(Place) Identity & Climate Adaptation in the Arctic Change

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This lecture

- Place identity and climate adaptation, the perspective of Arctic Indigenous People

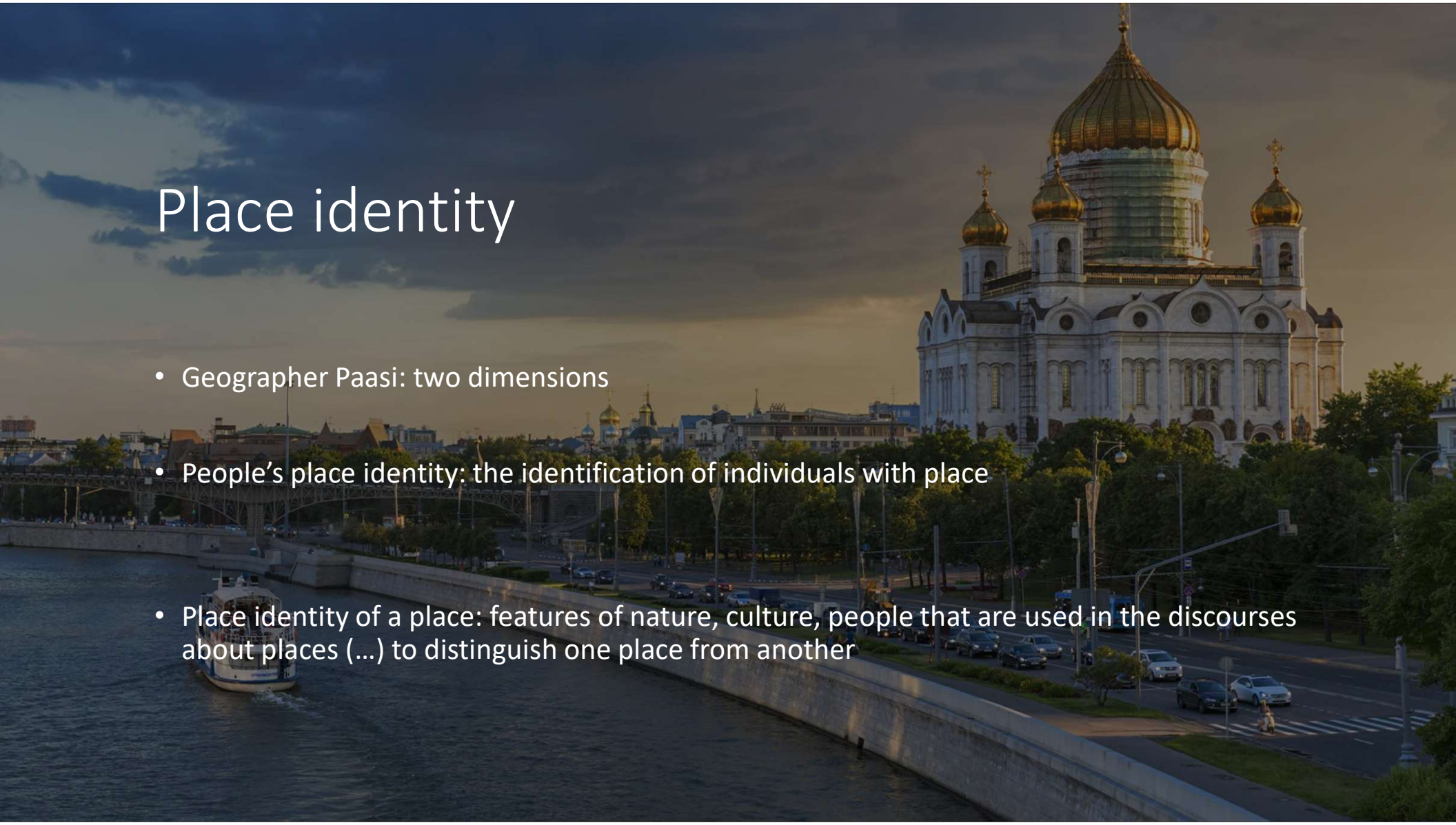
Set up:

- Climate change in the Arctic
- Place identity and climate change/adaptation
- The cases of Shishmaref, Alaska

Place identity

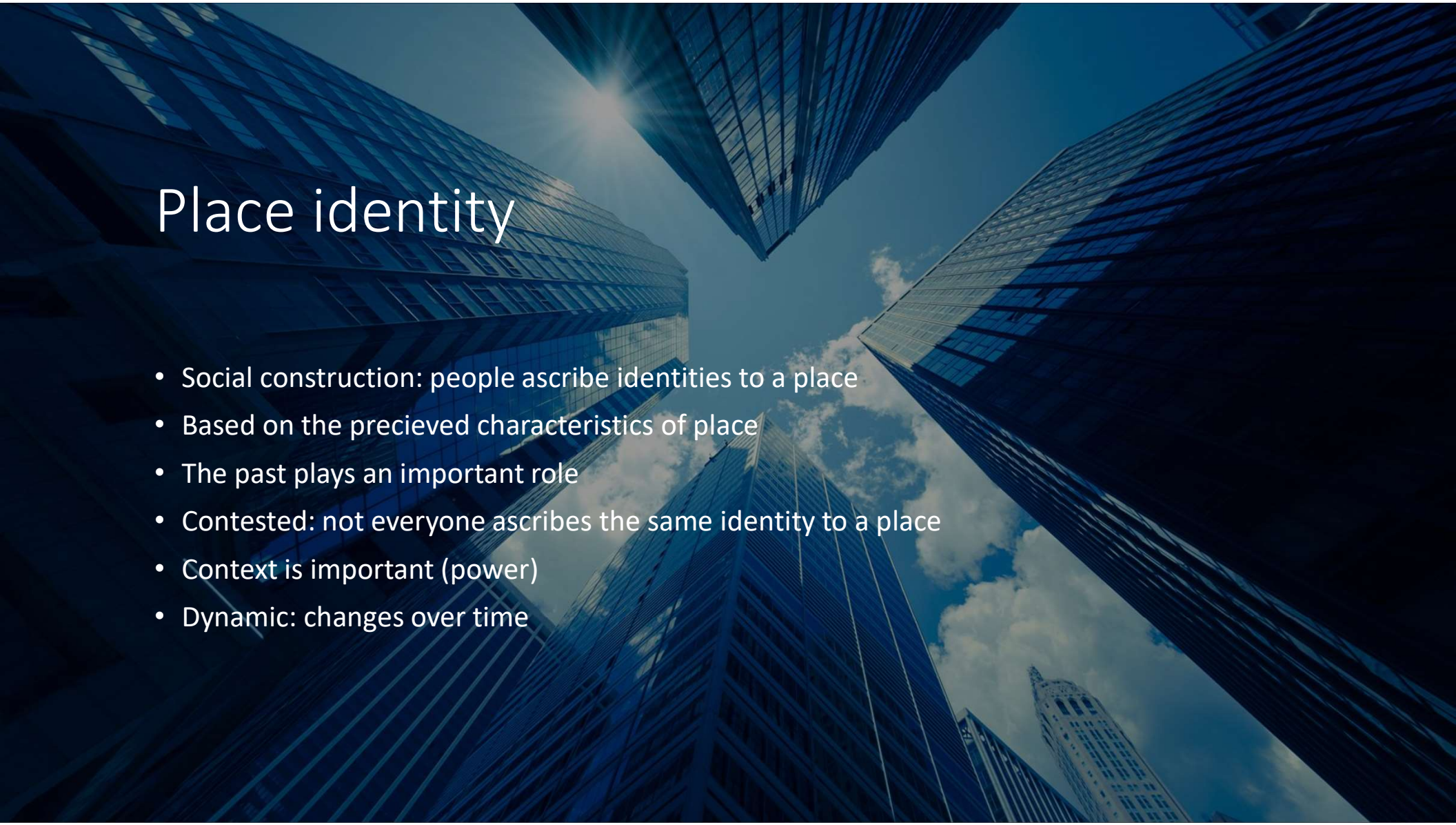
- Related concepts: place attachment, sense of place

- Proshansky et al (1976): “those dimensions of self that define the individual’s personal identity in the relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, feelings, values, goals, preferences, skills, and behavioral tendencies relevant to the specific environment” (155)



Place identity

- Geographer Paasi: two dimensions
- People's place identity: the identification of individuals with place
- Place identity of a place: features of nature, culture, people that are used in the discourses about places (…) to distinguish one place from another



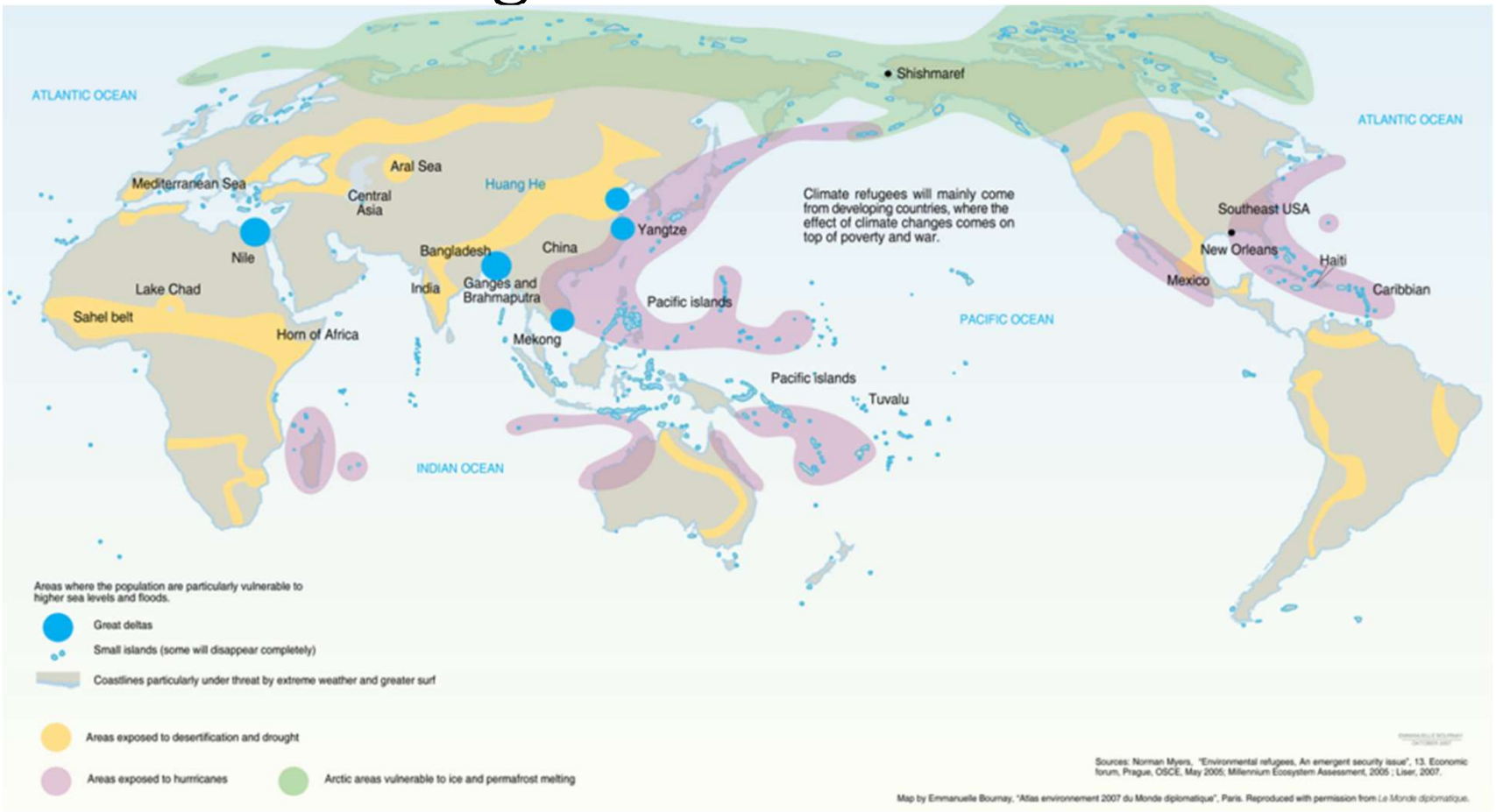
Place identity

- Social construction: people ascribe identities to a place
- Based on the precieved characteristics of place
- The past plays an important role
- Contested: not everyone ascribes the same identity to a place
- Context is important (power)
- Dynamic: changes over time

Place identity – place attachment

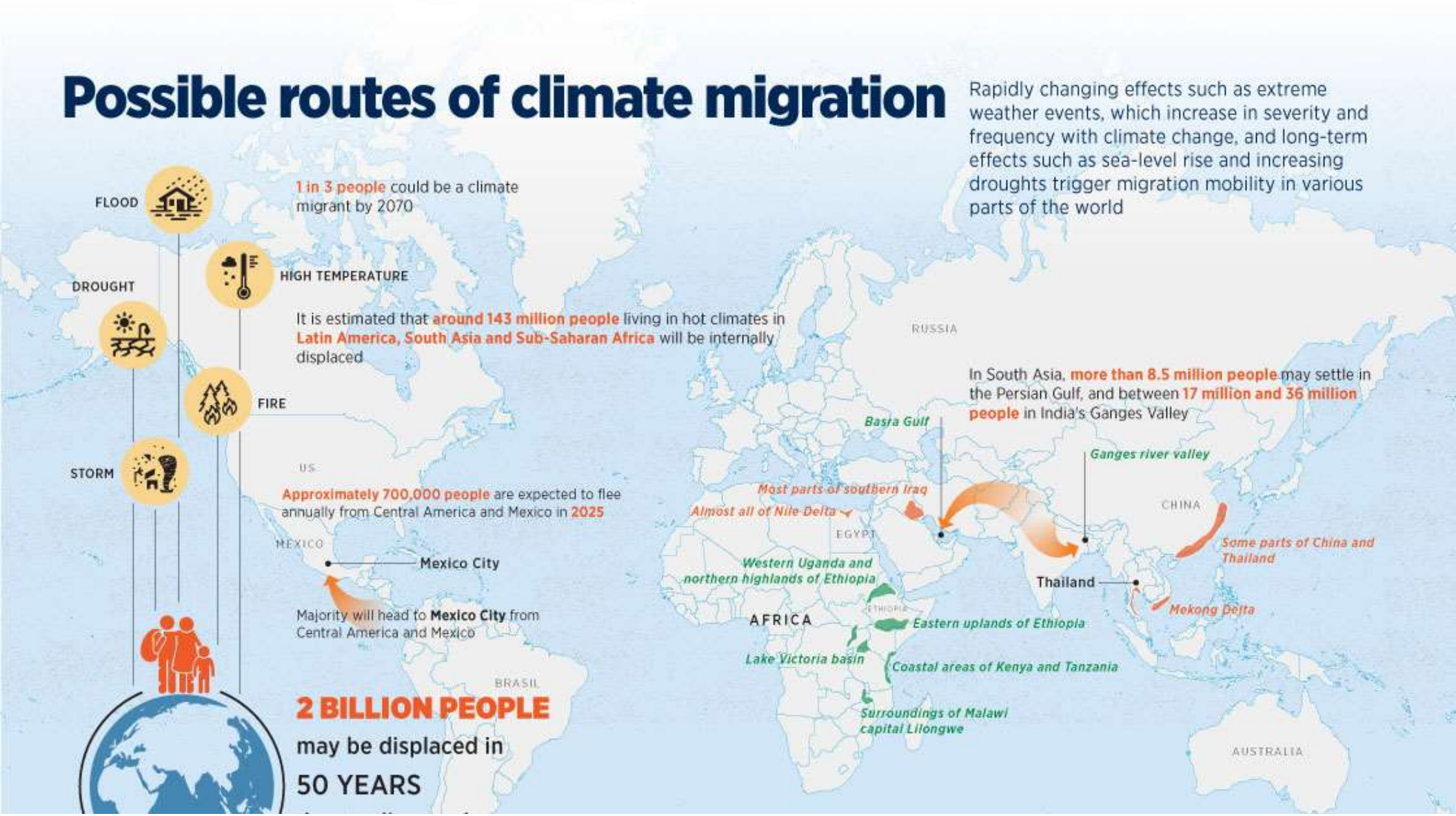
Climate change

Climate change

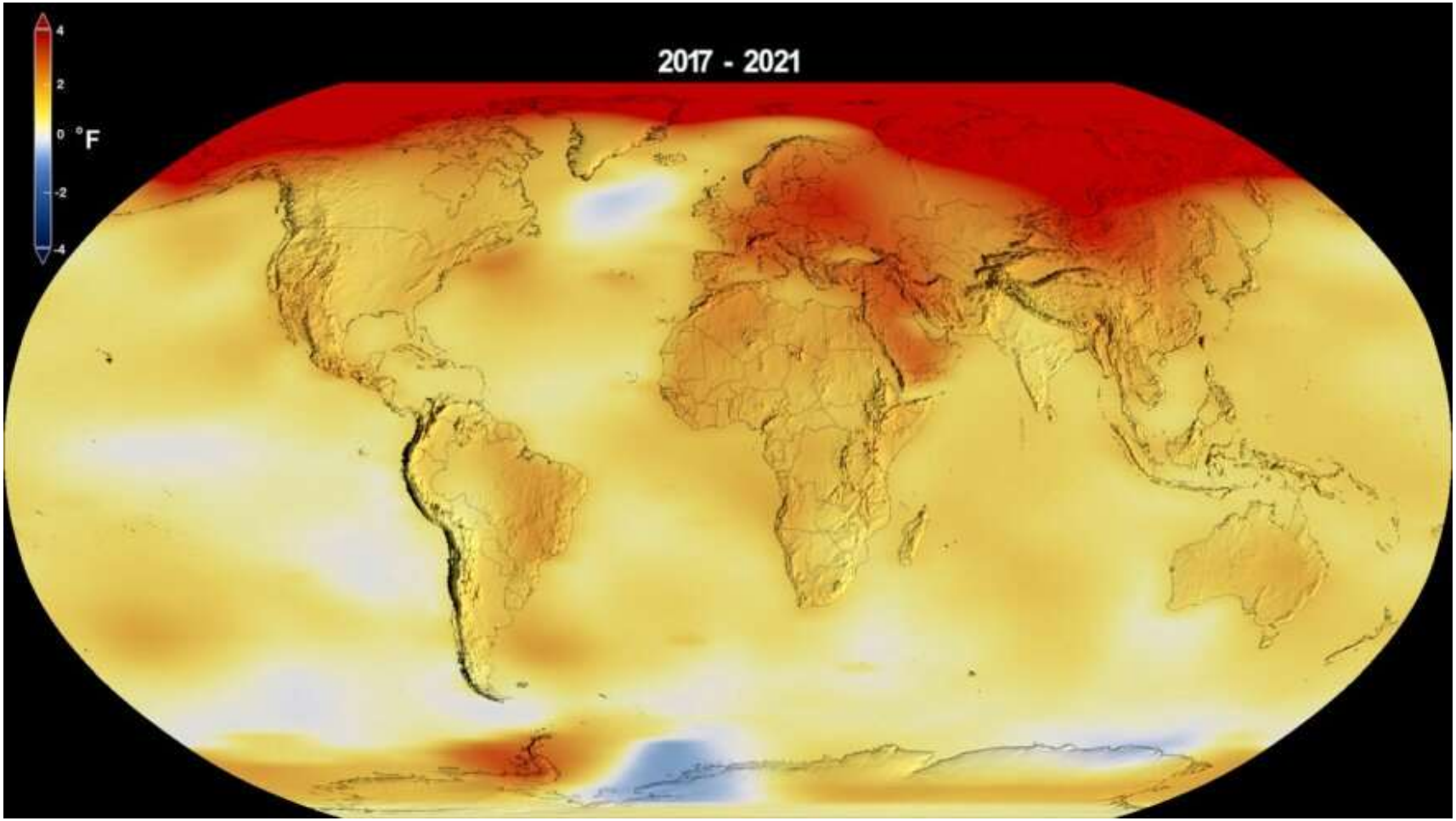


Possible routes of climate migration

Rapidly changing effects such as extreme weather events, which increase in severity and frequency with climate change, and long-term effects such as sea-level rise and increasing droughts trigger migration mobility in various parts of the world



Climate change & the Arctic



Arctic as icon of climate change

Icons of climate change

Photo by Florian Stammler www.arcticcentre.org

Indigenous knowledge

Differences IK and Science

The polar bear example:
Inuit IQ: polar bear populations have increased
Science: populations are in decline as result of climate change and over-hunting

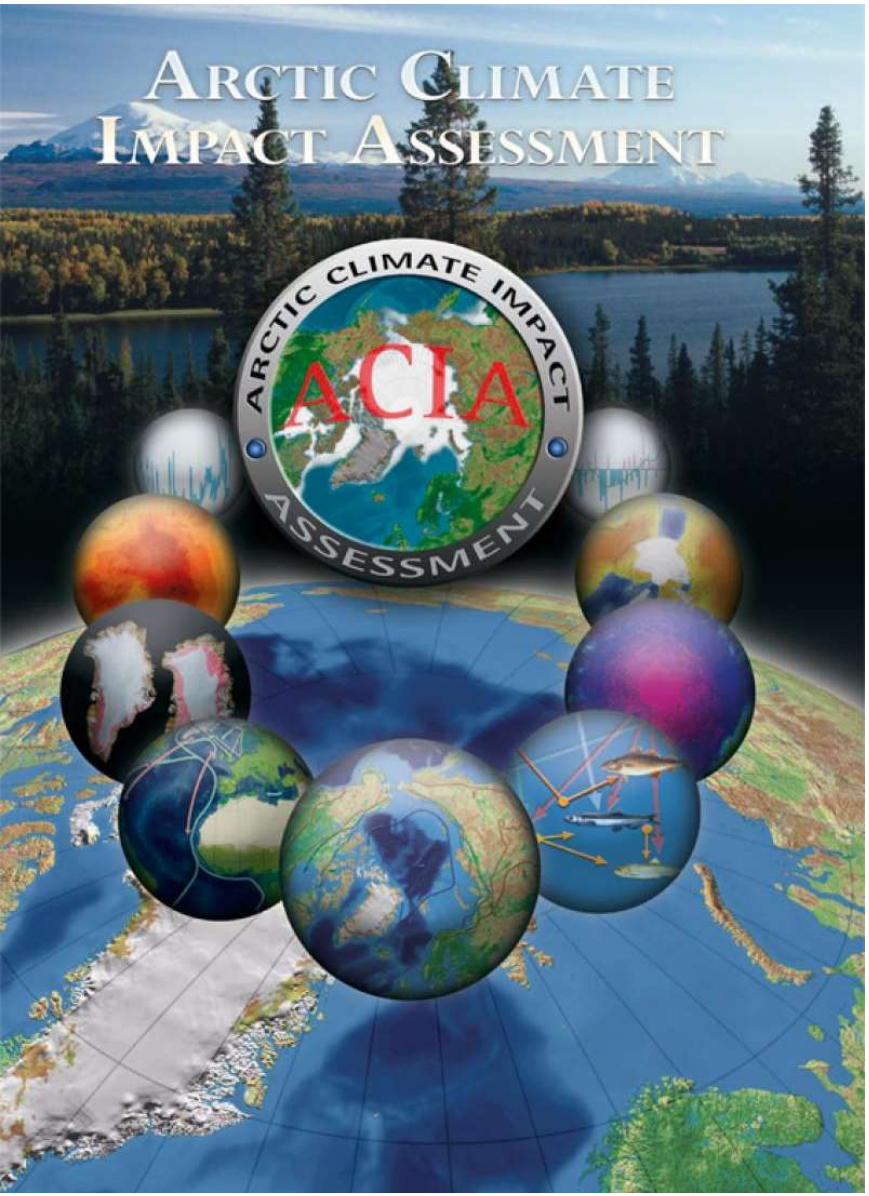
Indigenous knowledge	Western Scientific Knowlegde
Qualitative	Quantitative
Intuitive	Rational
Holistic	Reductionist
Moral, spiritual	Supposedly value free
Considers mind and matter together	Mechanistic
Based on empircal observation	Based on experimentation and systematization
Generated and held by the users themselves	Generated by specialists
Diachronic (long-time series of information on one locality)	Synchronic (short-time series over a large area)

Knowledge and power

Our elders were told that everything they knew was irrelevant. They were called stupid and ignorant and told to forget the past, so that their children could move into the present and adapt to the dominant culture. This assimilation by humiliation worked."

(Haakonson 2004:124)

Arctic Council



Arctic Climate Impact Assessment - ACIA

Some IPs observations (2005)

- The weather is less stable and predictable (traveling safety)
- Quality of snow changing, sea ice is thinning
- There is more rain
- Some animals (ringed seal – natsiq; polar bear) become less widespread making it more difficult to hunt (Nunavut)
- Other new animals appear North e.g insects (Nunavut)
- More thunder storms (Inuvialuit, western Canadian Arctic)
- Significant weather changes, vegetation, distribution of animals (Alaska, Canada Athabaskan)
- Changes in wind (Saami Norway)

Key findings (2005)

No 8: Indigenous communities face significant cultural changes, due to climate change

Responses to transforming places

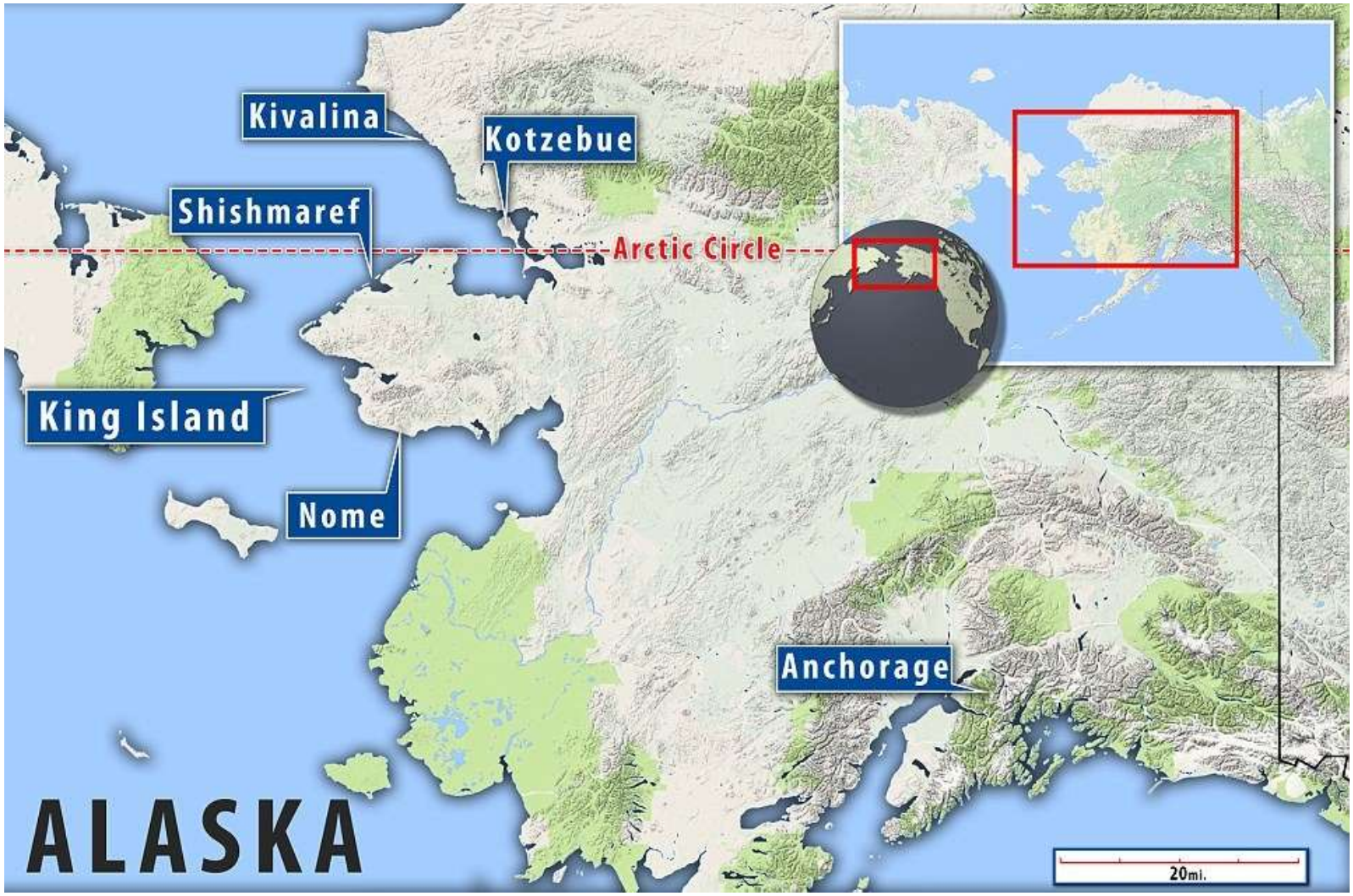
- External forces versus internal changes
- Positive or negative responses
- Potential indicators: sense of place, place attachment etc.

The case of Shishmaref, Alaska

- Fierce Climate Sacred Ground, An ethnography of climate change in Shishmaref Alaska

- By Elizabeth Marino, Anthropologist - Ethnographer

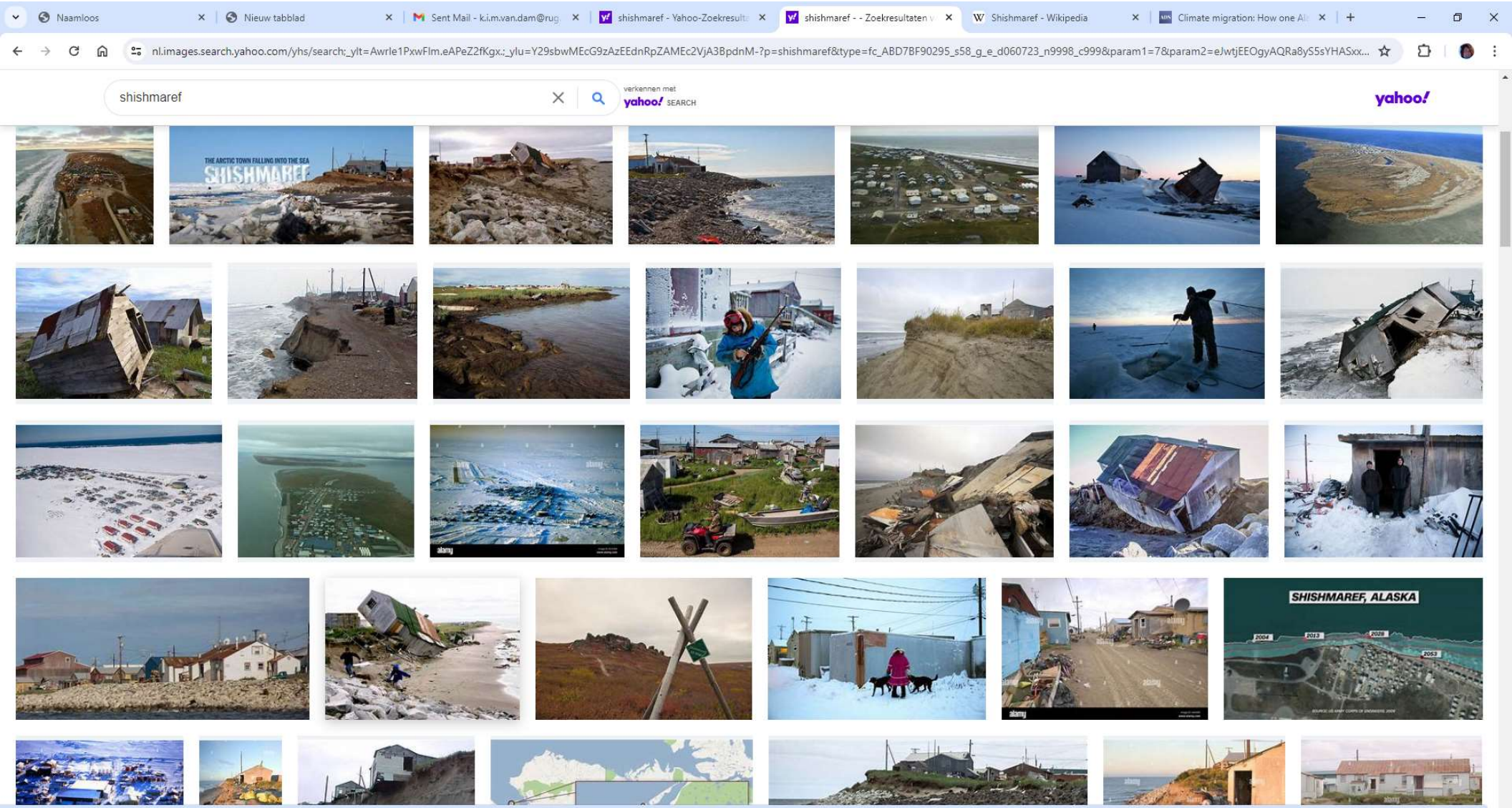
- 2015


Kivalina
Kotzebue
Shishmaref
Arctic Circle
King Island
Nome
Anchorage
ALASKA
20mi.

The island of Sarichef – with Shishmaref

The story in short

- Shishmaref is often identified as one of the first victims of human caused anthropogentic climate change
- What is actually happening: storms are eroding the coastline
- 2 times the population voted for relocation
- But everyone is still there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THE ARCTIC TOWN FALLING INTO THE SEA
SHISHMAREF
SHISHMAREF, ALASKA
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Community of Shishmaref

- Inupiaq community of 600 people (*Kigiqtaamiut – island people*)
- Shishmaref is on the island of Sarichef, most of part of the year
- Livelihood: subsistence hunting for sea mammals (bearded seal, spotted seal, walrus, caribou, musk ox, fish, berries, greens)
- People settled in the community around 1900s

What is actually happening?

- Physical conditions: located at Bering Sea, storms are coming in. This has always been the case but:
  - There is less sea ice, more water so more waves
  - Severe storms
  - Permafrost is diminishing
- Resulting in increased coastal erosion


SHISHMAREF, ALASKA
2004
2013
2028
2053
SOURCE: US ARMY CORPS OF ENGINEERS, 2009

What is happening 2: observations and science

- Weather
  - Stronger winds, different direction, shorter winter, longer spring and autumn
  - Greater variability and less predictable weather
- Permafrost thaw
  - Easier to dig in the ground, visual changes, sinking cabins
  - 2-4 degrees warming and thawing
- Thermocrast ponds
  - Lakes disappearing
- Freeze-up
  - Later freeze up, earlier breakup
- Coastal erosion
  - Heavy erosion, seawalls became necessary
  - Infrastructure damage

(Merino 2012)


But: is was is happening in Shishmaref actually due to climate change?

Vulnerability to climate change

- Natural disasters (hazards) come in many shapes and sizes
- However, how they play out is much more the result of socioeconomic conditions than the size of the event itself
- Examples:
  - Earthquake in San Francisco, Califorinia versus Izmir, Turkey (1999)
  - Katherina huricane
  - Haiti earthquake
- Concept of vulnerability: the conditions present in a community that includes both the hazard, and the (in)ability to cope with or adapt to those hazards in a way that prevents negative outcome (Marino 2012, 24)

Hazard centric - Vulnerability

- Hazard-centric: one off aberration from normal
- Focus is on the disaster itself. Solutions: warning systems, forecasting, protecting
- Techno-engineering response: rebuilding, in the same way at the same place

Social science insights (1970s, 1980s):

- Disasters are dependent on social systems and interactions
- Concept of vulnerability: the conditions present in a community that includes both the hazard, and the (in)ability to cope with or adapt to those hazards in a way that prevents negative outcome (Marino 2012, 24)

Explanation - climate change is there but:

- Erosion has always been there – it is a natural process of barrier islands
- Intervention measures (seawalls) seem to have increased erosion
- Elders: we always knew that the island would disappear
- Main problem: it is a fixed settlement, at the wrong place

Why is the village of Shishmaref there?

For the nomadic Inupiaq

- The island has always been good for subsistence hunting
- Good access to the ocean
- Winter camps were south on the island

With colonialism came relocation of the people in a settled place

- Western infrastructure
- The construction of the school
- At a site that was never thought of as being suitable

To sum up:

- Loss of flexibility
- Decision used to be grounded in local ecological knowledge now taken by outsiders without this knowledge
- Permanent villages were built in vulnerable locations without adequate methods of coping with hazards

- Local adaptation strategies to an inevitably dynamic coast were lost without adequate new adaptation strategies to replace them (59)

Relocation

- Relocation is considered since early 2000s. The community has voted in favour of relocation, twice
- One of the results is that there has been very limited investment so the village is in poor condition, lacking basic facilities (2012)
- Relocate where to?
- Relocate ….when?

Relocate when

- Started in 1970s after a storm. Estimated costs: 1 million dollar (now: 100 to 200 million)
- Residents did not vote in favour of relocation. Plans were stalled
- Major storms followed in 1988, 1997, 2001
- Relocation plans reemerged with residents in favour
- But despite media attention and many studies nothing really happened
- “Revolving door”experience leading to (seemingly) apathy and distrust in the community

Relocation to…

- To regional centre of Nome or Kotzebue: unacceptable

- To the mainland and reconstruct a new village: remain within the traditional subsistence territory

Concerns in the community

- Risks are increasing, the island will disappear (sense of helplessness)
- Distaster will occur and result in diaspora (evacuation) (biggest fear)
- Alienation and communication problems with agencies

Still there

- Relocation is too costly
- Places chosen are not optimal
- Most importantly: there are no places like Shishmaref (next slide)

(Associated Press, October 30, 2022)

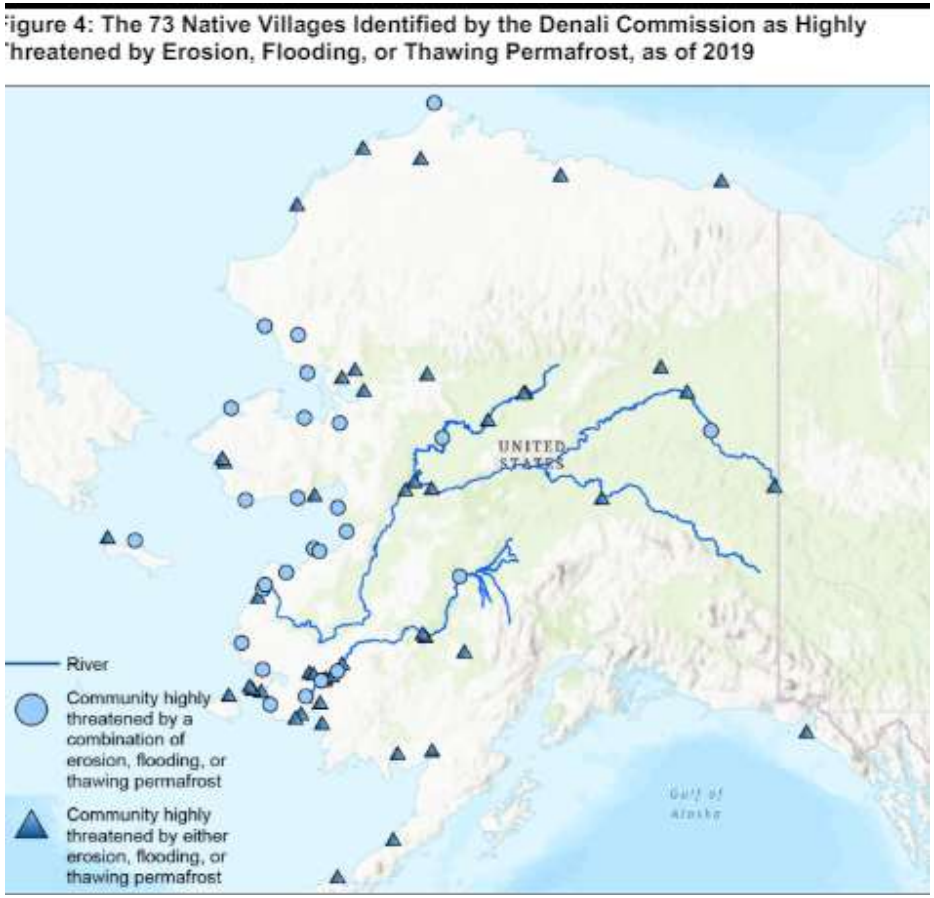
There is no place like Shishmaref

- The relation of the community and their landscape, the wider island
- The importance of subsistence practices, also for risk management. It is integrated in all aspects of life. These practices are flexible; abandoning them would be the breaking point of flexibility.
- “Place (…) secures sacred social-ecological relationships” (Marino 2012: 82)

Still there

- https://www.gao.gov/products/gao-22-104241

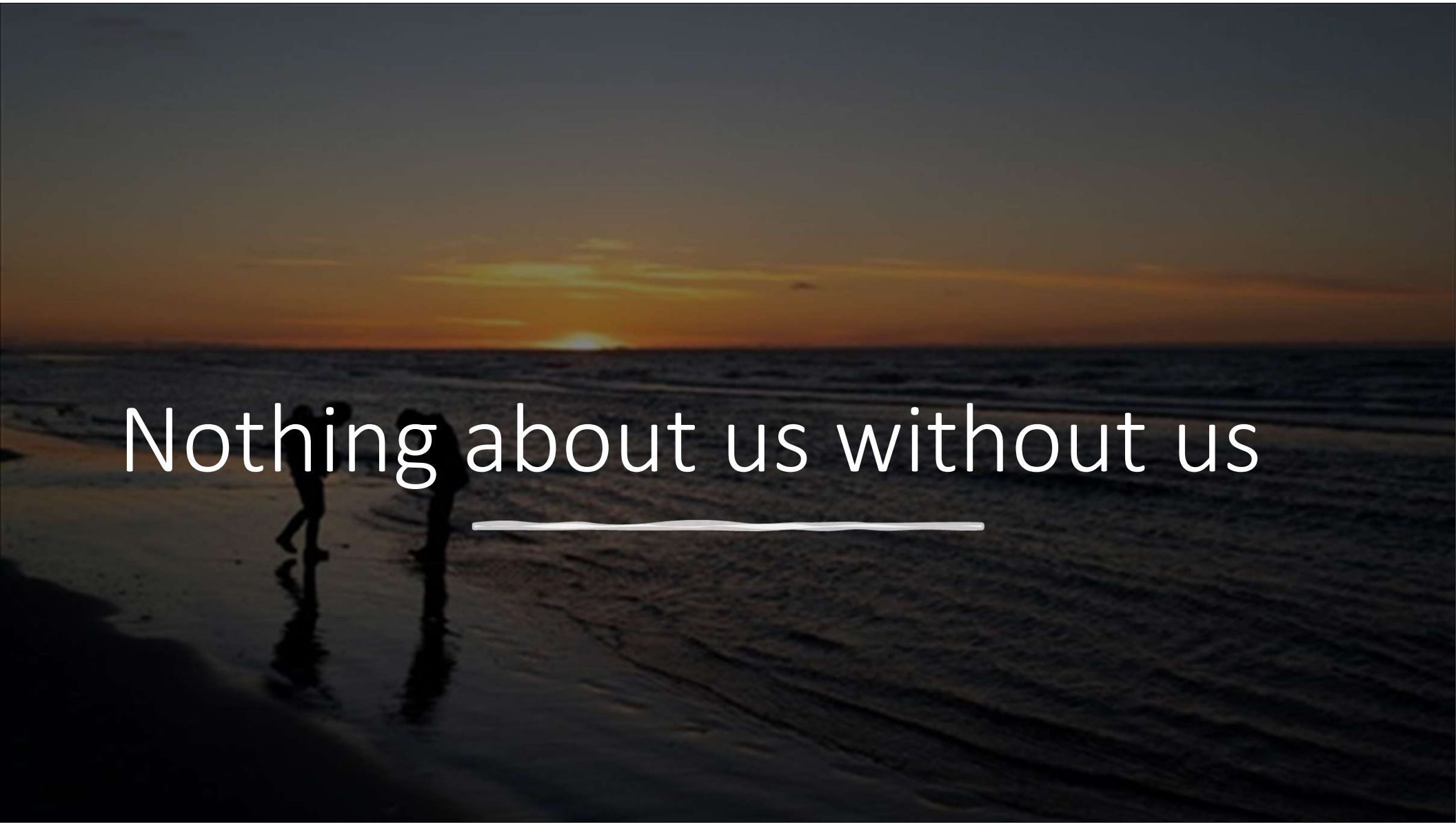
- 70 out of 200 native villages face threats from erosion, flooding



For the future

- Remain on traditional lands
- Have access to the ocean
- No diaspora, no integration in “urban” areas

- Take Indigenous People and their knowledge seriously


Nothing about us without us

Indigenous Knowledge

Indigenous Knowledge is a systematic way of thinking and knowing that is elaborated and applied to phenomena across biological, physical, cultural and linguistic systems.

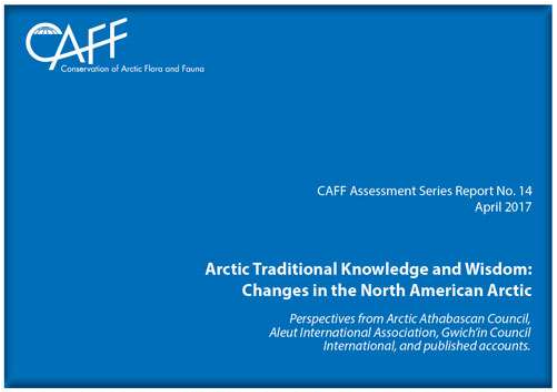
Indigenous Knowledge is owned by the holders of that knowledge, often collectively, and is uniquely expressed and transmitted through indigenous languages.

It is a body of knowledge generated through cultural practices, lived experiences including extensive and multi-generational observations, lessons and skills.

It has been developed and verified over millennia and is still developing in a living process, including knowledge acquired today and in the future, and it is passed on from generation to generation

(Ottawa Traditional Knowledge Principles 2015 and revised in October 2018).

Monitoring biodiversity



Statement (published in *Sustainability*)

The Indigenous Peoples are the **original Arctic researchers** who hold unique knowledge, grounded in multigenerational experiences, of land and environment.

This knowledge is **time tested** and implies **deep understanding** of the Arctic environment, socioeconomic systems, and human-environment relations.

Indigenous Knowledge provides a foundation for **individual and collective well-being** of **past, present, and future generations** of Arctic Indigenous Peoples.

Indigenous Knowledge systems have their **own ontologies, epistemologies, and methodologies**, and possess **internal validation principles** and processes based on reciprocity and respect.

Indigenous Knowledge is **key to accurate interpretation** of dynamics in the natural and social systems in the Arctic.

Science and policy that are **not inclusive** of the Indigenous Knowledge can**not** be considered **adequate** to address the Arctic Peoples' needs.

A major advancement in Arctic science will be achieved through **Indigenization of Arctic research**.

While working with Indigenous communities, one has to be mindful of the **systemic trauma** they have experienced in their history, and **allow time**, and channel resources so that these communities can **heal and reconcile** with their land, histories and languages that were disrupted due to colonization

Degai et al. 2022

Co-production should imply co-identification of research needs, co-creation of research ideas, co-design of research questions, co-definition of research objectives, co-development of research programs, co-authorship of research results, co-implementation of research projects and co-evaluation of research outcomes.

Co-production must ensure that Indigenous and non-Indigenous research partners share a common vision of what these, and other terms, mean in the research process. In addition to being based on co-production, Arctic research must also make room for Indigenous Peoples' knowledge systems to stand on their own without being validated by research partnerships with non-Indigenous scholars.

Finally, co-production should generate practical results important for Indigenous communities. It is important to acknowledge that these processes take time.

Principles for Research

- FPIC - Free, Prior, Informed, Consent
- Funding structures
- Addressing community research needs
- Research equality
- Culturally appropriate research practices
- Meaning of time
- Data sharing agreements
- Training and employment opportunities
- Conference participation and publications

(Src. Sarah M. Hazell, Canadian Archaeological Association, NWO Polar Symposium May 19, 2022)

Towards knowledge co-production

Progress: some meaningful inclusion has been done

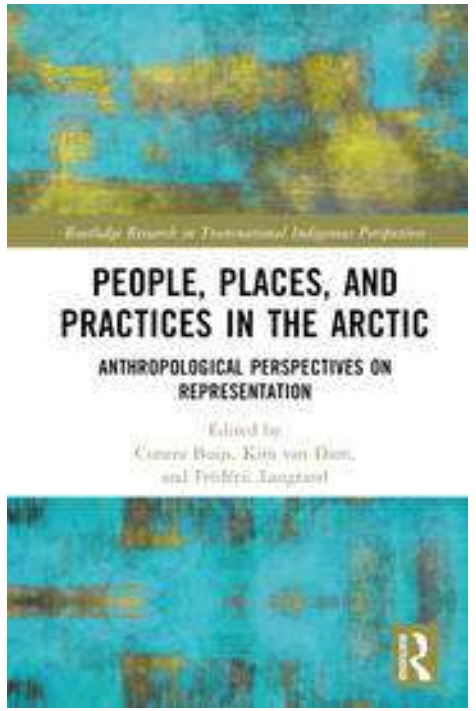
e.g. principles for research

But there are still many challenges, many of them related to lack of resources and time

Nothing about us, without us

To end: representation from anthropological perpective

- Representations made in the past (and in the present)
- *For* and *of* Indigenous Arctic Peoples
- And *by* Indigenous people
- Including: the (changing) role of Anthropology




January / 19
"Christmas Games"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