

Ant-ICON R3 Workshop #2

Tuesday, 5th April, 0500 UTC

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Introduction

Human dimensions of Antarctic conservation and management.

Ant-ICON introduction. Doing research to inform policy development.

Four major research themes. R3 Socio-ecological approaches to Antarctic and Southern Ocean conservation.

Four research questions of R3:

1. Taking into consideration socio-ecological connectivity, what are the **socio-political and economic impacts** and consequences of environmental change in Antarctica?
2. What are the characteristics and implications of **responsible and ethical governance for Antarctica** in the 21st Century?
3. What does **socio-ecological resilience** look like in Antarctica and the Southern Ocean?
4. What are the potential **implications of global social, health and economic shifts** for Antarctic activities?

Speakers

Ximena Senatore

Archaeologist working in Antarctica since the 1990s.

Member of International Polar Heritage Committee, ICOMOS

Focus on the South Shetland Islands in the 19th century

Particularly interested on the methods and approaches to address question 1 of R3 from the disciplinary perspective of Archaeology in the SSI region.

Polar exploration has dominated the narratives of Antarctica, contributing to ideas of wilderness. Archaeology has helped question this.

Archaeological research has explored in different scales the effects of capitalist expansion on Antarctica, and other remote places.

Approaches that prioritize material sources over written ones show the analytical power that material culture studies have to understanding human presence in Antarctica.

Archaeologists studying sealing industry in South Shetland Islands have collectively contributed to our understanding of 19th century Antarctica in global, regional, and local contexts.

Example

Meta-analysis of data collected since 1980s on more than fifty archaeological sites in SSI

Focus on four variables:

1. Chronology
2. Frequency of occupation
3. Group size
4. Length of stays

Results:

- Fast expansive strategy of unknown places
- Sealer's use of space change over time
- Flexible, rather than rigid strategy in early 19th century occupations
- High risk activities
- Opportunistic strategy in terms of natural resources exploited

ICOMOS International Polar Heritage Committee is working on ways to bring these approaches (material culture studies) to Ant-ICON research questions focused on Deception Island.

Ian Hawes

Ecologist working in Antarctica since 1978. Worked on Antarctic Peninsula and then moved to Ross Sea region.

Personal perspective on Human dimensions of Antarctic conservation and management

Science hegemony in the MCM Dry Valleys ASMA. But hegemony not necessarily always a bad thing.

Environmental management and impact assessments starting in 1993. Dominated by NZ and US.

The Dry Valleys are an ASMA. This contains ASPAs, but only one no-go zone.

Policy for the ASMA has been strongly dictated by and beneficial for the science and science-support community.

The science community are the dominant societal group with the Dry Valleys.

Guidelines protect science values, often with a short-term focus

Other values (aesthetic, spiritual, recreations) may have greater importance for other stakeholders who are largely side-lined from policy making

Operational policy has followed science lead

- Footprint reduction
- Maintained near-universal access
- Little focus on cumulative impact of future concern
- Every camp in the MDV has been relocated uphill as lake levels rise

Other stakeholders outside the science-logistics “cabal”

- Ecosystem services and values are differential and differentially responding to change
 - o Supporting
 - o Cultural
 - o Provisioning (not really present in Dry Valleys)
 - o Regulating (not really present in Dry Valleys)

Tensions around responses to climate change

- Science and conservation values often align, but not always
- Conservation wants to introduce more controls
- Science can be the greatest threat to conservation values (e.g. expanding human footprint)
- Policy needs to be international, consensus based, and viable for all stakeholders; this is not currently the case.

Daniela:

What is your perception of the role that ethics could play in this context? Could we get scientists themselves involved in reviewing an ethical code for their community, or does this need to come from outside?

Ian:

Yes, but it would need to include people outside the community. Also, ethics and environmental understanding differs among scientists. A glaciologist and an ecologist might not have the same language or perspectives. Need the broad spectrum of the community and people to be able to translate among disciplines. Also need to bring in non-NZ/US communities. Also, we need to implement more no-go areas in the continent.

Yelena Yermakova

Political philosopher working with background studying Antarctic Treaty System. Going to talk about approaches and methods for understanding R3 Research Question 4.

“Future Scenarios” approach: Tools for exploring different aspects of future change through structured, open inquiry

Case study on Antarctic Gateway cities:

- Up to 2035
- 2035-2050
- Scanned documents on the effects of COVID-19
- Categorized by themes
- Structured scenario building through the lenses of:
 - o Human impact
 - o Economic impact
 - o Ecological process
 - o Resource exploitation
 - o Governance
 - o Technology
- Results? We need to re-evaluate our relationship with Antarctica

Tips for applying the Future Scenarios approach to Ant-ICON:

- Social, health, and economic foci
- Time frame of 10 years, 20 years
- Specific localities/regions
- Three dimensions for indicators
 - o Cultural
 - o Social
 - o Political

Approach:

1. Scan literature
2. Categorize by region and type of shift (social, health, economic)
3. Structure scenarios

Concluding thoughts:

- What are the implications of current events?
 - o Look at what’s happening now
 - o Search for trends → structure
 - o Future scenarios → systemic analysis of possible outcomes
 - o Finding out preferable outcome → how to get to it

Hanne Nielsen

Lecturer on Antarctic governance at UTAS and member of Ant-ICON

Interested in conceptualising and engaging with the Antarctic

How do the stories that we tell and images we show about Antarctica affect the way we interact with the place?

We often see images of ice and polar plateau, but rarely images of human activity and impact

Focus on South Shetland Islands. Why?

- Science
- 98% cruise tourism
- Fishing
- Steeped in the history of Antarctic governance
 - o Palimpsest of human history

Three questions:

1. Senses and Guides: How do conceptions of Antarctica shifts when we encounter the continent **physically**?
2. Connections and Values: How do conceptions of Antarctica shifts when we physically encounter the continent **vicariously**?
3. Health, Far/Near and Role of Arts: How do conceptions of Antarctica shifts when **things at home** change?
 - o Social license for going south shifting as recognition of climate impacts of travel

Looking forward:

- What sort of future do we want? ← not just a question for scientists!
 - o Out of sight? Or a model for a new future?
 - o How do we imagine and foster an ethic of care?

Question from Daniela:

- Does Antarctica have an inherent identity, separate from our stories and interactions with it? Could we use the concept of identity in that context, for a non-human entity?

Answer from Hanne:

- This is a useful point. Ilan's book on "Antarcticness". There is work on ecocultural identity and how this can create an ethic of care for a place. How can we step away from that Anthropocentric view and listen to Antarctica?

Discussion

Elizabeth: A general question - what was the thinking behind the four case study locations - South Shetlands, Peninsula, Dry Valleys, Ross Sea?

Allesandro: Yes, could the Antarctic Conservation Biogeographic Regions be more present in this analysis?

Adrian: Yes, we are interested in expanding the biogeographic regions to think about biocultural regions or something similar.

Yelena: Ian, if the goal is to minimize the footprint of science, do you think this would have an effect on who has a say about what happens in Antarctica?

Ian: Good question. We should remember that the treaty is based around the idea of Antarctica as a continent for science. However, there could be a conflict of interest if scientists are the only ones with decision-making power and whose values are recognized.

Adrian: Ximena, are there lessons from 200 years ago (e.g. sealing) that can teach us something for today? Also, do we, as HASS, need to be projecting for the future in order to have value for policymakers?

Ximena: Yes, there are many lessons to be learned from the past. In the case of the sealing sites, there are more than 50 sites, but none of these are not protected by the Antarctic Treaty. This represents a disconnect, and similar to what Hanne was saying, that certain stories “count” and “matter” but others don’t. We are missing the bigger picture if we only focus on science and exploration. Moreover, we should think about how the entanglements of humans and material things change over time. We are always talking about natural aspects of the environment, but we don’t consider the ways we interact with things. As scientists, we are currently colonizing Antarctica and we should think hard about that. As archaeologists, we are always studying change, and this is a perspective with a lot to contribute to larger conversations.

Michael P: Building from Ximena, I’m interested in thinking about ethics and science. For example, during the sealing era, there were voices condemning the killing out of the seals which would ruin the economic resource for the future. These were drowned out by companies making profit. This dynamic has happened again and again. Perhaps with our work we can stimulate other conversations about these issues. We should include the sciences and the policy communities; get the different views to intersect and think about some of these ethical issues.

Adrian: Yes, we are reaching out and talking with the policymakers. Relatedly, Yelena, did you get any pushback on your work on Future Scenarios?

Yelena: Yes, we got pushback and scepticism. People wondering if we are just wildly speculating. But if you do your work well it can be useful.

Daniela: Michael, this is very interesting and important. I have a sense that there may be some closed ears at Antarctic Treaty tables. How do we ensure that we can stimulate discussions around ethics, especially among various stakeholders? How can we get people to listen and be open to hearing different voices?

Yelena: We are working on some of these issues, trying to recognize the inherent rights of Antarctica. Power alliances with small island nations which would be most impacted by Antarctic change could help to counterbalance.

Alessandro: Three questions:

I'm intrigued about the question of scale. If we talk about processes about who is acting on the ground in relation to Antarctic nature, we can be thinking about multiple scales: people, institutions, nations, etc. Microgeographical work can be very insightful. Are we thinking too ATS-centric? Is SCAR too ATS-centric? 2) Cultural diversity: these debates are pretty old in the rest of the world (i.e. role of indigenous people, metropole relations, etc.). In addition to supporting biodiversity, how do conservation practices build cultural diversity, especially when some of those cultures are not particularly nature friendly. 3) What other approaches to conservation are there that Antarctica can draw on and feed back into?

Daniela: Re: Alessandro's third point: we are trying to look at lessons elsewhere, especially from biocultural conservation and critical geography. Also, that's why we're trying to get as many people as possible from diverse backgrounds and disciplines involved in Ant-ICON and these discussions. We're also trying a bottom-up approach. This is a largely volunteer project, and we're trying to bring in interested PhD students and ECRs to be able to work on this for their research.

Michael P: Indigenous message to archaeologists: It's our home, it's your playground. You need to rethink your scientific approach. Perhaps this is an idea that could be posed to the ATS?

Alessandro: Thanks Michael - Yes, the "public" question for/of Antarctica consistently interests me - Adrian and I briefly (very briefly) addressed it in our *Journal of Historical Geography* article a few years ago that looked at the introduction of environmental impact assessment/statements to Antarctica - EIS were predicted on 'public' input, but where is Antarctica's public?

Ximena: The ATS has contributed to Antarctica as a geopolitical unit. What are the implications of thinking about Antarctica not as an undifferentiated totality or unity, but as collection of biocultural regions? This could change our thinking about Antarctica and have geopolitical implications too.

Hanne: Some thoughts: We spoke also about an ice place as a potential comparator. Agree that asking these questions at various scales is helpful. Within the Ant-TAG tourism group there has been discussion about encouraging more activity from other observers (eg from IUCN in the ATS). It's useful to get Antarctica on the agenda elsewhere (not just the ATS) - comes back to the stories we tell, who listens, why we want to protect (need to connect with and care about in order to do this).

Daniela: Ximena, in short, I think we need to be courageous about raising the matter around a biocultural ethic and expect a bit of backlash. However, it is very important to raise such different considerations, and if we don't do this now, who will?

Adrian: Thank you everyone! We want this to be a bottom-up approach, so please let us know if there is any questions or perspectives we are missing.