Introduction

Statistics are powerful persuaders. As systematically collected numerical facts, they do much more than summarize reality in numbers. They also interpret reality and influence the way we understand society. The researchers who create statistics leave their mark on them—not just because people are biased in overt or conscious ways, but also because social, cultural, economic, and political perspectives infuse the research data even when we think we are "just counting people."

Population statistics in particular are an evidentiary base that reflects *and* constructs particular visions considered important in and to the modern state. They map the very contours of the social world itself. They shape and thus create the accepted reality of things most of us think they merely describe. Population statistics also play a powerful part in defining a nation's concept of itself. They map national social and economic trends empirically: education levels; age and gender distributions; patterns of birth, morbidity and mortality; labor market figures; income dynamics; and many other phenomena. Via this mapping process they provide to the nation-state and its various populations a portrait of themselves. The social, cultural, and economic phenomena that are chosen for inclusion, and also those which are excluded, provide a reflection of the nation-state's changing social, cultural, and economic priorities and norms.

For example, up until the 1980s it was the norm in census questions relating to household structure in Western nations such as Australia, the United Kingdom, and the United States of America to categorize the male adult as the household head and the female adult as a dependent. Changes in the Western social norms around gender during the 1960s and 1970s led to changes in

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how household data were sought within the census. From the 1986 census, in Australia, for instance, any adult, male or female, in a household could be nominated as Person 1 on the census form (ASSDA n.d.). Likewise, in Canada changing definitions of the kinds of ethnicities that people could locate themselves in on the census played a role in the kinds of arguments they could make to government because they lacked "scientific" data to back up their claims.

For Indigenous peoples, especially in first world countries where population statistics powerfully influence governance and social services, these numbers have become a foundational lens through which we, as Indigenous people and peoples, become known to our respective nation-states and how we engage in many of our relationships with government actors. Statistics are used to describe our population profiles and geographical distribution, and, almost universally across the colonized first world, our lagging levels of educational achievement, labor market participation, health, and economic status. They are nation-states' chief tool for ascertaining and presenting the official "who," "what," "where," and "how" of Indigenous life. Often positioned as a subset of overall national social trends, these data are accepted as a straightforward, objective snapshot of an underlying reality. As such, they have also become the backbone for the creation and implementation of social policy for Indigenous peoples.

Australian census data on homelessness, for example, with their pattern of heavy over-representation of Indigenous peoples recorded among the homeless, influence government homelessness policy shape and program function (ISSR 2012). In Canada, census data are used to produce the formulas with which the Canadian government and various Aboriginal organizations calculate funding for Canada's Aboriginal employment and training programs and, increasingly, for post-secondary education for certain classifications of Aboriginal students (HRSDC 2004). In the United States, Census Bureau reports on where and how Native Americans live are a key factor in policy decisions on how best to deliver social services (Fonseca 2012).

In a very real sense, statistics also increasingly frame Indigenous understandings. As we invest ourselves and our communities in their categories, we increasingly use statistics to help us tell *ourselves* who we are. For example, the data collected by the United States Census Bureau that enumerate Native American and Alaska Native populations are used by tribal groups to plan the infrastructure needed to meet tribal government responsibilities (Census Bureau 2012). Equally importantly, however, members of these populations recognize ourselves *empirically* in these depictions. In Australia, for example, population data appear to confirm not only that Aboriginal and Torres Strait Islander peoples are growing as a proportion of the overall population, but also that we are increasingly urban (AIHW 2011a). Likewise, in Canada statistics have been used by Indigenous political leaders to document the long-standing gaps in our respective qualities of life. Statistics, therefore, do not

just describe reality—they create it. In doing so, they not only influence how the phenomena they describe are understood, they also shape their accepted explanations.

Three Premises

This book is based on three central premises that we will preface here. These premises that speak to issues regarding the cultural framework of Indigenous statistics, the methodologies that produce them, and understanding academia as a situated activity. Though we discuss them throughout the book, we would nonetheless like to preface them here.

The Cultural Framework of Indigenous Statistics

The first premise is that the quantitative methodologies that guide the collection, analysis, and interpretation of data about Indigenous peoples both reflect and constitute, in ways largely invisible to their producers and users, the dominant cultural framework of the nation-state within which they (that is, statistics) operate. Although the statistical depictions used to summarize the social complexity of Indigenous communities (all communities, for that matter) are neither natural nor normal, the cultural weight and power of statistical techniques and the numerical summaries they generate speak a "truth" about the communities on which they shine their statistical light. But the way that they shine that light pushes out other ways of conceiving about and acting upon those communities. In a straightforward Foucauldian sense, statistics—and official statistics in particular—operate as a powerful truth claim in most modern societies.

How does this apply to Indigenous peoples in particular? At the risk of belaboring this point, we argue that rather than representing neutral numerics, quantitative data play a powerful role in *constituting* reality through their underpinning methodologies by virtue of the social, cultural, and racial terrain in which they are conceived, collected, analysed, and interpreted. For Indigenous peoples in first world nations in particular (for reasons we discuss later), population statistics operate as a primary vehicle for majority non-Indigenous understandings of the minority Indigene in their midst (and for that matter, within Indigenous communities as well). As Māori scholar Tahu Kukutai (2011: 47) states, within the world of data, Indigenous populations are "statistical creations based on aggregated individual-level data, rather than 'real world' concrete groups."

Nonetheless, Indigenous statistics still define our relationship with our respective nation-states as though they constituted real things. The epistemological gap erased in failing to differentiate between social relations and

the statistics that draw estimates about them has effectively constituted the public Indigene in ways that, more often than not, are comparatively pejorative, tending toward a documentation of difference, deficit, and dysfunction. Of course, very real and enduring problems *do* get reflected in statistics, but the major failing of current statistical methodologies is that they tend to *only* understand us according to these terms. Not only are Indigenous peoples constituted as "the problem," non-Indigenous ways of life are left uncritiqued, despite the fact that in many cases current consumer lifestyles are environmentally unsustainable (to provide one example of many).

Methodologies Produce Indigenous Statistics

The book's second premise is that we need to differentiate between *methods* and *methodologies*. We argue that it is the methodologies within which data are collected, analysed, and interpreted that shape the picture that the statistics produce, rather than the research method of statistical analysis itself. Methodology is the active element in constituting the portrait of the realities that statistical techniques eventually create; it determines why and how particular research questions are asked (and why others are not); how, when, and where the data are gathered; how they are explored; and how the resulting data are interpreted and, significantly, eventually used. With statistics at the base of most comparative analyses of social relations, for researchers in any discipline, qualitative or quantitative, understanding how statistics are created and deployed—in everything from social service delivery and governance to cultural affairs and personal identity—is crucial to being able to understand them as social constructions and, therefore, to being able to fashion alternatives.

Academic Research Is a Situated Activity

The book's third and final premise—written in the spirit of emphasizing what Indigenous qualitative and quantitative methods share in common—is that we need to be more cognizant of the translative processes through which non-academic knowledge is translated into the academy. In other words, while many qualitative researchers (Indigenous or otherwise) position their work as anathema to statistical research, we both remain invested in the sets of power relations specific to the academy. Therefore, when Indigenous qualitative researchers speak to the importance of cultural markers without accounting for the particular forms of translation or refraction that occur—*must* occur—for their use in academic scholarship, they elide important conversations about the differences between "community" and "academic" knowledge. Equally, quantitative resources who fail to attend to these differences make the same mistake.

By emphasizing the underlying similarity of qualitative and quantitative academic knowledge, we are not suggesting that real differences do not exist. It is thus probably useful to lay out what we see as the key differences. For us, *qualitative* methodologies tend to focus on small or localized objectives and to examine them more deeply, analysing subjective experiences with a level of contextualization and depth, often over a long period of time. The point of qualitative methodologies is to situate the objects of analysis (a term not often used in qualitative research) in terms of the subjective feelings of their participants. In sociology, for example, qualitative methods are associated with the ground-breaking work of feminist scholars who attempted to demonstrate how contemporaneous male-dominated statistical research tended to cut out women's voices from the statistical "truths" they created. Likewise, many of the categories used to collect the data reflected male understandings (see Firestone 1972; Ortner 1974; Pateman 1991).

Quantitative research, in contrast, tends toward the numerical. Probably the most important element of this methodology is that it *abstracts*. That is, these methodologies allow researchers to draw information from local context, standardize it, and, removing it from context, deliver it to a central point of calculation (Curtis 2001: 31). Quantitative methodologies facilitate standardization and render information specific to local social relations both mobile and combinable. In this way, what is seen as the "messiness" of local context can be removed, ordered, scaled, compared, and rearranged as required by researchers (2001: 31). This reordering and rescaling is used to draw conclusions about larger numbers of people and broader sets of social relations (like "the city," "the nation," "the Western world," or, in this case, "the Indigenous population"). It is the issue of abstraction that appears to cause the most consternation among qualitative researchers, who suggest that this philosophical orientation tends to miss the complexity of our social relations in pursuit of broad macro-level patterns, tendencies, and summaries. It also seems to downplay the importance of "place," central to many expressions of Indigeneity.

As one of this book's reviewers rightly pointed out, quantitative methodologies are far broader than the specific subset we use in this book: official statistics. From a methodological point of view, censuses are distinctive among quantitative data in that they do not require methodological discussions (or methods) about *sampling*. Likewise, they need not worry in the same way about issues of *representation*—that is, the idea that a sample is generalizable to a broader population. By definition, populations are not representative[1]—they constitute the broader "group" that a representative sample would wish to speak on behalf of. In this book we focus specifically on issues of population and large scale survey data because, although quantitative samples carry their own forms of legitimacy,

census estimates and national surveys carry far and away the greatest weight when it comes to talking about empirical depictions of Indigenous qualities-of-life and the forms of social policy that engage with their findings.

Indigeneity and the Statistical Lens

We can immediately understand why Indigenous peoples in general, Indigenous scholars in particular, and those using qualitative methodologies would view quantitative methodologies with suspicion. Especially in the context of official data like those found in the census and other government databases, historical data collectors often had only the barest relationships with those whose information they collected. Moreover, government taxonomies tended to reflect the times they were constructed in such that official classifications had little to do with the highly contextual collective self-understandings of Indigenous peoples themselves. For example, in his discussion of historical state construction in South Asia, Benedict Anderson argued that "it is extremely unlikely that… more than a tiny fraction of those categorized and subcategorized would have recognized themselves under [state] labels. These 'identities', imagined by the (confusedly) classifying mind of the colonial state, still awaited the reification which imperial administrative penetration would soon make possible" (Anderson 1991: 165).

Anderson's (1991) point that official classifications reflect(ed) administrative desires rather than on-the-ground realities—despite their power to render such categories "real"—has obvious links to Foucault's concept of *discourse* as practices (seemingly in a way slightly different than pointed out earlier) that do not describe objects but rather "constitute them and in doing so conceal their own invention" (1972: 49). We note, too, a broad "governmentality" literature that explores the links between governance, identity, and statistics (see Barry et al. 1996; Burshell et al. 2001; Curtis 2001; Dean 2010; Rose 1999: ch. 6). In particular, Foucault and others have argued that statistics represented a central technology through which social relations were rendered "governable." Foucault (1991) fundamentally predicated the birth and legitimacy of modern, liberal forms of power on the calculated production of standardized knowledge useful for administrative intervention into a new object of governance: "the population."

In this context, statistics have come to play a central role. Coterminous with the growth of "bio-power," Foucault (1991) differentiated between what he termed an "art of government" geared towards intervening upon and regulating the citizenry as a whole ("the population") and the "micro-power" of discipline which acts upon individual bodies. Statistics were thought central to the practice of liberalism, which we broadly conceive as including a concern with limiting the exercise of formal state power while

developing the capacities of liberty among that power's citizens. In this sense, "population" was thought to represent naturally occurring phenomena that possessed their own autonomy and internally produced regularities (Burshell 1991: 126; Foucault 1991).

Importantly, in avoiding the risks inherent in over-governing, population-based statistics allowed liberal government authorities to respect the natural autonomy of certain "private zones," like market economies and civil society (Rose 1999: 49), while concomitantly shaping the activities within those zones according to certain objectives: "good government depended on the well-being of these domains; hence political authorities simultaneously acquired the obligation to foster self-organizing capacities of those natural spheres" (Rose 1999: 49). Liberal government was ultimately about how to best make efficient use of the natural capacities of populations and their members without over-interfering (see Foucault 1991). Hindess (2001, 2004, 2008) notes, however, that while early liberal thought focused on how best to govern in ways that guaranteed the liberty of those being governed, these rationalities presupposed a certain capacity to benefit from and contribute to that liberty. Using Adam Smith's discussion of market economies as an example, Hindess explains how collective interactions in the market were seen to foster, in an internal and self-regulated manner, values of prudence, autonomy, and self-direction. While these figured centrally in the reproduction of a "civilized" society, they necessarily presupposed individuals endowed with the *capacity* for such prudence, autonomy, and self-direction. In other words, only certain subjects were endowed with the capacity to benefit from the kind of liberalism that population-based governance helped bring about and then shepherd.

Hindess (2004) offers a second key insight: liberalism's authoritarian elements (what he terms its "unfreedom") cannot be understood as contradictory or aberrational to an otherwise enlightened form of rule. Rather, they speak centrally to its *developmentally based* notion of human capacity: government works best by making use of these capacities, and, as such, liberal authority required the discretion "to distinguish between what can be governed through the promotion of liberty and what must be governed in other ways" (Hindess 2004: 28). Perhaps unsurprisingly, early liberal theorists positioned Western civilization, with its form of civil society and exchange-based market economy, as most likely to foster the natural capacities of liberal subjects. As such, it was thought to represent the apex of civilized society.

Presupposing the capacity of subjects to bear (certain forms of) liberty enabled liberal authorities to confidently distinguish between populations suitable for liberal rule and those requiring more authoritarian forms of governance. Certain "non-liberal" populations were thought unable to produce the capacity required to be ruled according to liberal ideals. Both preferable and necessary

to liberal rule in certain cases, authoritarian rule was thought to ensure the steady advancement of colonial locales and populations towards the European/metropolitan norms of civilization: "Despotism…is a legitimate mode of government in dealing with barbarians, provided the end be their improvement" (J. S. Mill, in Li 2007: 14). Far from representing an irony or a contradiction of liberalism, then, authoritarianism constituted a necessary colonial potentiality, and Indigenous nations and communities were often the main targets of these forms of authoritative intervention.

Colonial authoritarianism represented a key plank in the global practice of liberalism, but that doesn't tell us much about what it looked like in practice. In his discussion of "colonial governmentality," Scott (1995: 196) critiques the imprecision of Partha Chatterjee's (1993) famous characterization of colonial power as rooted in a "rule of difference." Chatterjee argued that classifying differences marked a dividing line in the colonial dialectic of dominance and subservience, civilized and savage, self and other (also see McClintock 1995; Said 1978, 1993). While sympathetic to Chatterjee's analysis, Scott argued that even if the *fact* of this rule of exclusion generally holds true across time and space, it tells us nothing about the *form* it takes. Scott asked instead: "What are the specific power-effects of race? How was it inserted into subject-constituting practices, into the formation of certain kinds of "raced" subjectivities?" (1995: 196). In this sense, important—and more precise—questions emerge regarding who was targeted, how they were targeted, what effects or outcomes were prescribed, and what practicalities eventually emerged. Statistics played a central role in making these historical determinations, just as they continue to resonate in powerful ways today.

Despite its theoretical density, governmentality literature is thus useful for thinking about statistics as something other than neutrally describing artifacts. They hold real power to help constitute a social world that most of us more or less take for granted, and this is probably particularly the case in the context of communities that do not hold the power to produce their own statistical counter-realities, as is the case in most Indigenous communities. As the weight of statistical representations and the massive amount of policy reports and academic scholarship which make use of them begin to pile up, the sheer volume of the work tends to stand in for the more complex realities that sit beneath it. In an Indigenous context, in the hands of state actors and scholars with little practical knowledge about the peoples their statistics analyze, these reports have produced very narrow but largely accepted lenses through which most people think about and "understand" Indigenous peoples today.

Using the idea of a lens to think about statistical issues may seem slightly strange. In fact, it is surprisingly apt. Many of us who have gone to see an optometrist or an ophthalmologist for an eye examination have heard the refrain "better,

or worse?" as he or she attempted to calculate our sight deficiencies. This process helps them determine the correct eyeglass prescription. Unlike eyeglasses, there is no external standard to which populations can be submitted to determine if they are "true, or not true." Nonetheless, in a very real way censuses operate as a kind of lens through which we look at the social world. Different questions, different enumerators, different enumeratees—each shapes, in a metaphorical way, the kind of lens through which we look at the world. Thus, like eyeglass lenses, censuses do not simply reflect the social world: they refract it.

In addition to understanding the power of statistics for shaping the social world and its role in how governing takes place in nation-states, this book is also rooted in a second set of theoretical precepts. Indebted to the work of Foucault's contemporary Pierre Bourdieu, the discourse we refer to throughout the following chapters emerges from the dominant *habitus* of producers and users of statistical data peculiar to first world colonized nations, such as the United States, Canada, Australia, or Aotearoa New Zealand. Habitus, as Bourdieu (1984) explains, is the coalescence of our social dispositions: the set of beliefs, attitudes, skills, and practices possessed and employed by individuals in their daily life. Our dispositions are shaped by our position in three dimensional social space, a position delineated by our social, cultural, and economic capital positioning. As argued elsewhere (see Walter 2010c), we add race as a fourth dimension of social space, and in settler states in particular, perceive Indigeneity or settler majority origins as a central aspect of a society's race capital continuum. Our habitus not only shapes our worldview but also our life chances, and while we act as individuals, our life trajectories and our dispositions are likely similar to others with a similar habitus.

Most critical for our purpose is Bourdieu's (1984) argument that an individual's habitus is not a set of attributes and attitudes that is consciously worked out. Rather, it directs action largely unconsciously through beliefs that, while internalized, are nonetheless derived from external social forces. Thus, the social practices engendered by a particular habitus appear to the individuals involved in those social practices to be natural and normal, as "just the way things are." In Bourdieu's words, they possess a "synthetic unity" (1984: 173). Our central argument, therefore, is that the colonial habitus of the settler majority (who are the primary producers and users of Indigenous statistics) shapes the dominant quantitative methodological practices in these countries and that this habitus constitutes Indigenous statistics in a particular way. Equally importantly, we claim that as Indigenous policy actors and others become increasingly *invested* in statistical categories, the categories become naturalized by nearly all who make use of them. As Bourdieu might phrase it, they lose the forest for the trees.

It is in this way that dominant methodologies emerge from the dominant cultural framework of the society of their instigators and users. The quantitative

methodologies predominantly used within nation-states that have colonized Indigenous peoples, therefore, are those of the colonizer. This is not meant as a depreciatory statement but, rather, as a simple fact. All quantitative methodologies are historical, cultural, and racial artifacts—they cannot be otherwise. A key concern of this book, therefore, is to demonstrate that it is not possible to differentiate an Indigenous quantitative methodology without first delineating the predominant methodology with which the Indigenous quantitative methodologies will be compared and contrasted.

Current mainstream statistical methodologies also largely fail to provide a vehicle for Indigenous peoples to understand, portray, and constitute ourselves statistically. This is not to argue that current statistical data that focus on Indigenous issues are inaccurate or worthless. Statistical techniques are not only important research methods, they are methods that require considerable expertise and long hours of analysis to achieve rigorous results. Rather, our argument is that many of these data, as they currently exist, tend to constitute Indigenous peoples as *deficient* and that these portrayals can, and do, restrict and inhibit other ways of understanding or using statistical data by, and for, Indigenous peoples. The other concern of this book, therefore, is to define, conceptualize, and operationalize Indigenous quantitative methodologies in ways that stimulate the imagining of quantitative research that operates within, and reflects, Indigenous historical, cultural, and racial methodological values, priorities, and frameworks. Our aim is to support the construction of alternative Indigenous statistical portraits and narratives, ones that accord with Indigenous worldviews and interests. Moreover, and perhaps more controversially, we will demonstrate that quantitative methodologies reflect aspects of our contemporary selves every bit as Indigenous as those of qualitative methodologies.

In these contexts, the book proceeds according to two questions:

1. How can quantitative research methods be integrated into an Indigenous methodological frame?
2. What would such quantitative research look like in practice—how would it differ from "business as usual"?

The Structure of Our Book

It should be clear to readers that the straightforward adoption of standard quantitative methodological practice by Indigenous researchers is not in itself enough to constitute an Indigenous quantitative framework. An Indigenous researcher undertaking quantitative research does not by any measure translate into Indigenous quantitative methodological practice. Rather, as we argue in more detail in the coming chapters, Indigenous quantitative research is in essence quantitative research framed and developed from an Indigenous

socially positioned, epistemological, ontological, and axiological perspective (see Moreton-Robinson and Walter 2010). This is not as simple as: "add Indigeneity and stir." Rather, approaching quantitative research from an Indigenous frame is a methodologically transformative process that acknowledges *all* of our (Indigenous and non-) central presence in contemporary global modernity and does not assume that a movement *toward* modernity necessarily means a move *away* from Indigeneity.

This book articulates this process and this presence. To our knowledge this is the only book that takes Indigenous quantitative methodologies as its subject. It is also one of the few writings in the broader field of Indigenous methodologies to move beyond what Indigenous methodologies are to how they are actually practiced. Our purpose is to provide a directly applicable resource for researchers, one that includes, but reaches beyond, theorizing philosophy and underpinning methodological and paradigmatic principles to conceptually and pragmatically map Indigenous research quantitative methodology practices and processes.

We start in the next chapter by demonstrating how dominant quantitative methodologies fail Indigenous peoples and their nation-states. Narrow and pejorative delineations of Indigenous peoples play a key role in perpetuating the colonizing framework in first world nations. In Chapter 2 we do what most research books do not: we define and conceptualize methodology as a critical prerequisite of our articulation of an Indigenous quantitative methodological frame. In Chapter 3 we begin the process of conceptualizing an Indigenous quantitative methodology by exploring and setting the parameters of this paradigm. Here we argue for an accounting of modernity within first world Indigenous methodologies; we also argue against positioning Indigenous methodology dichotomously in opposition to Western frames and against grounding it in a concept of traditional knowledge and culture "outside of modernity."

Following this, Chapters 4 and 5 operationalize Indigenous quantitative methodology using case studies drawn from actual research conducted by the authors. Chapter 4 demonstrates *nayri kati*, an Australian-based Indigenous quantitative methodology, and in Chapter 5 Indigenous quantitative methodological practice is operationalized in a Canadian context. In the final chapter we argue the urgent case for a greater take up of quantitative research by Indigenous researchers and scholars and our allies around the globe.

Indigenous Peoples in this Book

Given the diversity of Indigenous peoples, the United Nations Permanent Forum on Indigenous Issues (UNPFII) declines to adopt an official definition of Indigenous. Instead, the body proposes a "modern understanding of this term based on the following: self-identification as indigenous peoples at the individual

level and accepted by the community as their member; historical continuity with pre-colonial and/or pre-settler societies; strong link to territories and surrounding natural resources; distinct social, economic or political systems; distinct language, culture and beliefs; form non-dominant groups of society; resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities" (UNPFII n.d.).

This non-definition has led to the frequent use, by those wishing to define Indigenous peoples (see Axelsson and Skold 2011 for example), of the 1987 working definition formulated by Jose R. Martinez Cobo (at the time a UN special rapporteur):

> Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system. (1987: Add 4, paras 379 and 381)

We accept the central premises of the UNPFII's criteria and Martinez Cobo's definition, but this book is written primarily in reference to the subgroup of Indigenous peoples whose own nations have been subsumed through colonization into Western first world nation-states because we believe that the liberalism which shapes these governing rhetorics requires a particular relationship with population statistics not (as) present in other global contexts (see Rose 1999: ch. 6). These Indigenous peoples fit also within with Dyck's (1985) definition of fourth world peoples as those who:

- are Indigenous to the lands that form the nation state;
- have had their sovereignty and territory appropriated by settler colonialism;
- are economically and politically marginalized;
- have their Indigenous culture stigmatized by the dominant culture;
- are struggling for social justice and for a right to self-determination and control over their traditional lands and resources; and
- constitute a tiny minority of the population of a nation, contributing to their political powerlessness.

Australian Aboriginal and Torres Strait Islanders, American Indians, Canadian Aboriginals, Māori, Inuit and Sami, Native Hawaiians, some peoples from Pacific Islands and some Arctic peoples—among others—fit these criteria.

In this text, however, we use the term "colonized first world Indigenous peoples" because of the centrality of the shared colonized histories and contemporary social, economic, and political positioning of Indigenous peoples living in Western colonized first world nations and how the dominant quantitative methodologies currently position these peoples. Of course, we believe that our analysis and methodologies are useful to other Indigenous peoples. But because methodologies cannot be conceptualized or operationalized in isolation from an understanding of their historical, cultural, and racial antecedents, we are careful not to assume that our analysis applies wholesale to the vast diversity of Indigenous peoples outside of our own personal and research experience. "Indigenous" is an umbrella term; it encompasses many different peoples living in many different nation-states, and many different social, political, and cultural circumstances. Thus, our term, colonized first world Indigenous peoples, is a useful heuristic that recognizes certain shared characteristics, but we still recognize diversity of peoples within this category, as well as connections and continuities with peoples outside this category.

Likewise, we emphasize, with many qualitative Indigenous methodology scholars, the importance of "place" to situating Indigeneity (see Battiste and Henderson 2000; Deloria and Wildcat 2001; Evans et al. forthcoming; Hart 2010; Kovach 2009). The otherwise legitimate emphasis on place has, however, marginalized what we see as two important contextual elements. First, "place" is itself always contextual and always a matter of scale—for example, we might take a local Indigenous settlement as an example of place that holds deep ceremonial meaning to those who live or are from there. However, Indigenous places are also, in many cases, "large." Whether we're talking about urban Aboriginal communities—remember, almost *all* cities were Indigenous spaces first—or about larger rural locales, statistical methods are in many cases more suitable to the research issues we seek answers to.

Second, Indigenous peoples are *modern* and we are heavily invested in that modernity. We will have more to say about this issue in later chapters, but here we want to flag the fact that many of the abstractions that some might think sit in opposition to Indigenous methodologies—often exemplified in government administrative categories of Indigeneity, for example—are already abstractions that we recognize our selves in, both singularly and collectively. This investment is a necessary evil of living in modern nation-states, what Métis scholar Paul Chartrand (1991) has termed our "captor nations." Therefore, to suggest that the kinds of abstractions that statisticians (must) engage in are innately anti-Indigenous is to ignore the extent to which we have already legitimized them in our daily lives.

We have written this book using primarily Australian and Canadian examples because it is in these places that our scholarship and Indigeneity

are grounded. From time to time we make use of examples from Hawaii, the rest of the United States, and Aotearoa New Zealand, but we remain mindful that we do not have scholarly expertise nor the Indigenous understandings to legitimately center these places in our arguments. Nonetheless, presenting Canadian and Australian Indigenous realities provides a powerful proxy for other colonized first world nations. Indigenous Australia and Canada are geographically on different continents; and the heritage, culture, and traditions of our various peoples have no common Indigenous antecedents. As detailed above, however, what we share is the governing rationalities of our colonizers, and it is this that shapes our contemporaneous similarity. Our argument is, thus, that if Indigenous peoples as diverse as those from Canada and Australia share Indigenous quantitative methodological commonalities, then it is highly likely that other Colonized First World Indigenous peoples will also in ways that, if not identical, are analogous.

Conclusion: Take the Indigenous Quantitative Journey

As a final introductory word we want to emphasize that our book is not intended to be for the exclusive use of Indigenous researchers. Indigenous quantitative methodologies are open to all who wish to undertake research. Indeed, understanding and observing how we rearticulate, reframe, redefine, redesign, and re-practice quantitative methodologies within Indigenous worldviews may prove revelatory for *all* quantitative practitioners, Indigenous and non-Indigenous alike. The journey is not, however, without its challenges. In reading this book you are entering Indigenous statistical space, whether as a new researcher or as a long-standing ally. Some non-Indigenous researchers in particular may feel unsettled by entering such a "raced" space where you are the subject of, rather than the definer of, how racial categories are statistically explored. Unconsciousness of dominant cultural, social, and racial norms can make turning the analytical lens 180 degrees away from its examination of the 'other' to being examined as the 'other' threatening. But it is also liberating. We welcome and encourage you to take the journey with us.

Note

1 This issue is actually more complicated than this. As internal demography debates make clear, different standards exist for more or less trustworthy analyses of population data.