

SESSION ABSTRACT

Infrastructure and the Built Environment in the Anthropocene

Organizer: Olga Povoroznyuk (University of Vienna), Peter Schweitzer (University of Vienna) **E-Mail Address:** olga.povoroznyuk@univie.ac.at, peter.schweitzer@univie.ac.at

Abstract: In recent decades, climate change, mass species extinction, ocean acidification, and other symptoms of the Anthropocene have led social scientists to engage with the environmental issues previously seen as the exclusive forte of natural scientists. Our stubborn reliance on carbon-intensive highways, railways, and airports, whose perpetuation exacerbates the sustainability crisis, thus reveals not only our unique ability to give rise to the world, but to also undermine its ecological foundations. Thus, the time is ripe to focus attention of the social anthropology on the human entanglements with the natural and the built environments and infrastructure. Tim Ingold's "dwelling perspective" (2000) laid a foundation for an anthropology of the built environment, an emerging research area we seek to more directly connect to critiques of sustainability as both discourse and practice. More recently, literature on political ecology and environmental anthropology of infrastructure has been growing (Carse and Lewis 2016; Hetherington 2019). Infrastructure standards create path dependencies that challenge our ability to envision, let alone build, alternative worlds. At the same time, infrastructures can be seen as material structures filled with the promise of development and progress (Anand et al. 2018).

In this panel, we aim to advance anthropological and social science inquiries into the built environment and infrastructure by questioning their potential to jeopardize or to contribute to sustainability of local communities. While the co-organizers of the session work primarily in the Arctic, case studies from this and other parts of the world challenged with a rapidly changing climate, expanding natural resource extraction, and militarization, are welcome.

SESSION SCHEDULE

Wednesday, September 28, 2022 | Slot 3 at 1:30 - 3:00 pm | Room 1

Olga Povoroznyuk and Peter Schweitzer: Introduction into the panel

Olga Povoroznyuk: Transformative infrastructure? Engineering landscapes and communities along the Baikal-Amur Mainline, East Siberia

Elena Davydova and Vladimir Davydov: "Podsadka" or how to board a plane/helicopter in Chukotka airports?

Tobias Holzlehner: Drift worlds: visceral architecture and adaptive materialities in northeastern Russia

Wednesday, September 28, 2022 | Slot 4 at 3:30 – 5:00 pm | Room 1 Manuel Helmus: Designing a river: hydrosocial transfigurations in the Vorarlberg Rhine Valley, Austria

Jeanine Dagyeli: How to build an environment: negotiating possible futures through infrastructures and cultural re-enactment

Alexis Sancho-Reinoso and Timothy Heleniak: Island hopping: infrastructure development in the Faroe Islands

Wednesday, September 28, 2022 | Slot 5 at 5:30 - 7:00 | Room 1

Philipp Budka: Infrastructural sustainability? The case of a town in northern Manitoba, Canada

Peter Schweitzer: Crossing, blocking, passing: Bering Strait transport over time General discussion and closing of the panel

SESSION PAPERS

Transformative Infrastructure? Engineering Landscapes and Communities along the Baikal-Amur Mainline, East Siberia *Olga Povoroznyuk*

This paper focuses on the Baikal-Amur Mainline (BAM), a large-scale railroad infrastructure built primarily in the 1970s and 1980s in the northern areas of East Siberia. Drawing on my ethnography of the railroad towns and indigenous villages, I explore how the Soviet BAM altered landscapes and shaped local communities and identities by attracting migrants and pulling indigenous residents into the orbit of modernization. Furthermore, I demonstrate how Soviet identities and modernization ideologies embodied in the natural and built environments along the railroad have been recently reconstructed and reused to propagate and to justify the costs of the railroad modernization program BAM-2 and intensified resource extraction. I argue that the BAM has been an example of extreme environmental and social engineering and remains a symbol of development and state power in an era of post-Soviet socio-economic decline. I use the concept of transformative infrastructure to explore promises, failures, and chances for more certain and sustainable futures of local communities entangled with the railroad infrastructure.

"Podsadka" or how to board a plane/helicopter in Chukotka airports? Elena Davydova, Vladimir Davydov

Airports are key transport infrastructures for Chukotka autonomous okrug providing connectivity of its different locations with each other and with the regions beyond. The significance of this channel of mobility varies in different communities depending on the state of other infrastructures nevertheless one hardly could overestimate it. This presentation will start from an analysis of the air mobility importance for local people. Through the long-term ethnographic fieldwork in Iultinskii district of Chukotka autonomous okrug we investigate how air means of transportation contribute and shape the movement of local people and things in this region. Further as getting a plane or helicopter is not often an easy task, we will discuss how people perceive and cope with the deficit of free places on board. The analysis is based on airport ethnography that was collected during a long wait for our own flights at the airports in Egvekinot and Anadyr, so it is partly an autoethnographic study. We argue that passengers develop special attentionally (Ingold 2016) to a range of processes that shape the possibility of flights like weather conditions, behaviour of and interaction with other passengers, conversations and actions of airport stuff, signs of supernatural beings. Undoubtedly mostly all passengers manage to board the plane/helicopter eventually but exactly boardings in time are key skills for "successful" mobility. In other words, waiting time defines the whole travel and its (un)luckiness. Skills of catching a luck (Brandisauskas 2017) in airports are acquired through interaction with different actors and depend upon "highly attuned attention to multiple dimensions of environmental co-variation" (Ingold 2017: 4). This research is a part of the European Research Council's project "Building Arctic Futures: Transport Infrastructures and Sustainable Northern Communities", PROJECT-ID: 885646

Drift Worlds: Visceral architecture and adaptive materialities in northeastern Russia Tobias Holzlehner

Semi-subterranean houses, reindeer skin tents, ceremonial sledges, and walrus hide boats of the North Pacific have one feature in common: marine mammal parts are actively incorporated into the design and architecture of dwellings and vessels. In these instances of architectural zoomorphism, where marine debris is transformed into human shelter, dwelling evolves as in-habiting animals. The collapse of the Soviet Union had left its very own derelicts behind, while superfluous oil drums and shipping containers found their way into the contemporary coastal building design. Extraordinary resilience as well as novel strategies of coping with loss and industrial collapse created new forms of maritime communities, where the self-led reuse and rebuilding of previously abandoned village sites play a paramount role. Thus, human-thing entanglements (Hodder 2011) become visible through infrastructural changes as part of new maritime adaptations. This paper is an experiment in tracking architectural transformations through time and exploring how the skeletons and shells of a contiguous world are used in the vernacular practices of inhabiting the Bering Sea coastline. At the same time, it reflects on human (building) activities within a coastal environment and explores the materiality and artefactual strategies of belonging in a littoral "shatter zone" (Scott 2010).

Designing a River: Hydrosocial transfigurations in the Vorarlberg Rhine Valley, Austria

Manuel Helmus

The eponymous river of the Rhine Valley was increasingly constricted, controlled, and civilized in times of industrialization, modernist discourse, and practices of colonizing nature. The watershed was incorporated into the "built environment" (Ingold 2015: 45) and was, adapted to human technopolitical expectations, morphed into a narrow canal where

"more-than-human" (Whatmore 2002: 4, Tsing 2013) life is barely possible. Today, a tight corset of dams pushes the water masses along with driftwood and gravel from the Alps past 15 communities across national boundaries to Lake Constance. This functional form is in fact a "materialization of social relations" (Tsing 2013: 28, cf. Anand 2017: 13), closely related to the "dilemma of industrial society" (Hajer 1998: 247). Because floods are expected to increase and intensify in the Anthropocene, the parameters of waterway management of the Internationale Rheinregulierung (IRR) are shifting with the project 'Rhesi' to embrace the "natural force" (Hastrup 2014: 18) of its vital matter and to restore wildlife habitat. This is coming close to a sustainable way of "designing environments for life" (Ingold 2014). However, its implementation is limited through concreted structures and conflicting perspectives of human dwellers. In this paper, based on empirical research, I contextualize the "transfiguration" (Mattes, et al. 2020: 75) of the Rhine and its affected watery entanglements. I argue that the river is not only a critical part of infrastructure but a fluid and figurational "knot" (Ingold 2015: 18), that weaves multiple and diverse meanings and invite you to discuss the social life and agency of water in morethan-human (concreted) worlds.

How to build an environment: Negotiating possible futures through infrastructures and cultural re-enactment Jeanine Dagveli

In the summer of 2020, popular protest in the Kazakh capital Nur-Sultan organised around the preservation of a lake/water reservoir that was to give way to real estate construction advertised as a 'park construction' by authorities. As former wetlands are drained for the growing city while climate change brings increasingly dryer and hotter summers, fears of water scarcity grow. Instead of a typical rally, protest incorporated traditional dress and music as symbols of alternative visions of human-environment relations. At the same time, Nur-Sultan continues to attract the rural unemployed but there is an acute shortage of affordable housing and municipal water provision effectively ends at the outskirts where people are demanding better infrastructure and services. Human interactions with the environment in Central Asia are very often shaped by recourse to historical orders, yet different ones. Large-scale extraction and urban construction sites, epitomes of the Soviet era modernisation model, are increasingly questioned and resisted by reference to 'autochthonous culture' that allegedly provided better care of the non-human world. By drawing on fieldwork in Kazakhstan and Tajikistan, this paper asks how existing or missing infrastructures as well as the narratives around them work towards the generation or disintegration of possible futures, and how strands of discourse and practice that refer to different pasts connect to ideas of liveable futures. It explores perceptions of a modernity that manifests itself in built infrastructure, survival strategies of economically vulnerable populations, and cultural reference to environmental protection that are often pitted against each other in the context of recurrent violent state response to social and environmental protests.

Island hopping: Infrastructure development in the Faroe Islands Timothy Heleniak; Alexis Sancho Reinoso

The Faroe Islands are an archipelago of 18 islands in the North Atlantic. It is a semiautonomous region under the Kingdom of Denmark and Denmark is the Faroe's major migration partner. The population of 53,000 is spread across the 16 islands which are inhabited. The Faroes were uninhabited until about the year 800. The population grew slowly, and the economy was based mainly on agriculture, mostly sheep farming, until fishing became important. For much of the Faroe's history, there was little urbanization but with the development of fishing, some of the smaller, outlying villages with poor harbours haven't developed and are losing population. There has been a trend of services and population leaving smaller villages into urban centres., thus eroding village-based social structure. The government attempted to merge smaller municipalities in the 1990s but this was abandoned in favor of infrastructure development in order to connect all or most of the settlements in the Faroes. In recent decades, there has been extensive infrastructure development with 80 percent of the population being connected via tunnels and bridges with work being started on several other sub-seas tunnels. Other more distant islands are connected via ferries and helicopters. The purpose of this infrastructure development was the link the entire population, retain village life, and to not have the entire population concentrated into the capital of Tórshavn. This paper examines the demographic and social effects of this extensive infrastructure development.

Infrastructural sustainability? The case of a town in northern Manitoba, Canada *Philipp Budka*

This paper explores how the built environment and in particular infrastructural entanglements contribute to the sustainability of the town of Churchill in Northern Manitoba, Canada. Situated at the junction of the boreal forest, the Arctic tundra, and the Hudson Bay, the town of 870 residents has become well-known as the "Polar Bear Capital of the World". But Churchill is also unique in terms of transport infrastructures. Whereas the town is not accessible via roads, it is home of Canada's only deep-water port on the Arctic Ocean. This port is the only harbor in the American (Sub)Arctic with a direct link to the North American railway network. And due to former military presence, the town also has a relatively big airport, which now supports the growing tourism industry. The community of Churchill only exists because of these transport infrastructures and it has been changing together with this built environment. By discussing ethnographic findings, the paper focuses on the failures, such as an 18-month train outage after the flooding of railway tracks in 2017, and the promises, such as the renovation of port and railway between 2021 and 2023 under new ownership, of transport infrastructures in sustaining the community. Churchill is one of several field sites in the ERC project InfraNorth, which looks into the affordances of transport infrastructures on a pan-Arctic scale through an anthropological lens.

Crossing, Blocking, Passing: Bering Strait Transport Over Time *Peter Schweitzer*

The Bering Strait, the body of water that both separates and binds together the USA and the Russian Federation, has been an area of heightened world historical significance ever since it formed a land bridge between Northeast Asia and Northwest North America. More recently, the area has been characterized by indigenous cultural contacts, imperial ambitions, resource extraction, as well as infrastructural projects and plans. This presentation will feature preliminary results from "Building Arctic Futures (InfraNorth)", an ERC project, which focuses on the nexus between transport infrastructures and the well-being of Arctic communities. While the geopolitical and strategic significance of the Bering Strait has been great throughout the 20th century, the invasion of the Ukraine will undoubtedly lead to making the 80 kilometres separating Russia from its eastern neighbour into even more volatile waters. Notwithstanding these global dimensions, the talk will be anthropological in nature and focus on the local scale, namely on Nome and the Seward Peninsula in Alaska.