

The affective power of melting ice



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Human geographies of
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Melting ice: The poster child of climate change

- Melting glaciers and sea ice have become hybrids – simultaneously acting as..
 - ..sites for scientific enquiries on climate change.
 - ..sites for tourism experiences of sublime landscape features & realtime climate change impacts
 - ..subject of imaginations in art and travel literature
- The agency and affective power of melting ice has seen limited attention from human geographers



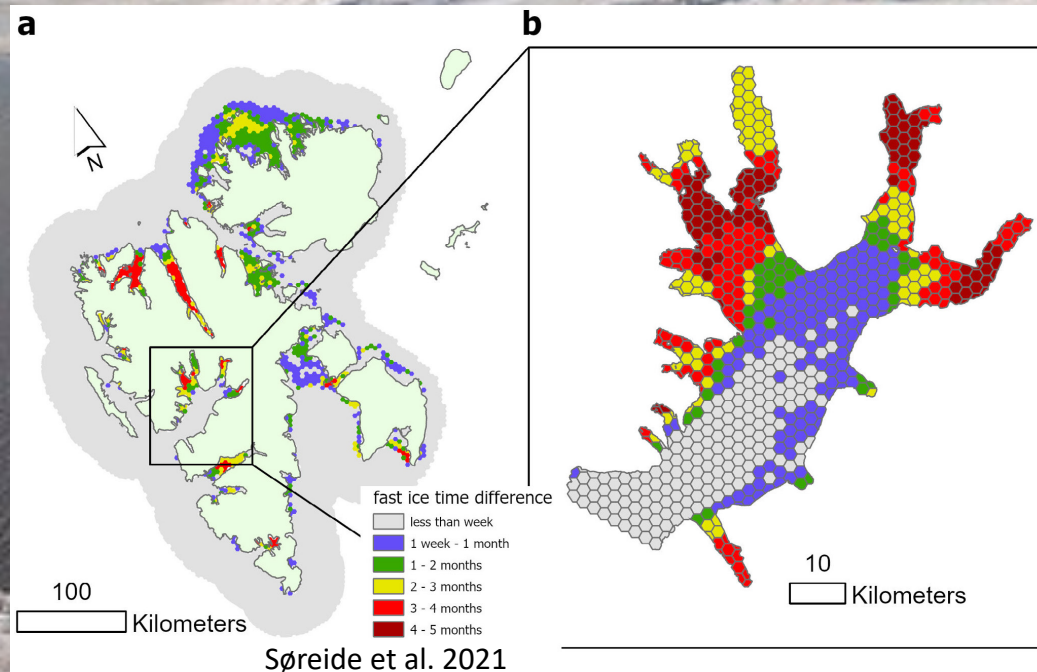
Nigardsbreen, J.C Dahl, 1844



Ice radar measurements at Jostedalbreen
Photo: K. Sjursen, JOSTICE-project, HVL.

Backdrop 1 – shrinking sea ice in Svalbard

- Strong decline in sea ice. Half the sea ice extent today compared to 1973-2000 (Urbanski and Litwicka, 2021)
- Mass balance of glaciers to be reduced by 50% by 2100 (Hanssen-Bauer et al. 2020)



Backdrop 2- glaciers and perennial snow is disappearing



- 70% of glaciated area loss by end of century
- 93% of glaciers will disappear (high emission scenario) (Hanssen-Bauer 2015)
- An ongoing loss of an iconic tourist activity in Norway.
- Changes the visual appearance of important mountain regions

Today's talk

Do tourism actors deliberately harness the power of affective relations and place attachment to inspire transformational change towards sustainability?



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Caring for melting glaciers

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Tourism and Outdoor Recreation in a Melting World
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Coping with rapid and cascading changes in Svalbard: the case of nature-based tourism in Svalbard

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Tourism has been booming in Svalbard and has almost returned to pre-pandemic levels. At the same time, the island is a hotspot of rapid and cascading climate and environmental changes, which are already placing natural and social systems under stress. There is more precipitation, less sea ice, and glaciers are shrinking at an increasing rate. Presently, sweeping legislative changes are underway in Svalbard that hold the potential to change the scope and conditions of tourism in multiple ways. Drawing on a review of literature presenting recent projections for climate and environmental change and interviews with tourism actors (n=25), this article outlines how climate and environmental changes are currently impacting nature-based tourism actors in the archipelago and discusses opportunities and barriers for their adaptation to



Methods and cases

Semi-structured interviews and workshops

Informants

- Mountain- and polar guides
- Guide company managers
- Destination Marketing Officials.
- Government officials

Projects

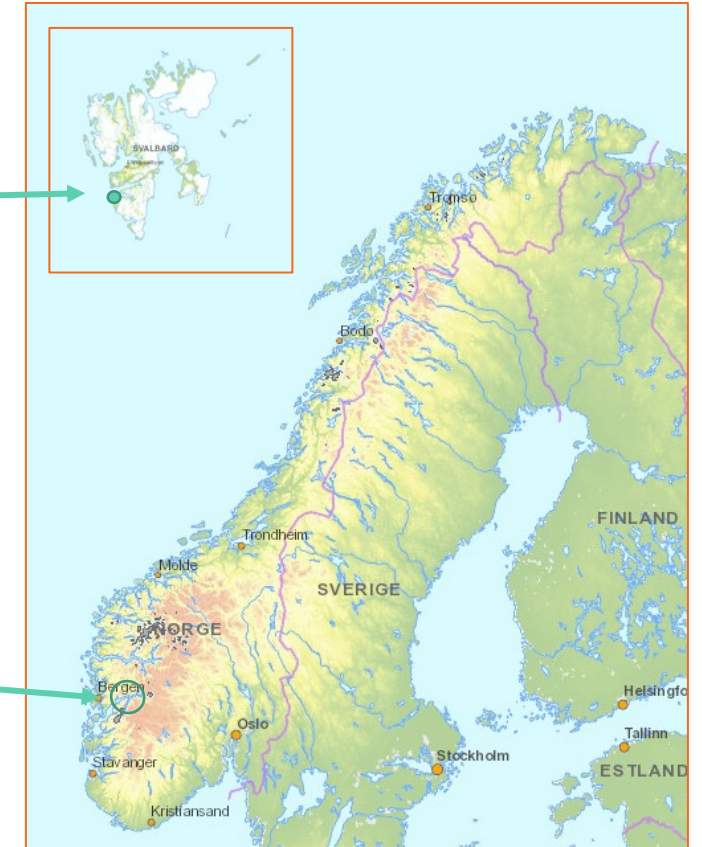
- JOSTICE 2021-2024, (Sogn case) RCN, **Balancing Act . 2021-2024, RCN, (Svalbard case)**
- EU H2020: **Face-it**, 2021-2024 (Svalbard case)

Svalbard

- 24 interviews,
- 3 workshops

Indre Sogn

- 2 workshop, 2 townhall meetings
- Two surveys (n=42, n=70)
- 12 interviews



Sense of place and connection to nature

- Glaciers and ice caps have importance for place identity and hold symbolic and cultural significance (Orlove et al., 2008; Jurt 2015; Allison 2016)
- Increasing number of last chance tourists in the Arctic and to glaciers (Lemeieux et al. 2019, Varnajot & Saarinen, 2022).
- Last chance tourists display stronger connection nature and motivation for pro-environmental behaviour than others (Lemeieux et al. 2019; Groulx et al. 2019)



Photo: Gisli Palsson from Twitter.

Charismatic entities and boundary objects

- “Charismatic” entities in the natural world have served to aid environmental protection – thus displaying a non-human agency (Lorimer 2007).
- Charisma contributes to emotional relations between humans and non-humans
- Charismatic entities can also serve as boundary objects (Star and Griesemer 1989, Guston 2001)
 - Serves to connect different realms or epistemic communities i.e science and the public.
 - Translates meaning and significance across boundaries between different realms.



Affect and care

- Charisma work through affect:
 - ‘(..)this interface where the boundary is made between the “we”, the “I” and the “more than human”, that affects flow, and where possibilities for transformation open up or close down’ (Nightingale et al., 2022, p. 7).
- Caring for nonhuman objects opens the way for intersubjective, mutual relations that transcend the modernist duality between the social and natural worlds (Stirling 2019).



Photo: Halvor Dannevig

Connections to mountains and place

It's a personal connection from when I was younger. I have had a lot of really powerful experiences, of mastery, and also experiences from trips where we failed but still learned a lot.

Guide #5

I feel a certain calmness and connectedness when in nature here. I could have lived anywhere in the world but I chose to live here [community near the glacier].

Accommodation manager #1

Affections tied to loss of snow and ice

*“It’s not nice. It’s becoming ugly”
”Nothing to hold your breath for anymore”.
“I want the mountains that I love,
particularly the glaciers, to remain as little
affected as possible. You want to keep what
you hold dear”.*

*«Its really really sad to see the change
from black and white mountains to
pure black. But I dont think it matter
much for the clients.»*

Interview statements from guides



Caring practices



«I try to increase my knowledge of sustainability to do things better. To analyse actual climate measures and which ones really make a difference. We use electric cars, buy used equipment, and I spend time teaching my staff how to fix our equipment instead of buying something new. We try to fix all that is repairable. It doesn't necessarily save us a lot of money, but it saves the environment, and we are able to set an example of how it can be done for our guests as well.»

Guide company manager

«By taking the tourists out into the Svalbard wilderness, we also have a responsibility to provide information and share knowledge. We will teach those who go on our tours about the nature and wildlife in Svalbard and not least about the human impact on the climate up here.»

Statement from tourist operator in Longyerbyen



Photo Hurtigruten Svalbard

The guide as a climate activist

“I think there is a need for a joint front [in the tourism industry], what I want is a kind of revolution, someone should say: “we have been just talking for some years, now it is time for drastic action.”

Guide # 4

Glacier guide to East Asian tourist:
«The longer you are flying to get her, the longer it will be to walk to the glacier»
(nrk.no; 17.01.2019)



Breføreren meiner isbreerekklame er breens eigen verste fiende

Norsk reiseliv brukar millionar på å marknadsføra Noreg og norsk natur i land på andre sidan av kloden. Det er dårleg nytt for isbreane, meiner både breførar og klimaforskar.



VANSKELEGARE FOR KVAR DAG: Å finna ei god rute til gjestene som skal opp på breen blir vanskelegare og vanskelegare.

FOTO: PATRICK DA SILVA SÆTHER / NRK



Sondre Dalaker
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Artikkelen er mer enn to år gammel.

Melting glaciers and sea ice as charismatic entities



- Glaciers serve and sea ice serve as boundary objects between the science of climate change, the guides and general public
- Glaciers' charisma is tied to their aesthetic value and iconic status from art, and guides own experiences and affective relationship
- The use of melting snow and ice to raise awareness and instigate pro-environmental behaviour show how glaciers functions as a charismatic entity with non-human agency.
- Still a danger of tourism operators using this for green washing.

Narratives of ice loss moving from a discourse of fear to a discourse of care

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