeserving' (Shakespeare et al., 2017).

Such cooptation of disability studies and BPS prompted the development of *critical* disability studies (CDS). The move towards using "CDS" in the 2000s also signals a move away from the social model as overly simplistic in its reliance on binary logics (e.g., medical v. social, disability v. impairment, communal v. individualistic) and economic determinism (Meekosha & Shuttleworth, 2009), and constitutes the second wave of disability studies identified by Campbell (2009).

### ***Critical Disability Studies***

While CDS is a diverse and interdisciplinary field that includes a multiplicity of positions, what unites CDS is a shared understanding that disability is a primarily oppressive

social construction that cannot be adequately addressed via (neo)liberal interventions into the lives of disabled people (Meekosha & Shuttleworth, 2009, pp. 65–66). There are several points that that I use to characterize CDS further. Mainly, CDS is concerned with treating disability as a social construction intricately linked with oppressive relationships of power and exploitation, but more importantly, CDS conceptualizes disability as *not* indicative of deficiency or a need for cure (Meekosha & Shuttleworth, 2009). This is similar to the aforementioned human variance model of disability, removed from its social model context. As Campbell (2009) explains, this move towards a separate CDS can also be understood as a move away from a focus on the marginalizing discourses of disableism and the disabled subject in oppressive systems. It is a move towards active and critical engagement with the “epistemologies and ontologies” of ableism (p. 3), where ‘ableism’ is defined as “a belief that impairment or disability (irrespective of ‘type’) is inherently negative and should the opportunity present itself, be ameliorated, cured or indeed eliminated” (Campbell, 2009, p. 5).

Beyond a refocusing on discourses of ableism, Meekosha and Shuttleworth (2009) discuss four other factors that contributed to the formation of CDS as a separate entity from disability studies (p. 50-51). First, disability studies has been critiqued for adhering to overly binary logic relating to disability v. impairment (a construct v. a biological condition) and its own relationship to the medical model (i.e., medical v. social models) (p. 50). Second, disability studies approaches to disability tend to focus solely on class dynamics, so called “economic determinism,” at the expense of a more nuanced understanding of the various power dynamics at play within discourses of ableism (p. 50). Thirdly, counter to the perspective and aims of CDS scholars (many of whom are disabled themselves), disability studies foregrounds disability as a deficiency, aiming to make the disabled body more ‘normal’ (p. 50-51). Finally, Meekosha and

Shuttleworth (2009, p. 51) recognize that Critical Legal Theory and Critical Race Theory (CRT) provided the theoretical and methodological foundation through which CDS was able to emerge as a site for the contestation of oppression vis-à-vis disability. While this last point may be the case, CDS has nevertheless tended to ignore the ways in which race and ability intersect as interdependent and compounding oppressive discourses (Annamma et al., 2013, p. 19). This has lead Annamma, Connor, and Ferri (2013) to establish a field of disability critical race theory (DisCrit) in order to better account for the intersections of ableism and racism.

***Disability Critical Race Theory: Bringing together CDS and CRT***

Despite drawing motivation from CRT to conceptualize disability as a social construction in much the same way as race, CDS and CRT have largely remained separate entities. While CRT scholarship has generally considered disability as a legitimate biological phenomenon, or has omitted it from analysis entirely, and while CDS has likewise omitted analyses taking seriously the importance of race in the construction of ableist discourse, Annamma, Connor, and Ferri (2013) argue that the concepts of race and disability are interdependent, though distinct:

We believe, for instance, that racism and ableism are normalizing processes that are interconnected and collusive. In other words, racism and ableism often work in ways that are unspoken, yet racism validates and reinforces ableism, and ableism validates and reinforces racism (p. 6).

In studying the intersections of race and disability, DisCrit is better positioned than either CDS and CRT alone to nuance understandings of the ways in which the normalizing discourses of race and ability are co-constructed and operationalized in the West. As explicated by Annamma et al. (2013), DisCrit:

1. Focuses on the interdependence of racism and ableism in perpetuating concepts of normality;
2. Foregrounds intersectional identities;
3. Recognizes that, while a socially constructed phenomenon, disability carries material and psychological repercussions for those it demarcates as being ‘abnormal’ to Western society;
4. Privileges marginalized voices;
5. Considers the impacts of history and the legal systems of the West on the racialized and disabled, and how this has been used to deny the rights of certain individuals;
6. Critiques whiteness and ability as forms of (white middle-class) property; and
7. Demands activism, and backs resistance in all its forms.

In the six years following the initial formation of DisCrit as a field, Annamma et al. (2013) identify many contributions that DisCrit has made to intersectional and interdisciplinary knowledge regarding the co-production of race and ability as oppressive structures. Many of these come from their co-edited work entitled *DisCrit: Disability studies and critical race theory in education* (Connor et al., 2016). These contributions include the analyzing the interconnections of ability, race, and class dynamics and the funnelling of students of colour into the prison-industrial complex.

There is no doubt that DisCrit is a meaningful and important intervention in the fields of both CRT and CDS, but even in its nuance, DisCrit is not capable of fully considering the ways in which the relationship between ableism and Indigeneity within a settler colonial society needs to be examined. This is because DisCrit draws primarily from the positionalities of Black and POC scholars from the USA, and not from Indigenous scholars in any settler state. This is



important, as Indigeneity cannot be considered as merely a sub-group within the boundaries of ‘POC’ (though many Indigenous peoples are also POC). Moreover, the relationship Indigenous peoples have to settler colonial states is not similar to the relationships that POC and Black people have to these same states. I-CDS’ and DisCrit’s respective aims for liberation are not necessarily the same. For example, Joanne Barker (2017) points out that while both CRT and Critical Indigenous Studies (CIS) formed in relation to the Civil Rights Movement, they did so differentially: while CRT focused on fighting for the rights of racialized people with regards to citizenship, voting, and labor rights, CIS was concerned with fighting for the rights of Indigenous nations as sovereign entities. This remains the case today, as the former is concerned with advocating for rights *within* Western states, while the latter is focused on the rights which come from *without* (Barker, 2017, p. 8)<sup>5</sup>. Thus, DisCrit focuses on analyzing the intersections of racism and ableism *within* frameworks of the sovereignty of settler colonial states. Bringing Indigeneity into the DisCrit fold cannot offer Indigenous scholars the means to address the issues which face our communities as our concerns largely come from our perspectives as sovereign nations separate and distinct from settler colonial states. With that said, an I-CDS approach can certainly learn from the tenets of DisCrit.

### **I-CDS and Indigenous Approaches to Disability Studies**

I now explicate a version of what I refer to as I-CDS, or *Indigenous Critical Disability Studies*. While many Indigenous peoples are most certainly impacted by anti-POC racism in Canada, and therein will likely find a DisCrit approach valuable, the primary concern of an I-

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<sup>5</sup> See also Moreton Robinson’s (2015) discussion of the overly binary logic of race (Black v. White) predominant in whiteness studies literature in their chapter “Writing off treaties: Possession in the U.S. critical whiteness literature” (p. 47-61).

CDS approach is to understand how the discourses of ableism and racism impact Indigenous peoples not as a *race*, but as a set of nations who are nonetheless racialized and share a particular relationship to the exploitative forces of settler colonialism and imperialism. In this way, and where DisCrit can be considered a branch of CRT, I-CDS can be considered a branch of CIS in that it is primarily concerned with understanding the place of racism and ableism in the continued theft of Indigenous lands and livelihoods. The starting point for I-CDS, then, is the recognition that Indigenous peoples remain sovereign axiomatically, though this sovereignty is hindered through the oppressive structures and discourses characterizing settler societies. While Indigeneity is *not* a racial categorization, Indigenous peoples are often understood through racial logics of the settler states in which they find themselves (Moreton-Robinson, 2015), in what I refer to here as ‘little ‘i’ indigeneity,’ or simply ‘indigeneity.’ However, adopting the intersectional approach of DisCrit, indigeneity must also be understood as a product of ableist discourses tied to the presumption of Indigenous peoples’ deficiency in comparison to a WEIRD (Western, Educated, Industrial, Rich, Democratic) norm. The racialized and the disabled indigenous body, then, becomes the discursive means through which to justify the continued theft of lands and bodies of Indigenous peoples.

As an emerging field of analysis, I-CDS does not have an explicit base of scholarship. However, there are certain considerations expressed in extant literature on disability and ableism in Indigenous contexts that nonetheless can be said to inform an I-CDS approach. This literature provides the basis for an I-CDS methodology, as it privileges the perspectives of Indigenous peoples and our experiences with disability (e.g., Adelson, 2009; King et al., 2014; Kress, 2017; Meekosha, 2011). I now overview some of this literature in order to then discuss what an I-CDS methodology might look like.

Meekosha's (2011) critique of CDS is one such article. Specifically, Meekosha argues that the ways the human variance model has been adopted by CDS in general ignores the disabling realities of colonization and imperialism experienced in the Global South (here, including the Aboriginal peoples in Australia) (Meekosha, 2011). The move towards Disability Pride characterizing (critical) disability studies constitutes epistemic colonialism, as it not only privileges the experiences of disabled people in the Global North, but also refuses to contend with the realities of impairment faced by disabled people in the Global South as a direct consequence of imperial and colonial policies and actions such as war, forced dependency, nuclear testing, extractive industry, and the dumping of hazardous materials (Meekosha, 2011, p. 688). Because of this, Meekosha (2011) argues that there is a need to understand disabling processes *as* colonial processes, and that such an understanding must create a paradigm shift in (C)DS scholarship in order for it to appropriately account for the impacts of colonialism and imperialism as disabling the Global South.<sup>6</sup> In this endeavour, Meekosha (2011) identifies a need in CDS to incorporate the works of medical anthropologists in order to begin to amend the dearth of scholarship in CDS that focuses on the experiences of disabled people in the Global South (p. 669).

For the purposes of I-CDS, Meekosha's (2011) critique offers an important intervention in CDS: that the human variation model and disability pride engender the capacity to erase the

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<sup>6</sup> Meekosha's discussion is problematic, if helpful for my purposes here. Despite including Indigenous Australian communities as part of the Global South, Meekosha (2011) makes no effort to nuance their discussion of the disabling impacts of colonialism on Indigenous peoples living in the Global North. This erases our positionalities, perspectives, and lived realities dealing with ableism in stolen lands, and assumes that simply because of our localities, we must relate to disability in a similar manner to others in the Global North.

material needs of communities in the Global South (and likely elsewhere). It is crucial that the formation of I-CDS scholarship be able to account for the very real and negative impacts that colonial and imperial processes have had and continue to have on Indigenous bodies. But do these realities then need to be understood through the medical or minority-group models of impairment if not through the human variance model? For an I-CDS approach, the answer is a resounding ‘no.’ Indigenous nations have a history of analytics and cultural knowledges which developed separately, contemporaneously, and incommensurably from Western discourses. This does not preclude the ability of Indigenous peoples to become experts in the knowledges of colonial bodies (see Andersen, 2016), but it does mean that Indigenous responses to settler ableism need not rely exclusively on Western models and frameworks of disability for their legitimacy. For example, while acknowledging the negative impacts that colonization has had and continues to have in Indigenous communities, Margaret Kress (2017) argues for educators and researchers to learn about Cree understandings of wellness and kinship in order to address the myriad of disabilities in Indigenous communities in ways which are more in keeping with holistic understandings of Indigenous health and well-being. The ableist framings in Western approaches to disability that devalue certain human bodily ontologies are a foreign concept, one which operates within settler colonial structures of domination to demarcate and do harm to Indigenous peoples (Kress, 2017; Piepzna-Samarasinha, 2018). As such, I-CDS may purposefully draw from those Indigenous traditions as well as the memories of these traditions that valued and/or accepted disabled peoples for the knowledges they embody (Kress, 2017; Piepzna-Samarasinha, 2018).

In exploring the conceptions of health and disability in Indigenous communities in Australia, King, Brough, and Knox (2014) discuss how the “‘standard’ dichotomy of social

versus biomedical explanation does not grapple with a greater diversity of social meaning among Indigenous Australians” (p. 741). In their work, they outline that what constitutes good ‘health’ for Aboriginal peoples in Australia is precisely one’s capacity to participate with other Indigenous people and live according to the local tenets of a good Indigenous lifeway. An example given by King and colleagues (2014) demonstrates what is meant by this statement: “[l]osing a leg through diabetes is a physical hindrance, but if interaction with family, kin and community continues there is no ‘disability’” (p. 746). This conception of disability as primarily referring to one’s (in)capacity to engage with one’s community is mirrored in Naomi Adelson’s (2000) work with the James Bay Cree of the community of Whapmagoostui, where conceptions of well-being primarily refer to the intersections of one’s social relationships, cultural identity, health of the land, and how these interact with one’s physiology. In the case of the Whapmagoostui Cree, as with many Indigenous peoples, there is no clear translatable term for ‘health’ as understood in English. Instead, Adelson chooses to frame Whapmagoostui conceptions of health according to the concept of *miyupimaatisiun*, or “being alive well” (p. 14). As a conception of health, *miyupimaatisiun* is

less determined by bodily functions than by the practices of daily living and by the balance of human relationships intrinsic to Cree lifestyles. . . that one is able to hunt, to pursue traditional activities, to eat the right foods, and . . . to keep warm. This is above all a matter of quality of life (p. 15).

Importantly, Adelson (2000) points out that while Western conceptions of health do not often account for the impacts of settler colonialism on Indigenous peoples, it is not possible to discuss Indigenous health or conceptions of health without also referring to historical and

contemporary impacts of colonialism: the “effects of displacement, discriminatory legislation, failed attempts at assimilation, forced religious conversion, and pervasive racism” (pp. 9-10).

While there may be many similarities, it is important to stress the diversity that exists in Indigenous cultures. As such, there is a danger in the I-CDS framework of erasing Indigenous peoples’ various perspectives, histories, and cultural analytics, essentializing all of this diversity into one or two perspectives that inappropriately cast Indigeneity as a homogenous whole. Such a process would likely privilege certain Indigenous analytical frames as inherent to all Indigenous peoples’ theories and ways of being (e.g., the medicine wheel), or may appeal to broad amalgamations of potentially incommensurable conceptions from various nations made legible to English speakers in colonizing countries (e.g., animism). While acknowledging that there exists a great deal diversity in worldviews across Indigenous nations, I use “I-CDS” primarily because of one commonality shared by most Indigenous peoples: the current disabling processes of settler colonialism and patriarchal white sovereignty. It is these processes with which I-CDS is concerned.

### **Methodology**

In discussing the methodological approach to this research, I adopt an understanding of research paradigms as discussed by Shawn Wilson (2008) of the Opaskwayak Cree Nation. Wilson (2008) identifies that a research paradigm/methodology encompasses the ontological, epistemic, and ethical (axiological) commitments defining a research project, as well as the choice of methods which arise from these commitments (p. 70). Where the term “ontological” refers to the nature of reality, the term “epistemological” refers to the nature of knowledge and its acquisition (p. 73-77). When searching for knowledge, a researcher’s axiological commitments reflect what ethical protocols they understand to be important in the research

process (p. 77-79). As such, I discuss my methodological approach through the ontological, epistemic, and axiological commitments I make in this research process before discussing what methods constitute the research. The explication of my methodological commitments constitutes the lens I use to examine the research problem.

### **Ontology**

Wilson (2008) states that one of the defining aspects of Indigenous research is the adoption of relational ontological approaches as they extend from traditional Indigenous worldviews and practices (p. 73). Such an approach assumes that reality is constituted by the relationships formed among entities, and that entities are themselves a particular amalgamation of relationship sets (Wilson, 2008, p. 73). In the context of my work, this is important to explicate, as *bodies* and *minds* present one of the kinds of entities that must be understood to arise, first and foremost, as relationship sets.

### ***Bodily Ontologies***

According to Maori scholar Brenden Hokowhitu (2014) (of the Ngāti Pūkenga iwi) Western knowledge production largely depends on the assumption that the mind and the body are distinct entities (p. 44). This separation is variously referred to as “Mind-Body Dualism” or “Cartesian Dualism” (see Clare, 2017, p. xvi; see Goodey, 2011c, p. 208). As a theoretical framework in itself, mind-body dualism has been identified not only as fundamental to the biopolitical discourses underpinning the continued colonization of Indigenous lands and bodies (painted as inferior to European mental capacities) (Hokowhitu, 2014), but also to the pathologization of bodies through medical discourses of disability (Engel, 1978; Goodey, 2011c, p. 208). As such, research which concerns itself with the intersections of disability and Indigeneity *must* come from a place where such distinctions are denied if it is to subvert

discourses of settler colonialism. Such a position is already well established in CDS literature. Therefore, in this research I elaborate on a linguistic choice common in CDS literature that more closely resembles this rejection of mind-body dualism. I refer to a unitary *body-mind* and deny the Cartesian dualist mind/body split “as if the two are distinct—the mind superior to the body, the mind defining personhood, the mind separating humans from nonhumans” (Claire 2017, p. xvi). However, whereas the subject area of my research (i.e., LD) is most readily understood as primarily *mental* in existing psychological scholarship, I choose instead not to use the term “body-mind,” but rather simply “body” for this purpose. What are labelled “mental disorders” remains a major subject of my research, but I choose to discuss them in terms of bodily ontologies which incorporate both body and mind through my use of “body.”

“Body,” in the relational sense in which I use it here, is synonymous to Povinelli’s (2016) concept of the *assemblage*, wherein all things that exist do so through the effortful relationships between relationship sets. Primacy is afforded to relationships and relationship sets, but not to distinctive entities (Povinelli, 2016). As such, the boundaries of one’s body become blurred; where distinct entities can be clearly pointed to and labeled as *here*, or *there*, assemblages can only ever be *hereish*, or *therish* (Povinelli, 2016). A reoccurring image that Povinelli uses is to equate entitative bodies as defined by skin, bounded within themselves, while the assemblage is to foreground the lungs and their interdependence on things considered ‘outside’ the purview of mainstream conceptions of body such as the very air we breathe *as* part of our body (Povinelli, 2016). It is easy, for example, to point to the skin of another body and understand where it begins and where it ends; it is much harder to point to the lungs and do the same given their incorporation of air as part of their constitution. Further, if air is considered part of our own individual bodies, so too is it part of other’s bodies, and so the hard distinctions such as those



between “me” and “you,” “here” and “there,” and “living” and “non-living<sup>7</sup>” become arbitrary (Povinelli, 2016). Thus, in defining body and mind not as distinctive entities, as is often the case in psychological disciplines, but as unitary and co-dependant aspects of *assemblages*, themselves co-dependant on other assemblages, my research is grounded in the kind of Indigenous relational ontology explicated by Wilson (2008).

In the case of Learning Disabilities, the body-as-assemblage opens up a series of questions and perspectives otherwise hidden. If bodies are assemblages, or relationship sets, it stands to reason that different bodies relate differently to other bodies they encounter, and indeed, are positioned variously within assemblage(s) that co-create(s) a shared reality. Thus, to characterize an LD such as dyslexia within this relational framework, we would have to say that the Dyslexic and the non-Dyslexic relate differently to the world which they co-produce as assemblages within assemblages.

### **Epistemology**

Wilson (2008) argues that in the Indigenous ways of being and knowing the term “knowledge” reflects the quality of relationships one builds with the world around oneself (p. 73). Indeed, a relational ontological approach necessitates that knowledge is not a ‘thing’ in the entitative sense (or, perhaps, the justified-true-belief sense), but rather that it indicates a quality relationship has been established between two or more bodies (Wilson, 2008, p. 73). In this way, the term “knowledge” in a relational methodology cannot be said to refer to the same phenomenon that it would in an entitative methodological approach.

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<sup>7</sup> By non-living, Povinelli (2016) means those things that people in Western societies generally have thought of as having never lived; e.g., rocks, oil, rivers, etc.

In the present research, knowledge is produced through the illuminating of relationships of power and exploitation in the functioning of psych-disciplinary research and interventions, creating in both the author and the reader a new relationship involving themselves and these relationships of power. This work intends to explicate these relationships accurately, presenting them in such a way that the reader realizes they are, and always have been, in relationship with these power relations. More work is needed to explicate, exactly, what words such as ‘realize,’ ‘understand,’ and ‘awareness’ mean in a relational approach. This prompts possibilities for research beyond the scope of this thesis.

### ***Bodily Epistemologies***

If we conceive of the body as a relationship set, then we commit ourselves to the conclusion that bodies necessarily give rise to knowledge themselves when ‘knowledge’ refers to kinds and qualities of relationships. In this way, it becomes important to discuss the knowledges that come with bodies *as* bodies.

Brendan Hokowhitu (2014) argues that the kind of knowledge which is embodied and produced in the daily lived realities of Māori people subverts Western rational thought, and its fundamental presumption of universal applicability, through the concept of “body-logic,” or the corporeal intelligence that resides beyond rational thought and has the conviction to produce dissenting subjectivities. . . [body-logic] refers to those critical bodily practices that unravel dominant taxonomies, which continue to superimpose and subjugate indigenous<sup>8</sup> knowledges. In doing so, indigenous body-logic incorporates insurrections of

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<sup>8</sup> Note that Hokowhitu’s use of the lower-case “i” in “indigenous” should be read as what I have labeled with the uppercase.

indigenous intelligence, which inherently disrupt the physical/metaphysical binary and mind/body duality (p. 43).

Said in another way, not all knowledges produced in bodies are amenable to Western rational thought. Hokowhitu argues that settler societies must regularly face the subverting knowledges produced in Indigenous bodies. For example, in opening the chapter, Hokowhitu discusses how the settler Vincent Ward's depiction of a Māori woman he was filming, Puhī, frames the phenomenon of *mākutu* (a kind of malevolent spiritual art) impacting her life as one of a "superstitious misunderstanding of a fundamentally empirical/scientific reality" (p. 32). Such a flippant disavowal of the knowledges held by Puhī and other Māori of the realities of *mākutu* not only demonstrates the hubris of Western rationality and its ignorance of Māori culture that links doing to being in the world, but also "signifies the presence of the inexplicable, the unknowable" (p. 32). It is not simply that Western epistemologies disregard *mākutu* out of hand, but also that they must reduce *mākutu* to something which is understandable within the limited confines of Western rational thought, as the reality it presents subverts the legitimacy of this epistemological approach.

In the same manner as the specific instance of *mākutu*, Indigenous bodies as a totality threaten the legitimacy of Western rationalism. As Hokowhitu posits, the pathologization of Māori people serves as a means of rationalizing the otherwise subversive realities of Indigenous body-logic, making them palatable and understandable to such Western modes of thought (p. 33). When this understanding of the epistemological functioning of pathologization is brought into our own context, to the psych-disciplines as they function in settler nations, we can begin to see that the process of identifying disorders/disabilities (e.g., LD) as pathology in Indigenous bodies is precisely the rationalizing process discussed by Hokowhitu—the pathologization of

Indigenous body-logics. For example, LD demarcates and disavows those precise knowledges that Indigenous bodies produce, which subvert the universality tenet of Western rationalist epistemology. This is a point that is further discussed in the chapter *Weaponizing Ambiguity*.

### **Axiology**

Eve Tuck (2009), in their work “Suspending Damage: A Letter to Communities,” calls on researchers, educators, and communities to re-evaluate their framing of Indigenous peoples as primarily damaged. Such a damage-centred viewpoint impacts the researcher’s capacity to make positive change in community settings when simultaneously depending on deficiency narratives (“deficit models”) of the community in order to do so (p. 413). The problem with such damage-centred research is precisely that it pathologizes communities and individuals, defining them exclusively in terms of their deficiency, their oppression, and not in the myriad of other ways in which they live and relate outside of these influences and frames (Tuck, 2009).

With Tuck’s (2009) call to academic action in mind, I want to make it very clear that the diversity of relational positionalities which arise in our communities is conceived as a strength here. In discussing models of disability and LD as they have been applied to Indigenous peoples, it is my intention not to reify these positions, but rather, to show how they operate to mask the body-logics and realities of Indigenous life-ways antithetical to settler colonial domination and sense-making. I state here, as a methodological commitment, that the diversity of bodily ontologies present in our communities is a source of strength and has inherent value to all of us as relational beings.

### ***Theories of Change***

Tuck (2009) also argues that all research endeavours in the social sciences (and perhaps all disciplines) contain a theory of change, noting:

A theory of change helps to operationalize the ethical stance of the project, what are considered data, what constitutes evidence, how a finding is identified, and what is made public and kept private or sacred. (2009, p. 413)

With this in mind, I recognize there are undoubtedly multiple and diverse ways in which Indigenous peoples relate to disability and to Indigeneity-as-race. While this is true, I will continue to discuss the ‘Indigenous context.’ I do this because I am mostly concerned with the ways that (little “i”) indigeneity functions as a discursive construct within psychological, psychiatric, and educational spaces, conceptualized, implicitly and historically, in relation to ableism and racism to attempt to justify the dispossession of (big “I”) Indigenous lands and bodies. Thus, there is the indigenous-body-as-race, but also, the indigenous-body-as-disability; and more often than not, these two narratives meld and co-produce one another through models of deficiency for colonial purposes (Annamma et al., 2013; see Tuck, 2009). The ‘Indigenous context’ to which I refer is this imposition of indigeneity on Indigenous people. From this perspective, the way that my research could motivate positive change is primarily by identifying losing strategies for Indigenous peoples in our continued struggle to access resources that are denied us within settler states. Learning Disability, and the resources that come with it, present one of these losing strategies. However, there is a possibility of creating Indigenous diagnostic categories and assessment methods that could foreground relationality and *miyopimatisiwin*, while also providing access to much needed resources in our communities. This, potentially, could be a ‘winning’ strategy.

## **Chapter 2: Extending the I-CDS Frame: Intelligence as a Possessive Logic**

Utilizing the I-CDS research methodology outlined in the previous chapter, in this chapter I examine how the discourses of race and ability operate in the disciplines of psychology, psychiatry, and education through concepts tied to Indigenous and racialized bodily deficiency. In particular, I consider how these two discourses intertwine and conflate in the psychological disciplines, focusing mainly on the development of the concept of intelligence as indicative of both. As a pervasive measure of the relative deficiency presumed to exist as part of bodily kinds, intelligence operates to marginalize disabled and racialized bodies and thus protect the settler nation as a white possession. By bringing Moreton-Robinson's (2015) work on race as a possessive logic into conversation with Intelligence scholars such as Gould (1981) and Goodey (2011a) within an I-CDS framework, this chapter argues that intelligence—as an instance of both racial logics and ableist logics—itself operates as a possessive logic in the service of patriarchal white sovereignty, discursively and materially limiting access of the nation and its resources to Indigenous peoples within the logic of capital.

I begin this chapter by discussing Moreton-Robinson's (2015) theory of white possession and the possessive logic of race as it operates in settler states to dismiss Indigenous sovereignties. I then briefly explore the ways in which, in the psychological disciplines, racism and ableism intertwine, implicating ableism as a possessive logic as well. This brief discussion provides a context within which I then discuss the foundation and continuation of white supremacy in intelligence research and its operationalization by psychologists to maintain the U.S. as a white possession. Pairing this with a discussion of the current characteristics of intelligence in psychological disciplines, I end this chapter by arguing that intelligence operates

as a possessive logic in the service of patriarchal white sovereignty wherever it is institutionally recognized.

Before beginning this analysis, I want to take a moment to clarify my meaning of two terms I use here: ‘intelligence,’ and ‘whiteness.’ While the following chapter does focus its historical discussion of the formation of intelligence in its *unitary* conception (i.e., the idea that there is only one kind of intelligence, often referred to as the ‘g factor’), in this chapter I examine an even more fundamental issue: the commitment on the part of psychological disciplines to conceptualize intelligence as a hierarchical phenomenon with a hereditary component. This intellectual hierarchy and hereditary component remain present in theories of multiple intelligences (see Gardner, 2006, p. 505; Kornhaber & Gardner, 2006, p. 258). Because of this, I maintain that my discussion here also applies to theories of multiple intelligence.

As to my use of the term ‘whiteness,’ which I discuss in more detail later, it is important for my analysis that I stress the term is fundamentally not about ethnicity, culture, or necessarily the colour of one’s skin. Whiteness, as I use it here, stresses a particular relationship to the settler state, its functions and institutions, which is not shared with Indigenous peoples. Furthermore, the privileges of patriarchal white sovereignty are not conferred on Indigenous peoples as they are on whites, even if the latter’s access to these privileges are also altered by marginalizing discourses of class, gender, sexuality, and ableism; they remain in a fundamentally privileged position as whites within patriarchal white sovereignty (see Moreton-Robinson, 2015, p. 16).

### **Patriarchal white Sovereignty and Possessive Logics**

In her analysis of the operationalization of racism in settler nations such as Canada, Australia, and the United States of America (U.S.), Aileen Moreton-Robinson (2015) stresses the

importance of discussing two very closely related concepts: patriarchal white sovereignty and possessive logics. While these concepts are not entirely distinct (i.e., patriarchal white sovereignty, itself, can be understood as a possessive logic), they nonetheless provide a means to understand how race, as an epistemological commitment, operates to maintain settler colonial dispossession of Indigenous lands from Indigenous peoples. I now further discuss Moreton-Robinson's (2015) characterization of these concepts in order to then apply them in the context of psychological disciplines and intelligence studies through the I-CDS framework outlined in chapter 1.

### **Patriarchal white sovereignty**

The notion of sovereignty, while a complicated and nuanced construction, can be thought about in terms of a collective sense of belongingness and a relationship to place (see Moreton-Robinson, 2015, p. 3). With this in mind, Moreton-Robinson (2015) argues that patriarchal white sovereignty is formed through a history of migrancy and Indigenous dispossessions, in which “a sense of belonging [is] derived . . . within the logic of capital” (p. 3). It is *exclusive ownership* of the land and its resources as property of the settler state which gives those of patriarchal white sovereignty their sense of belongingness to place, particularly through the recognition of property rights (p. xix).

In stark contrast to this sense of belonging are Indigenous senses of belongingness to these same places that regularly compete with patriarchal white sovereignty's claims of exclusive control over land and resources (p. 3). This tension produces an unease in patriarchal white sovereignty, as Indigenous claims to sovereignty are based in ontological and inalienable relationships to land and resources illegitimately claimed by settler nations (Moreton-Robinson, 2015). Where the ontological underpinnings of Indigenous sovereignties derive from the land



itself and the bodily relationship to territory (p. 11), patriarchal white sovereignty's ontological underpinning comes from a relationship to capital and stolen resources (p. 49, 146). As a governing system, patriarchal white sovereignty "protects the privileges of whites through diminishing Indigenous entitlements" and Indigenous peoples' capacity to accumulate resources within the confines of the nation as a white possession (p. 77)<sup>9</sup>. Particularly, this means that there is a need to define to whom resources should be allocated and property made available if not Indigenous peoples *as* Indigenous peoples (p. 179)—i.e., who should be considered 'white.' Thus, the term 'whiteness' is primarily concerned with one's relationship to capital within the confines of patriarchal white sovereignty (p. 146).

Though whiteness is primarily a fluid and relational term based in exclusive ownership of the nation and its resources, patriarchal white sovereignty is nonetheless maintained in part through the operationalization of the concept of race to protect the interests of whites (Moreton-Robinson, 2015). It is in the attributing the logics of race onto bodies that ownership and control of the nation as a white possession can be maintained. Racialized bodies are thus also attributed a particular set of racialized knowledges and are presumed to be known (p. xii). In the case of the 'American Indian', Moreton-Robinson (2015) shows how racial knowledge of Indigenous North Americans was mobilized by Enlightenment philosophers to theorize about human nature (i.e., through savagery) and human rights, essentially "relegating Indigenous people to a state of

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<sup>9</sup> It is worth noting that in the North American context, the existence of various treaties between Indigenous and colonial nations presents a complication in this narrative. While these treaties acknowledge the sovereignty of Indigenous nations (by definition), they remain largely ignored by settler nations. I maintain that such treaties do not form the basis of the ontological belongingness of settler nations so long as the stipulations and spirit of the treaties are not upheld by them (see Cardinal & Hildebrandt, 2000).

nature without any sovereign rights” (p. 57). These racialized knowledges persist today, “preventing Indigenous sovereignties from gaining recognition as relevant and alternative visions of differently constituted modernities and global futures” (p. 57). In the Australian context, for example, Moreton-Robinson (2015) argues that landmark legal decisions regarding Indigenous rights—such as the *Yorta Yorta* decision—have been made through an operationalization of such racialized logics of indigeneity produced by whites themselves, impacting the legal entitlements of Indigenous peoples today (e.g., p. 91).

Where once race operated explicitly to dispossess, a primary means through which race operates today is through appeals to race-blindness and objectivity. Speaking specifically in the case of the *Yorta Yorta* decision, Moreton-Robinson (2015) shows how “The High Court’s judges’ claims to objectivity served to mask the racialization of their knowledge and its partiality” (p. 92). The claims of patriarchal white sovereignty to ownership of land and resources is enabled by “the idea of race neutrality through concepts attached to the ideals of democracy, such as egalitarianism, equity, equal opportunity” (Moreton-Robinson, 2015, p. 81). These concepts underlie white interventions in the lives of Indigenous peoples, actively seeking to bring Indigenous peoples into the confines of patriarchal white sovereignty through a process of normalization—where “patriarchal white sovereignty defines normality for itself” (p. 81). Such democratic ideals operate in settler states to protect patriarchal white sovereign claims to exclusive ownership of land and resources by first dehumanizing and then normalizing Indigenous peoples into the realm of whiteness and a sense of belongingness based in capital (p. 11, 81, 173).

However, while Indigenous peoples can be increasingly folded into whiteness and the “cultural forms of the colonizer” (p. 11), Indigenous sovereignty is *embodied* through ontological

relationship to place as constitutive of Indigenous bodies themselves (p. 12). This creates “a duality whereby Indigenous subjects can ‘perform’ whiteness, while being Indigenous” (p. 11). The tension in patriarchal white sovereignty produced by the threat of Indigenous sovereignties remains despite the application of racial logics and normalizing interventions in Indigenous lives. Thus, there is an ever present need for what Moreton-Robinson (2015) terms “possessive logics” (pp. xii, 191).

### **Possessive Logics**

As Moreton-Robinson (2015) states, possessive logics

[d]enote a mode of rationalization, rather than a set of positions that produce a more or less inevitable answer, that is underpinned by an excessive desire to invest in reproducing and reaffirming the nation-state’s ownership, control, and domination. (p. xii)

These possessive logics primarily function to actively restrict “the availability of the modern world for Indigenous embodied ontologies” (Moreton-Robinson, 2015, p. 191). Such restriction of Indigenous embodied ontologies is carried out through the limiting of Indigenous ways of being recognized as legitimate by dominating settler states and through regulations then imposed by these states on Indigenous peoples, particularly through the work of “trained experts such as anthropologists and lawyers” (p. 191). As discussed above, this often occurs with an appeal to democratic concepts and benevolence (Moreton-Robinson, 2015, p. 81). In this way *indigeneity*, as conceptualized through white scholarship, becomes an epistemological white possession itself understood not in the terms defined by Indigenous peoples, but through the lens of whiteness and a conception of normality defined by whites in their likeness (see p. 114). It is for this very reason that Moreton-Robinson (2015) asks, to “what extent does white possession circulate as a regime of truth that simultaneously constitutes white subjectivity and circumscribes the political

possibilities of Indigenous sovereignty” (p. 131)? Moreton Robinson explicitly asks this question of the human sciences, specifying such disciplines as political science, Australian studies, history, Aboriginal studies, law, and anthropology (pp. xxiii, 132). I want to explore this question in the context of psychology. In particular, in this chapter I examine a defining feature of psychology that has been identified as its crowning achievement (Eysenck, 1988) and as integral to the establishing of psychology as a science (Gould, 1981, p. 192): the concept of intelligence.

### **The Intertwining of Ableism and Racism in Psychological Disciplines**

In order to explore how intelligence functions as a possessive logic, it is important to first examine the ways in which ableism and racism function together within psychological disciplines. Moreton-Robinson argues that indigeneity, as a racialized understanding of Indigenous peoples—a kind of epistemological white possession itself (Moreton-Robinson, 2015, p. 110)—operates in the service of patriarchal white sovereignty (Moreton-Robinson, 2015). But when we bring into focus the ways in which indigeneity is understood in its presumed bodily deficiency to whites, we not only open ourselves up to an analysis of how the discourses of race are applied to Indigenous bodies, but so too the discourses of ableism. Both of the discourses of racism and ableism derive from the fundamental presumption of deficiency in bodily kinds, and while they may demarcate bodies somewhat distinctly, they rely on and overlap with one another. This is especially the case in their reification of indigenous bodily deficiency in psychological disciplines.

### **Two Case Studies Depicting Psychology’s Logic of Race and Ability**

In this section, I argue that there is a clear history of the use of racial logics to inform psychological, psychiatric, and educational theories of development and current diagnostic criteria. In turn, I also show that this process has meant that racialized bodies are understood

through logics of ableism. A primary means through which the logics of race and ability have overlapped and intertwined is through what is called ‘recapitulation theory.’ Though very much discredited today, recapitulation theory continues to influence contemporary psychological theorising and research in that it has created the foundation from which our current discipline extends.

In the late 1800s and early 1900s, proponents of the recapitulation theory of human development argued that an individual’s biological development followed the evolutionary development of their ancestors (Fallace, 2015). Because Europeans were thought to be the most biologically advanced, supposed deficiencies in European disabled and young bodies were understood as the expression of their occupation of the same lower rungs of a developmental/race hierarchy as racialized bodies (Fallace, 2015, p. 78).

Recapitulation theory was a pervasive theory in its time, and was very much present in such work as anthropologist E. B. Tylor’s equating the psychological development of adult “savages” with that of white children in terms of their shared developmental stage (Fallace, 2015, pp. 79–80). Additionally, Fallace (2015) identifies the influence of the recapitulation theory on prominent sociologists Herbert Spencer and Lester F. Ward (who are often cited by curriculum scholars), the latter of whom believed that these developmental lags on the parts of ‘savages’ and ‘barbarians’ was the result of environment and could be changed with proper educational intervention (2015, pp. 80–81). Our current approach to child-centred pedagogy found its basis in recapitulation, aided and expanded through the works of scholars such as Jean-Jacques Rousseau, Friedrich Froebel, Johann Pestalozzi, Maria Montessori, and Cornelia Parker (Fallace, 2015). According to Fallace (2015), these theorists “made commonsense references to the social deficiency of savages at a time when the word was racially coded to mean non-white”

(p. 89). The characterization of un-civilized (i.e., savage and barbarous) peoples as akin to European children became the basis for what Fallace calls the “new psychology” founded by Wilhelm Wundt, who himself identified this notion of childish savagery as the foundation for any work relating to human mental development (Fallace, 2015, p. 83).

By the 1920s, the explicit adoption of the theory of recapitulation amongst researchers and practitioners was uncommon, but the underlying notion of the deficiency of races remains (Fallace, 2015). Some of the direct results of this history can be witnessed in the inclusion of Indigenous cultures and peoples as part of elementary school curriculum, and in contemporary psychological stage theories such as Jean Piaget’s theory of cognitive development (Fallace, 2015, p. 98).

As for diagnostic categories, we can look to the longevity of such diagnoses as Down Syndrome for evidence of the intersection of racial and ableist logics in psychological disciplines. In the middle of the 1800s, John Langdon Down classified residents of the then Royal Earlswood Asylum for Idiots<sup>10</sup> (the first major mental institution in Britain) according to racial categories with which Down identified similarities (Goodey, 2011a, p. 212; Ward, 1999). These disability categories were directly taken from Bendyshe’s translation of the work of anthropologist Johann Blumenbach, reflecting the categories of “Mongolians, Aztecs, Caucasians, Malayans, and Ethiopians” (Ward, 1999, p. 20). Down applied racialized knowledges to residents of the Asylum, and in doing so shows that racialized knowledge also operated as ableist knowledge in his theorising of bodily deficiency. Specifically, Down argued that those Europeans he diagnosed had not fully developed along the evolutionary hierarchy *in vitro*, and were born at an earlier stage of evolution than their European parents, existing at the

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<sup>10</sup> “Idiot” was a technical term at this time.

primitive evolutionary stages of various non-Europeans (Goodey, 2011a, p. 212). While the other disabilities classified by Down were not widely accepted, and later rejected by Down himself, his classification of the “Mongoloid” disability type remained (Ward, 1999, p. 20). As quoted by Ward (1999), Down states that a “very large number of congenital idiots are typical Mongols . . . [so] marked is this that, when placed side by side, it is difficult to believe the specimens compared are not children of the same parents” (p. 20) and that “it is difficult to realise that he is the child of Europeans, but . . . there can be no doubt that these ethnic features are the result of degeneration” (p. 21). In characterizing this disability, Down appealed to the commonly accepted racial logics of the time for legitimization. It is difficult to argue that there has not been a continuation of these racial logics applied to disability in the present, as the classification of the same disability type remains as “Down Syndrome” (Ward, 1999, p. 20). The term “mongoloid” also remains as a derogatory term.

With this brief discussion, I have shown that ableist and racist logics of the 19<sup>th</sup> century operated together, especially with the advent of recapitulation theory. Ability and race were not simply operationalized in parallel, with the odd reference to one another for their articulation, as the ontological commitments of recapitulation and the more general worldview of its adherents in fact conflated race and ability. It was not that disabled people were like racialized peoples in significant ways, and vice versa, but that in terms of their mental faculties and evolutionary development they were the same.

For psych-disciplines where bodies were, and are, essentialized into their mental faculties, recapitulation equated disabled bodies with racialized bodies. Through recapitulation theory, ableism and race intertwined and conflated. But this was not, and is not, the only instance of the conflation of these oppressive discourses in psychological disciplines. There is perhaps no

clearer indication of the intersections of race and ability in the psychological disciplines as they continue to function today than in the concept of intelligence. It is to this concept which I now turn, and which informs the remainder of this thesis.

### *Smartness and Whiteness*

Intelligence provides a very clear indication of how race and ability conflate to dispossess in the service of patriarchal white sovereignty. It is important here to note that the concept of intelligence cannot be clearly pointed to as a physiological phenomenon (Gould, 1981, p. 20). Rather, this concept reflects the social prejudices of whites against those that they have deemed undesirable to white society (Goodey, 2011a; Gould, 1981; Leonardo & Broderick, 2011). Leonardo and Broderick (2011) argue that there is a symbiotic relationship between the logics of ability and race as they operate in U.S school systems through the ideologies of whiteness and smartness (p. 2208). Rather than being entirely separate, a defining characteristic of both is the presumed mental superiority of whites when compared to non-whites (Leonardo & Broderick, 2011). These ideologies, the able conception of ‘smartness’ and the racial conception of ‘whiteness,’ operate together to uphold the narrative of the normative body as both the intelligent bodily kind and a white possession (see p. 2214).

While they are social constructions, smartness and whiteness have material consequences in that they inform social institutions, withholding social and material capital from non-whites while concomitantly increasing the worth of smartness and whiteness as property (Leonardo & Broderick, 2011). However, it is important to note that while whiteness and smartness do impact different, though often overlapping (as can be seen in the case of the ‘overrepresentation’ of students of colour in special education) sets of bodily kinds, “[h]istorically and materially, these



ideologies have operated not in isolation from one another, but as inextricably intertwined systems of oppression and exclusion” (p. 2226).

### **Intelligence and Whiteness**

When we look to the disciplines of psychology, psychiatry, and education, the focus on the ideology of smartness becomes a focus on the concept of intelligence. Thus, in looking at the historical roots of the concept of intelligence, its development in the 20<sup>th</sup> century, and the manner in which it is discussed presently, I argue inductively<sup>11</sup> that it is very likely that not only do the marginalizing foundations of smartness remain in its present configuration in the psych-disciplines, but so too, its ties to whiteness.

#### **Sir Francis Galton and the Whiteness of Intelligence**

As we understand it today, intelligence as a hierarchical measure of human ability has been greatly influenced by the work of Sir Francis Galton (Eckberg, 1981, p. 55; Eysenck, 1988, p. 3; Gonzalez, 1979, p. 45; Gould, 1981). Hans Eysenck, a recognized supporter of the hereditarian concept of intelligence<sup>12</sup> (Goodey, 2011b, p. 7), identifies Galton as the founder of this still current concept of intelligence (Eysenck, 1988, pp. 10–11). Such a claim is in some ways very likely to be accurate, but it is worth noting that elsewhere Galton is discussed only as a footnote (e.g., Gould, 1981). Whether or not we wish to say that Galton is the originator of our

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<sup>11</sup> Given time-restraints, I was not able to extend my discussion of how whiteness was carried forward to our present context beyond about 1960. Thus, the present section sets up an inductive argument that is meant to fill in the gap to the present, but also to encourage future research into the accuracy of this argument. My use of “very likely” reflects the inductive nature of my argument.

<sup>12</sup> This is discussed in more detail later, but the crux of the hereditarian concept of intelligence is that it is a) a biological phenomenon, and b) passed down genetically from parents to their children.

current concept of intelligence (albeit with much modification since), it is clear that his work has been foundational in its current configuration.

There is a very close relationship between the ideologies of race and intelligence in Galton's work. As he himself asserts in the preface to the 1914 reprint of his work *Hereditary Genius*, the "idea of investigating the subject of hereditary genius occurred to [him] during the course of a purely ethnological inquiry, into the mental peculiarities of different races" (p. v). He also asserts that the "natural ability of which this book mainly treats, is such as a modern European possesses in a much greater average share than men of the lower races" (p. x). Here *genius* (read as high intelligence) is defined very simply as inborn "superior faculties" (Galton, 1914, p. viii) that cannot be gained through education and experience but, rather, must be inherited (p. viii). With these excerpts, it is clear that prior to his theorizing of intelligence, Galton identified what he considered the innate superiority of European mental faculties over those of other racialized peoples. Intelligence, as posited by Galton as a hereditary trait, is very much linked to the then-current discourses painting the superiority of Europeans in a racial hierarchy.

Galton's work is not a purely descriptive undertaking. In a series of lectures, Galton (1907) identifies a problem that largely informs his work: that "[t]he mentally better stock in the nation is not reproducing itself at the same rate as it did of old" (p. 10-11). This alleged decline in reproduction among intelligent Europeans posed a major threat to the health of the nation according to Galton, and he sought a means to measure and ameliorate this threat. He goes on to say that "the only remedy, if one be possible at all, is to alter the relative fertility of the good and the bad stocks in the community" (p. 11). Thus, eugenics was the primary project of his work.

The issue was that eugenics was not immediately recognized as a viable or desirable undertaking. Indeed, from Galton's own account, the

direct pursuit of studies in Eugenics. . . did not at first attract investigators. The idea of effecting an improvement in that direction was too much in advance of the march of popular imagination, so I had to wait. In the meantime I occupied myself with collateral problems, more especially with that of dealing measurably with faculties that are variously distributed in a large population" (1907, pp. 9–10).

These "collateral problems," given the overall context in which this statement is made, are most clearly a) statistical methods to describe those traits in the population about which Galton was most concerned, and b) theories of intelligence which confirmed his suspicions of superiority. Galton's theory of intelligence would then apply his statistical methods in order to identify the 'good' and 'bad' stocks of the nation (see Galton, 1907, pp. 9–10). Here Galton himself asserts that his theorising of the very concept of intelligence as a biological mental faculty was motivated by his primary desire for eugenics and recognition of racial hierarchies. This notion of intelligence provided a means to justify, with the help of statistics, the practice of eugenics as a means of furthering the interests of a sub-group of European people.

While it may be that the explicit formulation of intelligence as a *primarily* racial concept has been somewhat moderated over the last century, intelligence as a white possession was picked up and expanded by early 20<sup>th</sup> century psychologists who nevertheless operationalized this concept as a possessive logic in the service of patriarchal white sovereignty.

### **Intelligence as a Possessive Logic**

Galton's conception of intelligence is not a unique historical oddity but has been picked up and expanded since. Certainly, in the U.S the concept of intelligence has been operationalized

as a means of maintaining the settler nation as a white possession within the broader logics of patriarchal white sovereignty. As Moreton-Robinson (2015) states,

the possessive logic of patriarchal white sovereignty was deployed in defining who was, and who was not, white, conferring privilege by identifying what legal entitlements accrued to those categorized as white. At the beginning of the twentieth century, this same logic was operative, making whiteness itself a visible form of property, particularly through immigration laws and those affecting Indigenous peoples, and at the beginning of the twenty-first century it continues to function invisibly to inform the legal exclusion and regulation of those who transgress within and outside its borders (p. 179).

The history of intelligence matches this description of the possessive logic of patriarchal white sovereignty: it has not only played a major role in identifying and characterizing whiteness as a possession through the work of Galton, but operated in the 20<sup>th</sup> century to either bestow or exclude the privileges of whiteness through immigration quotas. American hereditarians worked to adapt and apply intelligence scales as a means of denying access to the settler state, thus ensuring these states remain white possessions. I now discuss three of these hereditarians, as identified by Gould (1981), and show how their work in psychometrics (the measuring of psychological phenomena) relied upon and reinforced the conflation of racist and ableist discourses in the creation of intelligence scales.

### ***Henry Goddard***

As addressed by Critical Disabilities scholar Eli Clare (2017), the first hereditary I discuss here, Henry Goddard,

sought a way to quantify intelligence, eager to have a tool that would reveal the feeble-mindedness he and many others believed was overtaking the U.S. To this end, he

translated, revised, and championed a French intelligence test. He coined the word moron. He put his work through trial runs at Ellis Island using Jewish, Hungarian, Russian, and Italian immigrants as his subjects. He found 40 percent of the people he tested to be morons, which of course was the whole point—to prove what eugenicists already believed about immigrants and feeble-mindedness. (p. 39)

What is more, Goddard’s work and his coining of the term ‘moron’ were not only motivated by a desire to limit immigration into the U.S. of those he deemed unworthy, but was used to explain why some families within the U.S experienced marked economic hardship where others did not—primarily through appeals to the former’s inferior *genetic* predispositions—becoming the focus of what Goodey (2011a) deems the “first wave” of eugenics (p. 218). Indeed, in such states as Oregon as late as 1966, those given the more recent and analogous label to “moron” of “mentally retarded” were still being forcibly and coercively sterilized through eugenics legislations, including disability studies scholar Eli Clare himself (Clare, 2017). In a similar manner to Galton, Goddard saw a threat to what he envisioned to be the genetically superior white race in the U.S; namely, a threat of the immigration of lesser, non-white peoples to the US, and the reproduction of feeble-minded persons already in the U.S (Gould, 1981, p. 159). The ‘moron,’ considered to exhibit a somewhat more normal mental capacity than the ‘idiot’ or ‘imbecile,’<sup>13</sup> was identified as a threat to white society as “he ranks highest among the undesirable and might, if not identified, be allowed to flourish and propagate” (Gould, 1981, p. 162). Thus, Goddard adapted Binet’s scale—which according to Gould (1981) was meant to identify students who required more assistance in their schooling—to address the threat of the

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<sup>13</sup> All three of these now derogatory terms were once technical terms. I kept them here only to maintain coherency within this historical discussion.

racialized and disabled Other to the nation as a white possession, appending to this scale the assertion that it measured a genetically acquired capacity for thought most abundant in whites (Gould, 1981). The intelligence scale created by Goddard thus became a means of quantifying the racial prejudices of scholars such as Galton, and particularly for the aims of patriarchal white sovereignty in stolen Indigenous lands.

### *Lewis Terman*

While Goddard adapted Binet's scale to address the threat of feeble-mindedness from immigrants and disabled peoples in the U.S., Gould (1981) argues that it was Lewis Terman who popularized this test nationally, creating the first edition of the Stanford-Binet intelligence scale—currently in its fifth edition as of the writing of this thesis. Gould (1981) demonstrates that the eugenic intent of Goddard's intelligence scale remained in the Stanford-Binet, as Terman argued it was

safe to predict that in the near future intelligence tests will bring tens of thousands of these high-grade defectives under the surveillance and protection of society. . . . [It] will ultimately result in curtailing the reproduction of feeble-mindedness and the elimination of an enormous amount of crime, pauperism, and industrial inefficiency" (Terman 1916, pp. 6-7, as cited in Gould, 1981, p. 179).

This statement should be considered in light of the racial logics to which Terman seems to have been committed at this time. We can see yet again the use of racial categories to develop, justify, and then in turn interpret the results of intelligence scales. Terman himself is quoted in Gould (1981) comparing the intellect of labouring-class (European-American) men to "Spanish-Indian

and Mexican families of the Southwest and also among [Black peoples]<sup>14</sup>” (p. 190). That is to say, Terman identified a racial hierarchy in intelligence, and applied this racial logic to his characterization of the feeble-minded generally.

### ***Robert Yerkes***

The final hereditarian discussed by Gould (1981, pp. 192–193), Robert Yerkes, made it his mission to develop the reputation of psychology as a science through the use of intelligence scales, as they represented an ‘objective’ measure of natural phenomena akin to the natural phenomena studied by sciences such as biology or physics. First producing his Alpha and Beta intelligence scales for the U.S. military during World War I, Yerkes’ research into intelligence had a major impact both on U.S. education systems and immigration. Indeed, according to Gould (1981), these intelligence scales “provided essential technology for implementing the hereditarian ideology that advocated . . .the testing and ranking of all children” (pp. 230-231). These tests were immediately operationalized after World War I to justify racial segregation in U.S. school systems as well as to establish quotas of immigrants to be allowed into the U.S as a white possession (Gould, 1981, p. 232). According to Gould (1981),

these quotas. . . slowed immigration from southern and eastern Europe to a trickle . . . .  
 Jewish refugees, anticipating the holocaust, sought to emigrate, but were not admitted.  
 The legal quotas, and continuing eugenical propaganda, barred them even in years when  
 inflated quotas for western and northern European nations were not filled. (pp. 232-233)

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<sup>14</sup> While I left the derogatory terms mentioned in the last footnote, I chose to replace this one. I did this because the reader will likely be well aware of what term I have replaced and will have an understanding of what is being said here without me repeating it.

In this way, intelligence testing was not only directly operationalized in the service of patriarchal white sovereignty, but also established the merit of psychology as a discipline in so doing.

### *The Enduring Whiteness of Intelligence Scales*

Here I have presented the works of several scholars with the intent of briefly showing how the development of intelligence scales up until the middle of the 20<sup>th</sup> century carried forward the racial logics and eugenic intents of intelligence as demonstrated by Sir Francis Galton. However, it is not difficult to argue that our current configurations of intelligence scales such as the Stanford-Binet (5<sup>th</sup> ed.) or the Weschler Intelligence Scale for Children (5<sup>th</sup> ed.) have done little to threaten intelligence as a white possession, as a major criterion for determining the efficacy of novel intelligence scales or revisions to an intelligence scale is their level of agreement with previous intelligence measures already accepted—referred to as convergent evidence of validity (Urbina, 2014, p. 194; e.g., Canivez et al., 2009). Urbina (2014) specifies that convergent validity is a particularly relevant measure for determining validity in the case of general test revisions, stating that “[o]ne of the most basic examples of this type of procedure occurs when tests are revised and renormed. In such cases, test manuals almost invariably cite high correlations between the new and previous editions as evidence that both are measuring the same constructs” (p. 194). This, when paired with Gould’s (1981) assertion that the Stanford-Binet remained, at the time of his writing in 1981, the standard to which almost all other intelligence scales were held (p. 175), means it is likely that convergent evidence has bridged the historical gap from the hereditarians discussed above to our present use of intelligence scales. Because whiteness was the construct measured by the intelligence scales discussed above, and if evidence of validity via convergence has been a standard for intelligence scale revision since 1981, then whiteness is also the construct measured in contemporary intelligence scales—even if



subsequent revisions have attempted to address this. Thus, it is very likely that current intelligence scales operate in the U.S to maintain the settler state as a white possession today. If this is true, then it is true of all states that recognize intelligence testing as authoritative, as these tests will inevitably presume the mental superiority of whites and limit the ownership of the nation to non-whites.

Further, as Indigenous peoples (variously considered as “Native Americans,” “Savages,” “Aborigines,” among other descriptors in the historical and psychological literature) occupy very low tiers of innate human intelligence within the ideology of smartness, we can expect to see ways in which intelligence operates as a possessive logic denying the legitimacy of Indigenous sovereignty in the favour of patriarchal white sovereignty today. The marginalizing and eugenic intent of intelligence scales and their development needs to be understood within the context of settler nationalism, anti-immigration, and “above all, [American] persistent, Indigenous racism” (Gould, 1981, p. 158). Certainly, so too does it need to be understood in the context of anti-Black racism.

### **The Contemporary State of Intelligence in Psychological Disciplines**

Today, intelligence remains a white possession. At the extreme, psychologist Richard Lynn has published work as recently as 2006 which posits that racialized peoples’ intelligence is substantially inferior to European-descended people, primarily due to genetics. For example, where European-descended peoples’ intelligence scores are often set as the mean at 100, Lynn (2006) states that Sir Francis Galton’s estimate that the Indigenous peoples of what some call Australia have an average IQ score of about 68.8 was “a fairly accurate assessment” (p. 68). He goes on to examine eight reasons for concluding that these IQ scores are primarily due to genetic factors (pp. 74-75). In what we call Papua New Guinea, Lynn relates that Indigenous peoples

have average scores around 62-65 (p. 75). Māori get a score of about 90, Arctic peoples (Inuit, Aleuts, North Turkic and Chukchi peoples) collectively get about 91 (pp. 98-99), and Native Americans (including Indigenous peoples in what some call Canada) get 86 (p. 102). “Hybrids,” those of both European and non-European ancestry, generally obtain scores slightly higher than their respective non-European parent’s race, with “a correlation of 0.41 between the amount of white ancestry and IQ” (Lynn, 2006, p. 105).

These race differences in IQ matter, according to Lynn (2006), because they explain why some groups of people remained hunter gatherers while others developed “mature civilizations” (p. 159). If intelligence led to the formation of civilisation, and Europeans (read here, “whites”) have intelligence to a greater degree than other races, then civilized nations must also be white possessions. Of course, Lynn has privileged the European notion of civilization and has compared all other peoples that he identifies to this image, making such a connection between whiteness of civilization indicative of his personal biases and euro-centrism. Elsewhere, Lynn and Meisenberg (2010) argue that “to the extent that educational attainment is important for a country’s economic or cultural destiny, IQ is important as well” (n.a), as IQ and learning are linked. In this way, Lynn and Meisenberg (2010) make implicit the conclusion that the supposed importance of maintaining the nation as a white possession, populated by predominantly European people, is an economic and “cultural” *priority*.

While Richard Lynn is largely discredited, having been stripped of his position as Professor Emeritus at Ulster University in 2018 (British Broadcasting Corporation, 2018), his work remains influential and certainly indicative of a trend. We might consider, for example, that while it did not deign to state the exact IQ scores of racialized peoples, Herrnstein and Murray’s

(1996) extremely controversial, though not necessarily discredited, book *The Bell Curve* nonetheless posits the same position of the genetic inferiority of racialized peoples.

The characterization of intelligence as a hereditary phenomenon as presented by Lynn (2006) and Herrnstein and Murray (1996) is not a well defended position. Contrary to the ways in which proponents of intelligence have presented it, there seems never to have been a consensus as to what, exactly, is meant by the term ‘intelligence’ (Eckberg, 1981, p. 55). Further, it is not often clear whether many researchers who support the concept of intelligence consider intelligence to in fact exist as a real entity. Indeed, when pressed, prominent psychometricians and hereditarians have themselves stated that intelligence is not a real entity in one’s biology, but is simply reflective of a “scientific construct” (see Gould, 1981). It is difficult to understand how intelligence can both be an inherited trait that differs according to race, while also being a purely scientific construct not attached to one’s biology. Such inconsistency is not new. For example, Hans Eysenck (1988) posits that intelligence does not exist beyond its use as a scientific concept that explains empirical data, as have “Alfred Binet (‘inventor’ of intelligence testing), Truman Kelly and Cyril Burt (pioneers of educational psychology in the USA and Britain respectively)” (Goodey, 2011b, p. 7). Each of these researchers has argued that not only is the clear definition impossible, but the vagueness of current definitions is irrelevant, as intelligence can be measured nonetheless (Goodey, 2011b, p. 7) [emphasis removed]. In the words of Goodey (2011b), when he was arguing that intelligence is not ‘real’ beyond its use as a scientific construct, “[Eysenck] was following a tradition in psychometrics of being defiant and dismissive about defining one’s object of study” (p. 7).

Despite the fact that intelligence is an extremely vague construct, and its existence as an entity in nature is not even agreed on itself, psychology in many ways continues to operate as if

intelligence were indeed a biological phenomenon. In their analysis of introductory psychology textbooks, Lester and Gabriel (2014) found that “intelligence was commonly positioned as something that ‘we’ (society as a whole) know to be real and agree is defined in particular ways” (p. 783). These textbooks did often acknowledge that the concept of intelligence is hotly debated, but this was generally discussed in terms of its nature, and not whether it in fact exists as an ontological entity rather than an abstraction (Lester & Gabriel, 2014). We can see the commitment to intelligence as a biological reality through the work of contemporary geneticists who look for the genes which underlie intelligence, an endeavour necessitating the assumption that such a phenomenon indeed exists biologically (e.g., Lee et al., 2019; e.g., Plomin & von Stumm, 2018).

The illusion that there is a clear definition of “intelligence” comes from our assertion that we can *observe* the difference between the intellectual body and the intellectually disabled body, especially through intelligence testing (i.e., psychometrics), and that this difference reflects something deeper than our own biases applied to otherwise banal human bodily variation (Goodey, 2011b; Gould, 1981). In his examination of the historical foundation of intelligence-like concepts in Europe prior to the work of John Locke, Goodey (2011a) posits that the very concept of intelligence and the intellectually disabled (the ‘abnormal’) depend on one another other for their definition (p. 1). That is to say, the defining feature of intelligence is that it is not like unintelligence, and vice versa. Indeed, “if intelligence has any historically continuous characteristic at all, this circularity of definition is it” (Goodey, 2011a, p. 5). This recognition of the intelligent and the unintelligent carries with it a valuation linked to a notion of who is ‘normal’ and who is not; who is deserving of humanity and who is not in the favour of the intelligent bodily kind (Goodey, 2011a). Such valuation, in so far as it may appear real, only

reflects prejudice, and in the settler colonial context, this prejudice translates to the values, behaviors, and bodily kinds primarily of white settlers as the archetype of ‘normal’ and ‘valuable’ (Goodey, 2011a, p. 637; Grech, 2015, p. 10).

It is clear that historically and into the present, intelligence has provided a means to legitimize and justify the accumulation of social and material capital in the hands of whites, functioning as a white possessive logic within patriarchal white sovereignty. While it is the case that ableism mediates the relationship of whites to capital (along with other subject positions such as gender<sup>15</sup>), Indigenous and Black peoples stand as the prototypical Other from which intelligence gains meaning in juxtaposition. In this way, intelligence will always be anti-Indigenous and anti-Black; it will always function as a white possessive logic to dispossess Indigenous peoples from lands and resources.

### **Conclusion**

Early in this chapter I indicate how psychological disciplines conflated ableist and racist knowledges, and how this conflation has operated to make the mental peculiarities of whiteness synonymous with able-bodiedness. I then argue that in extending this conflation through

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<sup>15</sup> I want to take a moment to explain why I have not had a substantive focus on gender in this thesis. In my research on the topic of intelligence as a possessive logic, I found the ways in which gender has been treated by psychologists is a wholly separate area of study from the ways in which race has been treated. An analysis of the ways that ableism and gender intersect and function in psychological disciplines to maintain patriarchal white sovereignty requires its own study. To complicate matters further, contemporary gender and queer studies now encompass cisgender, transgender, and nonbinary foci. Such studies include recognizing that trans-erasure is a ubiquitous problem in psychological disciplines. There is also the need to study how gender in its diverse forms functions for Indigenous, Black, and People of Color with queer gender identities. I recognize that gender matters in my emerging research project, and it is something I would like to study with more time and resources.

intelligence, psychological disciplines socio-discursively maintain the dispossession of Indigenous peoples and lands in the service of patriarchal white sovereignty. The concept of intelligence is not only a white possession (as theorised by Galton), but it acts as a possessive logic through the formation of intelligence scales measuring whiteness and their subsequent use in immigration policy in the U.S. It is very likely that today intelligence continues to function as a possessive logic through its ties to these historical intelligence scales via the convergent criterion for validity in test revisions and the formation of novel scales. Indeed, and in support of this claim, in the works of such psychologists as Richard Lynn (2006) and Herrnstein and Murray (1996), we can see that intelligence remains a white possession tied to the aims of white supremacy and ownership of the nation and its resources. The possessive logic of intelligence remains strategically committed to conflation of the disabled body with the racialized body in order to further the aims of patriarchal white sovereignty.

As to the question posed by Moreton-Robinson (2015), quoted at the beginning of this chapter, it seems that whiteness operates as a regime of truth to a very high degree in psychological disciplines as a result of its commitments to the reality and/or utility of the possessive logic of intelligence. If intelligence can be said to be the crowning achievement of the psychological disciplines (see, Eysenck, 1988) and to underpin interventions and research in this field, then psychological disciplines must be understood as highly invested in patriarchal white sovereignty.

While I maintain that intelligence operates as a possessive logic in settler states, intelligence suffers from a persistent problem. As an ontological commitment of patriarchal white sovereignty within the framework of Western rationalism, intelligence suffers in its

insistence on having a positive relationship with learning capacity. It is to this subject that I turn in the next chapter, *Weaponizing Ambiguity*.

### **Chapter 3: Weaponizing Ambiguity in the Service of Patriarchal White Sovereignty**

This chapter has two foci: the possessive logic of learning disability (LD) and a method within psychological disciplines for maintaining possessive logics that I call ‘ambiguity.’ I argue that it is the pathologization of body logics subverting intelligence which produces the diagnosis of LD as understood today. In this way, the very concept of LD functions to maintain settler states such as Canada and the U.S. as white possessions through its legitimizing relationship to the possessive logic of intelligence.

In the psychological disciplines with which I am primarily concerned, the extending of the possessive logic of intelligence through pathologization occurs within a context of what I call definitional and operational ambiguity. Ambiguity, as I use it here, refers to the manner in which confusion and doubt as to the nature of one’s object of study is mobilized as a means of ensuring the longevity of possessive logics. It is the attempt to harness, albeit incompletely, the doubt that Indigenous body-logics inevitably produce in possessive logics for the purposes of patriarchal white sovereignty. In this way, the nebulous definitions operationalized in LD research and the inconsistencies of its diagnostic criteria (which change regularly) can be understood not as an obstacle to the study of LD, but rather, part of its very function as a possessive logic in the service of patriarchal white sovereignty. Where the possessive logic of intelligence is maintained through pathologization of subversive body-logics, so too is LD maintained through definitional and operational ambiguity. This ambiguity necessitates that the nature of the objects of psychological inquiry, intelligence and LD, will never be made clear through scientific research.

In this chapter I begin by presenting the ways in which LD is defined by psychological authorities in Canada and the U.S., especially focusing on the American Psychiatric Association’s *Diagnostic and Statistical Manual of Mental Disorders (5<sup>th</sup> ed.)* (DSM-5) (2013). I



focus on the DSM-5 because of its notable impact in psychological disciplines (Demazeux, 2015; Murphy, 2015). I argue that LD's relationship to intelligence is foundational to its meaning, and as such both operate as possessive logics. I then discuss the ambiguity of LD diagnoses and research, arguing that the difficulties which face psychological disciplines are not only identifiable, stable, and compounding, but in fact represent a method in themselves for enabling the continued operation of possessive logics.

Before beginning, I want to make clear that I am continuing to adopt I-CDS methodological commitments in this chapter, thus recognizing there exists a diversity of embodied ontologies and that all bodies are valuable. I am not trying to argue that bodies labeled with LD do not face a particular set of problems, nor do I want to suggest that all people diagnosed with LD do not share some commonalities in our bodily ontologies. What I assert and argue in this chapter is that psychiatric diagnoses such as LD have very little grounding outside of whiteness. Psychological disciplines reify and justify the normative body as a white possession, utilizing this discourse to then deny rights and resources to Indigenous bodies now understood through a lens of deficiency. Pathologization and ambiguity enable this process.

### **Learning Disability and its Problems**

Defining LD in a meaningful way is difficult. More than three decades ago, Stanovich (1989) asserted that the "field of learning disabilities (LD) has a checkered history that is littered with contention, false starts, fads, dead ends, pseudoscience, and just a little bit of hard-won progress" (p. 487). Moreover, noting the controversy in the psychological literature regarding the utility of IQ scores in measuring achievement, he contended that IQ scores have been erroneously correlated with student potential and thus cannot be foundational to defining LD. More recently, the Learning Disability Association of Canada's (LDAC) DSM 5 AD-Hoc

Committee (Fiedorowicz et al., 2015) similarly noted how the “field of learning disabilities has long struggled with definition and diagnostic criteria and has been influenced by multiple sectors: education, law, advocacy, and medicine – particularly psychiatry” (p. 8). However, there are some characteristics of LD that are commonly accepted.

In a general sense, psychological conceptions of the learning disabled refer to those people who, despite having at least average intellectual abilities (operationalized as one’s general capacity for thinking and reasoning), exhibit marked struggles in learning (LDAC, 2017). These struggles are discussed within the psychological discourses as arising from difficulty with tasks involving the capacities of “language processing; phonological processing; visual spatial processing; processing speed; memory and attention; [and/or] executive functions (e.g. planning and decision-making)” (LDAC, 2017). The underlying physiology of LD “may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information,” which can present as marked difficulty in academic pursuits (LDAC, 2017). Importantly, these difficulties cannot be better explained by appeal to issues related to hearing or vision, low socio-economic status, cultural differences, or especially intellectual “deficiency” (LDAC, 2017). It is widely agreed that LD is underpinned by “genetic and/or neurobiological factors” (LDAC 2015, APA 2013), often to the exclusion of injury. Note that while these agencies define LD as a pathological ‘fact,’ they also refrain from identifying its precise etiology. This is largely because there is no one clear understanding of what the physiological<sup>16</sup> basis of LD might be (APA, 2013; Becker et al., 2017; LDAC, 2017). This omission of reference to a specific etiology is a point I return to regularly in this chapter.

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<sup>16</sup> I use ‘physiological’ rather than “genetic and/or neurobiological” for ease of reading and to reduce redundancy.

It is difficult to estimate the prevalence rates of LD. However, the American Psychiatric Association estimates that around 5-15% of school age children in any cultural or linguistic group likely has a LD (APA, 2013). In the DSM-5, LD is diagnosed as *Specific Learning Disorder* (SLD) and is reported to co-occur more often than explained by chance in individuals with other neurodevelopmental disorders such as ADHD and mental disorders such as anxiety, depression, and bipolar disorder (APA 2013). Suicidal ideation is also reported frequently by those diagnosed with SLD (APA 2013). This high comorbidity (the phenomenon of multiple mental diagnoses being diagnosed together for the same individual) is not distinct to SLD, but is common in many disorders specified in the DSM-5 (Poland, 2015, p. 26). In fact, Poland (2015) argues that such high rates of comorbidity point to a general groundlessness of DSM diagnoses with regards to human experience.

While these high comorbidities should raise questions as to the legitimacy of these diagnoses as defined in diagnostic manuals such as the DSM-5, perhaps more fundamentally different institutions, political bodies, and academics define such diagnoses primarily by their presentation, and not by the etiology assumed to exist (see Kirk et al., 2015). This is a major problem referred to as *descriptive diagnostics*. According to Kirk et al. (2015), ‘descriptive diagnostics’ refers to a process through which diagnoses for disorders and mental disabilities rely solely on a set of behaviors/criteria which a patient must meet for a diagnosis, with no direct reference to a supposed etiology. Through this practice, the definition of mental disorders is circular (see Kirk et al., 2015). For example, in discussing the case of ADHD, Kirk et al. (2015) illustrate that

One cannot establish the validity of a medical illness unless they are linked empirically to a demonstrable physiological dysfunction that can be reasonably believed to cause the

behaviors and emotions. For example, clinicians say to parents that their “child is inattentive because he has ADHD,” implying that some underlying disease (ADHD) causes the child’s inattention. But if asked for evidence of the existence of the presumed disease, the clinician will offer the child’s inattention as evidence. Thus, the child is inattentive because of ADHD and he has ADHD because he is inattentive. Descriptive diagnosis offers tautology in the guise of scientific explanation. (pp. 68-69)

As with ADHD, so is tautology the basis of LD diagnoses as a result of its reliance on descriptive diagnostics. If the purpose of LD is to reflect a reality, this would pose a problem, as without other evidence to suggest that this phenomenon exists, it could very well be said not to exist given its circularity and a lack of grounding in anything but itself. Kirk et al. (2015) argue that, rather than describing pathological phenomena, descriptive diagnostics were created in the latter half of the twentieth century as a means of avoiding the fact that psychiatry could not provide “convincing scientific evidence . . . [of] the medical causes of, or biological markers associated with, any form of madness” (p. 64). In this way, descriptive diagnostics maintained the seeming legitimacy of these diagnoses despite a lack of supporting evidence (Kirk et al., 2015, p. 64). This deceit remains a primary function of descriptive diagnostics as utilized in psychiatry and wherever these diagnoses are considered valid (such as educational psychology) (Kirk et al., 2015). That is not to say these diagnoses—such as ADHD (Kirk et al., 2015, pp. 68–69), Intellectual Disability (ID) (Goodey, 2011b), and LD—do not exist at all, as such disorders exist within the functioning of settler-colonial institutions, discourses, and in medical/race sciences, which circumscribe the lived experiences and possibilities of Indigenous bodies.<sup>17</sup> As Goodey (2011b) states, in the case of ID, “even if intelligence is only a matter of appearances,

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<sup>17</sup> See Goodey’s discussion of “appearances” in the case of ID, beginning on page one.

appearances matter. Social structures have not only flattered and fed the concept but set it to work to ensure their own survival” (p. 1). The importance of appearances like intelligence to the functioning of colonial/imperial social systems should not be underestimated.

Murphy (2015) argues that the global influence of the DSM in its various editions is directly the result of American imperialism and the extending of the WEIRD (Western, Educated, Industrial, Rich, and Democratic) body as the norm. In this context, the APA’s (2013) appeal to the “clinical utility” of its diagnoses in the DSM-5, despite having no supportive evidence, can be understood as an appeal to the tenets of American imperialism and the requirements of white supremacy. Kirk et al. (2015) see the DSM “mainly as an insurance codebook—offering entitlements, legitimacy and revenues to interests groups—rather than a scientific or medical compendium” (p. 70). However, this does not go far enough. The appeal of the APA to “clinical utility” must be understood as stemming from a valuing of the process of normalizing WEIRD bodies and violently disrupting those which deviate from this norm. I argue that the powerful social purpose underlying these diagnostic categories, as discussed by Kirk et al. (2015), is not only socio-economic, but is also the maintenance of patriarchal white sovereignty.

### **An I-CDS Theory of Learning Disability**

Of particular interest to my analysis, and something which exists in all characterizations of LD, is its relationship to intelligence. For my purposes here, I focus on the DSM-5 diagnostic criteria for SLD.

### **The Pathologizing of Indigenous Body-Logics**

While the explicit requirement of intelligence testing in SLD diagnoses was dropped in the transition from the DSM-IV-TR to the DSM-5, intelligence remains closely related to

diagnoses of SLD. In particular, intelligence testing remains relevant for an LD diagnosis through the requirement—“Criterion B”—of “psychometric evidence from an individually administered, psychometrically sound and culturally appropriate test of academic achievement that is norm-referenced or criterion-referenced”<sup>18</sup> (APA 2013). Intelligence testing also remains relevant through the need to rule out intellectual disorders.<sup>19</sup> Further, intelligence and LD remain conceptually linked, as LD is primarily understood as describing an intelligent person who does not perform as expected given their intelligence. For example, and at its most fundamental, to obtain a diagnosis of SLD according to the DSM-5 criteria, a person must have average to above-average intelligence, but perform at the bottom 15.9% (1 SD) or 0.6% (2.5 SD) of their age group in at least one rudimentary academic field (such as reading, writing, or math).

In academic literature, definitions of intelligence often include one’s capacity for learning, such as Plomin and von Stumm’s (2018) assertion that intelligence is “the ability to learn, reason, and solve problems” (p.149). This association between intelligence and learning is arguably one of the most influential in academic literature, especially in the current genetics’ literature. Geneticists studying intelligence often use the number of years of schooling (termed “EduYears”) as a proxy variable for intelligence (e.g., Lee et al., 2018, e.g., 2019; e.g., Selzam et al., 2017; e.g., Sniekers et al., 2017). When it is tied to one’s capacity to learn, the thought is the

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<sup>18</sup> Such as an intelligence scale, though not exclusively.

<sup>19</sup> From the DSM-5, Diagnostic Features of Intellectual Disability (Intellectual Developmental Disorder): “Criterion A refers to intellectual functions that involve reasoning, problem solving, planning, abstract thinking, judgment, learning from instruction and experience, and practical understanding. . . . Intellectual functioning is typically measured with individually administered and psychometrically valid, comprehensive, culturally appropriate, psychometrically sound tests of intelligence.”

more intelligent person will learn in a manner which is somehow *better* than the unintelligent person. As discussed by Lester and Gabriel (2014), “the notion of IQ, inevitably linked to intelligence, remains positioned in the discourse of our times a primary indicator of one’s mental capacity and learning potential” (p. 779). In their analysis of introductory psychology textbooks, Lester and Gabriel (2014) found that the majority agree on many points, but especially for the discussion here, that intelligence is meaningfully related to learning ability, that “people who are intelligent in particular domains learn new information and behaviors in those domains more quickly and easily than people who are less intelligent in those domains” (p. 783).

If an individual is intelligent, then we should expect to see them flourish in academic pursuits by definition of ‘intelligent’—barring the influence of obstacles to performance (such as adversity, injury, impacts of low socio-economic status, vision/hearing impairments, etc.). But what if we do not see this? What if 5-15% of the time, regardless of cultural context, we find individuals with average to above-average intelligence (and with no significant obstacles to their performance) performing in the bottom 16% to 0.6% of their peers in any of their academic pursuits? Were intelligence a purely descriptive concept meant to reflect the way the world operates we would scrap it in light of this information, as it provides sufficient evidence to conclude that the concept of intelligence is a falsehood. Instead intelligence remains, and we find these 5-15% of people pathologized. This is my I-CDS theory of LD: LD functions to maintain the possessive logic of intelligence as the pathologization of these subversive body-logics which threaten it.

Hokowhita (2014) argues that Indigenous body-logics subvert Western rationalist epistemological and ontological commitments. In order to combat the threat of Indigenous body-logics, Hokowhita argues that Western thinkers resort to a process of pathologization, making

those subversive knowledges and practices of Indigenous bodies legible and containable through an appeal to their supposed unhealthiness and deviance from the norm (Hokowhitu, 2014, p. 33). As discussed in the introduction to this thesis, if we understand the protective function of pathologization in Western rationalist methodologies, then it is clear that the process of identifying disorders/disabilities in Indigenous bodies is precisely an instance of this same rationalizing process discussed by Hokowhitu—the pathologization of Indigenous body-logics.

Where Hokowhitu discusses these body-logics in terms of *mākutu*, the malevolent spiritual art known about by Māori, I argue we can extend this to the case of LD. If intelligence operates as a white possession, then it is no surprise that Indigenous peoples (as well as non-Indigenous peoples who do not fit the prototypical white body) will regularly be found not only lacking, but in liminal positions within and outside of the discourses of intelligence. This is because the discipline of psychology posits these discourses in reductionistic clinical and instrumental terms inattentive to ontological positionings and cultural contexts. This explains why the disciplinary concept of intelligence is itself neither aligned with nor cognizant of the bodily ontologies of Indigenous peoples. LD designates precisely this liminal space occupied by Indigenous bodies so that their knowledges can be made understandable and docile to Western rationalist methodologies.

If LD truly arises from such a pathologizing process, we should expect to see an increased reporting of the prevalence of LD in Indigenous communities when compared to white communities. Indeed, scholars have often noticed that marginalized peoples are impacted more often by disability discourses such as LD when compared to their white peers by virtue of the construction of the able bodied norm as a white possession (see Erevelles, 2000; Loutzenheiser & Erevelles, 2019; Reid & Knight, 2006; Vincent et al., 2012).



I now discuss several statistical findings that support this assertion, but I do so with a somewhat different purpose. Though these statistics may shed some light on the matter at hand, I am far more interested in the ways in which they can be subverted within psychological methodologies. For example, Statistics Canada (Government of Canada, 2019) reports that, in 2017, 7.2%, and 6.6% of First Nations and Métis people living off reserve, respectively, were identified with a Learning Disability compared to 3.8% of non-Indigenous peoples.<sup>20</sup> The Assembly of First Nations (2017) shares similar statistics for First Nations people living on reserves, where 5.8%<sup>21</sup> of youth and 3.6% of adults in 2008/2010 were identified with a learning disability. Kenney and Thierry (2014) discuss how “among children 6-21 years of age [in the U.S.], the [Indigenous] children with disabilities were approximately twice as likely to be served for specific learning disabilities” (p. 2077) at 49%—given data available through the Office of Special Education Programs Data Analysis System.

It seems clear that LD functions as a white possession through its close relationship to intelligence and the need for a justificatory discourse for intelligence in light of subversive Indigenous body-logics. However, as a possessive logic with its foundation in whiteness, and not observation, as it is claimed, LD is susceptible to the same problems of falsification and subversive knowledges as intelligence. Rather than appeal to processes of pathologization to remedy this conundrum for LD as is done for intelligence, psychologists employ a process I refer to as ambiguity.

### **The Logic of Ambiguity**

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<sup>20</sup> It is worth noting that the Inuit sample exhibited lower percentages than non-Indigenous peoples, 2.9%.

<sup>21</sup> Compared to 3.5% in 2002/2003.

Andersen<sup>22</sup> and Kukutai<sup>23</sup> (2017) point out that the use of statistics has regularly supported the aims of colonists. As a form of targeted reductionism positioning Indigenous communities and epistemologies primarily through narratives of deficiency, quantitative research in Indigenous communities takes a damaged-centred approach, ignoring the complicated local contexts from which these numbers are derived as well as the underlying “trauma of colonialism and the loss of sovereignty, land, knowledge, and lifeways” (p. 43). However, rather than forego the project of quantitative research, Andersen and Kukutai (2017) argue that, if done correctly, statistical analyses can be used to empower Indigenous communities. It is their assertion that “Indigenous scholars can deploy numbers strategically to ‘talk back’ on our own terms” (p. 48), even if these numbers remained flawed. In one sense I would have to agree with the assertion of Andersen and Kukutai (2017); however, this turn to statistics would require cautious analysis and appropriate deconstruction of methods and findings. I am not so optimistic that the utility of statistics will be as promising as Andersen and Kukutai (2017) suggest. As I discuss in the context of psychological disciplines, there exists within the methodologies of patriarchal white sovereignty a method of ambiguity that limits the possibilities of quantitative research to underpin tangible change and contestation of colonial systems which negatively impact Indigenous communities.

To the trained psychologist, the statistics mentioned above regarding LD in Indigenous communities should raise a number of questions. For example, if every participant in a study cannot realistically be expected to be given an intelligence test or an educational psych

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<sup>22</sup> Métis from Big Valley area of Saskatchewan

<sup>23</sup> Māori from Ngāruawāhia. Of the Ngāti Tīpā, Ngāti Mahanga, Ngāti Kinohaku, Ngāti Ngawaero and Te Aupōuri iwi.

assessment and a diagnosis of LD, how did the researchers behind these statistics operationally define LD for quantification? How was this data collected, and what potential confounding variables may be skewing these numbers? And to what degree? Do the findings of these different sources actually reflect the same phenomenon, or are they not comparable? Are there other variables which might underlie these statistics, such as socio-economic status? What are the confidence intervals, and are the differences in prevalence statistically significant? Until such questions can be answered these statistics will have to be treated with suspicion, as there is doubt regarding the legitimacy of these statistics to speak to the problem I have identified.

This doubt operates as a destabilizing characteristic of LD studies and psychological disciplines, but in destabilizing the concept of LD (and intelligence), it has a protective function. Because in this chapter I take for granted that LD is not a biologically realized phenomenon, the role of such doubt can be understood as protective in that it limits and blunts critique. Doubt ensures the ever-present need for more research before definitive answers can be ascertained. LD research demands stabilization of the concept even as it destabilizes, all the while assuming the existence of possessive logics such as LD or intelligence to which it is invested. This is ambiguity.

Both the Canadian Psychological Association and the American Psychological Association<sup>24</sup> claim the discipline of Psychology is a science. Indeed, Goodey (2011b) identifies a reoccurring theme of psychologists, especially through intelligence studies, to claim their research as scientific (p. 10). This is where the need for ambiguity in psychological research begins, as very commonly, science is understood as necessitating the Popperian approach that

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<sup>24</sup> For this chapter, “APA” refers to the American *Psychiatric* Association. To avoid confusion, whenever I reference the American Psychological Association, I use the full name.

demands scientific knowledges be characterized by a capacity to be found false—i.e., that scientific hypotheses are *falsifiable* (Thornton, 2019).

As a standard to which scientific knowledge is held, falsification can be understood as an epistemological and axiological commitment in these disciplines as adherents to Western scientific rationalism.<sup>25</sup> However, it is not the accurate depiction of the natural world in which psychological disciplines are primarily concerned in the case of LD nor intelligence studies, but the white possession of the settler nation. Falsification, while agreeable to the former goal of accuracy within a Western scientific methodology, is antagonistic to the possessive logics which give patriarchal white sovereignty its justification—as these possessive logics are not grounded in observation or in the description of naturally occurring kinds. Rather, possessive logics are grounded in “an excessive desire to invest in reproducing and reaffirming the nation-state’s ownership, control, and domination” (Moreton-Robinson, 2015, p. xii). It is because falsification holds possessive logics to a standard which they must resist that it poses a threat to the operationalization of LD and intelligence as a possessive logic.

While LD helps to maintain the concept of intelligence through a process of pathologizing Indigenous body-logics, it is itself threatened by the standard of falsification. Rather than appeal to pathology for protection from this threat, LD instead appeals to ambiguity. Wherever there is confusion or doubt as to the object of study within psychological disciplines, the benefit of the doubt will always favour the possessive logic(s). This is because psychological disciplines are invested in maintaining the nation as a white possession, as evidenced by their

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<sup>25</sup> Falsification is not characteristic of Western rationalism generally, only its most ambitious project *science*. As a criterion for knowledge, it is specifically a criterion for *scientific* knowledge. Though this is also contested (see Thornton, 2019).

commitment to the possessive logic of intelligence. Because ambiguity exacerbates this kind of doubt as to the object of study within LD studies, the existence of LD can always be assumed and acted on as if it were fact. This can be seen clearly in the DSM-5's (APA, 2013) appeal to "clinical utility" for justification: while there is doubt as to the objects of the DSM-5 classification (i.e., whether they exist, or not), because of "clinical utility," the APA assumes that these diagnoses do in fact represent real phenomena, and psychologists act accordingly. There are at least two areas of practice which I discuss below that can be said to characterize such ambiguity in LD studies: 'definitional ambiguity,' the shifting nature of diagnostic criteria; and 'operational ambiguity,' where research in LD studies contributes to the field's nebulous and generally careless nature.

### ***Definitional Ambiguity***

I would like to again point out that there is no mention of the specific physiological processes underpinning SLD in the DSM-5. This omission of an appeal to physiology is the hallmark of descriptive diagnostics (see Kirk et al., 2015). Indeed, the DSM-5 itself specifies in its Directions For Use that

Until incontrovertible etiological or pathophysiological mechanisms are identified to fully validate specific disorders or disorder spectra, the most important standard for the DSM-5 disorder criteria will be their clinical utility for the assessment of clinical course and treatment response of individuals grouped by a given set of diagnostic criteria.

Despite the lack of supporting evidence, the APA maintains that there is a physiological basis for the disorders they defined through descriptive diagnostics. In the case of SLD (LD), the APA (2013) states that SLD

is a neurodevelopmental disorder with a biological origin that is the basis for abnormalities at the cognitive level that are associated with the behavioral signs of the disorder. The biological origin includes an interaction of genetic, epigenetic, and environmental factors, which effect the brain's ability to perceive or process verbal or nonverbal information efficiently and accurately.

Again, however, the DSM-5 is unable to explicate what exactly these biological origins are other than to echo that they impact the individual. Later, it reiterates that for SLD "there are no known biological markers. . . [though as] a group, individuals with the disorder show circumscribed alterations in cognitive processing and brain structure and function" (APA, 2013). In other words, those diagnosed with LD have an abnormal brain structure that is of a particular kind.

Incredibly, were one to look for such abnormal brain structures and cognitive processes for the purposes of diagnosis, the APA (2013) states that this would be a failed undertaking as generally "cognitive testing, neuroimaging, or genetic testing are not useful for diagnosis at this time." The certainty with which the DSM-5 asserts that a common cognitive and brain abnormality underlies SLD is not then reflected in their discussion of what such structures may look like, nor a general capacity to know what these abnormalities are. Despite this, the APA continues to assume that SLD exists and is worthy of attention through clinical utility. It is clear that ambiguity is operative in that this definition nonetheless favours the operationalization of SLD through psychological practices despite its dubious characteristics and circularity.

The characterization of SLD in the DSM-5 has important implications for the way in which research is carried out in psychological disciplines. Particularly, as Fiedorowicz et al. (2015) point out, the change in definition from previous editions has likely increased the number of false-positive diagnoses by "including individuals who have academic challenges for reasons

other than learning disabilities” (p. 8). The impact of this change is that any research which adopts DSM-5 diagnostic criteria will now be subject to growing doubt, as the nature of bodies demarcated through the diagnoses of SLD in the DSM-5 is increasingly unwieldy. Thus, future research into the etiology of LD that lacks significant findings is less likely to be taken as falsifying evidence against the object of study (LD), and instead will be argued to reflect an increase in false-positive diagnoses. This definitional change in (S)LD from the DSM-IV-TR to the DSM-5 is one instance of ambiguity at work. Until psychologists can devote more research to the question of whether this change in the diagnosis of LD has actually led to more false positive diagnoses, LD will not only be assumed to exist, but falsifying evidence of LD will increasingly be called into question. However, how could such a state-of-affairs occur if our only means of identifying people with LD is through diagnostic criteria? Indeed, it cannot. Where diagnostic criteria are psychologists’ sole means of identifying bodies with LD, the question of false-positive diagnoses is meaningless. Indeed, it is not a question which can be asked *without* presuming that LD exists as anything other than its diagnostic criteria. In this conundrum, definitional ambiguity has enabled the longevity of LD as it functions to maintain patriarchal white sovereignty.

### ***Operational Ambiguity***

The kind of definitional ambiguity I have discussed in the case of the DSM-5 is carried over into research, where it is exacerbated. In their analysis of 46 research articles examining the genetic and/or environmental factors underlying dyslexia (a facet, or a kind of LD), Becker et al. (2017) identify at least three issues in this body of research:

1. The use of different instruments across studies to measure “reading performance. . . phonological process, and IQ. . . [which] make it difficult to compare and replicate findings” (p. 433);
2. Differing definitions and diagnostic criteria for identifying participants with dyslexia across studies, which are identified as “important issues regarding the definitions of [dyslexia] and its associate or candidate genes” (p. 433);
3. Use of non-randomized samples, making the generalizability of findings questionable.

Becker et al. (2017) relate how these issues make cross comparison of studies very difficult or next to impossible. Nonetheless, the authors continue to highlight the commonalities in findings between these wildly divergent studies. Doubt as to the quality and capacity for cross comparison between these studies favours the authors’ capacity to a) present Dyslexia as a real entity, and b) draw findings from the studies despite their collective weakness. Ambiguity is functional in this research as the methodological shortcomings of the 46 articles examined are framed to always favour the existence of the possessive logic of LD.

The meta-analysis conducted by Becker et al. (2017) illuminates a mismatch of the genes which each of these studies has claimed underlie dyslexia. Such evidence *could* be taken as suggesting that LD does not exist as a physiological entity, were it not for the methodological recklessness of the studies and the three issues stated above. This alone would constitute an instance of ambiguity in the research. However, Becker et al. (2017) compound this ambiguity, and rather than discuss this finding in terms of methodological recklessness, instead claim that different populations of people may have different etiologies for dyslexia:

It is important to highlight that genes that are not replicated in subsequent GWAS, based on different populations, may still be a valid component of the genetics predisposition.



The genetic architecture of the trait may differ between populations . . . Most of the genes identified as candidates have not been confirmed in subsequent studies. Therefore, it is not surprising that the list of candidate genes varies between the recently published reviews. (p. 436)

The potentially falsifying evidence that these studies do not largely agree with one another is not only ignored, but the confusion which results leads to further methodological recklessness. This claim *must* be understood as directly antagonistic to the claim that dyslexia (SLD) is a single pathological entity, as it cannot be understood to be a unitary entity realized genetically or neurophysiologically if its genetic architecture and physical manifestations differ by population. Rather than take the general disagreement of the literature to indicate that, perhaps, LD does not exist as a physiological entity at all, Becker et al. (2017) instead argue that not only does dyslexia exist as a unitary pathological kind with a genetic basis, but that it may do so variably. Again, while this position should, and does, raise suspicion, it is precisely the doubt it creates which enables the operationalization of LD in white educational and occupational systems “until incontrovertible etiological or pathophysiological mechanisms are identified to fully validate specific disorders or disorder spectra” (APA, 2013). Such a state of affairs will be made much more difficult by the ambiguity that exists in research on Dyslexia and LD as presented and exacerbated by Becker et al. (2017), and should be considered out of reach.

### **Ambiguity in Psychology**

In all, the scientific study of LD is made extremely difficult through ambiguity. Doubt as to the nature of LD’s physiological underpinnings will always favour the operation of LD, as it is primarily an ontological *commitment* of white psychological disciplines. Thus, ambiguity maintains this doubt, and fortifies LD against the potential threat of falsification through the

scientific method to which it is antagonistic. Because LD functions as a possessive logic in tandem with intelligence, the need for it to be operationalized as a means of dispossessing Indigenous lands and bodies means that the kind of doubt presented above will always favour the operationalization of LD and intelligence. In this way, ambiguity provides a means through which these possessive logics can be protected from the threat of falsification by ensuring that doubt will always be present, and the date at which psychologists can conclusively determine the physiology of LD, or lack thereof, can be indefinitely postponed. In destabilizing possessive logics, ambiguity ensures their longevity.

### **Conclusion**

In this chapter I have argued that the concept of LD functions as a possessive logic, primarily gaining meaning through its relationship to that of intelligence. Because intelligence as a concept is regularly subverted through Indigenous body-logics, the pathologization of these logics by white psychological disciplines enables its continued operationalization within settler states. However, because it is only the white psychological investment in these possessive logics through which intelligence and LD gain meaning, the existence of falsification through body-logics remains a threat to LD. Wherever there is doubt as to the legitimacy of LD or intelligence, white psychologists presume this doubt favours their possessive logics—such as the APA's (2013) insistence on the legitimacy of their diagnoses despite acknowledging a lack of supporting evidence. In response, ambiguity in diagnostic criteria, definitions of LD, and in research concerning LD ensures that such doubt will always remain. The actual explication of the etiology of LD does not present a concern to psychological disciplines, as it is already presumed to be a reality and made operational. Falsification presents a more immediate threat to psychological disciplines for their diagnostic categories than verification offers legitimacy.

Doubt as to the object of one's study is protective of the interests of psychological disciplines, as it guards against falsification even if it denies the possibility of verification. In this way, ambiguity refers to the ways in which psychological disciplines maintain doubts and confusion regarding their objects of study, ensuring that such concepts as LD and intelligence continue to function within patriarchal white sovereignty to dispossess Indigenous lands and bodies.

It is very likely that the psychological disciplines have egregiously mis-characterized the nature of a collection of bodily ontologies otherwise un-related outside their collective designation as learning disabled (see Poland, 2015). The processes which have led to this mischaracterization need to be understood in the context of the need for settler states to justify the dispossession of Indigenous lands and bodies through appeal to the inherent deficiency of Indigenous bodily kinds. LD functions conceptually as a means through which the possessive logic of intelligence can function within patriarchal white sovereignty.

## Chapter 4: Concluding Perspectives

In this thesis I have argued—through engaging with work in Critical Disability Studies, Indigenous Studies, psychological research, historical analyses of intelligence, and textual analyses of the DSM-5 diagnostic criteria for SLD—that it is not simply the epistemologies and methods of psychological disciplines which do harm to Indigenous communities, as discussed by the CPA and PFC (2018); rather, it is the entirety of the research methodologies that those working within psychological disciplines employ—especially their associated ontological commitments. This is because the psychological disciplines are primarily concerned with the maintenance of patriarchal white sovereignty and the dispossession of Indigenous lands and bodies.

Future I-CDS research in the area of LD studies should look to explicate the manner in which resources are allocated through the diagnoses and research of psychological disciplines and sub-disciplines. So too, future work in I-CDS should seek out and build on the works of Indigenous and allied scholarship in other fields, recognizing that many of the aims of I-CDS are addressed and shared with research already carried out in other fields. With that in mind, work in I-CDS should be cognizant of the manner in which Western rationalism and the medical model of disability have co-opted the language of Disability Studies, and may appear somewhat progressive on the surface while maintaining the aims of patriarchal white sovereignty on Indigenous lands and bodies nonetheless.

As discussed in chapter 1, one of the harmful commitments made in psychological disciplines is to the reality of disability as a pathological condition. Such a medical approach to the study of disability must itself depend on a commitment to an entitative reality. Of the three characteristics of the medical model of disability, Kavanagh (2018) points out that the third

characteristic is that remedies to the supposed problem of disability are reserved to the individual. From this perspective, I argue here that the medical approach necessitates that there can be a clearly bounded individual to which disability can be attributed. Entitative ontological commitments must underly such a medical approach. It is only through a material ontological commitment that disability and abnormality can be contained to clearly delineated confines of disabled bodies. With the addition of Cartesian dualism (Clare, 2017, p. xvi), so too then can disability be attributed to disabled minds (Goodey, 2011b, p. 208). Cartesian dualism has also been identified by Brenden Hokowhitu (2014) as a necessary foundation of settler colonialism and its white supremacist underpinnings. For this reason, the delimiting ontological commitments of psychological disciplines also share the blame in causing harm in Indigenous communities through psychological research and intervention.

If psychological disciplines are truly to address the harms they cause Indigenous peoples, and ensure that their actions do not continue to do harm into the future, then psychologists, psychiatrists, and educational researchers and practitioners will all need to actively work to address these harms, while also upending their understandings of the nature of bodily ontologies and the roles they carry out within patriarchal white sovereignty. A tangible first step would be ensuring that Indigenous peoples have access to the resources that psychological disciplines demarcate through such tools as psychoeducational assessments. In this regard, my preliminary examination of such access to these resources in Alberta points to the need for this kind of intervention. First, the average cost of a psychoeducational assessment (from a private practice) in Alberta ranges from \$1,550-3,000 (LDAA, 2016a, 2016b). The University of Alberta in Edmonton offers a substantially cheaper option, at \$600, performed by supervised students in the Department of Educational Psychology (Department of Educational Psychology, 2020), but the

wait list is very long. All of these costs may be too great. Indeed, in Canada, it is Indigenous children who will inevitably be targeted by such exorbitant costs, as 35-40% of Indigenous children are estimated to live in poverty as opposed to 18-19% of all children in Canada (Citizens for Public Justice, 2015; National Collaborating Centre for Aboriginal Health, 2017). Second, the geospatial distribution of psychologists offering psychoeducational assessments in Alberta seems to be largely contained to the lower-middle and western portions of the province, especially in the urban centres of Edmonton and Calgary (Fig. 1). The map shown below details the physical location of all (publicly available) psychologists registered on the Psychology Today website<sup>26</sup> who explicitly mention being able to conduct psychoeducational assessments. This poses a major concern for Indigenous communities. While roughly one third of all of Indigenous peoples living in Alberta live in either Edmonton or Calgary, a significant number live in rural areas and in the northern parts of the province (Government of Alberta, 2017, p. 4). Given that psychoeducational assessments take many days to complete, it is very likely families and individuals living outside of Edmonton and Calgary will be met with additional costs for lodging and food in addition to transport and professional fees should they seek out a psychologist for a psychoeducational assessment. Thus, in order to assure access to psychoeducational resources, psychologists will need to not only offer their services at reduced fees but must also regularly extend their practice to the furthest corners of the province, and at no extra cost to their clients.

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<sup>26</sup> As of June 2020. This profile information was collected by the author for the purposes of the present research endeavour and was mapped using Google Earth Pro. Copyright information and data attribution are provided as per the specifications of Google within the image in Figure 1.

*Figure 1.*

*Location of Psychologists Offering Psychoeducational Assessment Services in Alberta, Canada, from Psychology Today Profiles.*



Such measures as decreasing fees and extending the geospatial limits of psychological practices are only temporary measures to address the harms the discipline causes Indigenous peoples, as it is clear that these disciplines remain committed to the possessive logics of intelligence and LD to further the aims of colonization. This can be seen in such recommendations as those made by the Community-University Partnership at the University of Alberta to include Indigenous children in the normative sampling in the creation of ‘culturally relevant’ assessments. Such framing would then be used to measure the cognitive capacities of Indigenous children, effectively incorporating measures of Indigenous bodily ontologies into Western cultural frames and assessments of

disability (e.g., Early Childhood Measurement and Evaluation Resource Centre, 2008). These kinds of interventions into psychological research and practice do little to address the harms caused by psychological disciplines to Indigenous peoples through methodological biases as discussed both by the CPA and PFC (2018), and in the present work. The commitment of psychological disciplines to patriarchal white sovereignty will not be easy to address, but should these disciplines remain committed to the ontologies of whiteness, methods such as pathologization and ambiguity will inhibit whatever work is conducted to address the problems the CPA and PFC (2018) identify. Remaining committed to these methodologies will make positive change impossible in the psychological disciplines.

As difficult as it will be for psychological disciplines to make the changes necessary for them to discontinue the harm they cause, Indigenous peoples can also begin to address this problem for ourselves. Our communities already possess, or at least are familiar with, the kinds of knowledges and worldviews that psychologists must now try to adopt themselves (see Adelson, 2000; CPA & PFC, 2018; Hokowhitu, 2014; King et al., 2014; Kress, 2017; Povinelli, 2016; Wilson, 2008). It is my assertion that Indigenous communities need to find ways to build our own capacities and research to lobby for resource allocation streams not dependant on the work of psychological disciplines. Ideally, as Indigenous communities and peoples, we can find ways to move beyond the work of psychologists in order to address our own needs and the legacy of psychological malpractice in our communities.

As to how we can bring about this progressive state-of-affairs, I think there are many options. A general increasing of our capacities and access to resources will certainly help (while it will be difficult within the confines of settler nations beholden to patriarchal white sovereignty), as this will enable avenues of resource acquisition not dependent on psychological



intervention. Another avenue may be the direct confrontation of psychological disciplinary research and interventions. Andersen and Kukutai's (2017) assertion that Indigenous Studies can utilize quantitative methods for the purposes of Indigenous people's benefit may prove helpful in this scenario. But as discussed in Chapter 3, the method of ambiguity in psychological disciplines will make this process difficult. In identifying the specific ways in which ambiguity operates (which will undoubtedly prove fluid and changing), there is hope that Indigenous quantitative work can account for the problems posed by ambiguity. Thus, in order to reach the goal of non-reliance on psychology as a transgressive and transformative act, it is my assertion that we must study how psychological disciplines operate to dispossess and harm Indigenous lands and peoples globally.

It is not that I wish psychologists any ill will. I have experienced psychological interventions first-hand and can attest that they do indeed encourage some positive outcomes. But these outcomes will always come at the cost of the continued dispossession of Indigenous peoples from our lands and bodies. What is of primary concern to me is that psychologists do not harm Indigenous and other marginalized peoples. This is why I choose proactive non-reliance grounded in Indigenous research and practices as an end goal. The dream of such textured non-reliance may take a long time to attain. However, I am hopeful that if there was a beginning to the disciplines causing harm in our communities as we know them today, then there will certainly be an end.

Future research in this area should look to explicate the manner in which resources are allocated through the diagnoses and research of psychological disciplines and sub-disciplines. So too, future work in I-CDS should seek to build on the works of Indigenous scholars in other fields for grounding, recognizing that many of the aims of I-CDS are addressed and shared with

research already carried out in other fields. With that in mind, work in I-CDS should be cognizant of the manner in which Western rationalism and the medical model of disability have co-opted the language of Disability Studies, and may appear transgressive on the surface while maintaining the aims of patriarchal white sovereignty on Indigenous lands nonetheless.

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## Appendix A: Glossary

### *Framework*

is used in this thesis to refer to the ways in which phenomena are understood through methodological commitments and worldviews. The *framing* of problems and phenomena through the lens of one's assumptions about the nature of the world, and how we know it.

### *Indigenous*

It is perhaps most accurate to define this term on a case-by-case basis with an eye to local contexts and histories. Peoples such as the Tsuut'ina, Métis, Māori, Kanaka Maoli, Saami, Yorta Yorta, and many others are included. Peoples such as Euro-Americans (without ties to peoples included as Indigenous here) or Euro-Canadians are not considered Indigenous in so far as they claim territories in North America.

However, as I use the term imperfectly here, I primarily use it to mean peoples who:

- a) share a sense of collectivity based in shared history and culture;
- b) claim an ontological relationship to territories and other peoples in the places they call home (see Chapter 2);
- c) and where the relationship in *b* is not dependent on colonization of the area in order to be maintained.

### *Method*

Refers to the ways in which research is carried out.

E.g., surveys.

See, Wilson (2008)

### *Methodology*

the ontological, epistemic, and axiological (ethical) commitments of a particular research project. Also discussed in this thesis as an underlying *worldview* of research and academic disciplines/fields specifically.

e.g., post-positivism

See, Wilson (2008)

### *Methodological Commitments*

Here, I use ‘commitments’ to refer the nature of methodology in research as primarily one of operationalization—i.e., not necessarily reflective of the personal worldview of the researchers (though certainly there is a possibility these overlap), but only of the research.

### *Settler*

A relational term which demarcates two kinds of people: a) those directly descended from European colonizers and who currently live in colonized lands, but have no other relationship to these same lands, and b) those who move to colonized lands through the institutions and processes dictated by other Settlers.

### *Settler States*

States created by Settlers on colonized lands. See the discussion of *Patriarchal White Sovereignty* in Chapter 2.

### *Worldview*

assumptions about the nature of the world and 'knowledge' adopted by individuals, communities, and societies as influenced by culture. *Methodology*, but with a different scope.