CANADIAN NORTHERN CORRIDOR SPECIAL SERIES

LOST IN TRANSLATION

Evgeniia (Jen) Sidorova and Jenanne Ferguson

FOREWORD

THE CANADIAN NORTHERN CORRIDOR RESEARCH PROGRAM PAPER SERIES

This paper is part of a special series in *The School of Public Policy Publications,* investigating a concept that would connect the nation's southern infrastructure to a new series of corridors across middle and northern Canada. This paper is an output of the Canadian Northern Corridor Research Program.

The Canadian Northern Corridor Research Program at The School of Public Policy, University of Calgary, is the leading platform for information and analysis on the feasibility, desirability, and acceptability of a connected series of infrastructure corridors throughout Canada. Endorsed by the Senate of Canada, this work responds to the Council of the Federation's July 2019 call for informed discussion of pan-Canadian economic corridors as a key input to strengthening growth across Canada and "a strong, sustainable and environmentally responsible economy." This Research Program will benefit all Canadians, providing recommendations to advance the infrastructure planning and development process in Canada.

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Program Director, Canadian Northern Corridor Research Program

LOST IN TRANSLATION

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The meaningful incorporation of Traditional Ecological Knowledge (TEK) into large-scale northern infrastructure construction can improve sustainability practises and broaden our conceptual understanding of nature (Sidorova and Virla 2022). TEK refers to systems of collective knowledge production, established gradually by members of Indigenous and local communities and transferred through generations (Agrawala et al. 2010). While the 'traditional' part of the term TEK can be problematic, as the word may connote something old and static, we stress here that TEK is a dynamic, living tradition adaptable to new conditions and knowledge. Another key element in infrastructure projects is the Environmental Impact Assessment (EIA). EIAs are used to evaluate the likelihood of negative environmental impacts before deciding whether to move forward with a project. They also attempt to develop and implement strategies to avoid or reduce those negative impacts as conditions of approval for the project (Agrawala et al. 2010). This paper examines a particular tension that arises between TEK and EIA.

On the one hand, TEK is often formulated in Indigenous languages, and on the other EIA are often produced in non-Indigenous languages. Our aim in this paper is to understand what is lost or omitted when Indigenous-originating TEK is translated into non-Indigenous EIAs. We show that the contrast between the two knowledge forms is not merely linguistic, but also epistemological, and we ask how the use of Indigenous languages might contribute to closing the epistemological gap between TEK and EIA and so improve the decision-making around large projects in northern communities. We illustrate how the use of non-Indigenous language in EIAs leads to (over)simplification and a loss of nuance that renders TEK less meaningful as it is translated. Specifically, we draw upon examples from Sakha culture and language (in the Sakha Republic, Russia) and Nehiyawewin (Plains Cree) culture and language (in Alberta, Canada). We performed a content analysis of ethnological assessments (EA) in the Sakha Republic and EIA in Alberta. We keep the terminological distinction between EA in Russia and EIA in Canada, as the term 'ethnological' is legally imposed by the Russian government (Sleptsov and Petrova 2019). There is also distinction between EIAs and EAs in the Russian context. In Russia, EIAs study the impact of the industrial project on nature, while EAs focus on the impact on Indigenous Peoples, who are engaged in traditional subsistence activities (Sleptsov and Petrova 2019). In Canada, EIAs can also include ethnographic (culturally relevant) data.

We analyzed the ten most frequently occurring words in EIAs and EIA-like material, generated out of construction and infrastructure projects in the two regions. These reports were all publicly available on the regional governmental websites for both the Albertan and Sakha Republic jurisdictions. From these purposively sampled documents, we sought out Indigenous language translations for the frequently occurring non-Indigenous words, conducting a linguistic relativity analysis of the gaps that opened up between the EIA's formulations and worldview, and the words and worldviews of the languages where TEK was developed.

INDIGENOUS LANGUAGES AND WORLDVIEWS

Land and language are intrinsically connected in many Indigenous ontologies and should not be considered separately. Indeed, doing so can erase assumed relationships between land, language and knowledge that are foundational to many Indigenous cultures (Chiblow and Meighan 2022; Daniels-Fiss 2008; Ferguson and Weaselboy 2020). In many Indigenous languages, land is not exclusively 'pristine' *or* inhabited or impacted by humans, but rather is dynamic and thoroughly cultural. Similarly, language in many Indigenous cultures is viewed as animate, dynamic and essentially a part of the world itself. This contrasts with the objectivist assumptions of many non-Indigenous cultures in which language is assumed to be a tool used by humans to describe a separate and distinct non-human world. In Indigenous cultures, a speaker's social status may also be implicated in speech act, as words are embedded not just in the community's general worldview, but also in webs of specific sociopolitical relationships between individuals and the land.

Beginning with the work of Benjamin Lee Whorf (1956) and discussions of linguistic relativity — that the languages we speak have some influence on how we think, there as been an often thorny debate among language researchers concerning the dynamics of the relationship between language, thought and culture. In contrasting the ways that a selection of what he called "Standard Average European" languages and the Indigenous languages of North America he studied conceptualized key elements of their worldviews, he highlighted many of the potential pitfalls of trying to force grammatical and semantic elements of the latter to fit the descriptive categories of the former group of languages. A discussion of 'how much' language can influence our thinking — and exactly how we quantify what can get lost when translating between languages spoken by people with very different cosmologies — is beyond the scope of this brief paper; however, Whorf's insight that language and worldviews are intimately connected remain key for many linguistic anthropologists who continue to remind us that the world does not "sound the same in every language" (Webster 2015).

For many Indigenous language speakers, the animate, dynamic, culturally active nature of language can be stripped away when they must use another, objectivist language to talk about TEK, or when words from Indigenous languages are brought into that objectivist language without key aspects of their meanings investigated or fully understood by objectivist speakers. The potential here is that Indigenous worldviews are confined, and sociopolitical relationships are erased, as they are forced not just into the linguistic patterns of objectivist languages, but into Euro-Western scientific ways of knowing the world. Without context, it can be difficult to discern what phrases refer to, even if individual meanings or parts of phrases are understood. When recording local knowledges in an Indigenous language one should not simply collect a list of words. Rather, contextual information must be included and elucidated. Considering a diversity of interpretations of the relationship between humans and the natural environment is central to achieving robust policy (Harre et al. 1999). As such, using Indigenous words and definitions may help avoid the loss of nuance in translation.

Dokis (2015), Nadasdy (2003, 2017), and Whyte et al. (2016) note that dealing with Euro-Western bureaucracies means, for Indigenous language speakers, shifting from 'land as relationship' to 'land as resource' (Coulthard 2014). For example, Inuit conceive of a different relationship between polar bears and humans than between humans and other animals; polar bears have the same mind as humans and can make their own decisions (Schmidt and Dowsley 2010). Wildlife managers did not take this human/bear relationships in Inuit communities into consideration; in Western conceptions of rationality, virtually everything is considered passive (Schmidt and Dowsley 2010). Indigenous languages reflect these distinctions in worldviews, but these languages are often marginalized by Western systems. In this way, marginalizing a language often means marginalizing a worldview. Such marginalization not only raises issues of justice and equity, but as it confines worldviews and erases relationships, it may deprive policymakers of crucial insights. A practical application of these principles can be found in Prno, Pickard and Kaiyogana's work (2021). They note that while professional interpreters and translated documents were present in a community engagement session between a mining company and a Nunavut community, communication difficulties persisted. A lack of equivalents in Inuktut for mining-related terms was countered by having interpreters work with groups in advance of meetings. The engagement program also used plain language and varied communication techniques to increase the range of data that were collected during the EIA process. Traditional Inuit place names gathered through TEK research were also referenced where available, to ensure common understanding by traditional land users. This meant all participants, including the mining company, needed to be familiar with local TEK and some Inuktut to ensure effective communication; translation alone was insufficient (Prno, Pickard, and Kaiyogana 2021).

MANAGEMENT LANGUAGES AND WORLDVIEWS IN EIA

Policymakers tend to use managerial jargon, which is rooted in a technocratic understanding of the public interest (Eckert et al. 2020). According to Killingsworth and Palmer's 2012 study, the language of EIAs has been adapted to fit bureaucratic procedures and thus requires specialized training to be comprehended accurately. Expert users of this management-oriented linguistic register tend to be more engaged in procedures and facts, seeing these as providing objective distance from political action or scientific uncertainty.

This preference for procedurally and factually accomplished objectivity in EIA discourse in turn tends to displace Indigenous language and its socio-politically entwined worldview. Indeed, recent research has revealed differences between how environmentalists and Indigenous communities view the concept of land. For example, during pipeline protests environmentalists typically view the land as a collection of ecological systems that require protection, while for Indigenous peoples, defending their lands may also mean protecting and reclaiming their commitments to one another as well as to the planet (Bosworth 2021). As the Prno, Pickard and Kaiyogana (2021) study above suggests, the use of Indigenous languages by consultants conducting EIA work may be able to make space for worldviews that perceive land through a lens that includes more than eco-system preservation or objectivizing procedures and facts.

TEK AND POLICY: ENVIRONMENTAL DECISION-MAKING IN CANADA AND RUSSIA

The Sakha Republic is a subnational entity within the Russian Federation and is the first jurisdiction within that country to allow public dialogue with Indigenous Peoples over industrial development issues (Sleptsov 2015). The region is home to speakers of Sakha, an Indigenous Northeastern Siberian Turkic language, as well as speakers of the non-Indigenous Russian language. Five other Indigenous languages (Chukchi, Dolgan, Even, Evenki and Yukaghir) are also spoken in the region, but in addition to—or occasionally instead of—the Indigenous languages of their ethnicity, many of the Indigenous people who are subject to EAs are native Sakha speakers (Robbek 1998). For a Canadian comparison, we contrast the Sakha context with Cree speakers' experiences in the Alberta EIA procedure, which shares many similarities with the Sakha Republic's system While there are other Indigenous languages (e.g., Dene languages) spoken in the region, we chose to focus in on Cree due to greater familiarity with — and documentation of — that language. Indigenous languages are used widely in both these areas, but they are not included in the reporting procedure for EIA/EA which are solely in English or Russian.

SAKHA REPUBLIC CASE STUDY

The comparison between the most popular terms in Sakha translations and their equivalents in Russian is shown in the chart below.

Table 1. The translation of most frequently used terms in into Sakha.

Russian term	Sakha translation
Vozdeistvie (impact)	d'ajyy; sabydyallaahyn (to force someone to do something; to try in a forceful way to get things done)
Prozhivanie (residency)	oloruu (existence; habitation)
Traditsionnyj (traditional)	üges buolbut (traditional)
Khoziastvennaia deiatel'nost' (economic activity)	hahaajystybannaj üle (economic work, copied from Russian)
Territoriia (territory)	sir-uot (territory; literal meaning — land-house)
Mesto (place)	sir (place; literal meaning — land)
Etnologicheskaia (ethnographic)	etnologicheskai (ethnographic, copied from Russian)
Sreda (environment)	ejge (surroundings)
Ubytki (economic damages)	n'ochoot (costs)
Dokumentatsiia (documentation)	dokumuonnar (documents, copied from Russian)

The translation of these terms into Sakha reveals many gaps. Some words, like *etnologicheskaj* (ethnographic) had not been present in Sakha language originally and were adopted from Russian during colonization. Secondly, other Russian words such as *vozdeistvie* (impact) have Sakha equivalents, but their meanings in Sakha are not identical. For example, impact, *d'ajyy* or *sabydyallaahyn* in Sakha, refers to being pushy and forcing someone else to do something, rather than the action of one object coming forcibly into contact with another. This may reflect the animistic nature of Sakha traditional beliefs as

even lakes, rivers or lands have their own spirits. The Sakha counterpart of the Russian *mesto* (place), which is *sir* (land), can refer to the traditional subsistence activities — naming any place as 'the land' presumes that a person lives in the countryside as opposed to urban areas.

 Finally, words such as territory (*sir-uot*) and residency (*oloruu*) further reveal connections with Sakha worldviews. *Sir-uot* is directly translated as land-house, referring to the Sakha conception of home that goes beyond the dwelling into the alas (forest clearing) it sits within. Thus, naming any territory *sir-uot* implies that this land is inherently inhabited and seen as 'home' — the opposite of what 'wilderness' conveys. *Oloruu* does not simply mean the bureaucratized term 'residency,' but rather the existence of a being in the world.

ALBERTA CASE STUDY

English terms	Cree translation
Environment(al)	Not found in the dictionaries; the closest word might be 'surroundings' — wasakaskamihtawin
Ecology; ecological	Not found in the dictionaries
Land	askiy — can also refer to: land, country, earth, world, settlement, colony, pieces of farmland/land under cultivation
Water	Nipiy
Manage(ment)	A noun for 'management' is not found; however, in a verb construction (e.g., to manage) one could use pamihtâw
Wildlife	'Wild animal(s)' would be: pakwâcipisiskiw(ak)

The brief chart also reveals numerous English-Cree incongruencies. When consulting comprehensive online Plains Cree dictionaries (which draw upon numerous sources), we don't find entries for 'environment,' nor 'ecology/ecosystem.' Words like 'nature' are described in phrases that essentially define the English term, e.g., *askehk kîkway ka ohcimakahk*, or 'something that originates from/encompasses the land/earth.' 'Water' and 'land' may seem straightforward, but also contain different layers of meaning; e.g., Daniels-Fiss (2008) has noted that *okâwîmâwaskiy* may be used to refer to earth or land, and *okâwîmâw* means 'mother,' highlighting inherent kinship. As in Sakha, 'management' is difficult to render, and options arise with verbs that have differing connotations of 'taking care of something' versus 'control' or being 'able to do something.' This inspires the question: in a Cree-language EIA document, would 'land management' use the verb connoting care or the verb connoting control?

By examining Cree concepts related to worldview, we can see potential linguistic alternatives. *Wahkohtowin* (sometimes translated as 'relationality') is an illustrative example. Many Cree and Métis scholars (MacAdam 2015; Napoleon 2007; Todd 2016; Wildcat 2018) stress the importance of beginning from a place rooted in *wahkohtowin* to understand relationships between all beings. However, *wahkohtowin* is not simply 'ecology,' but 'ethical relationality — a broader ecological understanding predicated on the animacy of all things, that includes protocols for respecting and maintaining relationships (Donald 2016). *Wahkohtowin* cannot simply be overlaid onto Western understandings of ecology or environment. It reveals a different way of conceptualizing everything as fundamentally inseparable; it focuses on the connections between subjects, rather than the separate parts of objects or spaces.

CONCLUSION: NEW DISCURSIVE (AND POLICY) FORMATIONS

Through our analyses of the most prevalent content words in samples of EIAs/EAs, we demonstrated some incommensurabilities in Sakha-Russian and Cree-English translations. We highlighted some gaps in worldviews that can open up during the process of consultations and assessment if they are performed in non-Indigenous languages (Eckert et al. 2020). Using Indigenous languages in EIA helps to recognize how colonial states completely or partially damaged traditional subsistence activities and also helps to reveal the values and principles of Indigenous self-governance and self-determination (Coulthard 2014).

When considering the Truth and Reconciliation Commission's Calls to Action (2015) in Canada, it is important to implement more clearly delineated rules or best practices regarding linguistic and cultural knowledge for advisors and researchers. Wherever applicable, mandating the use of Indigenous languages expands the range of contexts in which they can be used, which also supports their continued maintenance. If hiring Indigenous EIA consultants is not always feasible, outside consultants will need to take the use of Indigenous languages into account when performing their job.

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