### Language vitality and well-being

# Lenore A. Grenoble grenoble@uchicago.edu

The University of Chicago

15 November 2017

- The Humanities Division of the University of Chicago
- American Council of Learned Societies
- American Councils for International Education ACTR/ACCELS Title VIII Research Scholar Award
- The many colleagues at Northeastern Federal University in Yakutsk (NEFU)







with Lindsay Whaley, Dartmouth College



## Outline

### 1 The Arctic

### 2 Well-being

- 3 Language & Health
- 4 Arctic Social Indicators & Well-being

#### 5 Typology of language endangerment

- Globalization
- Urbanization
- Climate change

### **6** Vitality Network Model

### The Arctic



### Arctic Indigenous languages





#### Arctic boundary according to AMAP

### Arctic Indigenous peoples



- "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO–World Health Organization, 2014)
- Health, physiological well-being (physical health)
- Psychological well-being (mental health)
- Social well-being
- Ecosystems & well-being



from Dodge et al. (2012: 230)

**well-being**: a balance point between an individual's resource pool & the challenges faced

- Each time an individual meets a challenge, the system of challenges and resources comes into a state of imbalance, as the individual is forced to adapt his or her resources to meet this particular challenge (Kloep et al. 2009: 337)
- stable well-being is when individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenge
- when individuals have more challenges than resources, the see-saw dips, along with their well-being, and vice-versa
- NB: emphasis on the individual (versus the group); may need to be adjusted for some societies

"Our psychological, social, and physical well-being is connected with our native language; it shapes our values, self-image, identity, relationships, and ultimately success in life."

The Endangered Languages Project

"Language revitalisation can be seen, therefore, as a health promotion strategy." King et al. (2009:78)

- the Arctic Social Indicators project identified a core set of indicators to evaluate Arctic well-being (ASI-I; Larsen et al. 2010)
- based on preliminary work by the Arctic Human Development Report (AHDR I) & the United Nations Human Development Index (UN HDI). Further adapted and expanded in (ASI-II, Larsen et al. 2014: 36).

Indicators are useful aids for planning, informing policy, and for guiding decisions and actions. They are valuable simply in building awareness of current conditions and trends over time.

Indicators are used by some groups to **predict change**, while other groups use them to **promote change** (ASI-I, Larsen et al. 2010).

- The ASI working group confirmed the three domains suggested by the AHDR, further developed by ASI-II:
  - health & population
  - 2 material well-being
  - education
  - Cultural well-being & cultural vitality
  - Scontact with nature
  - fate control

In developing the indicators, they looked for measurable variables

- A number of studies, in particular in Australia & Canada, indicate a positive correlation between Indigenous (Native/Aboriginal) language use and physical well-being (health)
- including:
  - diabetes
  - obesity
  - suicide rates
  - cardiovascular disease

- diabetes rates are inversely to Native language retention:
- for the 31 Canadian First Nations communities in Alberta the authors found lower rates of adult-onset (Type II) diabetes in those communities with higher rates of indigenous language use
- More language = less diabetes

(Oster et al. 2014)

- Halle, Chandler & Lalonde (2007) surveyed 150 Aboriginal communities surveyed
- Aboriginal "bands" that lack markers of cultural continuity regularly experience heightened rates of youth suicide and heightened school drop-out rates
- Markers of cultural continuity:
  - operationalized here using band-level measures of community control over the delivery of health, education, child protection and policing services, and
  - the achievement of a degree of self-governance, secure access to traditional lands, and
  - the construction of facilities for preserving cultural artifacts and traditions

### Suicide rates

British Columbia Native communities:

- Native language knowledge varies inversely with suicide rates
- none of the other six cultural continuity factors was a better predictor of suicide rates
  - self-government; land claims; education; health care; cultural facilities; and police & fire services
- youth suicide:
  - in communities with 50% or more knowledge of the Native language: 13.00 in 100,000
  - ▶ in communities with less than 50%: 96.59 per 100,000
- youth suicide rates effectively dropped to zero in those few communities in which at least a third of band members reported a conversational knowledge of Native language
- More language = less suicide

(Hallet et al. 2007)

Methodological considerations:

- a convincing rationale for proposing that the viability of a given indigenous language contributes to the viability of the broader culture to which it gives voice.
- empirical support for the hypothesized link between language and/or cultural loss, and the deterioration of community wellbeing-indexed in the present study by band-level rates of youth suicide in the more than 150 Aboriginal communities surveyed.
- trustworthy means must be found for indexing the variable degrees to which whole Aboriginal communities have managed to both preserve their indigenous language and to create a cultural life that young people judge worth living

Aboriginal communities in Canada, factors in maintaining & improving health, and in reducing risk factors:

- Iand and health
- 2 traditional medicine
  - literature on traditional medicine makes direct links to land, language & culture
- spirituality
- traditional foods
  - foods linked to culture and bio-regions (living "off the land")
- traditional activities
  - hunting, fishing, trapping, storytelling, dancing, arts & crafts, pow-wows, etc.
- traditional language

(McIvor et al. 2009)

Australian Aboriginal populations living a decentralized lifestyle away from urban centers exhibit:

- lower mortality rates
- lower rates of cardiovascular disease among
- "Conventional measures of employment, income, housing and education did not account for this health differential"
- MORE ACCESS TO THE LAND = LESS CARDIOVASCULAR DISEASE

Note: this study does not specifically consider the effects of language & culture

(Rowley et al. 2008)

Happiness among Australian Aboriginals

- positive relationship between language & well-being
- "even after controlling for a range of socio-economic variables, living on one's homelands/ traditional country and undertaking harvesting activities is associated with a higher level of self-reported happiness for Indigenous Australians
- So too were learning an Indigenous language and participating in Indigenous cultural activities."

(Biddle & Swee 2012)

### Arctic Social Indicators & Well-being



#### Health and Population

- infant mortality rate
- net migration (total immigration out-migration)

#### Material Well-being

- per capita gross domestic product
- net-migration (total immigration out-migration)
- unemployment rate
- poverty rate
- subsistence harvest

#### 3 Education Domain

- proportion of students pursuing post-secondary education
- proportion of students completing post-secondary education
- proportion of graduates still in the community 10 years later

#### Oultural Well-being & Cultural Vitality

- language retention
- cultural autonomy
- sense of belonging

### Oultural Well-being & Cultural Vitality

- language retention
- cultural autonomy
- sense of belonging

### Belonging

- What percentage of people are engaged in recreational or subsistence activities on the land?
- What is the relative size of the informal (subsistence-based) sector of the economy?

#### Cultural autonomy

- Do laws and policies exist in a given state or region that recognize institutions that advocate for the cultural autonomy of national minority populations?
- Do institutions representing national minority cultures exist?
- What is the proportion of such institutions to minority peoples, e.g. are all peoples represented through such organizations?
- Are resources available to such institutions?
- Are funding policies in place and how well-resourced are they?

#### Language Retention

• What percentage of a population speaks its ancestral language compared with the population as a whole?

#### Sontact with Nature

- consumption of traditional food
- harvest of traditional food

Contact with nature: somewhat intangible; indicators are extremely challenging to develop and difficult to measure

Major constraint = lack of current data

#### Fate Control

- Political power: Percentage of indigenous members in governing bodies (municipal, community, regional) relative to the percentage of the indigenous people in the total population
- Decision-making power: percentage of surface lands legally controlled by the inhabitants through public governments
- Economic control: percentage of public expenses within the region (regional government, municipal taxes, community sales taxes) raised locally
- Knowledge construction: percentage of individuals who speak a mother tongue (whether Native or not) in relation to the percentage of individuals reporting corresponding ethnicity

### How do we model this complexity?



## Typology of language endangerment

- a typology of language endangerment, with a set of cells of interrelated variables at the macro- and micro-levels (Grenoble & Whaley 1998)
- further developed with an expanded discussion of variables at different levels:

*local, regional, national,* and *extra-national* (in Grenoble & Whaley 2006: 22-45)

- these relationships still hold
- We need to add others, including:
  - global level (and global English)
  - 2 urbanization
  - climate change

Number of English speakers (approximate)

- 400 million L1 speakers; as many as 2 billion L2 speakers (Crystal 2008)
- 371 million L1 speakers; 611 million L2 speakers (Ethnologue 2017)

Compare Mandarin:

- 897 million LI, 193 million L2
- Total L1 + L2: Mandarin 1.09 billion; English 983 million

Other factors in the Arctic (and elsewhere)

- standardized tests
- English as language of science
- Web of Science, Scopus
- English as a third official language?
  - in Sakha Republic
  - in Greenland
- Cyberspace: University students in Yakutsk, Sakha report ....
  - first, primary or best language: Sakha
  - Facebook, v Kontakte, Instagram: Russian
  - MMORPG (Massively multiplayer online role-playing games): English

### Urbanization

#### Worldwide trends: 1960-2015



Grenoble (University of Chicago)

Country	1960	2016
Canada	69%	82%
Finland	55%	84%
Greenland	59%	87%
Norway	50%	81%
Russia	54%	74%
Sweden	72%	86%
US	70%	82%

Percentage of total population living in urban centers Source: World Bank

• Urbanization affects both levels of multilingualism but also the nature of multilingualism.



- Urbanization affects both levels of multilingualism but also the nature of multilingualism.
- In the post-Soviet period: increased internal migration, and immigration to Yakutsk from other parts of Russia, Central Asia & Caucasus
- SO indigenous people living
  - in Yakutsk, medium-sized cities (Neryungri) are in contact with Russians, Sakha(Yakut), and immigrant speakers of other languages (e.g. Kyrgyz, Ukrainian)
  - in rural settings they may be in contact with local indigenous groups, Russians (or Russian language), and Sakha

### Population dynamics in the Arctic



#### Source: Arctic Human Development Report II (2014: 56) (AHDR II)

Grenoble (University of Chicago)

### Population dynamics in the Arctic



#### Source: Arctic Human Development Report II (2014: 56)

### Climate change & environment

- issues: contaminants, land use, climate, security & access in the form of rights to land and sea
- coastal erosion & displacement



Climate change is accelerated in the Arctic (polar amplification effects)

- coastal erosion
- thinning sea ice
- access to oil, minerals
- loss of permafrost, release of methane
- changes in plants & animals
- changes in snow & ice

#### massive cultural disruption

### Direct effects

Climate change has a direct impact on indigenous life in the Arctic:

#### Subsistence lifestyle

- Hunting is disrupted
- Changes in sea mammals
- Changes in climate affect fish populations (in rivers, lakes and in sea water)
- Inland: changes in climate affect caribou populations
- ② Displacement of people
  - Coastal erosions: Shishmareff, Alaska
  - Resettlements of Canadian Inuit
  - Opening of Northern Sea Route
- Influx (& immigration) of outsiders
  - access to natural resources
  - security issues
  - doomsday tourism

We need an integrating framework, one that integrates these many variables with social indicators of well-being

- Language as a node in a complex system of interacting behaviors
- Changes to a node can have an impact on the system
- Group networks, and the language ecologies that exist in them, are complex adaptive systems
- The system is dynamic

- group boundaries are emergent properties of complex networks of socio-historical variables, including language use
- an individual's connection to a group is established by the degree to which his/her own complex web of identity matches the group network
- networks of variables that define both groups & individuals are not static, are constantly in flux in subtle ways, and can, to some degree, be manipulated

- variables that define the language ecology operate on multiple levels
- for the group and for individuals within the group, there can be considerable variation
- Example, in a multilingual community:
  - different individuals have different levels of multilingualism
  - language proficiency and usage is not constant for each individual
- a single speaker's proficiency & use of a language varies with the setting, domain & interlocutors
- usage can and does vary over time

### Modeling complexity?



### Vitality Network Model



Grenoble (University of Chicago)

•Capone, K., N. D. Spence, & J. White J. 2011. Examining the association between Aboriginal language skills and well-being in First Nations communities. In J. White, J. Peters, P. Dinsdale, & D. Beavon (Eds.), Aboriginal Policy Research: Health and Well-Being Volume IX, 57-78. Toronto, ON: Thompson Educational Publishing

•Chandler, M. J. & C. E. Lalonde. 1998. Cultural continuity as a hedge against suicide in Canada's First Nations. Transcultural Psychiatry 35: 191-219.

•Dodge, R., A. P. Daly, J. Huyton & L.D. Sanders. 2012. The challenge of defining wellbeing. International Journal of Wellbeing,2(3), 222-235. doi:10.5502/ijw.v2i3.4

•Hallett, D., M. J. Chandler & C. E. Lalonde. 2007. Aboriginal language knowledge and youth suicide. Cognitive Development 22: 392-399.

•Heleniak, Timothy. 2017. Boom and bust. Population change in Russia's Arctic cities. In R.W. Orttung, ed., Sustaining Russia's Arctic cities. Resource politics, migration and climate change, 67-87. New York: Berghahn.

•Kloep, M., N. Güney, F. Cok & O.F. Simsen. 2009. Motives for risk-taking in adolescence: a cross-cultural study. Journal of Adolescence 32/1:135-151.

•Larsen, J. N. & G. Fondahl. 2014. Arctic Human Development Report II. Copenhagen: Nordic Counsel of Ministers.

•McIvor, O., A. Napolean, & K. Dickie. 2009. Language and culture as protective factors for at-risk communities. The Journal Of Aboriginal Health 5/1: 6-26.

•Oster, R. T., A. Grier, R. Lightning, M. J. Mayan, & E. L. Toth, E. L. 2014. Cultural continuity, traditional Indigenous language, and diabetes in Alberta First Nations: a mixed methods study. International Journal for Equity in Health 13/92. doi:10.1186/s12939-014-0092-4

•Parker, C. & J.A. Schertow. 2016. Preserving language key to overcoming Native suicide epidemic. Intercontinental Cry April 14, 2016. https://intercontinentalcry.org/preserving-native-language-key-overcoming-native-suicide-epidemic/