Indigenous research sovereignties: Sparking the deeper conversations we need

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Abstract
This editors' introduction seeks to spark a conversation and further debate through the 14 papers and 3 commentaries comprising this special issue entitled "Indigenous Research Sovereignty." By inviting the authors to publish in this special edition and address Indigenous Research Sovereignty from a variety of viewpoints, we have brought together a collection that inspires, transforms, and expands on the ways in which Indigenous and non-Indigenous researchers are engaging with Indigenous communities to address the research agendas of communities across the globe. Through our work together over the past 8 years, the editorial team have identified eight themes within this broad concept of Indigenous Research Sovereignty. This article provides an introduction to those eight themes in the broadest strokes, while the papers and commentaries explore and refine them with significant depth. We seek to spark a conversation, we do not intend to provide answers to any of the dilemma facing Indigenous communities as they engage, or choose not to engage, in research. Our primary goal is to express an all-encompassing concern for the protection of Indigenous Communities' inherent rights and knowledges.

Keywords
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Over the past 8 years, a diverse group of Indigenous scholars have been working on a variety of topics related to research needs of Indigenous communities facing rapid environmental change. This research and network development has been supported by three US National Science Foundation grants, most recently a Research Coordination Network grant entitled, Facilitating Indigenous Research, Science, and Technology (FIRST). The work of the FIRST Network has been to engage Indigenous environmental scholars from a variety of fields, building connections through intentional listening, learning, and by sharing the stories of communities in order to find "common ground" upon which to bridge Western and Indigenous sciences. The underlying goal of the Network is to move forward an agenda of stewarding resilient communities and landscapes.

In her germinal work, *Decolonizing Methodologies*, Linda Tuhiwai Smith (1999: 1) describes the problematic relationship many Indigenous communities have with research: "the word itself, 'research,' is probably one of the dirtiest . . . in the Indigenous . . . vocabulary. When mentioned in many Indigenous contexts, it stirs . . . silence, it conjures up bad memories, it raises a smile that is knowing and distrustful." Overcoming this long-standing distrust of "research" has been the effort not only of Smith, but of a long list of Indigenous and non-Indigenous academics who endeavor to decolonize not only the associated principles, protocols, and practices of science, but the ontological frame that policies academic research (Chilisa, 2019; Kovach, 2010; Wilson, 2008). Increasingly, Indigenous environmentalists and geographers are calling for Indigenous leadership in research activity to meet the environmental, social, and health research needs of communities (Coombes et al., 2014; Hunt, 2014; Louis, 2007). However, taking leadership in the research enterprise requires more than merely addressing research methods. It means asserting Indigenous sovereignty over *all* aspects of the process. We have identified eight areas related to asserting sovereignty over the research process: setting the agenda, relationship building, cultural protocols, research permitting, practices and methods, data sovereignty, and evaluation and dissemination. Through this double special issue of *Environmental & Planning: F*, we are initiating a dialogue with scholars from across the globe who have joined us in articulating how Indigenous communities can take a greater role in governing research in order to perpetuate our shared responsibilities to steward landscapes and communities toward balance and resilience.

For this reason, we begin by describing the eight areas of Indigenous Research Sovereignty we have identified through our work together. Whether or not these eight areas, or our descriptions, resonate with others only time and subsequent publications will tell. Some of the papers submitted for this theme issue of *Environment and Planning F* have already redefined our initial understandings and, undoubtedly, readers will seek to explore and expand them further. As we describe the areas around which we are defining Indigenous Research Sovereignty, we weave in brief introductions to the papers, placed within their context. At the end of this themed issue, you'll also find three commentaries that seek to highlight an area within our work, or that connects this work to previous publications and those within the special edition. These commentaries explore aspects of research sovereignty from unique angles, furthering our understanding and expanding the ways in which we pursue an honorable research engagement and harvest of data (see Nelson, 2023).

Setting the agenda

Asserting Indigenous sovereignty over research must begin with communities identifying and setting the agenda for themselves. Agenda setting often develops from clearly identified needs related to environmental and community health. It's important to remember that, "Indigenous peoples have been employing systematic methods for learning and teaching about the natural world for thousands of years, sometimes utilizing techniques familiar to us today and sometimes not," (Johnson et al., 2014: 13). Whether or not we call this systematic engagement with the natural world "science," it was consistently guided by a desire to achieve balance between humans and our non-human relations. This reciprocal appropriation guided every protocol and practice (Brewer and

Johnson, 2023). Research was predicated upon understanding the relationships between relatives and perceiving the place-based struggles of co-existence (Larsen and Johnson, 2017). By setting the agenda, we seek to explore how tribal lifeways assist in establishing research foci based upon a contemporary desire to achieve a relational balance with the world around us. Reestablishing this balance may center around a community's desire to protect its members' mental and physical health, guarding the well-being of our treasured relatives, or protecting the freshwater necessary to carry all life.

Establishing an Indigenous and community-based research agenda is not a new concept. It's been articulated by authors in various forms over the past two decades (Hikuroa, 2017; Smith, 1999; Wilson, 2008). Any effort by Indigenous communities to control research within their communities, or that impacts their treasured relatives, first requires stating and establishing an agenda. What is important to our community? What is it that we want to learn and how do we envision that research proceeding? In keeping with previous work from Aotearoa/New Zealand, Te Kahuratai Painting et al. (2023) outline how Kaupapa Māori Science is being utilized in setting the research agenda in order to engage Māori environmental knowledge within geographic information systems. Lorinda Riley et al. (2023) outlines how the tenure process impacts Indigenous scholars in the North American system, documenting how this dated and racist system forces Indigenous academics to frequently choose between community engaged scholarship and an academic career.

Relationship building

Relationship building for researchers working with Indigenous peoples means developing thoughtful dialogue and trust between the community and the researcher(s). Māori scholar Russell Bishop (1995) refers to relationship building as a process of becoming aware and familiar with Indigenous community values, protocols, and visions. Likewise, it's important for communities to become familiar with a researcher's intent, goals, objectives, and knowledge. In association with the researcher's intent is the researchers predisposition to research in general and their preparation to conduct research alongside Indigenous peoples and communities. Relationship building takes time, a commodity not readily available in the contemporary academic environment (Castleden et al., 2012). Varying cultural conceptions of time, as may be found within Indigenous communities, is not typically a part of the training afforded researchers in Western institutions. Perhaps the most important linkage connecting researchers with a community is trust building. Trust building is place-based, requiring both researchers and communities to come together with good intentions, investing themselves into the messy coexistence of "being together in place" (Larsen and Johnson, 2017). While emotionally taxing on both sides, trust building can lead to the formation of close friendship bonds, long-lasting research collaborations, and the co-construction of knowledge. Within this on-going research relationship, the community and researcher may develop the trust required for knowledge production and reciprocity.

Two articles in this special edition specifically address the importance of relationship building for research ventures to serve as a "multi-vocal initiative" that brings together multiple viewpoints. Smith et al. (2023), identify the importance of relationship building to enable "two-eyed seeing" in order to restore environmental harms. Nicole Latulippe et al. (2023), remind us of the importance of building relationships not only with the human community, but primarily with and through Place and Ambtman-Smith et al. (2023) describe their efforts for relationship building through Indigenous-led training environments.

Cultural protocols

Indigenous peoples have their own worldviews and lifeways that are expressed and governed through different types of cultural protocols born from prolonged experiences and observations in their homelands (Cajete, 2000). These ethical principles guide and regulate behavior in different contexts. Often

referred to as customs, practices, values, beliefs, or behaviors, it is intended to demonstrate the way to create and maintain positive inclusive relationships within the human community and with our non-human relatives. As Johnson et al. (2014) observe, "Protocols cannot just satisfy a purely intellectual argument of sustaining resiliency for prolonged human consumption; it must also uphold ethical principles with a biocentric perspective" (p. 19). Whenever the topic of research comes up in Indigenous communities, one of the first questions to arise is "will the researcher respect our cultural protocols?" This is an essential question in Indigenous research and must be addressed early in the relationship building process. Understanding and respecting different Indigenous protocols is vital to productive and reciprocal research processes and is intimately linked to relationship building and engendering trust. This can seem to some researchers trained in a Western ideology like an additional burden in an already burdensome process. Western institutions already take steps to protect human subjects, and engaging with Indigenous community protocols may seem like an unnecessary added step. Frankly, it is an additional step, it can be time consuming, but Western institutions' human subjects permitting primarily protects the liability of the institution, not Indigenous knowledge or knowledge holders.

While no articles in this special edition address this topic predominantly, many of them address the need for establishing, understanding, and respecting cultural protocols in order for successful research relationships to be developed.

Research permitting

Since World War II, concerns over the protection of human subjects in research have been increasingly codified through international instruments such as the Nuremberg Code (1947), and by national statutes such as the US Common Rule, last revised in 2018. Crucially, these codes are geared toward ensuring the protection of human subjects in medical and social research through the work of institutional review boards. Increasingly, tribal communities are instituting their own review boards to ensure not only the protection of community members in the research process, but also that community interests and protocols are incorporated into approved research projects (Brugge and Missaghian, 2006; Kuhn et al., 2020). Beyond approvals and protocols, important questions are being asked by communities and Elders councils that force us to think about the life span of the research and collected data after the research is completed. That is, can the data that's been "harvested" and the research that has been written come back to harm the community, in any way? While not every Indigenous community has developed a research permitting process, some of those that have, incorporate elders into their review boards to bring tribal representation to the forefront (Louis, 2020).

Two articles within this special edition provide a detailed description of the process their team utilized in developing a research project with tribal partners. Murveit et al. (2023), describe how multiple university partners work with the Karuk Tribe to produce cultural fire-based research that is led by, permitted, and utilizes the protocols of the tribal partner. Dunaway et al. (2023) describe and this process with an international team conducting research with partners the Penan.

Practices and methods

Since time immemorial, Indigenous peoples have employed a variety of practices and methods for learning and gaining knowledge from the world, whether that be from individual elders and knowledge keepers, particular clans or societies, or non-human relatives and landscapes. Indigenous peoples have also used trans-rational ways of knowing such as dreaming, singing, art-making, or other forms of embodied observation and participation, to gain knowledge or "conduct research." As Cree ethicist Willie Ermine (1995) notes, Indigenous peoples look not just to outer space, or the physical

world, but to inner space, the metaphysical, as an important realm of knowledge. The oppression of Indigenous ways of knowing and the hegemony of Western "objective" forms of knowledge have created devastating consequences for Indigenous peoples, other marginalized peoples, and most importantly, the Earth. Scholars, students, and community researchers today often weave together Indigenous and Western methods that are agile or inclusive enough to seek knowledge through innovative practices that highlight Indigenous values and knowledge systems.

Since the publication of *Decolonizing Methodologies*, a significant focus within Indigenous research circles has been centered on methodological aspects of the research venture (Chilisa, 2019; Kovach, 2010; Wilson, 2008). More recently though, the focus has shifted toward identifying and evaluating the efficacy of specific research methods within Indigenous led and partnered research (Drawson et al., 2017; Windchief and San Pedro, 2019). Within this thematic issue, four articles and one of the commentaries seek to address the practices and methods aspect of research sovereignty (Arnold et al., 2023; Awasis, 2023; Forster, 2023; Lee et al., 2023; Louis, 2023). We encourage more researchers to write about and report on the implementation of specific methods within their research projects with Indigenous communities.

Data sovereignty

As the US Indigenous Data Sovereignty Network (Rainie Carroll et al., 2017) asserts, "Indigenous data sovereignty is the right of Native nations to govern the collection, ownership, and application of its own data." As data are collected on and about Indigenous communities without their consent or oversight, a troubling amount of sensitive information is being published by researchers. Unfortunately, as geographers we frequently see examples of private data from tribal communities being mapped in journal publications, sometimes naïvely and sometimes even knowingly. Today, the ancestral remains of countless Indigenous Peoples and their cultural hegemony remain housed in numerous US museums over 30 years after the Native American Graves and Protection Act was passed into law in 1990. Unfortunately, it's not uncommon to read in a published document the latitude and longitudinal locations of Indigenous People's graves and sacred sites. We wonder though why this unethical and illegal breach of Indigenous data is still allowed by academic institutions and publishers? As Melissa Nelson (2023) outlines in her commentary, data from and about Indigenous communities are frequently taken in a less than honorable harvest by researchers, who then share their data in ways that harm the community. There are numerous illustrative examples with some clearly demonstrating malice while others are thoughtless or reckless. This dishonorable harvest of data from Indigenous communities, along with restricting access to data that references or might benefit a community, has been a driving force behind Indigenous research sovereignty. The right to control data collected about Indigenous communities is founded within the inherent rights to govern their lands, resources, and people. These rights are not given, nor are they earned, in fact the fundamental underpinnings of "inherent" means these rights are of a metaphysical nature, not subject to human law. As Brewer et al. (2023) describe in their commentary, access to and control over sensitive data is critical in the management of Indigenous lands and resources.

In addition to the two commentaries by Nelson (2023) and Brewer et al. (2023), three original articles also engage with the importance of Indigenous data sovereignty, particularly in the area of environmental research (Nakhwotsii et al., 2023; Williamson et al., 2023) and agricultural systems (Paul et al., 2023).

Evaluation

Finally, we come to a frequently overlooked or undervalued aspect of the research endeavor, evaluation. Evaluating research involves in-depth critiques of the techniques used as well as the conditions

and contexts of the research process(es). Like many of the topics in this special edition, Indigenous evaluation does not occur only once in a research project. It is ever present from the moment you step foot on Indigenous territory and/or approach an Indigenous community. As Shawn Wilson observed, when you take part in the evaluation of research, from the inception of an idea and throughout to the conclusion and beyond, research is ceremony and like most Indigenous ceremony it is cyclical and on-going (Wilson, 2008). Alongside Indigenous peoples, research demands respect and reverence, it demands that the researcher and the research itself be void of bias. Not the bias we learn about in our Western institutional training in pursuit of validity, but the internal bias of the researchers' disposition in order to call into question their moral judgment that can shape bias in a way that harms, or even potentially harms, Indigenous peoples. For, by the time you believe you're done with your research project, both you and your project will have been "evaluated" several times by the community and through a reflexive monitoring of this work by the research team. Indigenous evaluation is culturally rooted, contextually responsive, and coexists with project implementation. (LaFrance and Nichols, 2009: 20). Including Indigenous perspectives in the evaluation process may ensure cultural integrity as subtleties and cultural mores are less likely to be misrepresented or overlooked as insignificant. However, "making our (Indigenous) values the central drivers for evaluation practices, rather than assuming we have to accept only Western values," is a goal that still resonates today (LaFrance and Nichols, 2009: 41). While none of the articles in this special edition address evaluation as their primary focus, a number do address the importance of on-going reflection and evaluation, particularly among cross-cultural research groups.

Dissemination

The dissemination of research findings is a foundational element of scientific practice. Dissemination, as a component of the scientific process, requires the sharing of data resources, methods, results, and peer-review. In some cases, researchers are required to sign the copyright of their work over to publishers or government agencies. The idea of scientific dissemination often runs counter to conservative Indigenous research protocols that closely guard information and knowledge. In some cases, Indigenous communities may require researchers to get permission from a nation's Internal Review Board (IRB) to publish sensitive data in journals or books. What is the appropriate level of reciprocity to be achieved between researchers and the community through their research and publications? What are the terms of data sovereignty agreements between researchers and nations? What are the knowledge co-production agreement terms between researchers and nations? When does it make sense for someone from the community, or the community itself, to appear as a coauthor on the work? Do nations have copyright procedures in place? All of these questions are continually being asked and answered in a shifting landscape of research publication and dissemination.

To be clear, we're not saying that this special edition is the "answer" to any of the dilemmas or current approaches we and the authors have outlined here. This is merely intended as an attempt to move this discussion forward and to envision Indigenous communities as research leaders, and full agents in setting the agenda. We end this introduction much as we started it, by reflecting on the number of questions that remain unanswered as we begin to consolidate these various aspects of the research process under an all-encompassing concern for the rights and knowledges of Indigenous communities.

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