



CLIMATE CHANGE IN NORTHERN TERRITORIES
Sharing Experiences, Exploring New Methods and Assessing Socio-Economic Impacts
Conference in Akureyri, Iceland
22nd – 23rd August 2013

Subtheme: Adaption to climate change in regions and local communities – examining methods and sharing knowledge

Incorporating climate change in polar tourism product development



**ICELANDIC TOURISM
RESEARCH CENTRE**

Dr. Edward H. Huijbens
Director
Icelandic Tourism Research Centre

edward@unak.is

A conceptual dialogue



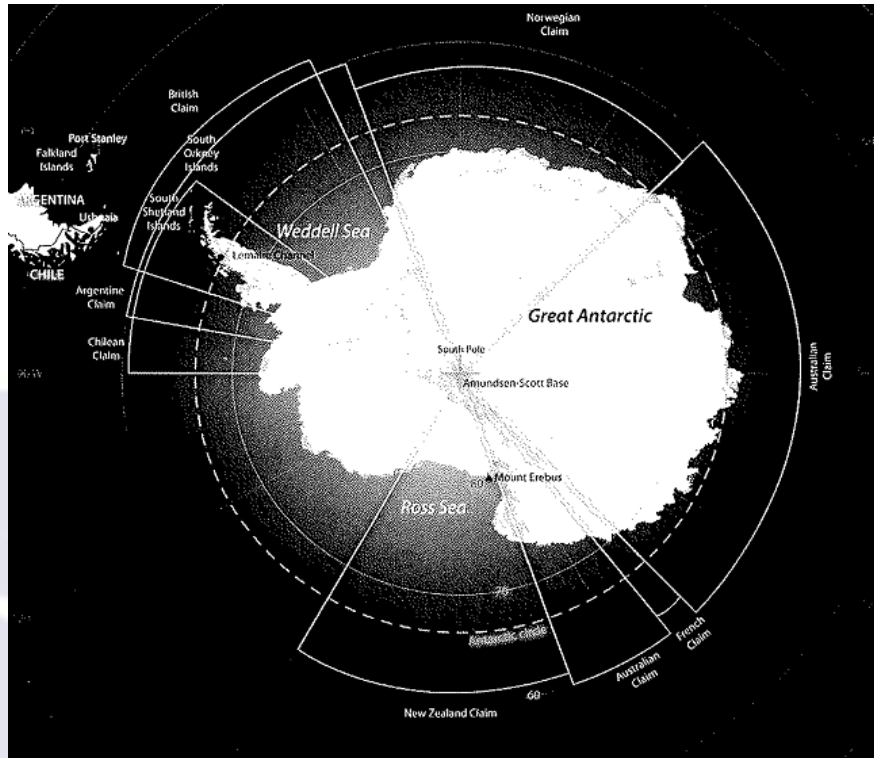
ICELANDIC TOURISM
RESEARCH CENTRE

POLAR TOURISM			
Geographical approach	<ul style="list-style-type: none"> • Experience associated with a specific geographical territory 	<ul style="list-style-type: none"> • Experience associated with polar mythology (abstraction) 	Sociological approach
	<ul style="list-style-type: none"> • Distance (physical) • Physical barriers 	<ul style="list-style-type: none"> • Loss of social and cultural markers of the domestic universe • Potential environment for personal new challenges (rite of passage) 	
	<ul style="list-style-type: none"> • As opposed to sunshine tourism 	<ul style="list-style-type: none"> • Search of distinction through acquisition of cultural capital 	
	<ul style="list-style-type: none"> • Polar environments as aesthetic sites (reflection) stimulated by the outside 	<ul style="list-style-type: none"> • Polar environments as a medium for intra-reflection (self search / spiritual dimension) 	
	<ul style="list-style-type: none"> • Allows accounting of tourists on a territorial basis 	<ul style="list-style-type: none"> • Allows accounting of tourists based on specific activities 	
	Unit of measure: the geographical space	Unit of measure: the activity	

The bipolar world



ICELANDIC TOURISM
RESEARCH CENTRE



Müller and Grenier, 2011:
Polar Tourism. A tool for Regional Development, pp. xxi-xxii

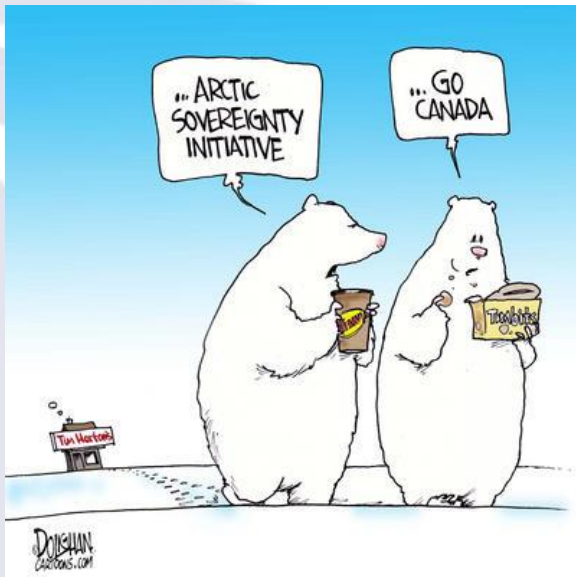
Valuing landscapes



ICELANDIC TOURISM
RESEARCH CENTRE

Not only is the North a land of raw and majestic beauty that has inspired generations of authors, artists and adventurers, and not only is it the home to a rich culture shaped through the millennia by the wisdom of Aboriginal people, but it also holds the potential to be a transformative economic asset for the country.

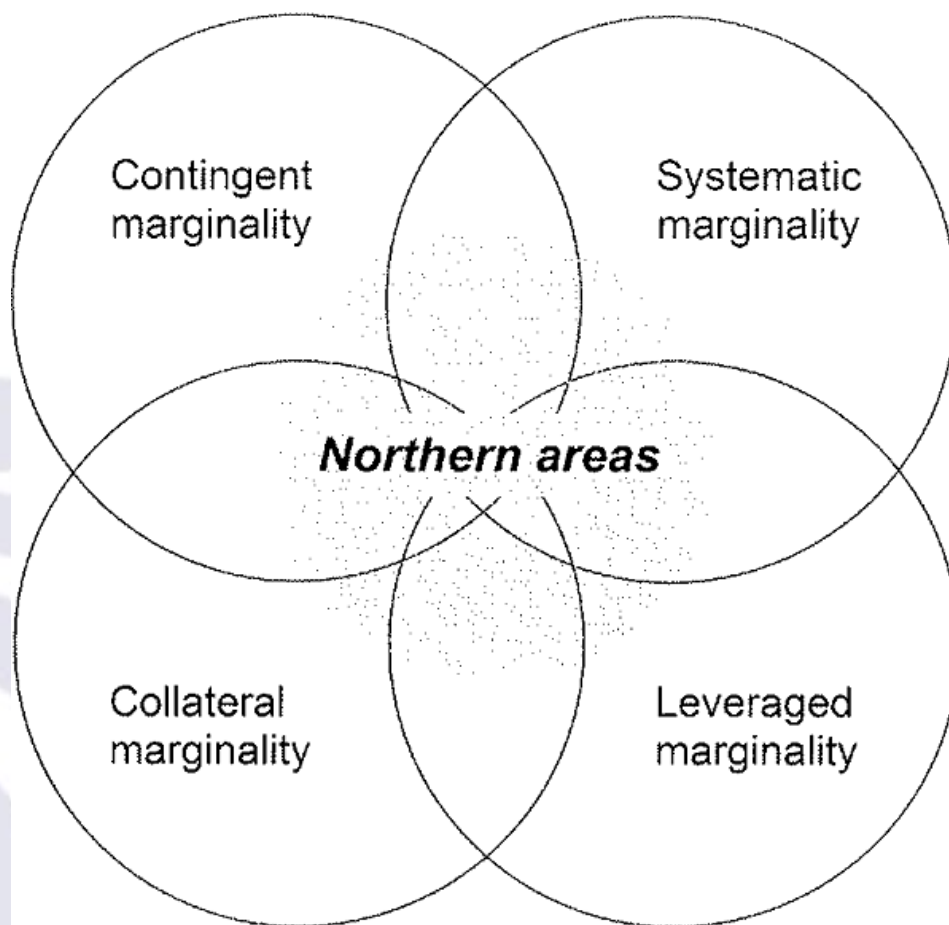
Stephen Harper, Canada's PM 2009, Iqaluit, Nunavut.
Statement on Canada's Arctic Foreign Policy, 2010



Understanding the polar region



ICELANDIC TOURISM
RESEARCH CENTRE



Müller, 2011: Tourism Development in Europe's Last Wilderness
In: *Polar Tourism. A tool for Regional Development*, p. 133

Understanding the polar region



ICELANDIC TOURISM
RESEARCH CENTRE

Peripheral problems

- Lack of political and economic control over decision-making
- Geographical remoteness from demand markets
- Weak internal economic linkages creating dependency on imports
- Decreasing population figures, ageing societies
- Comparative lack of innovation
- State intervention
- Poor information flows within and from the periphery
- High aesthetic natural value due to underdevelopment
- Poor infrastructure
- Lack of human capital

Müller, 2011: Tourism Development in Europe's Last Wilderness
In: *Polar Tourism. A tool for Regional Development*, p. 132

Arctic Observing Network Social Indicators Project



ICELANDIC TOURISM
RESEARCH CENTRE

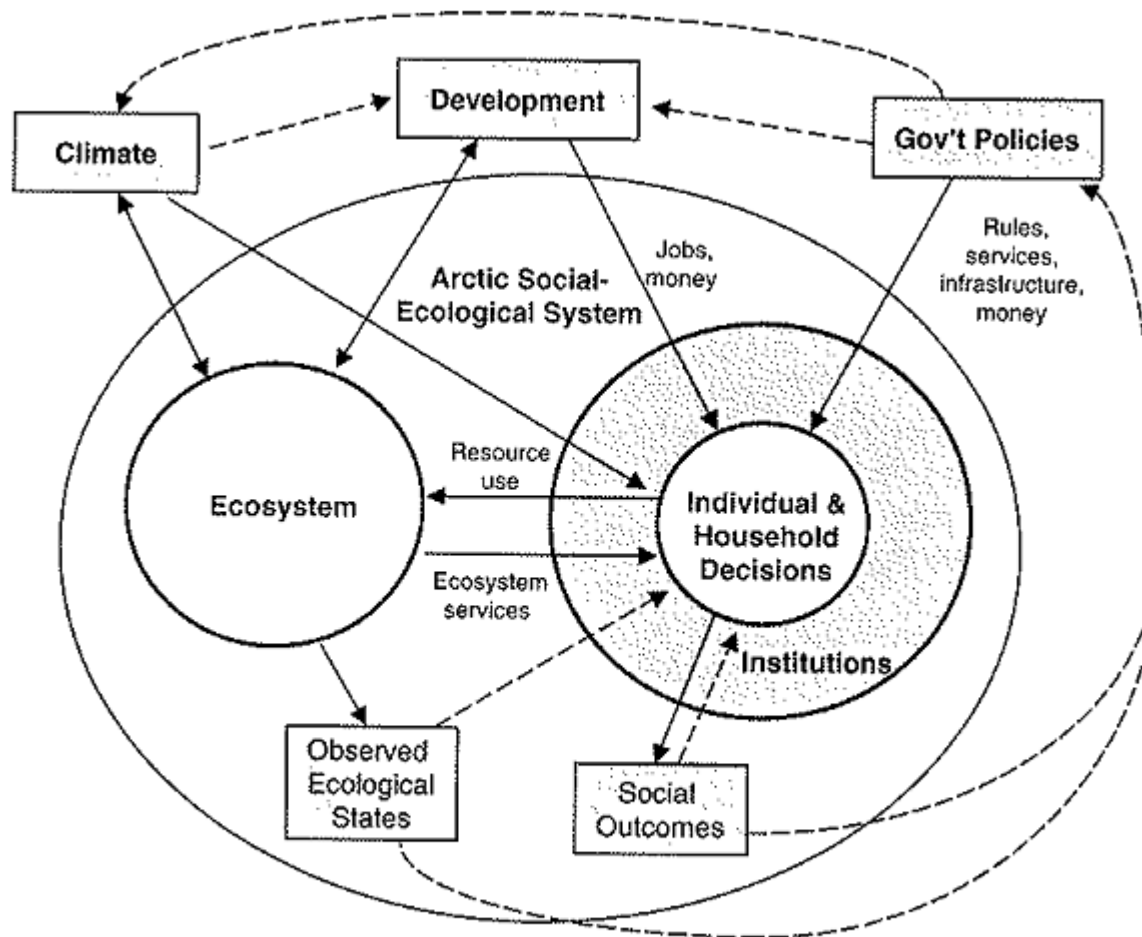
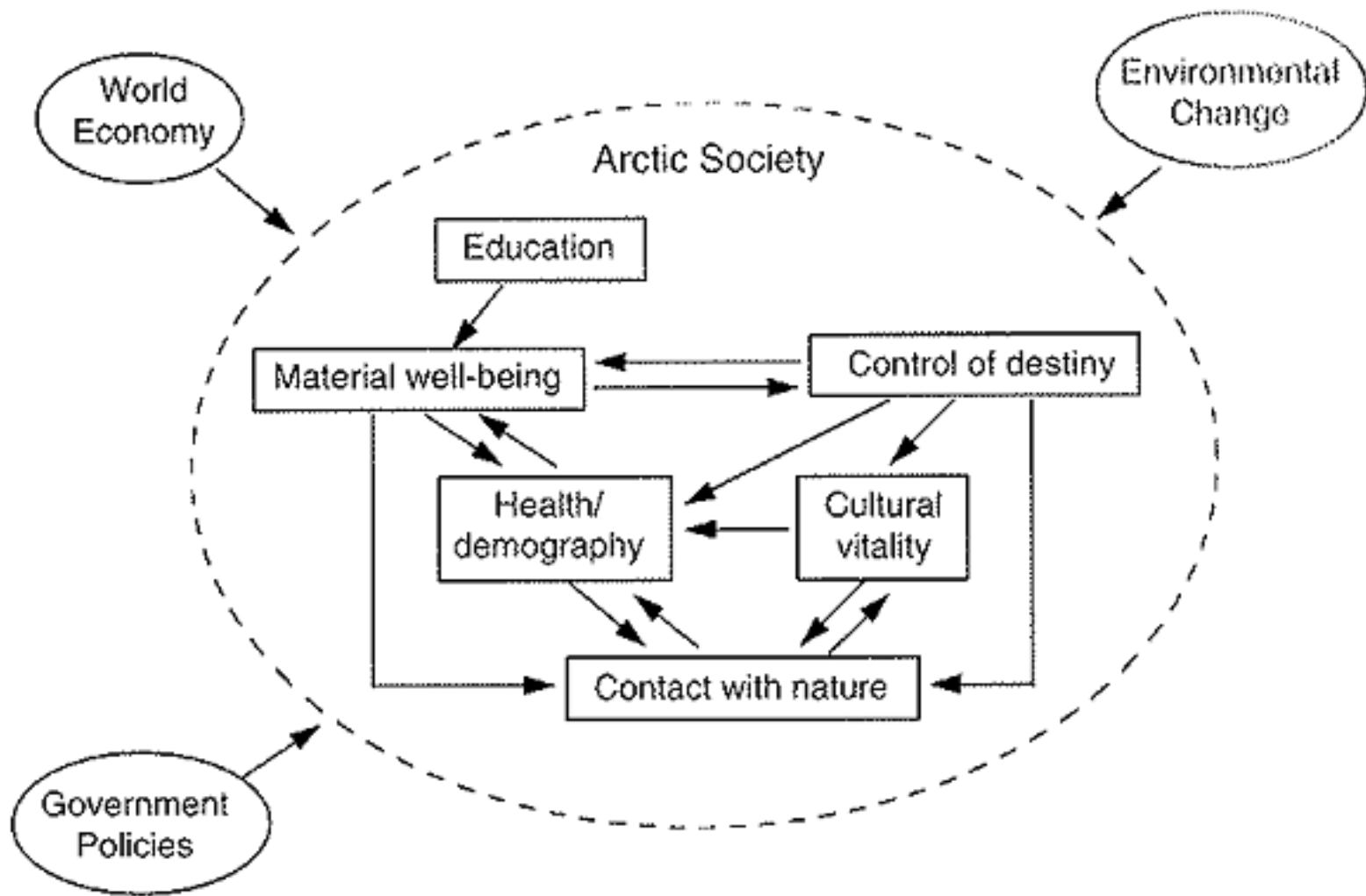


Figure 1. AON-SIP conceptual framework.

The Arctic Social System



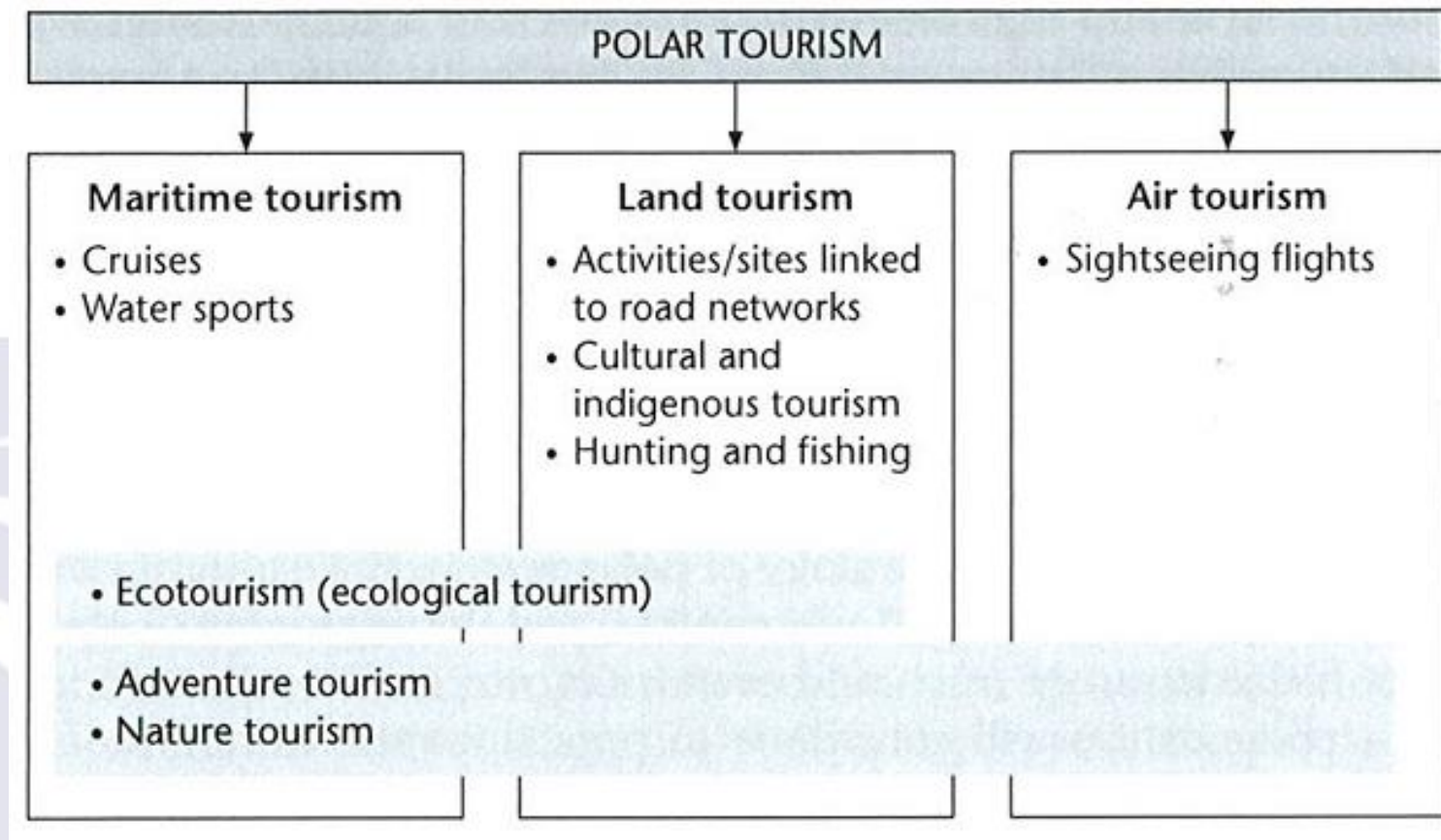
ICELANDIC TOURISM
RESEARCH CENTRE



Branches of Polar Tourism



ICELANDIC TOURISM
RESEARCH CENTRE



Emerging types

Cohen (1972)	Plog (1977)	Perreault, Dorden and Dorden (1979)	Cohen (1979)	Belgian survey (1986)
The organized mass tourist	Psychocentric	homebody	Recreational tourist	Traditionalists
The individual mass tourist	↓	vacationers	Diversionary tourists	Family - sun, sand sea lovers
The explorer		budget travellers	Experiential tourist	Discoverers
The drifter	Allocentric	moderates	Experimental tourist	Nature viewers
		adventurous	Existential tourist	Contact minded
				Active sea lovers

Dalen (1989)	Gallup and American Express (1989)	Smith (1989)	Wood and House (1991)	Wickens (1994)
Traditional materialists	Indulgers	Charter	Bad tourist	Lord Byrons
Traditional idealists	Worriers	Mass	↓	Heliolatus
Modern materialists	Economizers	Incipient		Shirley Valentines
Modern idealists	Dreamers	Unusual	Good tourist	Ravers
	Adventurers	Off-beat		Cultural heritage
		Elite		
		Explorers		

Based on: Swarbrooke and Horner 2007: *Consumer Behaviour in Tourism*, pp. 83-89

EQ segments



ICELANDIC TOURISM
RESEARCH CENTRE

Gentle Explorer

In the world of explorers, you are a Gentle Explorer. You like returning to past destinations and enjoy the security of familiar surroundings. You seek the most comfortable and serene places when you get away and avoid the unknown. Well-organized travel packages and guided tours that take care of all the details appeal to you - travel should be fun, not extra work! And if it's fun, chances are you'll be back.

Personality traits:

conservative
reliable
traditional
solitary
selective
discriminating
fun-loving

Most likely to be seen at:

branded hotels
spa
cottage
organized tour



Gentle
Explorers

Polar types



ICELANDIC TOURISM
RESEARCH CENTRE

Viken	Kaltenborn	Grenier	Snyder	Tourist types
Scientists		Experts of science		<i>Scientists</i>
Conquerors	Expeditionists	Conquerors	Adventure tourism	<i>Adventurous</i>
Naturalists	Wildernists	Birdwatchers	Ecotourism	<i>Naturalists</i>
	Traditionalists	Naturalists		
	Contradictionists	Cocooners	Sightseeing (mass tourism)	<i>Leisure</i>
	Pragmatists	Lonely travellers		
		Romance seekers		
		History lovers	Cultural and heritage	<i>Culture</i>
		Photographers		<i>Documentary</i>
			Fishing and hunting	<i>Game</i>
				<i>Climate</i>

Post tourist?



ICELANDIC TOURISM
RESEARCH CENTRE



... what was once different is now familiar and the necessity to travel to encounter difference is greatly diminished as the experience of foreign cultures, practices, tastes and fashions become routinely embedded in everyone's daily lives.

Williams, 2009: *Tourism Geography. A New Synthesis*, p. 6

... “rigorous”, “full of facts”, and “concrete details” but also “literary”, “evocative”, “engaging”, “imaginative”, “accessible” and full of “flesh and blood emotions” and “feelings” ...

Crang og Cook, 2007: *Doing Ethnographies*, p. 205

Type of arctic change



ICELANDIC TOURISM
RESEARCH CENTRE

Observed Change	Example of effect or possible cause	Observed Change	Example of effect or possible cause	Observed Change	Example of effect or possible cause
Changes in migration timing and routes	Access to resources	Drier conditions	Habitat changes, resource changes, access to hunting grounds	Deeper snows	Increased mortality of moose and caribou by wolves
Quality of fish declining	Softer, thinner, spoil faster	Poor condition of seals	Related to reduced sea ice habitat	Fewer seabirds	E.g. in Prince William Sound area
Abnormalities in fish or animals	Afraid to eat when abnormal	More bear	Drive reindeer away, increased predation	Less salmon	E.g. moving to cooler waters
New species	Salmon spawning further north	Poor quality of berries, beachgrass	Reduced harvest of berries	stronger sun	Sunburns, rashes
Reduction in thickness and duration of landfast and nearshore sea ice	Travel safety, access to hunting grounds	Shorter winters	Less access on snow and ice	Increased fog	Travel safety
Unpredictability and greater variability of weather conditions	Travel safety	More extreme weather events	E.g. tornado near Aklavik, thunderstorms	Changing wind patterns	Poor igloo quality
Less snow	Access to hunting grounds, wear and tear on snowmobiles and sleds	Freezing rain and icing	Health of wildlife	Spruce beetle infestations	Die off of trees
More bushes	More beaver	Increased storm surges, flooding	Safety, erosion	Fewer moose	May be related to change in habitat
		Increased presence of polar bear near communities	Safety	Red algae blooms	May be related to warmer water

Kruse 2011: Developing an arctic subsistence observation system.
In *Polar Geography*, 34(1-2): pp. 13-15

Incorporating climate change

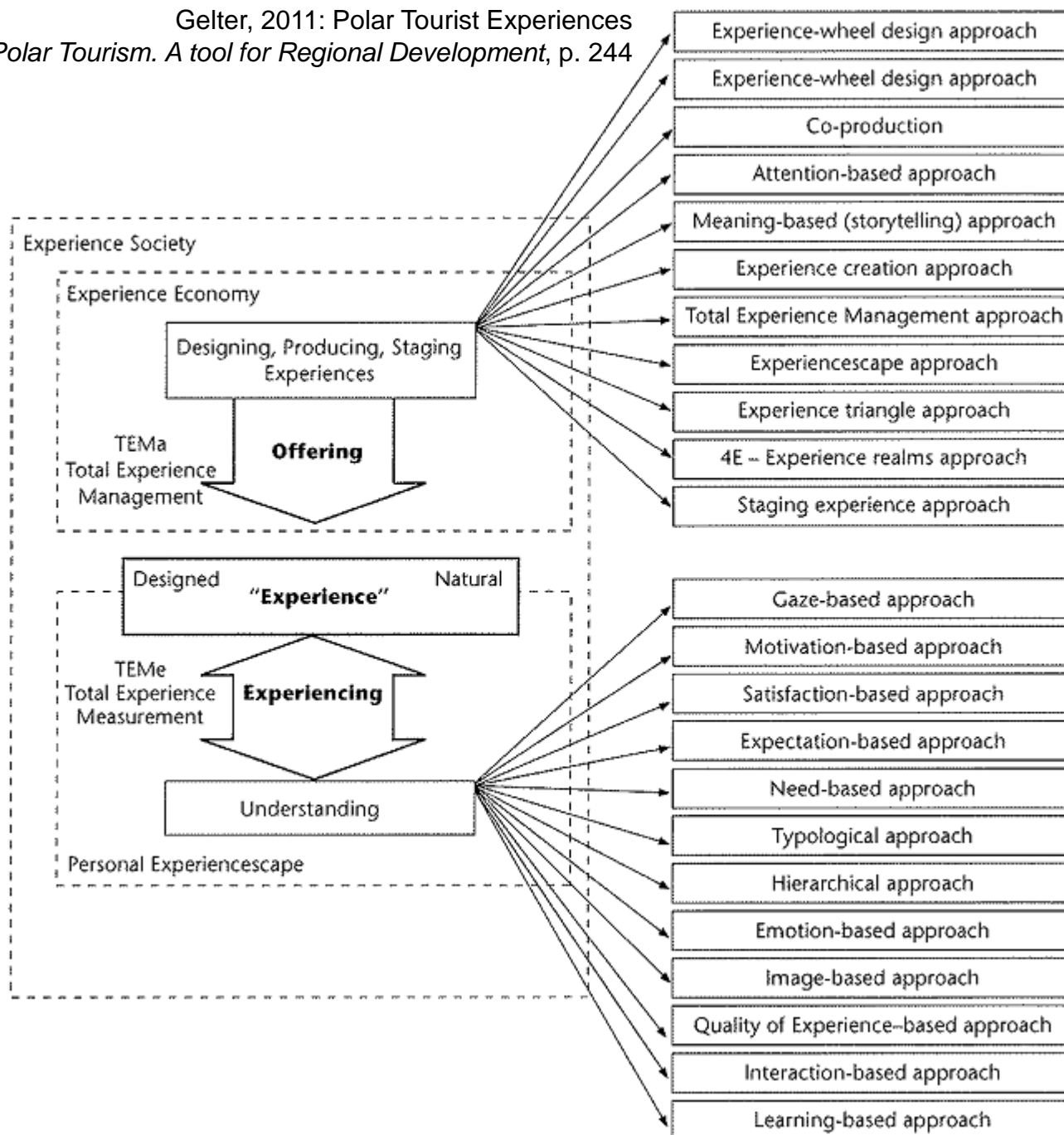
- New services
- New products
- Awareness raising



ICELANDIC TOURISM
RESEARCH CENTRE



Gelter, 2011: Polar Tourist Experiences
In: *Polar Tourism. A tool for Regional Development*, p. 245



ICELANDIC TOURISM
RESEARCH CENTRE

Various expression (activities) of polar tourism by season						
Activity	Type of activity	Prerequisite (clientele)	Main resources on which activity is based	Required infrastructrure (tour operator)	Main destinations*	Season
Ice driving	Adventure	Driver's licence	Nature, snow, ice	Vehicle, circuit	F,N,S	Winter
Polar cruise	Adventure	None	Sea, ice	Icebreaker	F,J	
Snow golf	Sport	None	Nature, snow	Golf course	F,N,S	
Heli-skiing	Extreme sport	Skill	Nature	Helicopter, mountain	BC,N,S	
Ice hotel and bar	General/recreational	None	Ice, snow	Close to services	F,Qc,S	
Ice castle	General/recreational	Driver's licence	Ice, snow	Close to services	F,Qc,S	
Snowmobile	Sport	None	Nature, snow	Paths, services	Everywhere	
Christmas tourism	Recreational	Darkness	Culture	Miscellaneous	F	
Northern lights observation	General/recreational	None	Atmosphere (clear sky, sun activity)	Close to services	F,NWT	
Speed riding	Sport/adventure	None	Snow, mountain	Accompaniment, equipment	Fr,It, Sw	
Snowboard	Sport	None	Nature	Mountain	Everywhere	
Driving under ice pack	Sport/adventure	Skill, certification	Nature	Support equipment	FR,N,Qc,R	
Snowshoeing	Sport/adventure	None	Nature, snow	None	Everywhere	
Snowmobile safari	Sport/adventure	Driver's licence	Snow, nature	Vehicle, paths, support equipment	Everywhere	
Sauna (Finnish)	Culture/recreational	None	Woods, water, culture	Sauna	F,N,S	
Downhill skiing	Sport	Skill	Nature, snow	Support equipment, circuit	Everywhere	
Skijeering	Sport	Skill	Snow, animals, nature	Support equipment, path	Fr,Qc	
Ski skating	Sport	Skill	Snow, nature	Support equipment, circuit	Everywhere	
Cross-country skiing	Sport/recreational	Skill	Snow, nature	Support equipment, path	Everywhere	
Snowscoot	Sport	Skill	Snow, nature	Support equipment, circuit	Everywhere	
Outdoor survival	Adventure	None	Nature, snow, mountain	Support equipment, guide	Everywhere	
Dogsled	Adventure	None	Snow, animals	Support equipment, path	Everywhere	
Reindeer sled ride	Adventure	None	Snow, animals	Support equipment, path	F	
Kicksled	Urban transport/sport	None	Snow	Support equipment, path	F,N,S	
Ice climbing	Recreational	Experience	Nature, cliff, ice	Support equipment, cascade	Everywhere	Spring
Ice fishing	Sport	None	Nature, ice, fish	Support equipment, lake	F,Qc,S	
Dwonhill skiing	Sport	Skill	Nature, snow	Support equipment, circuit	Everywhere	
Skijoring	Sport	Skill	Nature, snow, animals	Support equipment, path	Fr,Qc	
Cross country skiing	Sport/adventure	Skill	Nature, snow	Support equipment, circuit	Everywhere	
Bush skiing	Sport/adventure	Skill	Nature, snow	Support services	Everywhere	
Snowmobile	Sport	Skill	Snow, nature	Support equipment, circuit	Everywhere	
Camping	Recreational	None	Nature	Support equipment	Everywhere	Summer
Sea cruise	Recreational	None	Nature, urban environment	Ship, port services	A,Ant,G,I,N,Nk,Nu	
Hiking	Recreational, sport	None	Nature	None	Everywhere	
River and lake boating	Recreational	None	Nature, water	Ship, crafts, support services	Everywhere	
Water sports	Sport	Skill	Water	Equipment and support services	Ant, N,Nu	
Sightseeing flight	Recreational	None	Nature	Aircraft and service	Ant, Y	
Sea cruise	Recreational	None	Nature, urban environment	Ship, port services	A,Ant,G,I,N,Nk,Nu	Fall
Hiking	Recreational	None	Nature	None	Everywhere	
Relaxation journey in cottage	Recreational	None	Nature	Lodging, services	F	
Nordic hiking	Sport	None	Nature, urban environment	None	F,N,S	Year round
Native tourism	Cultural, recreational	None	Nature, urban environment	Museums, lodging, boutiques	CS,F,N,Nk,Nu,S,Qc	
Museum tourism	Educational, recreational	None	Culture	Building	Everywhere	

* A (Alaska), Ant (Antarctic), BC (British Columbia), CS (Canada southern regions), F (Finland), Fr (France), G (Greenland), I (Iceland), It (Italy), J (Japan), N (Norway), Nk (Nunavik), NWT (Northwest Territories), Qc (Québec), R (Russia), S (Sweden), Sw (Switzerland), Y (Yukon)

Vox Naturae



ICELANDIC TOURISM
RESEARCH CENTRE

VOX
Naturae

ADVOCATING AND MOBILIZING FOR ICE

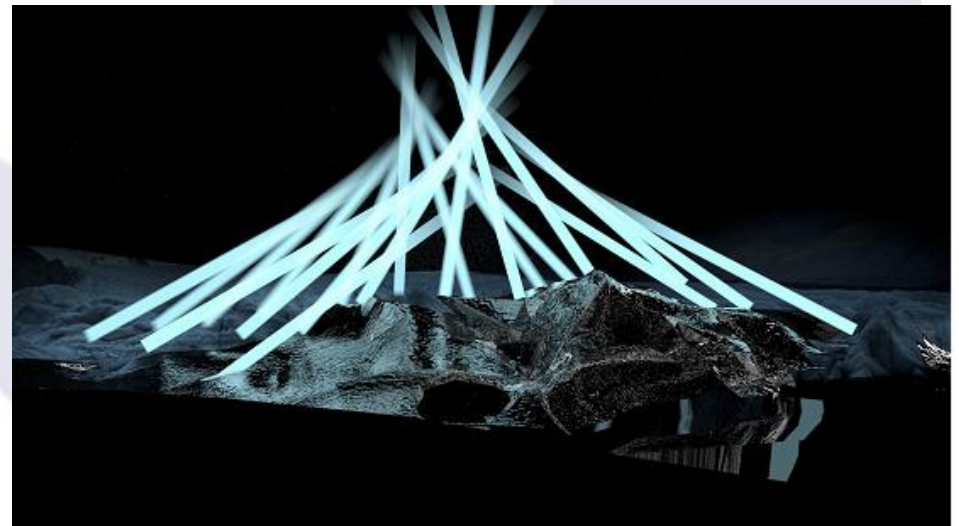


FOUNDERS

- Pall A. Davidsson, Director
- Bergljót Arnalds, Music Director and artistic concept
- Sighvatur Lárusson, Chairman
- Sturla Sighvatsson, Marketing Manager

CELEBRATING GLACIERS

We raise global awareness of ice
by joining art, science and nature
in eye-opening events celebrating
glaciers and communicating their
message of change.



Artist Jack Hattings's interpretation of a light show on a glacier