How Language Revitalization & Adult Immersion have been Justified

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1. Introduction

The purpose of this document is to describe in detail the ways that language revitalization can be or has been justified, with the intent of serving as a resource for any who seek to persuade others of the value of language revitalization. My description of justifications also includes discussion on what audiences might be receptive to each given justification, and includes counter-arguments to some arguments which have been made against language revitalization. Justifications for language revitalization are made on many grounds, including cultural reasons, economic reasons, and legal reasons, among others. Section 2 of this document will describe a wide range of justifications, following a categorization which I will outline at the beginning of that section.

This document has a specific focus on the justification of adult language immersion as a means of language revitalization. Adult language immersion is the teaching of a target language to adults through content entirely in that language, i.e. teaching Haudenosaunee languages without using English in the classroom. Adult immersion may be justified by its direct contributions to language revitalization, but it may also be justified on the basis of its many indirect contributions, and due to the obstacles posed by its absence in language revitalization efforts. In section 3 of this document, I will discuss the reasons why adult language immersion is both beneficial and indispensable to language revitalization.

2. Justifications for language revitalization

2.1 Section overview

It may be easy to take for granted that language revitalization is justified, especially for speakers of endangered languages and members of endangered language communities, but not all people recognize the value of language revitalization. For example, settler states and academic linguists have implicitly and explicitly devalued endangered languages and language revitalization movements. Additionally, there are members of endangered language communities who believe that language revitalization is not an important or valuable undertaking. Even among people who believe language revitalization to be justifiable to some degree, language revitalization may still be judged as not requiring all the resources and support it truly does. In order to engage with such beliefs, it is important to establish specific concrete arguments justifying language revitalization.

Different justifications may appeal to different audiences, based on a wide range of factors. For example, a capitalist settler may be more willing to entertain arguments centred around economic value or empirical measures than to entertain arguments based on the cultural value of language revitalization. I have included as wide a range of justifications of language revitalization as possible, in order to facilitate engagement with a variety of positions. As I describe different justifications, I will also discuss in general terms what audiences may be best suited by each argument. However, the beliefs of specific individuals in the value of language revitalization may well be influenced by any argument for it, regardless of a person's identity, ideology, or positioning with respect to colonialism.

I have separated the justifications I present into several categories, each of which will be discussed in its own sub-section. These include: justifications based on cultural value, justifications based on health and educational grounds, justifications based on scientific value, justifications based on rights and legal responsibilities, and justifications based on political functions. There is significant overlap between these categories, so I will describe my categorization scheme in more detail before discussing individual categories.

The category of justifications based on cultural value focuses on the connection between language and culture. It includes discussion of the value of Indigenous languages to Indigenous cultures, the inseparability of a culture and its language, and of how specific cultures may have unique ways of justifying language revitalization. I will also discuss how Indigenous languages may be valuable on cultural grounds to settlers.

The category of justifications based on health and educational grounds focuses on empirical measures of the effect of language revitalization on a target language community. It includes discussion of various studies which demonstrate that language revitalization can benefit physical and mental health and educational outcomes in Indigenous communities.

The category of justifications based on scientific value focuses on the ways that endangered languages and language revitalization can create or preserve scientific knowledge. This includes discussion of scientific knowledge which can be gained from linguistic analysis of endangered languages, and discussion of scientific knowledge generated by endangered language communities, contained in their languages.

The category of justifications based on rights and legal responsibilities is focused on various ways that language revitalization is established to be a legal obligation for a state to engage in or a right which should be guaranteed to language communities. This includes discussion of international

agreements, human rights, and legal declarations regarding language revitalization made by the U.S. or Canada.

Finally, the category of justifications based on political factors is focused on how language revitalization may aid or implicate on governance and political institutions. This includes discussion of how language revitalization may increase a community's engagement with political institutions and how language revitalization may aid Canadian reconciliation.

2.2 Justifications based on cultural value

There are several different arguments for language revitalization based on the value or benefits of language revitalization to a language community's culture. Such arguments would be expected to appeal most to members of that language community, as it is their culture which stands to benefit from language revitalization. These arguments are not as likely to appeal to hegemonic states, as they are not likely to value cultures associated with languages whose endangerment they are in large part responsible for. However, individual settlers and other non-Indigenous people who value pluralism or cultural diversity may accept such arguments.

I sort justifications based on cultural value into three categories. The first category contains arguments based on how languages are closely related to the traditional knowledge of a culture, and how preservation of that knowledge requires language preservation. The second category contains arguments based on how language revitalization strengthens cultural identity and increases the ability of a minority language community to organize. The third category contains arguments for the importance of language revitalization based on the traditional philosophies of specific language communities; such arguments are highly culturally specific, and so I can only provide a few examples. I will discuss these three groups in order.

Several academic works discuss the connection between a culture's language and its traditional knowledge. Chiblow & Meighan (2022) discuss how Indigenous languages encode various kinds of traditional knowledge, focusing on traditional values, ecological knowledge and the way that Indigenous languages relate to the land they are spoken on. They describe how Anishinaabe values, laws, and governance are all embedded in the Anishinaabemowin, the Anisinhaabe language. They also describe how Indigenous language place names tend to describe locations and contain useful local knowledge, while place names in dominant languages tend to be disconnected from local land and celebrate colonial legacies.

Jocks (1998) describes in more detail how traditional Indigenous values are best understood through their matching Indigenous languages. He describes how aspects of Haudenosaunee philosophy may become subtly changed in various ways based on how they are translated into English. For example, the oral tradition of Haudenosaunee governance is called the Kaianeren'ko:wa, in Mohawk, which has been translated into English many different ways: “Great Law,” “Great Peace,” “The Constitution of the Five Nations,” “The Great Binding Law,” among others. These English translations often emphasize a Western sense of legalism, while losing sight of the spiritual aspects of the Kaianeren'ko:wa. Jocks does not discount English discourses of Haudenosaunee philosophy entirely, as language loss has rendered English translation the only means by which many people can access Haudenosaunee philosophy, but he emphasizes the importance of Haudenosaunee languages to an authentic understanding of Haudenosaunee philosophy, and recommends a critical stance towards English interpretations and translations.

Hermes (2005) similarly discusses this topic, describing attempts to include Anishinaabe language and culture in several different reservation schools in the US. Hermes criticizes approaches which teach Anishinaabe culture in English, and only make token inclusions of Anishinaabe words. Such approaches remove both culture and language from their original context, causing distortion and loss of meaning. An interview subject describes how Anishinaabemowin animal names are seen by students as misspellings of English words and are pluralized using English forms, and are not understood as referring to both an animal and the context in which that animal lives, as an Anishinaabemowin speaker would.

These works provide several descriptions of how Indigenous languages and cultures are connected, and they all argue that Indigenous cultures will lose details and nuances if Indigenous languages are not preserved. Thus, language revitalization may be justified as a means to accurately preserve Indigenous cultures. This argument will of course be especially salient to anybody who already desires to preserve Indigenous cultures.

Other works discuss how language revitalization strengthens cultural identity in participants, and creates a greater sense of community, apart from the preservation of specific cultural aspects. Ridanpää (2018) describes how language revitalization can strengthen people's sense of cultural identity and create stronger bonds within a language's community. Meänkieli revitalization participants describe in interviews how they associate Meänkieli use, as at mealtimes, events, and in place names, with feelings of comfort. Ridanpää also describes how Meänkieli revitalization has combated historical

stigma against the language, and encouraged people to put effort into developing local culture, within the specific regions of Sweden where Meänkieli is spoken.

Although many of Ridanpää's (2018) interview participants speak positively about Meänkieli revitalization, some interviewees feel that Meänkieli is overemphasized, or that Meänkieli revitalization has created locally hegemonic discourses which supplant non-Meänkieli cultural identities, such that people become hesitant to identify as Finnish. Ridanpää offers no definite solution for this discomfort, but finds value in that Meänkieli revitalization is subjected to critical questioning by its language community.

Tatsch (2004) offers another perspective on the effect of language revitalization on culture. Tatsch describes language revitalization as a prerequisite for Indigenous people to maintain intellectual sovereignty, which she defines as "the right to create, interpret, evaluate, and conceive, without the willful assault of Euro-American languages, values, and social norms." For Tatsch, language revitalization allows Indigenous people to effectively organize and create "religious, educational, economic, and socio-political structures," and to situate themselves within the larger social and political structures of settler states. Tatsch's primary discussion is on the value of the notion of intellectual property to language revitalization; I will discuss this more in a later sub-section.

Ridanpää (2018) and Tatsch (2004) both presuppose the value of local and Indigenous organization and identity, and value language revitalization because of how it contributes to those things. Romaine (2008) similarly recognizes language revitalization's contribution to cultural identity, and also argues for the value of that cultural identity itself, in the context of Indigenous cultures of North America.

Romaine (2008) argues that linguistic revitalization and the attendant revitalization of Indigenous cultures may serve as a means to combat threats to biodiversity and as a support to sustainable ecological development. Romaine recognizes the major causes of language loss and ecological devastation to be the same; settler-colonialism and post-colonial economic development. Because of this, she suggests that these causes may both be answered by the same solution; empowering local people to control their linguistic situation and the economic development in their territory. Romaine recognizes that Indigenous languages and cultures are tied to local environments, and often contain knowledge on sustainable land use and stewardship specifically suited to those environments. Such knowledge should allow linguistic and cultural revitalization to mitigate and even heal local environments from the harms of colonialism and capitalist resource extraction.

The works described above provide a range of arguments for language revitalization based on its beneficial effect on local communities, cultures, and even environments. Any who believe in the value of local community engagement or the threat of ecological harms might accept these arguments for the value of language revitalization. For those skeptical of the abstractness of these values of connectedness and ecology, the statistical studies discussed in the next sub-section might be offered as empirical validation of their positive effect on people.

Before I move on to that sub-section, I will first discuss a final avenue of cultural justifications. Some academic works have discussed how the traditional cultural frameworks of some endangered language communities argue for language revitalization. Although such arguments are relatively rare in academic works, it is likely that the traditional knowledge of many language communities contain similar arguments.

Skerrett & Ritchie (2021) discuss how the Māori language has been recognized as a taonga, a treasured possession of the Māori people, by the Waitangi Tribunal, a New Zealand commission made to recognize treaty breaches by New Zealand. This designation was officially recognized by New Zealand in the Māori Language Act of 1987, and represents an argument within Māori frameworks for the revitalization of the Māori language. That the Māori language is a taonga creates an obligation for New Zealand to support Māori language revitalization, or else be seen to be failing established treaty obligations to the Māori people.

The treatment of languages by the Haudenosaunee Confederacy is rarely discussed in linguistic academic literature. However, because the member nations of the Confederacy speak several distinct languages, it stands to reason that there must be language policy in the traditional operation of the Confederacy. Some Haudenosaunee writings do briefly discuss this.

Traditional Teachings (1984), a book published by the North American Indian Travelling College, details a version of the Kaianeren'ko:wa, rendered as a series of distinct clauses, or wampums. It briefly refers to matters of language, stating in the 83rd Wampum that the member nations are made distinct by their languages.

Monture (2014), a Haudenosaunee author, discusses the Two Row Wampum, the Haudenosaunee treaty which describes how the Haudenosaunee Confederacy relates to settlers of North America. The Two Row Wampum depicts two vessels, one for the Haudenosaunee and one for European settlers, travelling down a river. The Two Row Wampum establishes the independent and equal autonomy of the Haudenosaunee and the settlers, meaning that each should be allowed their own

culture and traditions, and neither should interfere with the other. The vessels of the Two Row Wampum do contain language, meaning that it establishes a right of the Haudenosaunee to maintain their languages without interference from settlers.

Though these references are both sparse and primarily focused on things other than language, they indicate that Haudenosaunee tradition recognizes in its own terms the importance of Haudenosaunee languages and the right of the Haudenosaunee member nations to speak their languages.

These are two brief examples of how traditional cultural frameworks contain arguments and justifications for their revitalization of their matching traditional languages. Such arguments may also plausibly justify the revitalization of other languages; the Two Row Wampum equally justifies the right of settlers to revitalize English without the interference of the Haudenosaunee Confederacy, should English ever become endangered. Arguments like these are likely most attractive to members of the cultures they come from, but they may also be of importance in matters of nation-to-nation diplomacy, or to settlers who live in the territory of Indigenous peoples.

In this sub-section I have discussed three types of justifications for language revitalization, primarily relating to the culture associated with a target language, or the effect of language revitalization on that language's culture. I have discussed how language revitalization helps to strengthen or preserve the cultures of endangered languages, how language revitalization facilitates community connectedness in target language communities, and how the culture of endangered languages may have their own specific justifications for language revitalization.

2.3 Justifications based on health and educational grounds

Various studies have found empirical evidence of language revitalization's positive effect on the health and academic performance of language community members. These studies support justification of language revitalization on the grounds that it is materially beneficial to the target language community. Arguments based on statistical grounds like these may appeal especially to institutional oversight bodies such as grant organizations or government funding boards, as they identify the value of language revitalization in the preferred empirical terms of such bodies. They may also appeal to people who are otherwise resistant to arguments based on abstract value judgments, such as that language revitalization is valuable to the members of a culture, as empirical evidence is often seen as less arbitrary.

I divide the studies I will discuss in this section into three categories. The first category includes evidence of the positive effect language revitalization has on the physical health of community members. The second category includes evidence of the positive effect language revitalization has on the mental health of community members. The third category includes evidence of the positive effect of language revitalization on the academic performance of community members in various settings.

I will first discuss studies which have shown a relationship between improved physical health and language revitalization. Whalen et al. (2016) review the results of a variety of studies which support the positive effect of language revitalization on the physical health of language community members. For example, studies find that higher language use rates in North American Indigenous communities are correlated with lower smoking rates (Nez Henderson et al. 2005), and with self-reported good wellness (Hodge & Nandy 2011), which the same study found patterned with other indicators of good health, such as lower rates of diabetes. Whalen et al. (2016) also note that the relationship between health and minority language use is understudied and still likely to yield many more indicators of a positive relationship between the two, especially in light of Tulloch et al.'s (2013) note that many language revitalization programs are relatively recently formed and may require novel methodology to properly study.

Whalen et al. (2016) situate the significance of this positive relationship between physical health and language revitalization by also reviewing a wide range of studies on health trends in Indigenous people relative to other populations in North America. Indigenous people are generally subject to worse health outcomes than other populations, including shorter lifespans, a lesser degree of access to healthcare, and greater risk of death by various causes (Indian Health Services, 2014). These worse health outcomes render language revitalization quite notable as an empirically verified means of improving Indigenous health.

Studies have also demonstrated a connection between language revitalization and improved mental health in Indigenous communities. This topic is less studied than matters of physical health, but is still evidenced by multiple studies. Like matters of physical health, Indigenous communities experience worse mental health outcomes than other populations. I index this here primarily through suicide rates, which have been found to be much higher in U.S. Indigenous populations (Indian Health Services, 2014). Whalen et al. (2016) refer to Hallet et al. (2007), a preliminary report which finds that Indigenous communities where at least half of people report a conversational knowledge of an Indigenous language experience much lower rates of youth suicide than communities with less

Indigenous language knowledge. Barker et al. (2017) discuss Indigenous language and culture as a means of reducing youth suicide rates in more detail, asserting that cultural revitalization should be considered a viable means of treating youth suicide as a crisis affecting Indigenous communities.

Shea et al. (2019) discuss other positive effects of language and cultural revitalization on the mental health of Indigenous people, describing the results of a collaborative program involving the Miami Tribe of Oklahoma and Miami University. Through this program, Miami University offered courses on Myaamia language and culture to Indigenous Myaamia university students. Through surveys and interviews of students who participated in the program and were exposed to education on their Indigenous language and culture, Shea et al. found that the program helped students to feel more confident and socially connected, and to be more resilient in the face of challenges offered by their environment.

These are only a sample of the works discussing the positive effect of language revitalization on the physical and mental health of community members and revitalization participants. Whalen et al. (2016) cites many studies which demonstrate this relationship, and more studies on the topic have been published since. Because of this connection, anyone who is in interested in improving the physical or mental health of Indigenous people should also be interested in language revitalization as a means to do so, whether they be health workers, government workers, Indigenous people, or anybody else.

I will move on to discussing the effect of language revitalization on the academic performance of community members. Just as Indigenous people commonly face worse health outcomes than other populations, they also commonly face worse academic outcomes. The U.S.-based Indian Health Services (2014) have found that Indigenous people graduate both from high school and post-secondary education at lower rates than non-Indigenous people. Shea et al. (2019) discuss this academic outcome disparity as well, citing Chain et al. (2017) as a more recent study discussing lower academic achievement in Indigenous populations. Many different papers have discussed language and cultural revitalization as a means to generate better academic performance in participating or affected Indigenous students. I will discuss a few results and recommendations, as the full body of research surpasses what it is reasonable to cover here.

Shea et al. (2019), in addition to the positive effects on mental health already discussed, found that the university students who participated in their program and learned about their Indigenous language and culture experienced higher rates of graduation than non-participating Indigenous students. Shea et al. compared participating students to Myaamia students at Miami University from before the

program began, and to Indigenous university students across the U.S., and found that the participants graduated at a much higher rate, nearly doubling the graduation rate of non-participant Miami University students and more than tripling the national graduation rate of Indigenous students.

Demmert (2001), in a report for the U.S. Department of Education focusing on means to improve Indigenous academic performance, makes many recommendations, though I will only discuss here his recommendation for the inclusion of Indigenous language and culture in the schooling of Indigenous students. Demmert identifies similar past recommendations as far back as 1928, and cites a wide range of pre-2000 studies, most of which studied child education, finding that Indigenous language and culture programs yield a variety of academic benefits, including improved academic performance, decreased dropout rates, and improved school attendance rates. Several of the studies Demmert cites find that immersive Indigenous language education yields increased performance even in English education introduced in higher grades. Like Shea et al. (2019), many of the studies Demmert cites find that inclusion of Indigenous language and culture in education also improves student self-esteem and sense of identity. McIvor & McCarty (2017), assessing the overall profile of Indigenous language education in Canada and the USA, identify many more recently published studies which also find that Indigenous language education produces better academic outcomes.

There is a vast body of academic work, reviewed in detail by Demmert (2001) and McIvor & McCarty (2017), which has confirmed that Indigenous language education improves academic performance in Indigenous students, a population which is also academically established to achieve worse academic outcomes. That language revitalization improves Indigenous students' academic performance should serve as a compelling justification to any education worker or other person invested in the improvement of public education outcomes.

In this section I have discussed the evidenced positive effect of language revitalization on the physical health, mental health, and academic outcomes of target language community members. I also briefly discussed health and education problems faced by Indigenous people in Canada and the USA. That language revitalization improves the health and academic performance of affected people, especially those who already have poor health and academic performance, serves as an argument that it is a worthwhile endeavour.

2.4 Justifications based on scientific value

Some works have argued for the value of language revitalization based on the scientific value of the languages preserved by language revitalization efforts. These arguments might be expected to appeal to

scientists above all, though it would seem that scientists have also explicitly argued against language revitalization based on matters of scientific value more frequently than any other grounds. Scientific value might be framed as an argument more free or separate from underlying political interests than other arguments in favour of language revitalization; such a framing is likely to be among the most effective arguments possible to parties which are hostile to arguments perceived as overly politically-aligned.

I will discuss two arguments based on scientific value. The first argument is concerned with the value of languages, especially minority and Indigenous languages, as objects of scientific study. The second argument is concerned with already existing scientific knowledge contained in languages, which could be lost if language preservation and revitalization efforts are not put in place. I will also briefly discuss some arguments against language revitalization made on scientific grounds, as well as their counterarguments.

I will first discuss the value of languages as objects of scientific study, as argued for by Hale (1998) and Mithun (1998). Hale (1998) describes how comparison of theories across different languages allows for greater insight into questions of theoretical syntax. Some theorized syntactic operations or objects may be silent and difficult to directly evidence in some languages, but may be explicit and concretely visible in other languages. He offers one example using English and Modern Irish: Restrictions on the theorized syntactic operation of movement were proposed based on indirect evidence found in English, but could not be conclusively demonstrated by English data. In Modern Irish, the same process of syntactic movement leaves explicitly pronounced traces in a sentence. This allows for more direct identification of when syntactic movement occurs and when it is replaced by some distinct process, allowing for restrictions on the occurrence of movement to be more directly probed. Hale suggests that diversity of language is important to preserve on the grounds that it enables cross-linguistic comparisons such as these, which enable greater insight into theoretical questions of linguistics, many of which cannot be answered by evidence from a single language.

Mithun (1998) similarly argues for the value of languages as objects of scientific study, and the necessity of preserving linguistic diversity for the sake of science, but focuses on how linguistic diversity preserves history and demonstrates the range of linguistic possibility, rather than on how linguistic diversity grants direct investigative power. Mithun discusses how different languages may express the same concepts in different ways; languages may represent something using primarily nouns in one language or using primarily verbs in another. Mithun notes how the Mohawk language typically

uses far more verbs than English in describing the same events. Languages may also contain different degrees of specificity in their words, or encode distinctions differently. Mithun discusses how Central Pomo, an Indigenous language of California, has many different verbs equivalent to English "sit," each of which is used in different contexts, such that sitting on a bench requires a different word from sitting on the ground. Central Pomo also has many verbal affixes which indicate the source of information given in a sentence, distinguishing between if the speaker was told of an event by somebody else, or witnessed it personally. To encode the same distinctions in English, longer and more conspicuous construction are required.

Mithun (1998) asserts the importance of such differences between languages on the grounds that they represent both the range of possibility for language as a universal human faculty and the specific history of what has been considered important by people speaking a language. The examples from Central Pomo demonstrate possibilities of what language may represent that are not demonstrated by English; In general, as linguists are able to study more distinct languages, they will be able to identify and investigate more distinct possibilities and capabilities of human language. The Central Pomo examples also demonstrate what speakers have considered important enough culturally and in their environment to begin explicitly representing, meaning that the language also contains important historical and cultural information.

Hale (1998) and Mithun (1998) describe several ways that languages may help in scientific investigations or contain information of importance to science. From this, they both assert that it is important to preserve diversity of languages, and individual endangered languages, as potential scientific insight is lost when any language is lost, and cannot be easily replaced.

As mentioned earlier, I will now discuss the scientific knowledge contained in languages. Hale (1998) asserts the value of language preservation to science on the basis that languages themselves contain scientific knowledge. Hale discusses Damin, an invented ceremonial language used by the Lardil people of Australia, as an example of this. Damin was an impressive technical invention; it is based on Lardil, but could be taught to a new speaker in a single day. It contains speech sounds which are not used in Lardil, and which are rarely used anywhere in the world, and it uses an extremely limited vocabulary, but still retains expressive power which matches Lardil. Damin and its associated ceremonial tradition have both been severely damaged by language loss, as the last fluent speaker of Damin passed away before 1998. Mithun (1998), suggesting a similar argument, says that Central Pomo and Mohawk speakers have both commented that they "think differently" when speaking their

Indigenous languages, and asserts that language loss would also cause a loss of these unique ways of thinking. This argument might also call to mind the intellectual sovereignty described by Tatsch (2004), previously mentioned in section 3.2.

Romaine (2006) also recognizes the scientific knowledge contained in languages, saying that there is “a vast amount of undocumented scientific knowledge in the world's Indigenous languages.” More recent academic work (e.g. Meighan 2022, Chiblow & Meighan 2022) has taken steps to recognize this valuable knowledge, developing frameworks which identify and utilize Traditional Ecological Knowledge (TEK). TEK-based frameworks, Hale (1998), and Mithun (1998) all argue that endangered languages and especially Indigenous languages should be preserved and revitalized in order to prevent the loss of the scientific knowledge they carry, the unique ways of thinking they enable, and the historical and cultural information they contain.

I will now discuss some arguments against language revitalization made on scientific grounds, as discussed by Romaine (2008). Romaine discusses two primary arguments made by other linguists against language revitalization. The first argues that language endangerment is a subset of language change, meaning that it is natural and should not be interfered with, typically with reference to the natural language change undergone by European languages. The second argues that language revitalization is an overly political action which should not be undertaken by scientists.

While natural language change does exist, Romaine (2008) notes that natural language change is distinct from language endangerment caused by genocidal practices and active linguistic suppression. Arguments that language revitalization interferes with natural language change either deny or fail to recognize the causes of language harm in order to falsely equivocate between natural language change and genocidal language endangerment. Romaine notes that some arguments focus on the individual choices made by community members not to pass on their heritage languages and speak a dominant language instead, arguing that because these are choices made by individuals, the resulting language decline is natural. Such arguments either deny or fail to recognize the various ideological and economic factors which condition those individual choices. In any case, language revitalization, being typically advanced and led by members of an endangered language's community, is hardly less natural than language endangerment or natural language change. I will later discuss some of the ways that language revitalization interfaces with natural language change.

Language revitalization is a political action, and scientists engaging in language revitalization would be engaging in political actions. Romaine (2008) discusses how arguments that scientists should

not engage in political action presuppose a political neutrality which is not actually accessible by scientists. As I discussed previously, scientists have often engaged in political action by making negative value judgments of Indigenous languages and licensing the genocidal actions of settler states. If scientists were to refuse to engage in language revitalization, this too would be a political action, and it would be one closely aligned with the harmful actions that contributed to the current crisis of language endangerment; to stand back and let languages continue to decline would validate the actions which started the decline and which continue to contribute to it.

In this section I have discussed two scientific arguments in favour of language revitalization, and some arguments against language revitalization on scientific grounds. Scientific arguments for language revitalization recognize endangered languages as useful tools of inquiry for linguists and as stores of scientific knowledge, and because of this declares them worth preserving. Scientific arguments against language revitalization falsely cast language endangerment as a natural process which should not be interfered with, or claim that language revitalization is too political an act for scientists to engage in, despite how scientists have already engaged in political acts like the justification of linguistic genocide.

2.5 Justifications based on rights and legal responsibilities

In this section I will discuss arguments justifying language revitalization based on legal grounds, such as through rights granted to people or through legal responsibilities of states created by laws. Legal arguments might be expected to appeal most to members of legal institutions or state apparatuses, as the rightful implementation and upholding of laws are important to both those groups. People who otherwise believe in the merit of Western legal frameworks, such as followers of neoliberal capitalist ideology, are also likely to accept arguments for language revitalization based on legal grounds.

I will discuss legal arguments for language revitalization primarily in terms of legal rights. First, I will discuss language rights, which identify language as a right to which people are entitled, and find that language revitalization is a means for ensuring or protecting language rights. I will then discuss other legal rights which do not as directly concern language, but which still implicate on language and language revitalization. I will also discuss some of the legal declarations and commitments made in U.S. which concern Indigenous languages.

Skutnabb-Kangas (2018), discussing language rights as they pertain to language revitalization, identifies language rights as a highly debated and contested concept, on which there has been little

agreement by various discussants. She distinguishes multiple types of language rights, language human rights and ancillary or instrumental language rights. In an earlier work focused on defining language rights, Skutnabb-Kangas (2012) defines language human rights as those rights which are so basic and essential to dignified life that all people possess them, while ancillary or instrumental language rights include all other language rights, which could encompass language rights relating to economic opportunity, mobility, translation, interpretation, and so on. She describes her definition of language human rights as vague and moralizing, but asserts the prefigurative value of this definition due to how little codification and legal implementation exists of languages rights. Skutnabb-Kangas (2012, 2018) primarily focuses on language human rights rather than than ancillary language rights, which I will follow here.

Skutnabb-Kangas (2012) describes a few specific language human rights, noting also that language human rights are highly interdependent, presupposing each other and often requiring implementation of other rights. She describes the right to change or shift languages as a language human right. This right refers to the right for a person to voluntarily choose what language or languages they learn, use and identify with. A person granted this right could freely choose to learn and use a heritage language, a dominant language, or both. She also describes the right to education through the medium of one's mother tongue as a language human right. A person granted this right would be able to access education taught in their native language or heritage language, even if that language differs from the local dominant language.

In practical terms, Indigenous people are often denied both these rights, due to social and economic pressures to assimilate towards dominant languages, and due to requirements to place their children in dominant language education, which has been discussed as a genocidal practice (Skutnabb-Kangas & Dunbar 2010). In order to grant just these two language human rights, a substantial minimum of language revitalization for most endangered languages would be necessary. Mother tongue medium education for children is already a goal or past accomplishment of many language revitalization programs, while the right to change or shift languages requires the re-establishment of intergenerational transmission, or at least the development of robust adult language education programs.

Although language human rights as Skutnabb-Kangas (2012) describes would support language revitalization, as she discusses elsewhere (Skutnabb-Kangas 2018), there are no binding implementations of language human rights that do support language revitalization. She describes that

there are implementations of language rights in various documents and regulations at regional, national, and international levels, but that where these rights are legally binding, they are too vague to truly support language revitalization. Although language rights are described implicitly and explicitly in such documents as the UN Declaration on the Rights of Indigenous Peoples (2008) or the UN Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities (1992), these declarations are not legally binding, and are still too vague to substantially support language revitalization. Skutnabb-Kangas (2018) also notes that even when there is support in legal documentation like constitutions or multi-national agreements, it is not matched by significant functional achievement of language revitalization.

The current and past implementation of language rights in Canada demonstrate the tenuousness of language rights' ability to support language revitalization. Selinger (2022) discusses the implementation of Canada's Indigenous Languages Act, signed into law in 2019: The act promises funding and support of Indigenous language revitalization as called for Canada's Truth and Reconciliation Commission. Though funds have been distributed under the act, Selinger notes that Canadian government bodies rarely engage with Indigenous community on matters of Indigenous languages, and the actual funds distributed under the Indigenous Languages Act do not meet what is promised, leaving programs still frequently underfunded. Thus, the legal implementation of Indigenous language rights in Canada has not yet yielded significant material support of Indigenous languages, even as it explicitly proclaims support for Indigenous language revitalization.

The Indigenous Languages Act's failure to materially support language revitalization may stem from earlier developments in Canadian language policy. Haque & Patrick (2015) describe the development of Canadian language policy and how Indigenous languages and Indigenous concerns have historically been excluded from language policy. Haque & Patrick assert the Royal Commission on Bilingualism and Biculturalism (RCBB) (1963-1970) to be the foundation of modern Canadian language policy, and describe how the RCBB functioned to reinforce settler narratives, recognizing French and English speakers as the founders of Canada, while excluding Indigenous languages entirely. This created a racial hierarchy in Canadian language policy which was maintained as it developed: The Canadian Charter of Rights and Freedoms, established in 1982, specifically recognized language rights of English and French speakers, but still excluded Indigenous language rights. The Indigenous Languages Act of 2019 thus represents a very recent turn towards support of Indigenous language rights in Canada's historically racist language policy. As time passes, this change of course may

continue and begin to yield more substantial results.

Despite the lack of effective legal implementation and legal support for language human rights, they do still serve as a grounds by which to argue for language revitalization. The language human rights described by Skutnabb-Kangas (2012) clearly support language revitalization, and Skutnabb-Kangas (2018) says that although there are not direct and binding language human rights relating to revitalization in international law, it is clear what language human rights should exist.

Other legal rights may also be used as grounds to argue in favour of language revitalization. Tatsch (2004) argues for the protection of Indigenous languages based on intellectual property rights. Tatsch first discusses how U.S. law conceives of intellectual property in a sense which is both individualistic and focused on the economic function of anything which is considered to be intellectual property. Because of this, U.S. law is not able to recognize collective ownership of intellectual property, as of Indigenous languages by Indigenous peoples, rendering it of little use to Tatsch. Tatsch instead finds value in international law, arguing that, per Daes' (1997) report to the United Nations, United Nations statutes allow for the recognition of Indigenous peoples as the true collective owners of their heritage, including their Indigenous languages. This recognition means that Indigenous languages should be protected as the intellectual property of Indigenous people under United Nations law. This does not directly establish a responsibility for states to assist Indigenous language revitalization, but it does help to establish Indigenous intellectual sovereignty and the right of Indigenous peoples to determine for themselves what is done with their languages, which may include language revitalization.

McCarty (2008b) discusses various rights related to language and self-determination given to Indigenous peoples in the United States and discusses how these rights support language revitalization. Indigenous peoples in the United States, as members of distinct Indigenous nations, possess tribal sovereignty recognized by the U.S. Constitution. This tribal sovereignty means that Indigenous peoples have a right to self-government, self-determination, and self-education, all of which are violated by monolingual public education: If Indigenous people are required by the United States to place their children in public schools where their children are taught English without the opportunity to learn Indigenous languages, then they are not self-governing, they are not self-determining, and they are not self-educating. This alone creates a responsibility for the United States to cease violating tribal sovereignty, which would include letting Indigenous people freely work to revitalize their Indigenous languages.

Although tribal sovereignty is frequently violated by the United States, McCarty (2008b)

recognizes a great deal of federal legislation which supports tribal sovereignty and especially the right of Indigenous people to self-educate and to revitalize their languages. These include the 1972 Indian Education Act, the 1975 Self-Determination and Educational Assistance Act, the 1990/1992 Native American Languages Act and the 2006 Native American Language Preservation Act. These acts help to create a legal framework for Indigenous language revitalization and allocate sufficient resources to allow Indigenous peoples to develop and run curriculum and schools for language revitalization, including Indigenous language medium education, immersion programs, and language nests. These acts recognize tribal sovereignty and reduce the degree to which it is violated by public education, and they also represent a commitment by the United States to assist Indigenous language revitalization. As long as that commitment is robust, then it would be expected that language revitalization programs should be well-supported and successful.

Although arguments based on language rights, or other rights, like intellectual property rights and tribal sovereignty are not able to firmly establish a positive support for language revitalization, they do help to establish the right of Indigenous people to work towards language revitalization without interference. Such arguments are still valuable, as language revitalization in general must be performed by the language community, so securing the right for a language community to revitalize without interference is an important aspect of ensuring successful revitalization. The arguments described also demonstrate the commitments made by states and other organizations to assist in language revitalization; where such commitments exist, they may be leaned on when language revitalization efforts require more resources than are otherwise available. Arzoz (2015) discusses the real and effective support given to Basque language revitalization efforts by the Spanish government in the form of institutional, economic, and educational support. Basque revitalization support may provide an example which the commitments of other states to aid language revitalization might be held to.

2.6 Justifications based on political goals

In this section I will discuss arguments in favour of language revitalization based on political goals of states. As I have already discussed economic and legal arguments, the political goals discussed in this section will only encompass a small fraction of all the goals any given state has which are ultimately in some sense political. Rather than discussing all political goals, I will discuss goals relating to the legitimization of a state's governance over its citizens. Like the legal arguments of the last section, I would expect these arguments to appeal most to state actors and state institutions, as well as various

state citizens who presuppose the legitimacy of a state or are otherwise concerned for its true legitimacy. These arguments might specifically lack appeal to members of endangered language communities, due to tensions between endangered language communities and states which have violently subjected them to external rule, as will be discussed in more detail during this section.

I will discuss two political goals of states that could be aided by language revitalization. The first goal, which is goal likely common to many modern states, is that of helping all governed citizens to participate in democratic processes and access the services of the state. The second goal, which is largely specific to Canada, though it may be generalized to other settler states, is that of mending the relationship between Canada and the Indigenous peoples who live in North America, usually framed by Canada as a process of reconciliation.

Nickson (2009) discusses how language revitalization may help to improve participation in political processes and reduce language-based wealth inequality, in the context of Guaraní revitalization in Paraguay. Guaraní is the preferred language of the majority of the Paraguayan population, while Spanish is only spoken out of necessity, if at all, outside of a small minority. Despite this prevalence of Guaraní in the population, the Paraguayan education system used exclusively Spanish from 1870 to 1970. Education reform was initiated in 1992, attempting to begin teaching children in their mother tongues, primarily Guaraní, but has met little success, possibly due to the use of overly formal Guaraní, unlike the everyday Guaraní of students' parents, poor teacher training, and the general negative effect of stigma against the Guaraní language. Political discourse and government ministries both also excluded Guaraní for a significant historical period, with most government communication delivered in Spanish only.

Nickson (2009) asserts that the suppression of Guaraní in Paraguayan history has been a significant contributor to the exclusion of the Guaraní speaking majority of the Paraguayan population from participation in Paraguayan political institutions, and increased wealth inequality between the Guaraní speaking majority and the Spanish speaking economic elite. Paraguay began a democratization process in 1989, but that process has largely excluded language policy or the inclusion of Guaraní from its methods, which Nickson suggests is why it has failed to decrease poverty and inequality in Paraguay. While the specific situation of Paraguay is quite unique, the importance of linguistic inclusion to the inclusion of a people in their governance applies to some degree in any state where a part of the population speaks languages different from the dominant language of that state. Meades (2015) touches on this same problem in Canada when he describes how the Nishnawbe Askwi Nation

and the Ojibway and Cree Cultural Centre produced a glossary of political terminology for the purpose of ensuring that Cree speaking people are able to be more involved in issues of local governance.

The process of mending the relationship between the settler state of Canada and the Indigenous people colonized by Canada has been granted considerable explicit attention by Canada itself, primarily in the form of the Truth and Reconciliation Commission of Canada (TRC). The TRC was formed in 2008, and issued its final report in 2015, with a mandate to reveal to Canadians the extent of colonial genocide and to guide a process of healing and reconciliation between Indigenous people and Canadian settlers (TRC 2015a). The TRC issued many calls to action, which describe courses of action the TRC found important to securing reconciliation, including many related to Indigenous languages, calling for Indigenous language rights to be established, for Indigenous language revitalization to be funded and managed by Indigenous people, and for the development of post-secondary education in Indigenous language (TRC 2015b). The goals of the TRC and its calls to action are on their own an argument for language revitalization in Canada, as they clearly frame language revitalization to be an important component of the reconciliation described by the TRC and desired by Canada.

Since the issuing of the TRC's reports, some academic works have been written discussing how the TRC's language related calls to action have been implemented and responded to by Indigenous language revitalizers. Sterzuk & Fayant (2016) focus on the language planning necessary to incorporate Michif, an Indigenous language, into post-secondary education in Canada, and the likely benefits of such incorporation, such as the development of well-trained teachers of Indigenous languages and a challenging of the dominance of English typical to higher education. Sterzuk & Fayant for the most part accept the framework of reconciliation, but they recognize that some people may have misgivings about realizing reconciliation through within the same post-secondary institutions which were instrumental to cultural harm in the first place. They emphasize the importance of real actions to revitalization and reconciliation, whether in the form of creating supportive language legislation, which had not been done at the time of publication, or in the form of meaningfully including Indigenous languages in post-secondary curricula regardless of language legislation.

McGregor (2017) investigates the perspectives of Indigenous people on reconciliation, and finds a position which is much more critical of reconciliation. An interview subject who works in Oneida language revitalization questions whether reconciliation is truly for the benefit of Indigenous people, and describes how Indigenous people have already been reconciling with the presence of settlers since initial contact. Alfred (2005), a previous critic of reconciliation, describes reconciliation

as drawing a false moral equivalence between settlers and Indigenous people, and Coulthard (2014), another previous critic, describes the framework of reconciliation as ideologically fabricating a separation between present-day non-colonial Canada and the colonial Canada of the past, despite the fact that there has not been any formal separation between those periods. McGregor (2017) and these previous critics of reconciliation advance other modes of redress over reconciliation, such as Indigenous resurgence, a framework which de-emphasizes colonial values, goals, and institutions, and instead focuses on Indigenous people's ability to regenerate and self-empower within traditional Indigenous frameworks.

Although reconciliation is not always accepted as-is by Indigenous people, it remains an argument in favour of language revitalization. Reconciliation, as conceived by Canada, finds Indigenous language revitalization to be important, and even when reconciliation is criticized by Indigenous people, the importance of language revitalization is not contested. Although reconciliation appears to be used primarily in Canadian contexts, any settler state may benefit from similar frameworks addressing and redressing colonial harms to Indigenous people.

Arguments for language revitalization based on the goals of governing states frame language revitalization as a benefit for the state, challenging monolingualist arguments that language diversity is a threat to national unity and good governance, as advanced by Ladefoged (1992). It is important when advancing arguments like these to also remember that language revitalization is best performed by the language community themselves, as these arguments might otherwise encourage states to attempt to directly run or manage language revitalization programs, which might cause a program to be managed against the desires of the language community it serves, reducing success rates.

2.7. Section conclusion

I have now described arguments in favour of language revitalization in five distinct categories: Cultural arguments, health and economic measurement based arguments, scientific arguments, legal arguments, and political arguments. It is likely that there remain some arguments not described in this section, but I suspect that the majority of extant arguments in favour of language revitalization rely on some recognizable combination of the points described in this section, or otherwise on points related to those. I imagine future novel arguments are likely to rely on new discoveries or new applications of extant knowledge, such as the application of different economic metrics or values of different cultures to the field of language revitalization, but to still fit within the categorization I have used.

The emphasis of the section was on exhaustiveness description of arguments rather than the iteration of novel arguments or the construction of a novel composite argument. Because of this, I have sought to describe how each argument might appeal to different audiences, including how some audiences might disprefer some arguments. This suits the value of exhaustive description of the various arguments; Description of the widest possible range of arguments allows this document to support language revitalizers in seeking support from the widest possible audience. It is no problem that some audiences might disprefer some arguments, as there are most likely other arguments which will be more appealing to those audiences. So long as the concerns of the most important parties, such as Indigenous peoples and endangered language communities, are heard and incorporated into argumentation, then I do not feel there should be any lasting problems in divided acceptance of distinct arguments. As an example, I would emphasize the importance of recognizing and incorporating Indigenous people's critique of reconciliation frameworks whenever reconciliation is advanced as a justification for language revitalization.

Similarly, I have not sought to directly reconcile contradictions that might arise between the different arguments I have described. Arguments for language revitalization based on traditional Haudenosaunee values of autonomy from settlers might be seen to contradict arguments for language revitalization based on the goal of Canada to reconcile with Indigenous peoples, including the Haudenosaunee. I do not see this contradiction as a problem, but instead as an opportunity for further development in reasoning. The honest discussion and resolution of any contradiction between the TRC's framing of reconciliation and the autonomy described by the Two Row Wampum is likely to yield improvements to both arguments as justifications for language revitalization.

One complication to the justification of language revitalization which I have not discussed up to this point is that opposition to language revitalization may be based in racism, colonial attitudes, or other forms of bigotry, overt or covert, just as historical language harm has been. While some arguments may be able to appeal to racist, colonialist, or otherwise bigoted people due to surface level depoliticization, especially scientific or legal arguments, I suspect that these forms of bigotry may present an obstacle towards wider acceptance of language revitalization that cannot be challenged within the frameworks of language revitalization. Because of this, I suggest that widespread direct challenging and erosion of these forms of bigotry is a necessary prerequisite to achieving wider acceptance of the necessity of language revitalization, or to securing good faith engagement with arguments for language revitalization.

I would like also to specifically emphasize the importance of directly challenging covert expressions of racism and colonialist ideology. Modern critical work such as the previously cited Nakagawa & Kouritzin (2021) and Meighan (2022) describe how modern neoliberal ideology reflects historical racist and colonialist ideology in covert forms, in ways that present themselves as complimentary and uplifting towards Indigenous people. I experience these forms of covert bigotry as often barred from direct challenge, due to social pressures which demand that Indigenous people treat such covert bigotry only according to its outward presentation as complimentary and uplifting. I believe it is important to directly challenge covert bigotry, and in doing so render it either overt or non-existent, thus preparing the way for more open and honest discussion about the necessity of language revitalization.

3. Justification for adult language immersion as a specific method of language revitalization

3.1 Section overview

Having discussed the justification of language revitalization in general, I will now specifically discuss the justification of adult language education as a means of revitalizing languages. There are three primary factors motivating this discussion on the justification of adult language education, which I will describe in this section introduction. In the rest of this section, I will discuss the various reasons why adult language education is an important part of language revitalization. I will discuss why language education is a strictly necessary part of language revitalization, as well as how adult language education yields important secondary benefits to other aspects of language revitalization. Much of this justification suits adult language education in general, without specific reference to immersion; I will separately discuss the reasons why immersion-based education is preferable over other types of adult language education.

DeCaire (2023), a work written by an instructor of Onkwawenna Kentyohkwa, discusses at length the particular necessity of adult immersion education in Kanyen'keha revitalization. DeCaire argues on many of the same grounds discussed in this section, as well as some distinct grounds. A more comprehensive understanding of the role and necessity of adult immersion education in language revitalization and in Kanyen'keha revitalization in particular can certainly be achieved by reading DeCaire (2023).

The first factor which motivates this discussion is the necessity of accurately valuing education as a means of language revitalization. Skepticism towards education as a means of language

revitalization has been expressed to various degrees throughout the language revitalization literature. I have previously discussed this skepticism as expressed by Fishman (1991) and McCarty (2008a), both of which assert that language education is not on its own sufficient to revitalize language. This assertion is evidenced elsewhere in the literature, as in Gomashie (2019), which discusses how learners of endangered languages do not use the language outside of classes despite their proficiency. Beyond mere insufficiency, Fishman (1991) also suggests that pursuit of language education could be harmful to language revitalization initiatives in early stages, as language education efforts may necessitate more contact with hegemonic institutions, such as state education regulators, and divert resources away from efforts Fishman sees as more essential to language revitalization. While it is certainly the case that language education is not on its own sufficient to revitalize a language, it is important that justified skepticism not be allowed to overshadow the genuine utility or necessity of language education to language revitalization.

On the other hand, Pérez Báez et al. (2019) find, after surveying many language revitalization efforts around the world, that language education is the most commonly engaged-in language revitalization activity. Regardless of how seriously skepticism towards education is taken in the language revitalization literature, it is clear that language education is seen as important by people who are actively engaging in language revitalization. It may even be the case that language education is overemphasized in language revitalization activities; Pérez Báez et al. (2019) suggest that intergenerational transmission, the primary goal of language revitalization per Fishman (1991), is consistently underemphasized among the surveyed language revitalization efforts. Even if the there is a global overemphasis on education, education might still be neglected within the specific context of any individual language. Such an overemphasis, similarly to academic skepticism, should be approached with an honest accounting of the utility or necessity of language education to language revitalization; even if there is an overemphasis, the size of that overemphasis must be accurately assessed.

The second factor which motivates this discussion is the difficulty of adult language immersion, and of adult language education in general. The difficulty of adult language education is frequently discussed in the language revitalization literature, as a primary topic (McIvor, 2012; King & Hermes, 2014; among others), or as preamble to discussion of other topics related to adult language education (Foxcroft, 2016; Gordon, 2009; among others). Immersion-based education presents additional challenges, some of which are described by Maracle & Richards (2002): Classes move slowly, concepts must be explained multiple times, students fall back to their native language for comfort. The

endangered status of a language can also pose additional challenges: Riestenberg (2020) describes how endangered language learners often lack access to social opportunities to speak their target language, rendering learning more difficult than would be the case with widely-spoken languages. The great difficulty of adult language education is often exacerbated by perceptions of that difficulty: Students and potential learners may feel discouraged by the apparent difficulty of learning an endangered language, and so avoid taking classes, fully engaging in classes they take, or using the language outside of the classroom (King & Hermes 2014, Peter 2014). Because of this great difficulty and its discouraging effects, it is important to understand the role adult language education must play in language revitalization as a whole. If adult language education is properly contextualized, its difficulty may seem more explicable and less daunting, in turn rendering it less difficult; Peter (2014) describes how students who feel hopeful despite the difficulty of learning an endangered language typically experience better education outcomes.

The third factor which motivates this discussion is the distribution of education efforts for language revitalization between adult and child education. Pérez Báez et al. (2019) do not directly compare the frequency of adult and child education among the language revitalization efforts they survey, but their data and analysis suggest that education efforts are for the most part aimed at children. Pérez Báez et al. find that language teaching comprises approximately 30% of language revitalization activities; activities identified as language teaching include school-external language classes and camps, as well as various types of schools, including pre-schools, immersion schools, and bilingual or multilingual schools. While the analysis generally does not state whether the activities in these categories are or are not directed at adults, several of the categories explicitly describe child education, suggesting that language education tends to be directed more towards children than adults. Pérez Báez et al. report that 46% of overall surveyed activities are designed for children and 54% for adults, but this breakdown includes all non-educational activities. Many of the non-educational activities are aimed at proficient speakers and likely account for a large part of the adult-directed activities. If language education efforts are directed primarily towards children, it is likely the case that adult education is underemphasized. Apart from direct negative effects on adult learner outcomes, such an underemphasis may also worsen the outcomes of child learners, for reasons that will be discussed in more detail later in this section.

This third factor is especially relevant in the context of Haudenosaunee language revitalization. All of Tehatiwennathe’tányons' partner programs report that child language programs in their

communities are better funded than adult language programs. As a result, the child language programs are typically better-paying than the adult language programs, and more easily retain staff. The staff of these child language programs are often graduates of the lesser-funded adult language programs, which have trouble hiring and retaining sufficient staff to expand their class sizes or offer more advanced programming, because they must compete with child language programs as employers.

These three described factors motivate this section discussing why adult education is important for language revitalization. Clear understanding of the role of adult education in language revitalization should help language revitalizers to engage productively with issues related to these factors and ensure that adult education is afforded the focus and resources necessary for success. This might take the form of defusing excessive skepticism, encouraging persistence despite difficulty, correcting underemphasis on adult education, or simply engaging in adult language education.

3.2 The necessity of adult education to language revitalization

In this sub-section, I will discuss how adult immersion education has been argued or implied to be a necessary component of successful language revitalization. I will discuss skepticism towards education, what makes adult education necessary, and how this necessity changes as the situation of a specific language changes.

Shah & Brenzinger (2018) have argued that education is a necessary step for language revitalization when intergenerational transmission has ceased, as is frequently the case for endangered or declining languages, the typical targets of language revitalization. The reason for this is that education is one of the only remaining ways for a language to be transmitted when natural intergenerational transmission has ceased. Regardless of whether a language revitalization movement's proximal goal is to restore intergenerational transmission, to increase language use in a community, or to create more speakers, it will always be necessary to transmit the language to more people.

Fishman (1991) expresses general skepticism towards education for language revitalization. Shah & Brenzinger (2018) argue against this skepticism, citing the success of the Hawaiian revival movement, which is centred around Hawaiian-medium education, and in which “Hawaiian is acquired in schools through formal education and spreads from there into other domains, including homes.”

Fishman's skepticism is based on two grounds. The first is that the goal of language revitalization is to re-establish intergenerational transmission, which language education cannot directly achieve. Fishman describes language education as beginning at “point zero” with each generation of

students, where new students have little to no knowledge of the language they are learning. He contrasts this with intergenerational transmission which he describes as gradually accumulating language knowledge over generations, rather than starting fresh with each generation of students. Despite this, Fishman's framework is frequently unclear about how language revitalization should occur without reliance on language education, especially in the earliest stages.

The second is that language education efforts may be captured or controlled by hegemonic institutions, or otherwise absorb effort which may more effectively contribute to intergenerational transmission if spent elsewhere. Fishman distinguishes between locally-controlled schools, which are independent from hegemonic powers and controlled by the local language community, and externally-controlled schools, which are maintained by hegemonic powers, and may only reluctantly participate in language revitalization activities, or even work counter to the goals of a language revitalization movement. Externally-controlled schools may function to sabotage language revitalization movements, while locally-controlled schools may require too many resources for a community to reasonably operate, causing other aspects of a language revitalization movement to become understaffed or underfunded, and hence less effective.

Fishman's skepticism, though applicable to child education, should not apply to adult education. Adult education is likely to be more necessary and more plausibly achievable than child education in early stages of language revitalization, while child education becomes more necessary and more plausibly achievable in later stages. Adult second language learners will not benefit from any gradual generational accumulation of language knowledge, as they have already not been transmitted the language. Adult education programs, rather than absorbing staff required for other aspects of language revitalization, actually serve to create staff for other aspects of language revitalization.

However, as Shah & Brenzinger (2018) point out, the success of the Hawaiian language revitalization began with the establishment of formal child education using Hawaiian as the language instruction, so adult education need not always precede child education. Shah & Brenzinger suggest that Hawaiian medium education was able to achieve success in part due to the historic importance of the Hawaiian language in the Hawaiian Kingdom, prior to U.S. annexation: Hawaiian medium education had previously existed at all levels of education, and a wealth of written Hawaiian material was still accessible. Many other language revitalization movements will not have these same benefits.

In any case, language education is still necessary in the earliest stages of language revitalization, when a language is at stage 7 or 8 on Fishman's GIDS. At these stages, most users of a language are in

the oldest generation, past the age where they might raise new children speaking the language. In stage 8 they are additionally socially isolated, not knowing any other speakers and lacking opportunities to use the language socially. For Fishman, it is necessary at this stage to “reconstruct” the language. This consists of documenting the language and its associated culture and developing a group of people with working knowledge of the language. Fishman warns against language education in the stage of reconstructing a language, saying that language learnt in that stage “has [no] functional contextualization,” meaning that there are no social contexts in which the language can be used, so it cannot contribute to the development of intergenerational transmission. However, for a group of people with working knowledge of the language to develop, people must learn the language.

Once the language has been reconstructed or reassembled, the next goal is to develop a cohort of second-language speakers who are young enough that they could have children and raise them speaking the language. Fishman identifies “youth groups [...] young parent groups and [...] residential communities or neighbourhoods, all of which utilize [the language]” as important to success in the early stages of language revitalization, as such groups foster continued social use of the language by families of child-bearing age, and will eventually foster successful intergenerational transmission. However, Fishman does not identify where the young people with knowledge of the language who must populate these groups come from, or how they acquire the necessary language knowledge to use the language in these groups. Unless there is a dedicated adult education program, these groups can only be formed by young people who do not speak the language, who must teach themselves the language.

The adult language program partners of Tehatiwennathe'tanyons are developing cohorts of young adult language speakers while simultaneously developing the social contexts in which those cohorts will use their developing language skills; the continued operation of each adult language program gradually develops a surrounding community of young speakers who use the language to speak to each other and who intend to raise children speaking the language. Thus, the adult language programs are the source of the language knowledge which Fishman's groups of young people must acquire, which is necessary for advancement to later stages of language revitalization in Fishman's model. It is not clear what alternatives to these programs would be more effective while evading Fishman's skepticism towards education.

Skutnabb-Kangas & Dunbar (2010) provide grounds for further arguments that both child & adult language education is necessary for language revitalization, though the work does not directly

discuss language revitalization. Skutnabb-Kangas & Dunbar's primary focus is the negative consequences of mass education of minority groups, especially Indigenous people, using hegemonic languages as the medium of education. They discuss hegemonic language education as subtractive language learning, or submersion education: Indigenous children entering these systems are not taught in their mother tongue, the original language of their culture, resulting in loss of language proficiency, poor quality education, and mental and physical harm to children, and marginalization. These negative effects can occur even for Indigenous children who have grown up speaking the local dominant language, because a locally dominant language does not become the mother tongue of a people after it displaces their original language.

Skutnabb-Kangas & Dunbar identify subtractive language education as an important direct causal factor of language endangerment. Subtractive language education has the effect of displacing and replacing the original language of Indigenous peoples, and may be considered a means of linguistic genocide. Even if intergenerational transmission of a revitalizing language is established through work in domains outside of education, as prioritized by Fishman's (1991) model, it will still be necessary to develop language education using the target language as medium in order to provide an alternative to hegemonic language education. Otherwise, new speakers of a revitalizing language may become reassimilated through hegemonic language education, counteracting the development of new generations of speakers.

Skutnabb-Kangas & Dunbar suggest guidelines for the achievement of quality education of Indigenous children. They suggest that Indigenous children be primarily educated in their mother tongue for at least the first 8 years of education, with hegemonic languages taught as a subject, not used as an education medium. After 8 years, hegemonic languages can be gradually introduced as an education medium. These guidelines are evidenced to yield the best education outcomes without harming children's language proficiency in their native language or the hegemonic language. For language revitalization to succeed in the long-term, these guidelines should eventually be met.

Adult immersion education will be necessary in the majority of cases to create sufficient teaching staff to meet these guidelines. Skutnabb-Kangas & Dunbar stress the importance of Indigenous children being taught by adults with a high degree of proficiency in their mother tongue, preferably native speakers. In many cases, native speakers with the necessary education training may not yet exist. Adult language education is thus necessary as a means to train the educators who will operate Indigenous language medium child education. Pérez Báez et al. (2019) find that child language

programs consistently have trouble finding sufficient fluent and trained staff to run their programs, and suggest that adult education programs are an important means to solve this problem. McCarty (2008a), in a case study of several North American language revitalization efforts, describes how the staffing of Hawaiian-medium public education for children who have aged out of the existing Hawaiian language nests is an ongoing problem, though she does not mention the same problem for Navajo, likely in part due to Navajo's much larger community of speakers.

The degree to which adult immersion education is a necessary component of language revitalization will vary depending on the real context of a given language, but adult language education of some kind will, like child language education, always be necessary to establish at some point. In the earliest stages, when there is no intergenerational transmission or social use of the language, adult immersion education is a necessary step towards the development of sufficient speaking population to re-establish these things, and so may be the most important aspect of language revitalization. Adult education will remain crucial for at least as long as it takes for adult second language learners to raise a generation of native speakers to adulthood, in order to fulfil the staffing requirements of the movement in its early stages.

Even as the importance of adult immersion education begins to diminish, it will remain necessary, as there will always be adult learners. For some generations, there will remain members of the "missing generation," a population of adults who have not yet learned the language. As the language achieves more social use, especially among the younger generations, the missing generation may become socially and culturally alienated if they do not have opportunities to learn the language. As well, there may be prospective adult learners from outside the culture of the language, who should be given some means of learning the language, as all increases to the speaking population benefit the language revitalization movement.

3.3 Secondary benefits of adult language education to language revitalization

In this sub-section, I will discuss various benefits which adult language education offers to language revitalization movements, beyond fulfilling the necessity described in the previous sub-section. I will discuss how adult speakers created by adult education programs are well positioned to introduce target language use to their communities, to participate in cultural work using the target language, and to support other language education efforts. I will also discuss the issue of the "missing generation," which adult education works to mitigate.

The first secondary benefit of adult language education to language revitalization I will discuss is the ability of adult second language speakers created by education programs to expand the use domains of a target language. In section 2.4.4, I discussed how Pohe (2012) posits that adult speakers, and adult education, are better suited to expand a language's use domains than child speakers and child education. I will here describe this claim in more detail.

Pohe (2012) describes how despite children learning the language in school and speaking it there, they do not go on to use the language outside of school. Māori is seen as having less status compared to English, and non-Māori speakers may react to Māori use in public with discomfort, discouraging Māori use in public. Pohe suggests that communities of adult speakers are better able to resist and challenge these monolingual norms than child speakers, and can even establish new social norms in which Māori use in normal, accepted, and encouraged. Children do not generally have the social status to establish norms on their own. King & Hermes (2014) echoes Pohe's claim, describing how the public language use of fluent speakers can positively influence less fluent or hesitant speakers, inspiring them to use the language more frequently, or to commit more strongly to increasing their own fluency.

Pohe (2012) also claims that in order to restore Māori as the primary language used by children in the home, adults must be proficient speakers of the language themselves, as communication requires two people who speak the language. If adults in a child's home do not speak Māori, children do not have as many potential conversation partners to speak the language with. Gomashie (2018) describes how children who have learned Kanyen'keha avoid speaking it in the presence of adults who do not also speak the language, echoing both the greater ability of adults to set linguistic norms, and the importance of adult fluency to children's public use of the target language.

Another secondary benefit to of adult language education to language revitalization can be found in the areas of cultural revitalization and creation of art in the target language. Alie (2016) discusses the potential benefits of cultural work such as art and performance to language revitalization, and the historic relation between cultural work and language revitalization work in Canada. Alie discusses how cultural revitalization and language revitalization have historically been separate, especially before the 90's, when language endangerment began to be more publicly recognized. This separation has meant that Indigenous performance and art has infrequently involved Indigenous languages, and performance and art have infrequently been a component of language revitalization programs.

Alie (2016) connects this separation of cultural revitalization and language revitalization in part to a sense that Indigenous cultural work must use English in order to reach a sufficient audience. Indigenous languages are spoken by a small and diminishing population, so Indigenous artists have

preferred to work in English, so that their work is not constrained to a small audience. Adult language education offers a means to resolve this problem and foster a unified revitalization of culture and language: The creation of new adult second language speakers by adult education programs directly increases the size of the potential audience of Indigenous language performance and art, as well as creating more potential authors of such work, rendering Indigenous language cultural work more viable both as art for its own sake and as a means of language revitalization.

Smith (2003) posits that Maori language revitalization success may be rooted in a cultural revolution orienting Maori towards self-sufficiency and consciousness-raising. Smith proposes that successful language revitalization efforts are an outward sign of this preceding more profound shift in thinking. Minimizing the gap between cultural revitalization and language revitalization identified by Alie (2016) through the development of a larger audience and author population may be a way to foster and leverage similar consciousness-raising for the benefit of North American language revitalization movements.

Adult immersion education also has the benefit of supporting less intensive means of language revitalization and rendering them more effective. DeCaire (2023) discusses several pathways for adults to acquire Kanyen'keha: self-teaching, the Master-Apprentice Program, which pairs learners with fluent mentors, group classes, often taught as undergraduate courses at universities, and language camps, which gather learners in an intensive language environment for a period typically measured in weeks. DeCaire judges all of these pathways as largely ineffective in comparison with full-time adult immersion education, primarily due to their inability to provide sufficient time speaking and hearing the target language. However, once a sufficient population of fluent speakers has been established by full-time adult immersion education, these pathways will become more effective, as their limited language contact time can be supplemented by interaction with the existing community of speakers, provided learners are taught the necessary language to engage with other speakers.

The ability of a large speaker population to support other means of language revitalization can be seen in the case of Hawaiian language revitalization, as described by Cowell (2012), where the comparatively large speaker population has allowed initial revitalization efforts to succeed by focusing on creating children's schools, Hawaiian-medium public education, and university-level Hawaiian language learning programs. In mainland North America, where speaker populations are typically smaller and thus insufficient to support focus on public education, focus on children's education and education through public schooling systems have been much less effective in creating speakers.

Finally, adult language education has the benefit of counteracting the problem of the so-called "missing generation," the population of adults of child-rearing age who do not speak the target language. Wilson et al. (2022) identify the missing generation as created by emphasis of language revitalization on child education to the exclusion of adult education, and reliance on L1 speakers to staff revitalization programs. As mentioned before, Gomashie (2018) describes how child speakers are hesitant to use the language around non-speaking adults. Wilson et al. (2022) identify many additional negative effects of the missing generation, including prevention of the target language from being normalized in the community, and failure of children's fluency to continue to develop as they age out of child education in the target language. Adult language education is a natural solution to the problem of the missing generation, as adult language programs directly educate non-speaking adults and convert them to speakers, often specifically targeting the age range of the missing generation.

In this section, I have discussed some of the ways that adult immersion education benefits language revitalization beyond fulfilling its strict necessity in the earliest stages of language revitalization described in the previous section. The benefits of adult immersion education include more effective normalization of the target language in public, more potential language contact for child speakers, more support for cultural work done in the target language, greater effectiveness of less intense forms of adult education, and mitigation of the issue of the missing generation. This list of benefits is likely not exhaustive.

3.4 Why immersion education is preferable

In this section I will discuss some of the reasons why immersion-based adult language education is preferable over non-immersion language education in the context of language revitalization. The first reason is that immersion education is more effective at raising learners to a high level of fluency. The second is that speakers who learn through immersion are better prepared to contribute to language revitalization. The final reason is that immersion education is able to more effectively teach learners the culture associated with the target language, ensuring that learners do not learn the language outside of its cultural context.

A great number of published works have identified immersion education as more effective than non-immersion education for language learning, especially for child learners (Groom-Hall 2003, McCarty 2008a, McIvor & McCarty 2017, Daniels 2021, among others). Hawaiian and Navajo child immersion programs have been found to effectively produce fluency in the target language and to

produce better outcomes in other areas, such as greater English fluency compared to standard English-medium education (McIvor & McCarty 2017, Demmert 2001). Less work has specifically studied adult immersion, but similar results have been found; Green (2017) compares self-rated proficiency of adult learners from immersion and non-immersion programs, and finds that learners from immersion programs rate themselves highest.

Maracle & Richards (2002) describe how adult immersion education has successfully produced speakers in the same community where years of weekly classes did not produce speakers. They attribute this to adult immersion's ability to better prepare students to actively use the language and provide an environment where students are encouraged to use the language, in contrast to weekly classes, which do not teach students the skills necessary to engage with other speakers of the language and do not give students the opportunity to use the language in natural conversation. King & Hermes (2014) discuss difficulties faced in adult language learning of Ojibwe, and connect non-immersive education to learning which does not encourage direct interaction and meaningful communication between speakers, and instead focuses on passive learning, individual performance of memorized speeches, producing learners who study the language for many years without becoming able to hold a conversation in the language. Immersion education produces speakers with greater fluency and greater willingness to use the language to communicate, in comparison with non-immersion education.

Beyond that immersion education produces speakers more effectively, the speakers that immersion education produces are often more able to actively contribute to language revitalization in the future. Maracle & Richards (2002) characterizes the goal of an adult immersion program as to create speakers, who will then create a ripple effect by virtue of being speakers, increasing language use and knowledge in their homes and in the community around them. Groom-Hall (2003) describes how adult learners often become highly personally committed to language revitalization after attaining fluency, and go on to work in revitalization programs, or otherwise find ways to actively contribute to language revitalization. The goal of creating speakers and the effect of creating speakers strongly committed to language revitalization are not unique to immersion programs, but the speakers created by immersion programs are particularly well-positioned to contribute further to language revitalization.

Pohe (2012) and DeCaire (2023) both discuss how adult immersion program graduates are equipped with the confidence and language skills to continue to develop fluency as speakers, and have developed direct links to other speakers through their program cohort. Riestenberg (2020) discusses tactics used in language immersion to maintain the language environment while ensuring that students

actively use the target language. These tactics create learners who are capable of holding conversation in the target language with other speakers of varying fluency, and who are willing to actively engage socially and create opportunities to use the target language. Immersion program graduates are thus especially well-suited to normalize the target language in social settings, having the confidence and ability to speak the language, even with highly fluent speakers. Additionally, immersion programs are naturally are situated in a network of other speakers, their classmates, with whom they can speak the language, which they are also likely to expand to include other speakers.

An additional benefit of immersion education is that it allows for learners to become deeply familiar with the culture associated with the target language, and it allows for learners to develop a more authentic understanding of that culture. Hermes (2005) discusses how Ojibwe culture and language become distorted when taught in the English or as an add-on to standard dominant culture curricula. Hermes identifies several issues in this method: that explicit teaching of Ojibwe culture creates a distinction between standard curriculum material and cultural material, that it removes culture from its natural context and constrains it to what can be fit into class sessions, and that Ojibwe culture is understood "in English." This leads students to feel a tension between success in school and success "as Ojibwe," and to learn Ojibwe culture in isolated and shallowly understood parts, rather than as the natural everyday activity of Ojibwe people. As an example of this distortion, Hermes discusses how students learn Ojibwe words in English-language classes, and then pluralize those words as if they were English words.

Hermes (2007) discusses how immersion education helps to solve these issues, suggesting that Ojibwe students should be taught using Ojibwe as the language of instruction rather than teaching Ojibwe culture as an add-on to standard English education. Using Ojibwe as the language of instruction mitigates the issue of division between academic and cultural material, and allows for culture to naturally become a part of the class, because using and teaching Ojibwe necessarily includes Ojibwe culture. English cannot distort the understanding of Ojibwe culture to the same degree when it is not present in the classroom, and Ojibwe culture can be presented more completely because it is not isolated as a subject distinct from math or science, but present throughout all class subjects.

Hermes (2005, 2007) discusses cultural distortion and immersion education in the context of child education. Similar points have been made about cultural teaching in the context of adult immersion. Richards & Maracle (2002) briefly touches on the topic of teaching culture but frames the connection between the two differently than Hermes does, saying that while it is important to teach

culture and language together, it is necessary to first focus on the mechanics of the language, because students need to achieve a certain degree of understanding of the language in order to begin to natural acquire an understanding of the culture. DeCaire (2023) speaks similarly on the topic, saying that adult immersion programs should be principally concerned with language acquisition without directly teaching cultural knowledge, which is deeply embedded throughout all taught language material, and is acquired by students as natural consequence of learning the language.

Thus in this section I have described three reasons why immersion language education is preferable over less intensive methods of language education: It is more effective at producing speakers with a high degree of fluency, it produces speakers who are confident and socially connected to enact language practices and contribute further to the revitalization of the target language, and it produces speakers who have a deep understanding of the culture associated with their language in addition to their fluency.

3.5 Section conclusion

In this section I have discussed various reasons why adult language education is both useful and necessary in language revitalization. The purpose of this discussion is to justify adult language education, which is often treated with skepticism in the language revitalization literature and often devalued in language revitalization movements, as a crucial component of an effective language revitalization movement. My hope is that this document will help to equip language revitalizers who are interested in running adult language programs with the arguments necessary to justify their work, and convince language revitalizers who are skeptical towards adult language education of its utility.

I have separated my arguments for adult language education into two categories. The first category of arguments includes reasons why adult language education is strictly and fundamentally necessary to language revitalization, such that adult language education is the only means to fulfill some of the needs of language revitalization. The second category of arguments includes reasons why adult language is necessary for its ability to render other means of language revitalization, such as child education, more effective. I have also discussed in this section several reasons why immersion education should specifically be preferred as the means of adult language education for language revitalization.

Please use this document as a resource with which to argue for language revitalization, and for adult immersion education as a means of langauge revitalization and to help secure funding for all

language revitalization efforts and especially adult language programs.

References

Alfred, T. 2005. Wasáse: Indigenous Pathways of Action and Freedom. Broadview Press.

Alie, R. (2016). Aboriginal performance cultures and language revitalization: Foundations, discontinuities, and possibilities. The University of Western Ontario Journal of Anthropology. 24(1): 30-43.

Arzoz, X. (2015). The Impact of Language Policy on Language Revitalization. In Marten, H., Rießler, M., Saarikivi, J., Toivanen, R. (eds.) Cultural and Linguistic Minorities in the Russian Federation and the European Union. 315-334. Springer.

Barker, B., Goodman, A., & DeBeck, K. (2017). Reclaiming Indigenous identities: Culture as strength against suicide among Indigenous youth in Canada. Canadian Journal of Public Health. 108(2): e208-e210.

Chain, J., Shapiro, V., LeBuffe, P., Bryson, A., American Indian and Alaska Native Advisory Committe. Academic achievement of American Indian and Alaska Native students: Does social-emotional competence reduce the impact of poverty? American Indian and Alaska Native Mental Health Research. 24: 1-29.

Chiblow, S., & Meighan, P. J. (2022). Language is land, land is language: The importance of Indigenous languages. Human Geography. 15(2): 206-210.

Coulthard, G. (2014). Red Skin, White Masks: Rejecting the Colonial Politics of Recognition. Minneapolis: University of Minnesota Press.

Cowell, A. (2012). The Hawaiian model of language revitalization: problems of extension to mainland native America. International Journal of the Sociology of Language. 218: 167-193.

Daes, E. A. (1997). Protection of the Heritage of Indigenous People. United Nations.

Daniels, B. C. (2021). ē kakwē nēhiyaw pimātisiyān ōta nīkihk: The lifelong journey home. (Doctoral dissertation, University of Saskatchewan).

DeCaire, R. (2023). The Role of Adult Immersion in Kanien'kéha Revitalization. (Doctoral dissertation, University of Hawai‘i at Hilo)

Demmert, W. G. (2001). Improving academic performance among Native American students: A review of the research literature. U.S. Department of Education.g

Fishman, J. A. (1991). Reversing language shift. Theoretical and empirical foundations of assistance to threatened languages. Clevedon: Multilingual Matters.

Foxcroft, D. T. (2016). saač’inkin huuḥtakšiiḥ (We are Always Learning Together): Advancing

nuučaaɁnuł Adult Learners Through Peer-Support. (Master's degree dissertation, University of Victora.)

Gomashie, G. (2019). Kanien'keha / Mohawk Indigenous language revitalisation efforts in Canada. McGill Journal of Education / Revue des sciences de l'éducation de McGill. 54(1): 151-171.

Gordon, C. J. (2009). Anishinaabemowin pane: A qualitative exploratory case study of an Indigenous language immersion revitalization program. (Doctoral dissertation, Capella University.)

Green, J. (2017). Pathways to creating Onkwehonwehnéha speakers at Six Nations of The Grand River Territory. Six Nations Polytechnic.

Groom-Hall, M. (2003). Indigenous language revitalization in Montana: Perspectives from four nations. (Doctoral dissertation, University of Montana.)

Hale, K. (1998). On endangered languages and the importance of linguistic diversity. In Grenoble, L. & Whaley, L. (eds.) Endangered Languages: Language Loss and Community Response. 192-216. Cambridge: Cambridge University Press.

Hallet, D., Chandler, M. J., & Lalonde, C. E. (2007). Aboriginal language knowledge and youth suicide. Cognitive Development. 22: 392–399.

Haque, E., & Patrick, D. (2015). Indigenous languages and the racial hierarchisation of language policy in Canada. Journal of Multilingual and Multicultural Developmet. 36(1): 27-41.

Hermes, M. (2005). "Ma'iingan is just a misspelling of the word wolf": A case for teaching culture through language. Anthropology & Education Quarterly. 36(1): 43-56.

Hermes, M. (2007). Moving towards the language: Reflections on language as culture in Native American education. Journal of American Indian Education. 46(3): 54-71h

Hodge, F. S., & Nandy, K. (2011). Predictors of wellness and American Indians. Journal of Health Care for the Poor and Underserved. 22(3): 791–803

Indian Health Service. (2014) Trends in Indian health: 2014 edition. Indian Health Service.

Ladefoged, P. (1992). Another view of endangered languages. Language. 68(4): 809-811.

Macaulay, T. B. (1835). Minute on Indian education, February 2, 1835.

Maracle, D. K., & Richards, M. (2002). A native language immersion program for adults: Reflections on year 1. In Burnaby, B., Reyhner, J. (eds.) Indigenous Languages across the Community.

McCarty, T. L. (2008a). Schools as strategic tools for Indigenous language revitalization: Lessons from Native America. In Hornberger, H. (ed.) Can schools save indigenous languages? 161-179. Palgrave Macmillan, London.

McCarty, T.L. (2008b). Native American Languages as Heritage Mother Tongues. Language, Culture, and Curriculum. 21(3): 201–225.

McGregor, H. (2017). Entangled resurgence: Investigating 'reconciliation' and the politics of language revitalization in the Oneida Nation of the Thames. (Master's degree dissertation, University of Western Ontario.)

McIvor, O. (2012). îkakwiy nîhiyawiyân : I am learning [to be] Cree. (Doctoral dissertation, University of British Columbia.)

McIvor, O., & McCarty, T. L. (2017). Indigenous bilingual and revitalization-immersion education in Canada and the USA. In Garcia O., Lin A., May S. (eds.) Bilingual and Multingual Education. Encyclopedia of Language and Education. 421-438.

Meades, S. B. (2015). From the bush to the boardroom: Economic domains in Indigenous language revitalization. (Doctoral dissertation, York University.)

Meighan, P. (2022). Colonialingualism: colonial legacies, imperial mindsets, and inequitable practices in English language education. Diaspora, Indigenous, and Minority Education.

Mithun, M. (1998). The significance of diversity in language endangerment and preservation. In L. Grenoble & L. Whaley (eds.) Endangered Languages: Language Loss and Community Response. 163-191.

Monture, R. (2014). We Share Our Matters: Two Centuries of Writing and Resistance at Six Nations of the Grand River. Winnipeg, Manitoba: University of Manitoba Press.

Nakagawa, S., & Kouritzin, S. (2021). Identities of resignation: Threats to indigenous languages from neoliberal linguistic and educational practices. Journal of Language, Identity & Education. 20(5): 296-310.

Nez Henderson, P., Jacobsen, C., Beals, J., & AI-SUPERPFP Team (2005). Correlates of cigarette smoking among selected Southwest and Northern plains tribal groups: the AI-SUPERPFP Study. American Journal of Public Health. 95(5): 867–872.

North American Indian Travelling College. (1984). Traditional Teachings. Akwesasne, Ontario: North American Indian Travelling College.

Nickson, R. A. (2009). Governance and the revitalization of the Guaraní language in Paraguay. Latin American Research Review. 44(3): 3-26.

Obiero, O. J. (2010). From assessing language endangerment or vitality to creating and evaluating

language revitalization programmes. Nordic Journal of African Studies. 19(4): 201-226.

Pérez Báez, G., Vogel, R., & Patolo, U. (2019). Global survey of revitalization efforts: A mixed methods approach to understanding language revitalization practices. Language Documentation & Conservation. 13: 446-513.

Peter, L. (2014). Language ideologies and Cherokee revitalization: Impracticality, legitimacy, and hope. Journal of immersion and content-based language education. 2(1): 96-118.

Pohe, E. J. (2012). Whakawhanaungatanga a-reo: An indigenous grounded theory for the revitalization of Māori language speech communities. (Doctoral dissertation, Victoria University of Wellington.)

Richards, M., & Maracle, D. (2002). An intensive native language program for adults: The instructors' perspective. McGill Journal of Education. 37(3): 371-385.

Ridanpää, J. (2018). Why save a minority language? Meänkieli and rationales of language revitalization. Fennia-International Journal of Geography. 196(2): 187-203.

Riestenberg, K. J. (2020). Meaningful interaction and affordances for language learning at a Zapotec revitalisation programme. The Language Learning Journal. 48(3), 316-330.

Romaine, S. (2006). Planning for the survival of linguistic diversity. Language Policy. 5(4): 443-475.

Romaine, S. (2008). Linguistic diversity, sustainability, and the future of the past. In King, K., Schilling, N., Fogle, L., Lou, J., Soukup, B. (eds.) Sustaining Linguistic Diversity: Endangered and Minority Languages and Language Varieties. 7-21.

Selinger, M. J. (2022). Promises made or promises kept? USURJ: University of Saskatchewan Undergraduate Research Journal. 8(1).

Shah, S., & Brenzinger, M. (2018). The role of teaching in language revival and revitalization movements. Annual Review of Applied Linguistics. 38: 201–208.

Skerrett, M, & Ritchie, J.. (2020). Te Rangatiratanga o te Reo: Sovereignty in Indigenous languages. Kōtuitui: New Zealand Journal of Social Sciences Online. 16(2): 250-264.

Skutnabb-Kangas, T., & Dunbar, R. (2010). Indigenous children's education as linguistic genocide and a crime against humanity?: A global view. Guovdageaidnu: Gáldu.

Skutnabb-Kangas, T. (2012) Linguistic human rights. In Solan, L. & Tiersma, P. (eds.) The Oxford Handbook of Language and Law. 235-247. Oxford University Press.

Skutnabb-Kangas, T. (2018). Language rights and revitalization. In L. Hinton, L. Huss, & G. Roche (eds.) The Routledge handbook of language revitalization. Routledge.

Smith, G. H. (2003). Kaupapa Māori theory: Theorizing indigenous transformation of education and schooling. Presented at Kaupapa Māori Symposium: NZARE/AARE Joint Conference.

Sterzuk, A., & Fayant, R. (2016). Towards reconciliation through language planning for Indigenous languages in Canadian universities. Current Issues in Language Planning. 17(3-4): 332-350.

Tatsch, S. (2004). Language revitalization in Native North America–Issues of intellectual property rights and intellectual sovereignty. Collegium Antropologicum. 28(1): 257-262.

Truth and Reconciliation Commission of Canada. (2015a). Honouring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada. Winnipeg.

Truth and Reconciliation Commission of Canada. (2015b). Truth and Reconciliation Commission of Canada: Calls to Action. Winnipeg.

Tulloch, S., Kusugak, A., Uluqsi, G., Pilakapsi, Q., Chenier, C., Ziegler, A., & Crockatt, K. (2013). Stitching together literacy, culture & well-being: The potential of non-formal learning programs. Northern Public Affairs. 2(2): 28-32.

United Nations. (1992). Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities.

United Nations. (1997). Declaration on the Rights of Indigenous Peoples.

Vallejo, J. M. (2019). Revitalising language through music: a case study of music and culturally grounded pedagogy in two Kanien'ke:ha (Mohawk) language immersion programmes. Ethnomusicology Forum. 28(1): 89-117.

Whalen, D. H., Moss, M., & Baldwin, D. (2016). Healing through language: Positive physical health effects of indigenous language use. F1000Research. 5(852).

Wilson, W. H., DeCaire, R., Gonzalez, B. N., & McCarty, T. L. (2022). Progress, Challenges, and Trajectories for Indigenous Language Content-Based Instruction in the United States and Canada. Journal of Immersion and Content-Based Language Education. 10(2): 343-373.