Use in modern media is of decisive importance to the survival of indigenous languages.

Photo: Magnus Elander.
This silence we named “Qarrtsiluni” which means waiting for something to burst forth.

Inuit woman, Nunivak Island.

Chapter 20

Linguistic Diversity

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SUMMARY

The future is bleak for the majority of the languages currently spoken in the North. If no action is taken, most are likely to become extinct in the next few generations. Twenty-one northern languages have become extinct since the 1800s and 10 of these extinctions have taken place after 1990, indicating an increasing rate of language extinction.

Twenty-eight languages classified as critically endangered are in dire need of attention before they, too, are lost forever. Over 70% of the northern indigenous languages are spoken only in single countries, and so are particularly exposed to the policies of a single government bringing with it the potential perhaps, for more effective conservation of these languages, as no cross-border efforts are required. The remaining languages are spread across a number of jurisdictions and are therefore subject to differing approaches when it comes to addressing their revitalization.

Language revitalization in the North is possible, and there are multiple examples to prove it. However, whether it is sufficiently important to invest the time and resources needed to make revitalization a reality, is a question that politicians need to ask themselves sooner rather than later. They will face in the future increasing pressure from the indigenous peoples they represent to take action. Many indigenous groups have already begun working on language revitalization, viewing it as an important component of their identity. The Permanent Participants of the Arctic Council look to political leaders to implement policies which will help them promote and sustain their indigenous languages.

20.1. INTRODUCTION

Language provides the conceptual and cognitive mechanisms via which humans perceive their environment. Hence, understanding language as a culturally embedded system of meaning is an important guide to understanding how humans adapt and act within their environment. Language not only communicates, it defines culture, nature, history, humanity and ancestry (UNESCO 2009). The indigenous languages of the North have been formed and shaped in close contact with their environment. Languages are a valuable source of information, and a wealth of knowledge on human interactions with nature is encoded in languages (UNESCO 2003; see Box 20.1). The preservation of languages is a crucial step in allowing us to benefit from traditional knowledge and form a better understanding of our environment. The Convention on Biological Diversity (CBD) recognizes that linguistic diversity is a useful indicator of the retention and use of traditional knowledge, including knowledge of biodiversity. It is, therefore, included in the suite of indicators used to assess progress towards meeting the CBDs 2020 biodiversity targets. With this in mind, this chapter considers the vitality of indigenous languages in the North and their current status and trends. We include indigenous languages of both the Arctic and boreal zones, and as this includes languages from outside the Arctic, we refer to the North instead. An indigenous language for the purposes of this chapter is defined as a language that is native to a region and spoken by indigenous people and with the exception of Greenlandic is a minority language.

The United Nations’ Educational, Cultural and Scientific Organization (UNESCO) has developed a framework comprised of nine factors which can be used to determine the vitality and state of endangerment of a language (UNESCO 2003). Eight of these are critical to understanding language vitality in the North: (1) intergenerational transmission, (2) absolute numbers of speakers, (3) proportion of speakers within the total population, (4) trends in existing language domains, (5) response to new domains and media, (6) materials for language education and literacy, (7) governmental and institutional attitudes, and (8) community members’ attitudes toward their own language.1

All of these factors are involved in situations of language shift and loss; they interact in complicated ways. For example, most linguists consider intergenerational transmission to be the single biggest indicator of language vitality, as children are future speakers. If a language has a large number of speakers and a relatively high proportion of the total ethnic population, then if a small percentage of the younger generation does not learn the language, it is not necessarily a sign of shift. The status of indigenous languages with even relatively large numbers of speakers, can change from ‘safe’ or ‘vulnerable’ to ‘endangered’ very rapidly, if a segment of the children cease learning the language; this is potentially the case with Inuktitut in Canada. In 2006, 64% of 32,200 Canadian Inuit reported Inuktitut as their mother language, representing a decline from 68% just 10 years earlier (Statistics Canada 2012). More to the point, only 50% report using Inuktitut as a home language (down from 58% in 1996), suggesting that children are not acquiring it (Statistics Canada 2012). These figures, along with other indicators, have led the Nunavut Language Commissioner to take specific actions, legislative and promotional, to foster the use of Inuktitut in all domains. As this suggests, efforts at strengthening indigenous languages need to take into account the multi-faceted nature of the contexts in which these languages are situated. Taken as a whole, these indicators are thus useful not only in assessing language vitality, but also in determining measures to revitalize them by pointing out areas in need of development.

This chapter looks at two of these criteria (absolute number of speakers and proportion of speakers within

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1 The 9th factor proposed by UNESCO, amount and quality of documentation, is not an indicator of vitality, but rather was included in the report as a guide in determining which languages are in most urgent need of documentation.
Indigenous peoples have adapted their lifestyles to live in the extreme Arctic climate. Many still maintain a subsistence or partial-subsistence lifestyle and survive by hunting, fishing and herding reindeer. The knowledge engendered by this intimate contact with their surroundings finds expression in languages and their vocabularies.

Languages provide windows into how cultures experience, interact and think about their environment (Nettle & Romaine 2001, Harrison 2007, Evans 2010). This knowledge and interconnectedness is expressed in song, everyday experiences, resource use, relationships with animals and other cultural expressions but especially in place names across the North. Place names of indigenous peoples reflect subsistence practices, histories, storytelling, dwelling sites, ecological significance and links to the sacred. Thornton (2008) provides a rich study of Tlingit place names, where he shows how place names encode information on history, geography and interactions between the Tlingit people and the places themselves. In Tlingit it is difficult to be introduced without reference to places.

Reindeer herding cultures have rich lexical means for referring to reindeer. The terms that are lexicalized tell much about the herding practices of peoples such as Saami, Nenets and Evenki, as they make specific reference to the age and status of reindeer, or lexicalize herding implements and practices. For example, the Evenki have separate words for a one-year old male reindeer (avlakan) versus a two-year old (ektana) versus a one-year old female (sachan), with over 30 words to distinguish different types of reindeer. These naming practices reflect differences which are relevant to maintaining healthy herds. The links between language, knowledge and environment are inseparable. Evenki maintain that they cannot herd reindeer in Russian; it must be done in Evenki. As elsewhere, the Evenki language is maintained by those who live a traditional lifestyle. As this lifestyle is lost – through climate change and/or cultural shift – so is the language, and vice versa. Harrison (2007) provides a compelling ethnolinguistic account of this process for a southern Siberian group, arguing for the same intertwining of language, knowledge and culture.

A very different sort of example is provided by ongoing studies of sea ice (see Krupnik et al. 2010; see also Gearheart et al. 2010, Aporta et al. 2011, Heyes 2011). Sea ice is fundamental to Arctic life; it is the heart of the circumpolar world. It provides a home to some and a landing pad to others. Sea ice has a social ontology and at the same time a life of its own. Knowledge of sea ice is encoded in the words and ways the Inuit speak of it, not only in terms of thickness and age, but also in terms of purpose. Thus the word alluq ‘fishing hole’ is central to life: seals use it to breathe; polar bears and people use it for hunting seals. It forms the base for alluaq ‘fishing hole’ (or literally ‘seal-breathing hole-alike’).

Sea ice lexicon provides information about how people use and measure the ice; botanical terminology provides native taxonomies which can differ from Western science, creating classification systems according to features which provide different insights into the world; reindeer terminology informs us of herding and breeding practices.

Much can be deciphered about what cultures use and value by looking at their language.

2 Although Appendix 20 summarizes the best available data on current language vitality; it should be treated with caution. The figures come primarily from census data and represent self-reporting of language knowledge, not the results of proficiency testing. In most cases, the figures are probably overly optimistic, with a higher estimate of speakers than is actually the case.
It undeniably indicates that the future is rather bleak for the majority of the languages currently spoken in the North. If no action is taken, most of them are likely to become extinct in the next few generations. It should be noted, however, that this doesn’t necessarily mean that the communities or peoples speaking the languages in question become physically extinct. It is more common that language extinction can best be described as the end point of language shift, that a population ceases to speak its original language and replaces it with another through a gradual process. This situation is by no means unique to the North. The last century has seen a dramatic speeding up of the processes of language shift and extinction in most corners of the world, causing some researchers to talk about an ecological crisis of languages (Dahl 2000) or even claim that this century will see the extinction of 90% of all languages currently spoken (Krauss 1992).

### 20.2.1. Language trends

The North is inhabited by an array of peoples with different cultures and language groupings. For this report, information was compiled on 89 northern languages which accounts for a little more than 1% of the world’s living languages. These can be grouped into six distinct language families plus three isolated languages presently unconnected to any other language grouping (Fig. 20.1). It was possible to consider changes in populations for 46 languages (Fig. 20.2). Of these, 77% had populations of 10,000 or fewer, and 38% had populations of 1,000 or fewer. Between 1986 and 2010, 18 populations experienced decreases in size ranging from 5 to 50%.

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3 Although it is difficult to determine, *The Ethnologue* lists 6,909 living languages (Lewis 2009).
majority of these being located in Alaska and the Russian Federation. This implies either a decline in indigenous populations or alternatively a change in the methods used for census survey; Krauss (2007) provides a useful discussion of some of the challenges of such assessments. The indigenous population that experienced the greatest increase in net population was the Inuit, and the Veps experienced the greatest decrease in population.

It was possible to calculate change in the absolute number of speakers and proportion of speakers for 46 of the surveyed languages. Absolute numbers and percentage of speakers are two separate indicators of language vitality4 (UNESCO 2003). Only three languages displayed an increase in absolute numbers of speakers, proportion of speakers and net population (Tab. 20.1).

Thirty-seven of the surveyed languages experienced a decrease both in numbers of speakers and in the proportion of speakers within their populations (Tab. 20.2). Only nine languages displayed an increase in proportion of speakers (Fig. 20.3).

### 20.2.2. Language vitality

UNESCO (2003) has classified the vitality of 87 of the northern languages on which data was collected (Fig. 20.4). It is striking to note that 21 of these languages have become extinct since the 1800s, and that 10 of these extinctions have taken place after 1990, indicating an increasing rate of language extinction. Of these extinctions, one was in Finland, one in Alaska, one in Canada and 18 in the Russian Federation (Fig. 20.5). With this in mind, the 30 languages classified as critically endangered are in dire need of attention before they, too, are lost forever.

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4 The smaller the numbers of speakers, the more at risk the language is, even if all community members are fluent in the language. Very small communities are simply vulnerable to rapid shift or even natural disaster. Percentage of speakers is an indicator of shift, not only because it shows that fewer people speak the language, but because the domains where it is spoken are diminished, since the non-speakers will use another language in all domains. Of course, the two combined can give a very good sense of overall vitality: a small population with less than half of its members retaining fluency indicates advanced language loss.

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**Table 20.1.** Languages displaying an increase in absolute numbers of speakers, proportion of speakers and net population.

<table>
<thead>
<tr>
<th>Languages</th>
<th>Current population estimates</th>
<th>Estimated population increase</th>
<th>Estimated increase in proportion of speakers (%)</th>
<th>Estimated increase in absolute numbers of speakers</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inuit</td>
<td>107,608</td>
<td>18,299</td>
<td>4</td>
<td>13,246</td>
<td>1989-2006</td>
</tr>
<tr>
<td>Saami languages</td>
<td>69,101</td>
<td>4,674</td>
<td>12</td>
<td>9,841</td>
<td>1995-2006</td>
</tr>
<tr>
<td>Tsimshianic</td>
<td>4,600</td>
<td>100</td>
<td>12</td>
<td>35</td>
<td>1997-2006</td>
</tr>
</tbody>
</table>

**Figure 20.2.** Change in population (estimated percentages) for 47 indigenous groups between 1989 and 2010.

**Figure 20.3.** Estimated change in proportion of speakers for 46 northern languages between 1989 and 2006.
Table 20.2. Languages with the greatest increase and decrease in numbers of speakers.

<table>
<thead>
<tr>
<th>Language</th>
<th>Current population estimates</th>
<th>Estimated changes in numbers of speakers</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nanai</td>
<td>12,003</td>
<td>991</td>
<td>1997-2010</td>
</tr>
<tr>
<td>Saami languages</td>
<td>69,101</td>
<td>9,841</td>
<td>1995-2006</td>
</tr>
<tr>
<td>Inuit</td>
<td>107,608</td>
<td>13,246</td>
<td>1989-2006</td>
</tr>
<tr>
<td>Chukchi</td>
<td>15,908</td>
<td>-6,355</td>
<td>1989-2010</td>
</tr>
<tr>
<td>Nenets</td>
<td>44,640</td>
<td>-5,592</td>
<td>1989-2010</td>
</tr>
<tr>
<td>Evenk</td>
<td>38,396</td>
<td>-5,089</td>
<td>1989-2010</td>
</tr>
</tbody>
</table>

Figure 20.4. Vitality of northern languages as classified by UNESCO (2012).

Figure 20.5. Map showing the languages colour coded after their vitality status as noted by UNESCO.

Table 20.2. Languages with the greatest increase and decrease in numbers of speakers.
Box 20.2. Language revitalization

In one of the coastal Saami villages where Saami is spoken as the mother tongue mainly by those over 50, a son came to his mother who was studying Saami at the university and said “Do I have to go to the University to learn Saami?” The mother realized that this should not be the case, which became a turning point for providing Saami as a subject in schools where it had never been offered before. (Gunn-Britt Retter in Einarsson et al. 2004).

Revitalization efforts of various kinds are taking place throughout the North and are strong testimony to the interest of indigenous peoples in revitalizing and promoting their languages. Revitalization programs are largely grassroots movements with a variety of activities, such as intensive summer school programs, attempts to promote the language in the local schools and special courses aimed at adult second-language learners. A popular model in many parts of North America is the Master-Apprentice program (Hinton et al. 2002), which pairs an elder speaker with a single adult language learner. The Denaina language revitalization program in Alaska is one such example. Northern communities speaking an indigenous language are often spread over great distances, and many programs make a concerted effort to bring speakers and learners together to work on language revitalization together.

Aside from the special case of Greenland (see Box 20.3) there are a number of examples where revitalization efforts have the support of local governments e.g. the Nunavut Language Act, or language laws in the Republic of Sakha (Yakutia), Siberia, which grant official status to local indigenous languages (Chukchi, Dolgan, Even, Evenki and Yukaghir) in those regions where the populations are located. Coupled with legislative support are some active revitalization efforts, such as the nomadic school program in Sakha (Yakutia), aimed at delivering mother-tongue education to herding groups (Sakha (Yakutsk) Law on Nomadic Schools 2008, Semenova 2008, Sarviro n.d.). The model has gained popularity and spread to other regions of Siberia (such as the Krasnoyarsk region) (Evenki Nomadic Schools 2011).

Despite the fact that the Saami peoples speak somewhat different languages and are living primarily in four separate Arctic Council member states (Norway, Sweden, Finland and Russia), they have found great strength in unity and collaboration. In March 2010, the DoBeS program (Dokumentation Bedrohter Sprachen, funded by Volkswagen Stiftung) sponsored a two-week long ‘winter school’ devoted to Saami language documentation and revitalization (Saami Winter School 2010). These efforts are not new, but have been reinvigorated in recent years. Inari Saami instruction was started in primary schools in the 1970s but vitality reached a critical point in 1997, with only four fluent speakers. Since then, active revitalization at the community level has had a positive impact on language prestige and on vitality, creating new speakers (Pasanen 2010).

These are just a sample of the many language revitalization programs taking place in the North today. Anecdotally, we hear that these programs do more than revitalize language: they create a sense of community and purpose. Although in some cases the actual number of new speakers which come from these programs is not great, many people learn some words, basic greetings and conversation. More importantly, they provide a source of increased ethnic pride and a sense of identity. Revitalizing language is an important part of revitalizing community. The fact that so many programs are happening today, despite lack of governmental or financial support, is testimony to the commitment of communities and the strong role that language plays in them.

20.3. CONCERNS FOR THE FUTURE

Since the 19th century, indigenous languages in the North have been subject to pressures and challenges from the colonial powers active in the North. In the early 20th century, this involved a process whereby indigenous languages were not incorporated within educational and civil systems. This often resulted in weakening ties to language and subsequently to culture and traditions. Today, the dominant languages in the North are Russian, English, Finnish and the Scandinavian languages. As documented above, the majority of northern indigenous languages have experienced significant decreases in the absolute number of speakers and the proportion of speakers. This indicates that northern languages are facing an uncertain future, and efforts to increase our understanding of the cultures and traditions contained within these languages should be amplified. However, some indigenous languages have gained stronger status in recent decades and been subject
to sustained efforts to revitalize them both as tools of cultural heritage and as official languages, for example in Greenland and in Nunavut and the Northwest Territories, Canada (see Box 20.2).

No single factor can be singled out as the main culprit of the increased rate of language shift and extinction. Rather, each language and the general conditions of the language community using it have to be considered separately in search of the cause — or a combination of causes — that weakens its position. This is a point underscored by linguistic research on language shift (Fishman 1991, Nettle & Romaine 2000, Grenoble & Whaley 2006). Nonetheless, a few factors emerge more often than others in this context, whether in the North or elsewhere. These factors include the increased rate of urbanization, which has meant that formerly rural populations which were largely isolated from the outside world have since become part of modern urban societies. This in turn places great pressure on indigenous languages, which tend not to be a viable means of social and economic advancement in the new urban environment. Hence, their speakers gradually abandon them and start using the majority language of the society in question.

Another common factor is a lack of institutional support for many of the smaller languages of the world. More often than not these languages are minority languages in the countries in which they are spoken. Even where the authorities in question hold a friendly view of minority
languages, they simply do not have the means to support the use of them in fields such as administration, education and media. UNESCO (2003) targeted the use of language in these three spheres as critical to its vitality. Indeed, new media can even offer new possibilities for strengthening language use (Moriarty 2011). As a result, minority languages become, in a sense, invisible outside the communities using them, often compounding the effects of urbanization as mentioned above.

While a low number of speakers may seem to be a clear indicator of a language in risk of replacement, this is not necessarily the case as there are examples of languages where a small number of speakers is compensated for by strong loyalties to the language. A clearer indicator of the vitality of a language is probably “the ratio between the number of members of the ethnic group and the number of speakers of the ethnic tongue” (Brenzinger 1997). This means that a language that is used by 90% (e.g. 1,800) of speakers in an ethnic group with 2,000 members is likely in a healthier state than a language that is used by 20% (e.g. 40,000) of speakers in an ethnic group with 200,000 members. This should be kept in mind when examining Appendix 20.

The discussion above also raises the question as to what, if anything is lost with the disappearance of a language. After all, all languages change over time, and it could be suggested that the language extinction (and the possible emergence of new ones) is simply a natural change. Linguistic diversity is a possible source of conflict between populations or ethnic groups, as it may complicate communication between authorities on the one hand and segments of the population on the other e.g. with regards access to education, media and employment opportunities (Ostler 2005). Nonetheless, linguists tend to view the extinction of a language in a negative light. Here they point to the importance of language in the culture and identity of the ethnic group in question (Need 2010). Its history and traditions are encoded in the vitality of one’s family, and this can be transferred to the speech community as a whole.

A final question is whether anything can be done to reverse the trend of language shift and extinction, and instead to revitalize languages in danger of becoming extinct. The common consensus appears to be that something can be done, at least in theory, but there is less agreement on exactly what this is. One of the better known approaches in this respect is Fishman’s (1991) program for reversing language shift. These actions include ensuring a language’s survival as the language of the home to create a foundation for mother-tongue transmission; enabling and/or strengthening its use in education, mass media, the work sphere and governmental operations; and, in the case of languages which are on the brink of extinction, the reconstruction of the language and its acquisition by adults. There are multiple examples of ongoing efforts at language revitalization in the North today (see Box 20.2). These programs receive varying levels of support – institutional, financial and political – in varying regions. The situation in Greenland is a special case (see Box 20.3), as local (Inuit) concerns about language shift were an integral part of the popular support for the institution of Home Rule in 1979. The development of language policy to revitalize and support the use of West Greenlandic was an important achievement of the Home Rule government. Even today in Greenland, language maintenance and development is a central political and social issue.

Despite the plethora of such programs, they often struggle due to limited resources and inadequate means to address all the problems driving language shift. Northern indigenous language programs face serious challenges in creating domains for language usage, developing the language in media and new domains and changing attitudes toward not only the indigenous language, but often toward the indigenous peoples themselves. Almost all programs face struggle due to a lack of support from federal governments and even hostile policies and attitudes. Some national language and education policies (such as the No Child Left Behind Act in the United States or Unified State Exam in the Russian Federation) may require children to abandon their mother tongue in order to meet standardized test requirements. Financial resources are needed to create pedagogical materials, train teachers and create educational programs. Language attitudes at all levels can be a serious impediment to language revitalization. These issues were discussed at length at a meeting of the Permanent Participants of the Arctic Council in Tromsø 2008 (ICC 2008), resulting in several sets of recommendations to the Arctic Council and to the national governments in ways to assess, support and foster the use of circumpolar languages.

It is important to keep in mind that because language is one of a set of factors in social health and vitality, strengthening it is fundamental to strengthening the communities as well.

Over 70% of the northern indigenous languages are spoken only in single countries, and so are particularly exposed to the policies of a single government bringing with it the potential perhaps for more effective conservation of these languages as no cross border efforts are required. The remaining languages are spread across a number of jurisdictions and are therefore subject to differing approaches when it comes to addressing their revitalization.
Language revitalization is certainly possible, and there are multiple examples to prove it. Whether it is sufficiently important to invest the time and resources needed to make revitalization a reality is, however, a question which politicians in the North, as in most other parts of the world, need to ask themselves sooner rather than later.

20.4. RECOMMENDATIONS

• Encourage the development of improved methods for collecting data on language use and vitality in the North.
• Recognize the diverse richness of the northern indigenous languages, and acknowledge that their preservation is a crucial step in allowing us to benefit from traditional knowledge and form a better understanding of our environment.
• Encourage efforts to support language revitalization for the northern indigenous languages including sharing lessons from successful efforts.
• Undertake an assessment of the northern indigenous languages to allow for a better understanding of their status and what needs to be done to insure their future vitality.

ACKNOWLEDGEMENTS

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Appendix 20: www.abds.is/aba-2013-appendix-20