



SESSION ABSTRACT

Researching climate/environmental change from a more-than-anthropology perspective: The challenges and opportunities of interdisciplinary and multi-epistemic knowledge production

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Abstract: In recent years we have seen an increase in number of research projects contributing to a better understanding of climate/environmental change, where anthropologists and other social scientists work together with natural scientists, and Indigenous and non-Indigenous knowledge holders. Priorities of regional, national and transnational funding agencies will likely keep going in this direction also in the near future.

In this session we want to unpack pitfalls, challenges, strategies and best practices of collaboration in projects on climate/environmental change, where interdisciplinarity and different knowledge systems have relevance. What does it mean to adopt such a more-than-anthropology perspective when, for instance, tackling the complexities of climate change, and other human-environment or more-than-human entanglements? How is knowledge and data about climate/environmental change being defined, collected/created, analysed and combined in interdisciplinary teams and/or teams dealing with various knowledge systems? We welcome reflective (auto-)ethnography and empirical accounts of both enriching and challenging practices of knowledge production. The interest lies e.g. where concrete methodologies enabling creative, inclusive and scientifically sound practices of data collection, analysis, interpretation, integration and management are discussed. Theoretical contributions are welcome, especially if based on practical experience. Communication, outreach, and societal relevance can also be addressed.

Where does the added value of a more-than-anthropology perspective lie and what are the most urgent challenges of interdisciplinary and multi-epistemic research projects dealing with climate/environmental change? The aim of the session is to explore and share practices and methods that work, but also openly discuss problematic aspects of such research.

SESSION SCHEDULE

Thursday, September 29, 2022 | Slot 1 | Room 2

Slot 1

intro by session organizers

SCALES OF ATTENTION

Frank Muttenger, Marc Leopold & Thierry Razanakoto: Vale chains, resource access, and relevant units of analysis: Madagascar's mud crab fishery from a more-than-anthropology perspective

Markéta Zandlová: „Scaling“ in interdisciplinary research on climate change

Nataša Gregorič Bon, Urša Kanjir & Liza Stančič: Intersecting big and thick data – some approaches to the study of riverine environments

Thursday, September 29, 2022 | Slot 2 | Room 2

Sharing experience with interdisciplinarity & humble methodologies

Greta Ferloni, Danai-Maria Kontou & Laura Seddon: Interdisciplinary Knowledge Production of Environmental Changes in the Arctic: A Geographers' Perspective

Esteban Ramirez Hincapie, Ann Eileen Lennert, Zdenka Sokolickova & Jasmine Zhang: Wading through treacle? Working across disciplines on environmental change in Svalbard

Zofia Boni: Anthropology and the Co-production of Knowledges about Urban Heat

Mareike Pampus: The Making of Nature: Land restoration in post-mining Eastern Germany

Thursday, September 29, 2022 | Slot 3 | Room 2

Panel Discussion

SESSION PAPERS

Vale chains, resource access, and relevant units of analysis: Madagascar's mud crab fishery from a more-than-anthropology perspective

Frank Muttenger, Marc Leopold & Thierry Razanakoto

This paper describes my collaboration as environmental anthropologist in an ongoing multidisciplinary research project about economic and ecological change in the mangrove crab fisheries of Madagascar. Thousands of tons of live crabs per year are being shipped from Madagascar to China by air cargo. Local crab fishers are paid 0.50\$ /kg. The other researchers in the project are marine ecologists (fishery scientists) and social economists. The former are mainly interested in the productivity of the species and compare quantitative data on the number of fishermen, gear, mangroves, and yields collected regularly from dozens of villages in four different study regions. The social economists surveyed about 400 households based on a

standard questionnaire administered to household heads. Based on these two large data sets as well as the ethnographic findings the project aims to propose a diagnostic of ecological changes as well as the social dynamics involved. One argument shared by fishery scientists and social economists has been that mangrove crabs are an open access resource. Exponential growth of exports, particularly to China, since 2015 and competition between exporters is leading to increased pressure on the resource and a rise in prices. The resulting colonization of mangroves by crab fishers is attributed by researchers to rural migration. Adopting a more-than-anthropology perspective has led me to criticize these assumptions. Ethnographic observations suggest that the relevant scale for understanding the fishing economy is the "micro region" (river delta) or the "bay" (coastal mangroves) or simply the "trading network". Since mobility occurs within these larger local units, it is arbitrary to take single camps or villages as the unit to define what constitutes a migrant. Likewise, the overharvesting of crabs caused by the community access regime put in place by expanding trading networks suggests that the fishery is effectively held as a commons.

„Scaling“ in interdisciplinary research on climate change

Markéta Zandlová

Climate change research strives to unpack highly complex phenomena. It's hard to imagine that the toolkit for such an endeavor could be narrowly specialized and one-dimensional. For our research project „The Stories of Drought“, we built an interdisciplinary team from both the natural and social science communities. Social anthropologists, sociologists, social ecologists, bio-climatologists, geographers, and environmental scientists have been examining the perception and understanding of drought in six South Moravian villages for four years. In my presentation, I will explore the topic of „scaling“ in detail: how to bridge different temporal, spatial, and processual scales, intrinsic to distinct disciplines, methodologies, and epistemologies? My answer to these questions will be based on the description of participatory future scenarios building that we carried out in the researched localities. I will focus particularly on the central role of ethnography, linking local knowledge on climate change and land use to global climate models and locating them in the wider social and historical contexts.

Intersecting big and thick data – some approaches to the study of riverine environments

Nataša Gregorič Bon, Urša Kanjir & Liza Stančič

In the contemporary world of digitization and evolving technology, big data is becoming an important asset and often a tool for various purposes. But what do these big data mean if they lack social and cultural context? How are they interpreted when coupled and entangled with the thick data of ethnographic research? Using a cross-disciplinary method that combines remote (based on remote sensing big data) and near (based on thick, ethnographic data) sensing, this paper explores how social practices and ways of being in the world are in close interplay with geophysical features and other physical and ecological characteristics in southern Albania. Here we depart from our long-standing research on the Vjosa River, where we seek to understand the multitude of entanglements between the social, cultural, and geophysical riverine environment over a forty-year period. We question how the physical (e.g., erosion, deforestation), social and cultural features and infrastructural interventions (e.g., hydropower plants, irrigation canals) are embedded in people's lives and how people's practices are spatialised in the landscape. By delving into

delicate intersection of big/remote and thick data, we seek to rethink current methodological approaches to the study of riverine environments.

Interdisciplinary Knowledge Production of Environmental Changes in the Arctic: A Geographers' Perspective

Greta Ferloni, Danai-Maria Kontou & Laura Seddon: Interdisciplinary

In this talk, our aim is to share reflections on our experiences of conducting interdisciplinary PhD research on knowledge production of environmental changes in the Arctic. We consider how (auto)ethnographic practices, creative methodologies and interdisciplinary approaches have shaped our work.

First, we reflect on the ways in which interdisciplinary approaches within geography have pushed our research boundaries, both theoretically and methodologically, in adopting research practices outside of our usual disciplines. In particular, highlighting how interdisciplinarity is well suited to research on environmental change, as modern society strives to make sense of such a complex and pressing topic.

Second, we reflect on our own research on challenging notions of objectivity and authority that underpin scientific knowledges of Arctic environments. We stress that knowledge production is always partial and situated, creating subjective representations, rather than perfect reflections, of reality. Within this context, we consider the ways in which our interdisciplinary approaches influence the kind of work that we are able to produce, how this contributes to interdisciplinary advances within academia, and how we find this to be (mis)aligned with current expectations and structures of Western academia.

Finally, we deliberate on the ways in which the DurhamARCTIC program (Durham Arctic Research Centre for Training and Interdisciplinary Collaboration) has shaped us, as individuals, throughout our PhD journeys, creating a thriving, yet challenging, environment for creativity and freedom of expression. We hope that our experiences can inspire others to undertake more interdisciplinary work, stepping outside one's own comfort zone and field of expertise, and expanding into other disciplines.

Wading through treacle? Working across disciplines on environmental change in Svalbard

Esteban Ramirez Hincapie, Ann Eileen Lennert, Zdenka Sokolickova & Jasmine Zhang

With the growing trend towards interdisciplinary research on climate and environmental change, forming teams that can integrate their knowledge is of paramount importance. To tackle the complexity of the environmental crisis, complementing each other is not enough; we need reflexive dialogues about how and why our understandings differ. Our paper exposes the challenges a team of researchers with mixed professional backgrounds faces while working on a project attempting to integrate long term environmental monitoring and local/experiential notion of change in the High Arctic. Our aim is no less ambitious than exploring and facilitating an “environmental memory” of Svalbard.

Our talk will be centered on the following questions: How do we experience the

different stakes at what “science” and “data” means, and how do we deal with the “science friction” (Edwards et al. 2011)? How to overcome the gap between natural scientists concentrating on material aspects of environmental change, and social scientists interested in the ways people live and interpret them (Simonetti and Ingold 2018)? Is it possible to achieve “productive complicity” (Singleton et al. 2021) when expectations regarding the research process, analysis, and usefulness of the outcomes diverge? Can we disregard the political ecology of data (Noss and Goldstein 2022) when the field is highly politicized? What is it like for a postdoc trained in social science to work on a project led by senior natural scientists, and how to complete our task empowered rather than burnt out (Selberg et al. 2021)? And what kind of science are we performing when the ideal of objectivity (Simonetti 2021) is still around? We also discuss our view on the role funding schemes play, and share both our frustrations and valuable lessons learned on how to converge scientific knowledge and other ways of remembering how the Svalbard environment has been changing.

Anthropology and the Co-production of Knowledges about Urban Heat

Zofia Boni

This paper studies the complexities (Mol and Law 2002) involved in developing and implementing an interdisciplinary research project about climate change and urban heat. Embodying Climate Change: Transdisciplinary Research on Urban Overheating (EmCliC) brings together physicists, sociologists, economists, environmental and climate scientists, environmental engineers, cultural studies scholars and social anthropologists. The project aims to understand (1) how climate change and urban overheating have been impacting vulnerable groups, and (2) older adults’ embodied and socially situated experiences of heat in two European locations, Warsaw and Madrid. It also aims to develop a transdisciplinary methodology. While the subjects of our research are adults over 65 years old, the project is organized around studying several ‘objects’: heat, vulnerability, adaptation, embodiment and climate change.

The focus of this paper is on heat, heat stress and heatwaves, and how these have been conceptualized through different parts of the project. It reflects on how the knowledge and data about what is heat has been constructed and gathered by anthropologists, physicists, climate scientists and epidemiologists. It considers whether we can combine numbers, models and statistics with people’s embodied experiences by bringing together the perspectives and practices of natural scientists, social scientists and older adults living in Warsaw and Madrid.

The paper reflects on our collaboration and the challenges and frictions we have encountered, related for instance to hierarchies of knowledge, methodological reductionism, scalability, data gathering and collaborative analysis; and how have we dealt (or not) with them. It also focuses on the role of anthropology and anthropologists in such collaborations, to consider how are we positioned between other scientists and ‘local’ people, and what are the challenges and advantages of such positionality.

The Making of Nature: Land restoration in post-mining Eastern Germany

Mareike Pampus

The coalition agreement of Germany’s Federal government set the achievement of the

Paris climate protection goals as a top priority and plans to abandon coal by 2030. When open-cast lignite mining is stopped a bleak crater-shaped landscape of devastated zones remain. By law, German mining companies are obliged to restore the land. But how can landscapes be restored? Or put in the words of anthropologists Anna Tsing (2017): How can new lifeworlds emerge in the ruins of a damaged planet?

Taking up on these questions, my research examines land restoration of former mining areas in eastern Germany from an ethnographic perspective. In the field of mining, Renaturierung is understood as a procedure for those areas in postmining landscape on which biotopes and species protection have priority over other types of land use (e.g. forestry or agriculture). Renaturierung is thus described as a process of „restoring areas to a state resembling nature“. But how can a landscape resemble nature? And what should this nature entail and look like? Through an ethnographic approach, I examine the multiple pasts, practices and potential postfossil futures that are inscribed in the landscapes. My research aim is to go beyond the sheer visual description of postmining areas but instead contextualise them by a deep understanding of ecological systems and multi-species interactions. Consequently, gaining knowledge of flora, fauna, sand and soil is imperative and needs to draw on different bodies of knowledge acquired through interdisciplinary cooperation. My research partners and informants are different scientists (hydrologists, biologists, chemists etc.), as well as employers of mining companies, activists, conservationists, and residents. In this paper, I discuss the necessity of interdisciplinary cooperation, its benefits and challenges.