

TITLE

The Snow Needs to Be Stomped On: (Re-)Configurations of Grassland Ecosystem Revival in Siberia

RESEARCHER/S

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ABSTRACT, INTELLECTUAL MERIT, BROAD IMPACT

With Siberia on fire, it seems rather counterintuitive to bring forth deforestation and de-scrubbing of the Siberian tundra. Rather, the idea of revitalising grasslands in the North to mitigate the possible catastrophic effects of global warming—should the permafrost melt and microbes release tons of methane into the atmosphere— is catching on. A full-scale scientific experiment called Pleistocene Park in Russia aims to do just this. I argue that Pleistocene Park is a feat of terraforming. Moreover, terraformation is not simply a techno-economic solution, but a deeply biopolitical one as well that will transform social and more-than-human relations, where some beings will thrive and others may be subject to slow death. Using approaches from new materialism that traces the manifold entanglements in “natureculture”, this research raises critical inquiries into biopolitics at play in assemblages that coalesce, endure and disperse through the driving force of human-modeled transformation, even as animals, microbes, and grasses behave in unpredictable ways. As increasing numbers of geoengineered projects are proposed and initiated to hold climate change at bay, understanding the human-more-than-human entanglements and assemblages that come into being in all their complexity is critical.

OVERVIEW / RESEARCH QUESTIONS

Several areas of study are feasible. The overarching theme for these is a critical inquiry into a human-tampered transformation of ecosystem(-s) in Pleistocene Park and its entanglements.

The project could ask:

- What is the Pleistocene Park in its material-semiotic forms, performances, and plays?

How does it appear throughout different “construction sites”, such as the family who takes care of the Park, animals (e.g. bison from Denmark or Yakutian Horses), scholars analysing this project, the government, local communities and knowledges, grasslands themselves and the forest around, global ecosystems, Siberia, funding, etc.?

Another mode of inquiry could follow the arrival of species and how they affect the surroundings. For example, following the Yakutian Horses all the way from their place of origin, the village of Aleko-Kuel 800 km away, to the grasslands in question. Inquiries would relate to their multi-faceted becomings of the Park dwellers. How do they change through the journeys of their becoming(s)?

Even the phenomena of “fencing off” could be included here, as it has its own practices, affects and (dis-)entanglements. And one more enticing idea – to investigate this whole initiative through the perspective of snow.

Questions for these inquiries could be as follow:

What is the Pleistocene Park multiple? [following Mol, 2002]. What are the practices that form and inform the Park? What relations or entanglements do these practices build? How do these practices add or reduce to the global climate change question?

How is the Animal constructed through the initiative’s perspective? What is the Yakutian Horse in becoming? What are the issues of repopulating the tundra with megafauna?

What are the fencing practices? What entanglements do they create, and what is their extension to wider issues of climate change?

Similar questions would apply to snow:

-What is snow in the various construction sites (grasslands of the Park, scientific papers, local knowledges, herds of animals, fences, etc.)?

What are the practices and knowledges of snow that are implemented in the Park?

-What is their affect and transferability?

BACKGROUND AND SIGNIFICANCE

Background: The proposal to convert the Siberian tundra into grassland was first raised by Sergey Zimov, founder of the Northeast Science Station in CherskiyZimov in the 1990’s., and implemented as initially turning it into a full-scale experiment in Sakha Republic, Russia, called the Pleistocene Park. The Park was meant to recreate Pleistocene grasslands complete with an ecosystem of animals who would help tamp down ice, and grasses that would increase the reflective albedo effect and capture carbon dioxide. In short, the Pleistocene Park is meant to be a feat of climate terraforming.

Significance: The significance of this research would be to critically assess the initiative, its human-centrality, power relations and the biopolitics which are inevitable in this nature-culture entanglement

LITERATURE REVIEW

Multiple ontologies

Envirotechnical systems
Radical relationality and making more-than-human kin

METHODS AND DATA RESOURCES

Methods of data collection include but are not limited to participant observation at various “construction sites”, semi-structured interviews (snowball and purposive samplings), cartographic (GIS) analysis of the territories, sensory ethnography, document and media analysis.

Following snow, horses or the park would entail starting from them and getting lost in the intricate entanglements of various spatio-temporalities. The focus would gradually move onto practices. It would then shift to understanding the processes behind constructing the human and the animal.

THEORETICAL FRAMES & DATA ANALYSIS

Unpacking the meaning of “construction site” (how enviro-socio-technical worlds are created)

PLAN OF WORK

Get funding and permission from those on the ground to conduct in-situ ethnography in Siberia

CHALLENGES AND ETHICAL CONSIDERATIONS

Get funding and permission from those on the ground to conduct in-situ ethnography in Siberia!

VALIDITY AND EVALUATION

PREPARATION AND WORK THUS FAR

REFERENCES

- Alaimo 2010 – ALAIMO, S. (2010). Bodily Natures: Science, Environment, and the Material Self. Bloomington; Indianapolis: Indiana University Press.
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- Lien 2015 - Lien, Marianne Elisabeth. 2015. Becoming Salmon: Aquaculture and the Domestication of a Fish. 1st ed., University of California Press.
- Mol 2002 - Mol, Annemarie. (2002). The body multiple: Ontology in medical practice. Durham: Duke University Press.

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- <https://pleistocenepark.ru/> (accessed on 2022-04-22).

DATA MANAGEMENT PLAN

FURTHER NOTES

POINTERS

- Make sure to come up with a title (though this is hard and always feels -- and is -- reductive).
- The abstract should describe your project significance, aims, methods, expected findings/contributions (intellectual merit) and expected societal implications (broad impact). Describe each in a sentence.
- In the Overview / Research Questions, try to articulate the scales, systems or objects that will be foregrounded in the project, and its context | location (geographic, ecologic, geopolitical, discursive, etc). Include both theoretical and empirical questions, and a description of the types of data you will generate and mobilize. End with a few statements about what the project will push *against* (methodological nationalism or essentialist constructs of identity or place, for example).
- In the Literature Review section for a literature review, describe two to four topical literatures that you will build on and contribute to through this research. See [Annual Reviews](#) for ideas but reach for [bibliodiversity](#).
- In the methods section, describe *what you will do, where and with whom* -- and the different kinds of data and insight these activities will produce. Consider, for example, how you might include multisited ethnography ([Marcus 1995](#), a tale of implosion ([Dumit 2014](#)), tactile analytics ([Patricia Alvarez Astacio 2021](#)), drawing as analysis ([Rachel Douglas-Jones 2021](#)), or archive ethnography ([Fortun et al. 2021](#)).
- In the section for theoretical frames, describe the basic theoretical insights that you can mobilize in your study design, data collection, analysis, and writing. You could mobilize understanding of “the subaltern,” for example, or Foucaultian ideas about discourse and subject formation. This can be a long list with very cursory descriptions. Note that this section is not usually included in a proposal submitted to funders -- but should be part of your thinking and dialogue with collaborators
- In building your references, reach for bibliodiversity and a transnational field of reference.