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## Nuclear Fiction within Nuclear Knowledge Management: Towards Energy Literacy

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2021-11-01

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Sukhenko , I 2021 , ' Nuclear Fiction within Nuclear Knowledge Management: Towards Energy Literacy ' , BALTEHUMS II , 01/11/2021 - 02/11/2021 pp. 52-53 .

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<http://hdl.handle.net/10138/339635>

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# BALTEHUMS II

**Second Baltic Conference on the  
Environmental Humanities and Social Sciences**

**November 1–2, 2021  
Held online from Tallinn University, Estonia**



# Program

Click on the session name for a quick access to the Zoom link

November 1			November 2		
8.50– 9.00	<a href="#">Opening words</a>		9.00– 10.15	<a href="#">5A Animals</a> <i>Mänd, Hannikainen, Hein</i>	<a href="#">5B Facing modern challenges</a> <i>Tamir, Rabitz, Vitkauskaitė-Ramanauskienė</i>
9.00– 10.30	<a href="#">1A Archaeological environments</a> <i>Daugnora et al., Stivrins et al., Salmina &amp; Salmin, Kadakas</i>	<a href="#">1B Transmitting environmental messages</a> <i>Balcare, Robin, Goman</i>			
10.45– 12.00	<a href="#">2A Perceptions of climate and weather</a> <i>Tack, Vanamölder &amp; Kruusmaa</i>	<a href="#">2B Hybrid natures in transition</a> <i>Ješkina, Paulus et al., Zariņa &amp; Vinogradovs</i>	10.45 – 12.00	<a href="#">6A Multi-species encounters</a> <i>Maran, Sauka, Bachmann</i>	<a href="#">6B Disaster History</a> <i>Sepp et al., Rus, Raudkivi</i>
13.00– 14.30	<a href="#">3A Energy and Environment</a> <i>Agafonova, Klüppelberg &amp; Lindström, Pikner, Sukhenko</i>	<a href="#">3B Narratives of lived landscapes</a> <i>Metsvahi, Heinapuu, Bula, Purs &amp; Urtane</i>	13.15 – 14.30	<a href="#">7A Sustainable forests</a> <i>Laine, Zydeliene, Annist</i>	<a href="#">7B Environmentalism in arts and culture</a>  <i>Martinelli, Kaljundi, Tüür</i>
15.00– 15.45	<a href="#">Social event: Meet your colleagues</a>		15.00 – 15.30	<a href="#">Social event: What's next for BALTEHUMS?</a>	
16.15– 17.30	<a href="#">4A Just post-Soviet environments</a> <i>Svece &amp; Zarina, Pungas &amp; Plüschke-Altöf, Ruudi</i>	<a href="#">4B Literary maps</a> <i>Mandal &amp; Bhat-tacharya, Talivee &amp; Jānes, Žakevičienė</i>	16.00 – 17.00	<a href="#">Keynote: Michael Loader</a>	
			17.00 – 17.05	Closing words (before dividing us for the final session!)	
18.00– 19.00	<a href="#">Keynote: Kate Brown</a>		17.30 – 18.45 (19.30)	<a href="#">8A Literary environments</a> <i>Gubenko, Bédard-Goulet, Annus, Soovik</i>	<a href="#">8B Discussion: Environmentalising Baltic art histories</a> <i>Kaljundi et al.</i>

*November 1, 2021*

8.50–9.00

**Opening words: Kadri Tüür**

head of the Estonian Centre for Environmental History (KAJAK), Tallinn University

Zoom: <https://zoom.us/j/96454557936>

Chair: Kati Lindström

9.00–10.30

**1A Archaeological environments**

Zoom: <https://zoom.us/j/99951442019>

Chair: Kati Lindström

Linus Daugnora, Algirdas Girininkas, Simona Tučkutė

**Trace elements of Palaeolithic reindeer antlers in Lithuanian territory**

Normunds Stivrins, Laimdota Kalnina, Agrita Briede, Jurijs Ješkins, Nauris Jasiunas, Dace Steinberga, Liva Trasune, Alekss Maksims, Zigmars Rendenieks

**Current state of waterbodies and surrounding vegetation as reflected in surface lake and pond sediments in Latvia**

Elena Salmina, Sergey Salmin

**A river within an urban area: On the ground and underground**

Villu Kadakas

**The medieval water supply system of Tallinn**

**1B Transmitting environmental messages**

Zoom: <https://zoom.us/j/94366212838>

Chair: Aet Annist

Kitija Balcare

**Theatre and environmental conservation: Eco-narratives in performances in the year of pandemic in Latvia (2020)**

Libby Robin

**The old and the new: Curating the Age of Stuffocation**

Iuliia Goman

**Developing environmental responsibility to students of technical university at classes of foreign language**

10.45–12.00

## **2A Perceptions of climate and weather**

Zoom: <https://zoom.us/j/96113195169>

Chair: Linda Kaljundi

Laura Tack

**Sea bear, storm flood, tsunami – The impact and perception of a historical Baltic Sea flood event in 1497**

Kaarel Vanamölder, Krister Kruusmaa

**Weather forecast and observations in the St. Peterburgischer Calender in the 1780s**

## **2B Hybrid natures in transition**

Zoom: <https://zoom.us/j/97073085396>

Chair: Achim Klüppelberg

Karīna Ješkina

**Protection of ethnographic landscapes in Soviet Latvia: The case of Gauja National Park**

Ave Paulus, Kati Lindström, Robert Treufeldt

**Shifts in the environmental and social context of the Cold War military infrastructures on the coastal areas of Lahemaa National Park**

Anita Zariņa, Ivo Vinogradovs

**Spaces of post-nature: Reterritorialization of wetlands**

13.00–14.30

## **3A Energy and Environment**

Zoom: <https://zoom.us/j/91757778500>

Chair: Anu Printsman

Anna B. Agafonova

**Energy transition in northern Russian cities at the first third of the 20th century**

Kati Lindström, Achim Klüppelberg

**A fishy tale of the nuclear power plant never built in Estonia**

Tarmo Pikner

**Encountering presence of de-carbonisation and related b/orderings**

Inna Sukhenko

**Nuclear fiction within nuclear knowledge management: Towards energy literacy**

**3B Narratives of lived landscapes**  
Zoom: <https://zoom.us/j/94577360840>  
Chair: Elle-Mari Talivee

Merili Metsvahi  
**Pre-modern Estonian peasants' relationship with the lakes and rivers**

Ott Heinapuu  
**Transforming roles and shifting meanings of sacred natural sites in Estonia**

Dace Bula  
**Flood stories: Agency of water and relationality of narrative**

Indra Purs, Marta Urtane  
**Āraiši cultural landscape**

15.00–15.45

**Social event: Meet your colleagues**  
Zoom: <https://zoom.us/j/92194539514>  
Chair: Kadri Tüür

An informal chat room where you are randomly shuffled with colleagues to speak about your present research projects. What do you work on now?

16.15–17.30

**4A Just post-Soviet environments**  
Zoom: <https://zoom.us/j/91546814257>  
Chair: Joonas Plaan

Artis Svece, Anita Zariņa  
**Conflicts of values and ecological solidarity: The case of Kemer National Park**

Lilian Pungas, Bianka Plüschke-Altöf  
**Same, same but different? The 'right' kind of gardening and the negotiation of neo-liberal urban governance in the post-socialist city**

Ingrid Ruudi  
**Looking for ethics of care in the built environment of the transition era**

**4B Literary maps**  
Zoom: <https://zoom.us/j/92679271456>  
Chair: Inna Sukhenko

Aratrika Mandal, Somdatta Bhattacharya  
**Maps and reference points in the Baltic: A study of landscape in Henning Mankell's *The Dogs of Riga***

Elle-Mari Talivee, Marin Jänes

**The travel and weather map of a political refugee from the Baltics in the early 20th century**

Indrė Žakevičienė

**Bioregion in the field of literary research: The ecology of place**

18.00–19.00

**Keynote: Kate Brown**

**The Soviet everyday is a green everyday**

Zoom: <https://zoom.us/j/98613402994>

Chair: Kati Lindström

*November 2, 2021*

9.00–10.15

**5A Animals**

Zoom: <https://zoom.us/j/99481088575>

Chair: Elle-Mari Talivee

Anu Mänd

**Inherited animal: Domestic animals in Livonian wills and probate inventories (14th–16th centuries)**

Matti O. Hannikainen

**Rough fish? The role of fish in the Finnish society during the 20th century**

Karl Hein

**Animal protection movement in interwar Estonia**

**5B Facing modern challenges**

Zoom: <https://zoom.us/j/93564059876>

Chair: Aet Annist

Dan Tamir

***Nihil sub sole novum?* Some thoughts about similarities between human response to COVID-19 and human response to malaria**

Florian Rabitz

**Sustainability, technology and international institutions**

Jonė Vitkauskaitė-Ramanauskienė

**Towards a sustainable plant-based diet: Rethinking the practice of animal consumption**

10.45–12.00

**6A Multi-species encounters**

Zoom: <https://zoom.us/j/92228282423>

Chair: Sara Bédard-Goulet

Timo Maran

**Dark umwelts, species extinction and literary imagination**

Anne Sauka

**Political space, abjected matter: Living with wildlife in post-Soviet spaces**

Karin Bachmann

**Unpleasant and inevitable nature**



## **6B Disaster history**

Zoom: <https://zoom.us/j/98758784141>

Chair: Elle-Mari Talivee

Mait Sepp, Taavi Pae, Evelyn Uuemaa

**Lightning fatalities in Estonia, 1880–1940**

Dorin-Ioan Rus

**The weather anomalies of 1815–1818 as reflected in the German-Baltic newspapers**

Priit Raudkivi

**Tracing the impact of 1783 Laki eruption in Estonia. Demographic point of view**

13.15–14.30

## **7A Sustainable forests**

Zoom: <https://zoom.us/j/92609679315>

Chair: Joonas Plaan

Jaana Laine

**Forest science and the Finnish society from 19th century onwards**

Loreta Zydeliene

**Towards the sustainable forestry in interwar Lithuania: The power of paradigm, the reason of compromise and the significance of commitment**

Aet Annist

**“The consequences are obvious”: Protest groups’ role in the recognition of (future) disasters**

## **7B Environmentalism in arts and culture**

Zoom: <https://zoom.us/j/97085186447>

Chair: Priit Raudkivi

Dario Martinelli

**Give peas a chance! Environment, animals and vegetarianism in the Beatles’ repertoire**

Linda Kaljundi

**Tracing transformations: How, when and why to look for environmentalism in late Soviet Estonian art**

Kadri Tüür

**Eco-nationalism? Artistic manifestations of environmental concerns in national protests**

15.00-15.30

**Social event: what's next for BALTEHUMS?**

Zoom: <https://zoom.us/j/92309779920>

Chair: Kati Lindström

Join the informal meeting to brainstorm and discuss what would you want BALTEHUMS to do, how to find more interested people and take initiative to organise new events!

16.00–17.00.

**Keynote: Michael Loader**

**A watershed moment: The environmental movement and resistance to the Pļaviņas Hydroelectric Dam Project in Soviet Latvia**

Zoom: <https://zoom.us/j/91356715687>

Chair: Linda Kaljundi

17.00–17.05

**Closing words:** quick good bye before we divide up for the final session  
Kati Lindström

17.30–18.45

**8A Literary environments**

Zoom: <https://zoom.us/j/93695718654>

Chair: Kadri Tüür

Igors Gubenko

**Nature in discourse: Exposing normativity haunted by the spectre of the unnatural**

Sara Bédard-Goulet

**Landscape and gender: The ocean and the masculine in *Plus rien que les vagues et le vent* (2014) by Christine Montalbetti**

Epp Annus

**From the personal to the planetary: Alberts Bels, Jaan Kaplinski and reverence for life in the late Soviet era Baltics**

Ene-Reet Soovik

**The country, the city and the weather: Jaan Kaplinski's seasonal and ephemeral landscapes**

17.30–19.30

**8B Discussion: Environmentalising Baltic art histories – experience from research and curatorship**

Zoom: <https://us02web.zoom.us/j/84456187101?pwd=cWc2dGVmdFo0emVvSVc4dVVU-bEt2dz09> Passcode: 525436

Convenors: Linda Kaljundi and Ieva Astahovska

Panelists: Inga Lace, Bart Pushaw, Eda Tuulberg, Nomedā ja Gediminas Urbanis

*Attention:* This discussion is going to be streamed on Facebook. When you connect to Zoom, your name or image may be streamed when asking questions, even if we normally stream only the speakers' image. If you want to be entirely sure that your name or image do not appear on the Facebook stream, we recommend you watch the event on Facebook instead. Facebook stream is available even for those who do not have a Facebook account themselves. Access the live stream here: <https://www.facebook.com/LMC.LV>

# *Abstracts*

## **Energy transition in northern Russian cities at the first third of the 20th century**

Anna B. Agafonova, Higher School of Economics, St. Petersburg

The report is devoted to the analysis of the energy transition at four Russian cities (Pskov, Arkhangelsk, Vologda, and Cherepovets). In the 1910 – the 1920s there was made a transition from kerosene lighting to electric lighting of the city. At the same time, the transition was carried out in the conditions of the First World War and the Civil War and was accompanied by an energy crisis. These cities were among the first northern provincial cities to switch to electric lighting. At the same time, the transition was carried out in the conditions of the First World War and the Civil War and was accompanied by an energy crisis. In Pskov, the electrification was made at the expense of the concessionaire. Vologda and Arkhangelsk built electric stations at the expense of municipal budgets in the late imperial period. The first power plant in Cherepovets was built in 1916, together with a running water supply system. After the revolution of 1917, a new power plant was built for the lighting of the city and the work of industrial enterprises. The technological choice of the electric system influenced the possibilities and velocity of the energy transition. The electric stations worked on wood fuel insofar as the availability of forest resources in the Russian North determined wood as a source of fuel. However, almost from the first years of work, this choice showed its inefficiency. There were problems with costs, delivery, and storage of fuel. Next decades, the stations operated inefficiency due to the shortage of fuel and the rapid deterioration of equipment.

The report will highlight the features of the construction of power plants in Tsarist and Bolshevik Russia, the reasons for making certain technological decisions, and their subsequent impact on the electrical economy of cities during the Soviet period.

**“The consequences are obvious”:**

**Protest groups’ role in the recognition of (future) disasters**

Aet Annist, Tallinn University; University of Tartu

This contribution will focus on the perception and processing of and responses to the environmental losses, based on the case of Estonian forests and anti-logging groups witnessing and protesting the transformations over the recent years of changing definitions and regulations. I will look at the national self-myths in relation to both past, in relation to the ideas of Estonians as “forest people”, and future, in relation to digital solutions, and the effects these have on the visibility and recognisability of change.

The effects of logging up and down the scales, and the extent and character of changes in terms of wildlife and biodiversity destruction are observed by protesters as witnesses of local events, and by digital solutions as witnesses of regional, national and global realities. Protest groups are capable of alternate collapsing and expanding of such spatial scales for an honest reading of the consequences of changes. Such knowledge confronts the antagonistic, shifting and uncertainty-generating rhetoric from the forest industry, obscuring the applicability of local witnessing events to larger scale realities. As they struggle for moving their observations to the centre of attention, their own as well as the societal ability to recognise dangers is further undermined by the hierarchies between human and non-human worlds, as well as within societies. I will apply theories of othering and dispossession to consider the ability to recognise suffering.

I will further aim to understand the protest groups use of temporal scales for the provision of future imaginaries, and attempt an early analysis of certainty as a relationship between already-experienced losses on the spatial scale and their perceived extension on the temporal to the future, as perceived in the obliteration of Others.

## **From the personal to the planetary: Alberts Bels, Jaan Kaplinski and reverence for life in the late Soviet era Baltics**

Epp Annus, Tallinn University; Ohio State University

This presentation analyzes writings by Alberts Bels and Jaan Kaplinski to rethink the late Soviet-era constitution of subjecthoods from an environmental perspective. Jakob von Üexküll's concept of Umwelt will serve as a tool to articulate an understanding of the human self as "bigger than body" and to argue the necessity of humans to extend, ground, and support their selves within their surrounding environment. The elaboration of late Soviet-era self-worlds is linked to environmental thinking of the 1960s–1980s and to Albert Schweitzer's broadly impactful dictum *Reverence for Life*.

In Kaplinski's essay *Ökoloogia ja ökonoomika* (1972) and in his other writings, the global and planetary aspects of the extended selfhood are linked to the ideas of Albert Schweitzer. Inspired by Schweitzer and by different native mythologies, Kaplinski's writings link the subjective perception of one's sense of self as related to one's surroundings with global and planetary perspectives.

Alberts Bels turns the novel genre into a mode of investigation into both environmental and sociological issues. Bels's descriptions of the forest-sensoria and his deep worry about both local natural environments and the global pollution all tie into a vision of the world as seen from a bigger-than-body-subjecthood.

Bels's and Kaplinski's model of selfhood is multiscalar, it includes (a) self as extending to self-world, the directly sensed and perceptible presence of everything familiar; (b) a grounding attitude, or care, that proceeds from the extended understanding of selfhood as seen not through othering and juxtaposing, but through extensions outward; (c) an imaginary extension of the human self-world to include a global and planetary reach and a vision of one's co-belonging with all living and nonliving matter.

## **Unpleasant and inevitable nature**

Karin Bachmann, Estonian Academy of Arts

Being in nature, going into it and interacting with it has become an activity that requires extra time. Most of us live in cities. Exposure to nature is weekend trips; on a daily basis the citizens are surrounded by a controlled and extremely nourished urban environment, the maintenance techniques of which are largely oriented towards culturally acceptable solutions: a safe mass-taste-proof beauty.

Anthropocentric public urban space uses nature as a material, as a background to decorate the space according to humans. There is also some talk about the dust and noise or provision of shelter from wind, rain and sun, but the main emphasis is still providing some aesthetic experiences for people. There is almost no use of nature's self-acting processes because they are either expensive, inconvenient, or unaesthetic. In other words, if we talk about for example the treatment of rainwater, it is several times cheaper to direct it to the pipeline than to arrange local impregnation – to return it to the natural substance circulation.

In nature there is distinction between habitat types, for example swampy forest, coastal meadow and etc. They all have different conditions for growth and development: soil, microclimate, topography, abundance of moisture and nutrients and so on. Similarly, the urban environment is full of opportunities for such diverse habitats but realizing these is largely excluded by different cultural attitudes. Therefore, the greenery types used in public spaces are repeated both from city to city and from country to country. The criteria according to which urban landscaping is selected are based on technical justifications such as price, ease of management, vandal resistance. And also, aesthetic considerations which are very one-sided and based only on the abundance of flowers, the length of flowering time and the variety of colors. Other criteria – biodiversity, providing habitats for other species – are not valued.

The decline of biodiversity is also due to the misconception that nature's place is outside of the city because there is more space and opportunities for biodiversity; the city is a controlled environment, fed by everything else necessary for the surrounding landscape. But in fact, most cities are surrounded by monocultural large-scale fields. However, the city is very heterogeneous by its nature, full of opportunities for every species. The only obstacle to realizing this potential is cultural beliefs.

What could be friendly solutions for all species, including humans?

**Theatre and environmental conservation:  
Eco-narratives in performances in the year of pandemic in Latvia (2020)**

Kitija Balcare, University of Latvia

Environmental issues are growing day by day looking from the perspective of Anthropocene. While there is an emphasis on environmental education, what is the role of the performing arts, especially, theatre in order to raise awareness of environmental issues among society? The use of the performing arts in the context of environmental conservation reach it's peak on repertoires of local theatres in 2020. Is it just coincidence while using safe stages outdoors in the time of pandemic or is it conscious trend in the performing arts in the face of inevitable changes in nature? How nature comes from the background of scenery to the foreground of the play? The aim of this research is to highlight eco-narratives in theatre premieres in Latvia in the year of pandemic 2020 meanwhile looking for the raise of eco-theatre on various stages in Latvia. This work seeks to relate these eco-narratives to the daily agenda on media connected to environmental issues looking for the approach for solutions given by creative teams of performances.



**Landscape and gender: The ocean and the masculine in  
*Plus rien que les vagues et le vent* (2014)  
by Christine Montalbetti**

Sara Bédard-Goulet, University of Tartu

*Plus rien que les vagues et le vent* (2014) (translated in English as *Nothing but Waves and Wind* in 2017), a contemporary novel by French author Christine Montalbetti, borrows from the road novel genre to intertwine the itineraries of several characters who end up in a small town on the coast of Oregon (Motte 2015). Quickly, we learn from the narrator and main character that “all of that, is to blame on the ocean” (Montalbetti 2014: 86), while several passages of the novel describe the relentless violence of the ocean. The novel carefully builds up tension until the final outcome, when the protagonist gets beaten up by the local boss’ henchman for no apparent reason. The novel challenges the common feminine representations of the ocean (Helmreich 2017) and offers a striking depiction of ‘hegemonic masculinity’ (Connell & Messerschmidt 2005) in the context of the economic crisis of 2008 (Kieffer 2019), while at the same time questioning a metaphysical analysis of the ontology of being.

On the basis of relational ontologies of becoming that have rematerialized geography (Nieuwenhuis 2016), this paper examines how Montalbetti’s novel connects landscape and gender through the image of the ocean, shedding light on a type of contemporary masculinity (Hultman 2017) commonly termed ‘toxic masculinity’ (Ging 2017). It aims to describe the novel’s contribution to a renewed understanding of gender performativity (Butler 1990; Barad 2012) and to highlight the ‘wet ontologies’ (Steinberg & Peters 2015) suggested by the narrative. Such a new materialist perspective contributes to reconceptualize our understanding of landscape and adds to the current limited ecocritical approaches of Montalbetti’s work (McConnell 2020).

## **The Soviet everyday is a green everyday**

Kate Brown, Massachusetts Institute of Technology

Soviet kitchen gardens were some of the most economically-successful, long-lasting and sustainable production sites of the Soviet polity. In garden communities and household kitchen gardens across the country Soviets made wealth out of nothing. They literally pulled nitrogen, phosphorus and potassium from air, rock and waste. Starting with the Bolshevik Revolution, Soviets gardened their way through every crisis. They also self-provisioned through peace and affluence. The most prosperous years of the USSR were those when gardening thrived. No one called Soviet urban farmers “green,” “slow” or “sustainable,” though indeed they were. Rather than seeing allotment gardens as a response to emergency or failure, Soviet self provisioning sounds out as a drumbeat, ubiquitous and persistent, that was a powerful engine behind the Soviet economy, a major feature of self-governance, a platform supporting health and culture. Following edible, urban plants in Soviet cities leads to an understanding of how people gained a social welfare network and built a network of private property and political autonomy.

## **Flood stories: Agency of water and relationality of narrative**

Dace Bula, University of Latvia

“Before 1969, we didn’t bother much about flood water. We were used to: it arrived, circled around the house without coming inside. But in 1969, the water — when it rose — was getting in not only through the door but even through windows!” From a frequent, inevitable but tolerated visitor into a destructive intruder — such is the transformation flood water underwent in the experience of the lower Daugava inhabitants during the storm that hit Riga, the capital of Latvia, in November 1969. People living close to the river mouth are accustomed to the fluctuations of water levels and occasional minor inundations. Yet there have been two major flooding events — the storms of 1969 and 2005 — that have had a lasting effect on the material world in the neighborhoods and are alive in people’s memory and narration. In both narrative disguises — either as a visitor or an intruder — water figures as an active participant in the local network of relations. Moreover, due to anthropomorphizing narrative techniques, it acquires humanlike “behavior” and becomes a cohabitant whose doings seriously challenge people’s ability to fully control their lives.

Based on flood stories from Riga’s neighborhoods surrounding the mouth of the Daugava river, this paper seeks to explore the relational capacity of environmental narrative. Reverberating ideas of recent posthumanist and new materialist origin, it aims to bring to the fore personal oral accounts as a source for phenomenological inquiry into how people experience the agency of matter and how they narratively build relationships with their environment. Narratives of flooding experience that constitute paper’s empirical material are part of environmental talk documented in field interviews with residents of four Riga’s neighborhoods — Bolderāja, Kundziņsala, Mangaļsala, and Vecmīlgrāvis — that border on the port of Riga.

## **Trace elements of Palaeolithic reindeer antlers in Lithuanian territory**

Linus Daugnora, Algirdas Girininkas

Klaipeda University

Simona Tučkutė, Lithuanian Energy Institute

During the late Glacial in the territory of East Baltic region after retreat of the glaciers, the main hunting object was reindeer (*Rangifer tarandus L.*). Baltic region specimens would considerably help in the reconstruction of the origin and migration routes of the extant wild reindeer populations in northern Europe. In 16 localities of the territory of Lithuania and radiocarbon dates from antlers of reindeer between 12 085 and 10 435 yr BP were collected. The majority of radiocarbon dating results show that reindeers colonized the eastern Baltic region quite rapidly and possibly all at once – 13400–12300 yr. BP.

Express Energy-dispersive X-ray spectroscopy analysis of the reindeer antlers in Lithuanian territory showed that Palaeolithic antler loss of organic fraction, increase of apatite crystallinity, uptake and loss of exogenous trace elements could be seen. These measurements show that Ca and P distributions are homogeneous. Elements such as Ba, Si, Al and S are generally irregularly distributed. Fe, Mn and F present decreasing profiles and Na, Zn and Cl also show decreasing profiles with a slight depletion in the outermost parts. These features can be explained by the presence of trapped inclusions in the pores of the antler fragments. Our analyses showed that Palaeolithic antler is affected by the same kind of diagenetic modifications as ancient bone or ivory.

## **Nature in discourse:**

### **Exposing normativity haunted by the spectre of the unnatural**

Igors Gubenko, University of Latvia

The paper explores the philosophical implications of nature as a normative discursive category. I connect the discourse of 'agrarian nationalism' as analysed by Katrina Schwarz with Timothy Morton's critique of the concept of nature and its normative employment in discourses of conservation and beyond. Highlighting the pertinence of the Romantic idea of nature as an organic totality in the dominant discourses of Latvian national identity both in 20th and the 21st century, I suggest a continuity between the poetic exaltation of nature by Latvian intellectuals on the one hand and the discourses of 'agrarian nationalist' landowners on the other. I argue that in these discourses, 'nature' functions as an ideological concept par excellence: a normative idea in the guise of a purely descriptive signifier.

In environmental discourses this peculiar functioning of 'nature' and the Romantic heritage implied in the concept is less perceptible due to the scientific framing of such discourses, the default interpretation of nature being 'the subject matter of natural science'. However, the normative employment of 'nature' becomes much more apparent in contexts when the concept is applied to social relations, e. g. in the recent Latvian debate on the so-called 'natural marriage'. As awkward as these exclusionary discourses are, they demonstrate the same conceptual matrix at work in agrarian nationalist and other environmental discourses as well, namely, a normative delineation effected between the attributes considered natural and ones positioned as unnatural. The essential role of what is excluded from nature ('the unnatural') in the constitution and discursive functioning of this concept indicates that the specific understanding of nature is always at least in part a matter of the interests pursued by the subjects of discourse and the ultimate clash in the conflicting discourses of nature is thus one over the definition of nature itself.

## **Rough fish? The role of fish in the Finnish society during the 20th century**

Matti O. Hannikainen, University of Helsinki

Fishing is the most ancient way for gathering food that remains important today. In Finland, fish plays a less important part of diet despite the abundance of fish in streams and lakes not to mention the Baltic Sea. The disparity between the various species of fish has broadened reflecting their changing economic and cultural values. Consequently, species like common roach (*Rutilus rutilus*) and even Baltic herring (*Clupea harengus membras*) are labelled less valuable. The concept of rough fish meaning species with little or no value for human consumption is relatively new however. Its advent was linked to novel scientific thinking on fishing, which portrayed human as the master over nature with power to preserve and farm the valuable species or to exterminate the unwanted species of fish.

This paper aims to unravel the origins and influence of the new scientific discourse over fish and fishing in Finland during the 20th century. Analysing previously little used sources like the reports of the fishing committees in addition to articles published in professional journals like *Suomen Kalastuslehti* and women's magazines like *Kotiliesi* in addition to cookery books, this presentation aims to bridge environmental history and social history (of food). Doing so, it seeks to answer the following main questions: 1) who promoted the scientific discourse and the concept of rough fish in particular, and 2) how did these affect perceptions and uses of different species of fish for food?

## **Animal protection movement in interwar Estonia**

Karl Hein, Tallinn University

The movement of animal protection is often seen as relatively new. When talking about animal rights and animal protection the starting point is generally 1975, when Peter Singer published his *Animal Liberation*. But factually the roots of the movement go much further. The idea that you should be kind towards animals and care about their welfare was frequently discussed in the 18th-19th century philosophy and also before that. Likewise, the movement for animal protection has a long history, starting from the 19th century England. It was fairly active also at the beginning of the 20th century.

My presentation is an attempt to give an overview of the development of the idea of animal welfare in Estonia during the interwar period. The animal protection movement during that time was quite active. By the end of the interwar period, there were over 20 animal protection organizations established in Estonia. The members of the animal protection groups cooperated with the government, organized charity events and distributed thematic literature, posters and journals. They spoke up publicly for the protection of the stray dogs in the cities, for the pigs and the cows in the slaughterhouses and for the horses that were mal-treated by the teamsters and farmers. Often they went hands-on with helping the animals by establishing shelters and clinics and by keeping guard in the streets against animal torturers. It is suggested that at peak time there were over 10 000 people affiliated with the movement.

# **Transforming roles and shifting meanings of sacred natural sites in Estonia**

Ott Heinapuu, University of Tartu

Estonian landscapes have traditionally included a pattern of sacred natural sites, including but not limited to groves of trees, sacred springs and wells and sacrificial stones. These have been documented in detail in archive records from the end of the 19th century. How innovative or conservative this pattern has been in the more distant past is open to debate. But in the last century and a half, this pattern has gone through a turbulent period of parcelling communal lands into private plots, several land reforms and other momentous changes in the wake of alterations in land use. From a heritage point of view, these changes have been accompanied with the forgetting, recalling and repurposing of heritage, attempts at restoration and new starts. I will discuss the quantity and quality of available information on traditional sacred sites in Estonia and propose a theoretical framework for the further application of the concept of sacred natural site and the classification of such sites. A general pattern of contemporary perceptions and current uses of traditional sacred natural sites will be sketched in order to make sense of who uses the sites and what meanings are ascribed to them.



## **The medieval water supply system of Tallinn**

Villu Kadakas, Tallinn University

The people of Tallinn have had clear and drinkable water running from tap for about a century. The system has not failed for a day, not even during the WW II. Such a guaranteed flow and temporal distance is enough to forget about the previous seven centuries of continued efforts of the townspeople to get more or less clean water or to get some water at all. Therefore, at the first glance one could get a false impression, as if nothing was done to supply the town with fresh water before the 20th century.

Although the medieval Old Town of Tallinn has preserved very well, the elements of the former water supply system, in extensive use until 1860s, have almost completely disappeared from townscape: streams, springs and the Härjapea River, the Ülemiste aqueduct, mill ponds and moats, dug wells, also the network of public wells built upon a timber pipe system, which was unique not only in Estonia but in the whole medieval Livonia. Archaeologists sometimes stumble upon remains of the former water system and try to reconstruct the whole from the pieces. Since the 18th century the mill ponds and public wells have accidentally got on the paintings and engravings, since the 19th century on the town plans and photos.

In this paper also the continuous problems of maintenance of the system, also with scarcity and clarity of water and fight with floods will be introduced. Briefly, the new system of cast iron pipelines, hydrants and pumping system, built in the 2nd quarter of the 19th century, also the developments which led to building the water treatment plant in the 1920s will be described. As an urban archaeologist specialized on research of medieval Tallinn, I will also point out some key problems with reconstructing the earliest elements of the medieval water supply system.

## **Protection of ethnographic landscapes in Soviet Latvia:**

### **The case of Gauja National Park**

Karīna Ješkina, University of Latvia

Until the 1970s, protected nature areas in Latvia were mostly closed to visitors and intended for scientific research. Inspired partly by the centenary materials of Yellowstone National Park leading nature protection movements at the time – Latvian Nature and monument protection association and the Nature Protection Division of the Institute of Forestry Problems – encouraged the creation of a new model of protected areas – national parks. According to Aija Melluma, one of the initiators of the establishment of the Gauja National Park, unprecedented large areas of agricultural landscapes were included in the territory of the park, which are characterized by at the time contested pre-Soviet landscapes. Pre-Soviet landscape, with their characteristic individual farms, are considered to represent golden age of Latvia. In order to preserve this “prototype of Latvian agrarian landscapes” and reduce the nation’s disappearing awareness of local history and ethnographic traditions, the protection of cultural and historical values became an important goal of the park’s establishment.

At the same time, the media in the 1970s were portraying a different interpretation of agricultural landscape values. The classical understanding of conservation, which is determined by the value of the object, was justified differently in this case. By giving “non-value” roles to historical agricultural landscapes, they were to become the background for the achievements of the Soviet era. Pre-soviet agricultural methods and lifestyle had to serve as a comparison of the technological superiority of the Soviet regime. Given the differences between nature conservation movements and conservation objectives in the media in the 1970s, the aim of this study is to explain how these discrepancies affected the management of the national park in the Soviet period.

## **Discussion: Environmentalising Baltic art histories – experience from research and Curatorship**

Organisers: LCCA and Kumu Art Museum

Convenors: Linda Kaljundi and Ieva Astahovska

Panelists: Inga Lace, Bart Pushaw, Eda Tuulberg, Nomeda ja Gediminas Urbanis

One of the most influential tendencies of the current art world are the numerous attempts to write and curate global art histories from ecocritical and environmental perspectives. While these are also characterised by an increasing awareness of the importance of approaching art history from global, comparative and transnational perspectives, we are also facing an already well-established tradition where much of the ecocritical art histories so far have been produced from the perspective of the West. The same holds true for the history of environmentalism, which has also been written and defined by Western models and experiences. This places re-writing and re-curating ecocritical art history into the very centre of a larger project of provincialising the West in global history.

Deprovincialising environmental histories hidden in the peripheries of Eastern European art history can be conceptualised as a part of this project. To paraphrase Piotr Piotrowsky, we should not concentrate our attention should on just simply inscribing the environmental practices and interests of Eastern European art of the 1960s–1980s into the canonical frameworks of Western ecocritical art histories. Instead, we should look for the local experiences, revising and deconstructing the relations between the West and the East (as well as with the global South), and to take the non-Western experiences and developments seriously. This would enable to construct a more heterogeneous, pluralistic art histories of environmental art, which would include the diversity of non-Western practices and entanglements between art and environment.

The discussion invites researchers and curators dealing with the Baltic region to talk about these challenges based on their experiences. What are the specifics of environmental practices and ideas that reveal themselves in the histories of Baltic visual arts and culture? What transnational entanglements do these reveal, and how can it contribute to reconceptualising the global art history in a way that would challenge the Western model? What are your experiences of writing and curating Baltic art history from ecocritical perspectives? How does art resonate with contemporary art and exhibition scene in the Baltic region and

beyond? All participants are invited discuss some of these key issues with the help of concrete examples from their own practice, giving presentations of around 10 minutes. This will be followed by discussant's response and discussion.

## **Tracing transformations: How, when and why to look for environmentalism in late Soviet Estonian art**

Linda Kaljundi, Estonian Academy of Arts; Tallinn University

The birth of Eastern European environmentalism is often still associated with *Perestroika* period citizen activism and protests in the late 1980s that ultimately contributed to the fall of the Soviet regime. Yet, more and more scholars are arguing that also in this region, environmentalism appeared already much earlier. The late Soviet period seems to be especially crucial in this regard, bearing witness to the spread of popular engagement in conservationist societies, the rise of ecology into one of the keywords of academic, cultural, and public discourse, etc. From the late 1960s onwards, these developments were also shaped by increasing, but largely unexplored entanglements between Eastern and Western ideologies and practices of environmentalism.

This paper suggests that visual arts and culture offers rich, but in the Estonian and Baltic case largely overlooked material for tracing the transnational histories of environmentalism. While in Estonia the close involvement of several artists to the popular Society for Nature Conservation (est. 1966) is relatively well known, many other artists' attention towards environment remains forgotten. As argued by Maja Fowkes in her book *The Green Bloc* (2015), the historiographical void around Eastern European artists' environmental practices „should not be mistaken for its nonexistence, as works dealing with the issues of nature, ecology, and natural environment were an essential part of many artists' oeuvres“.

The paper maps the transforming attitudes towards environment in diverse artistic media, genres, and collectives, such as land and pop art, as well as painting and print of the late Soviet Estonia. Offering an initial overview and first generalisations, it also aims to show the presence of environment in the practices of a wide spectrum of artists from the late 1960s until the 1980s. Looking also beyond visual culture, the paper very briefly touches upon the entanglements between visual arts, science and other fields of culture, claiming that such transdisciplinary entanglements were emblematic and even crucial to the spread of environmentalism in the late Soviet period.

# **Forest science and the Finnish society from 19th century onwards**

Jaana Laine, University of Helsinki

This paper explains how the forest science has responded to the societal information demands. From the late 19th century to the 2020s, the history of forest science consists of four main periods. The data used were archive materials of the Finnish Forest Research Institute and forest research publications.

## “Understand the forests” (late 19th century – 1930s)

The society needed and gained information on forests: growing timber stock (the first forest inventory in the 1920s) and the wood consumption (the first inventory of wood consumption in the 1930s). In addition, researchers produced knowledge for silvicultural practices and on forest biology.

## “Exploit the forests” (1940s–1960s)

Rationalizing forestry and developing the timber procurement were seen essential. Since timber removals exceeded the annual growth, the state launched massive forest improvement actions. Large clear-cuttings were regenerated with conifer saplings and massive ditching of bogs were enacted. As a result, the society extensively exploited and influenced the forests.

## “Define forest’s values” (1970s–1990s)

Forests were no longer respected merely as a source of economic prosperity. Escalated disputes existed when environmental activism and public discussions challenged the forestry practices. Scientific knowledge became embedded, beside traditional forestry values, also with conservational, recreational and more environmental values related to forests. During the 1990s changes in forest legislation paved the way towards more pluralistic values of forests.

## “Discover forest’s futures” (2000s–)

The era of climate change and conflicting human-forest relationships set new demands to forestry and forest science. The forest’s importance has enlarged from private and national level to global context. Forests are respected as a carbon sink/storage, for rich biodiversity, and a source of mental and physical health. Forests as living entities are recognized. The steps towards more pluralistic human-forest relationships, posthumanism and interspecies have been taken.

## **A fishy tale of the nuclear power plant never built in Estonia**

Kati Lindström, Achim Klüppelberg  
KTH Royal Institute of Technology

One of the most mysterious stories of Estonian energy history is that of the nuclear power plant (NPP) that was allegedly planned to be constructed at Lake Võrtsjärv during the 1960s, but ultimately never built. Thanks to the skilful negotiation by three Estonian academicians that participated in the secret planning committee, delegates from Moscow became convinced that the proposal was not feasible. The story has been well consolidated in the media but also in the oral narratives of the researchers working at Võrtsjärv's limnology station during the 1960s.

Yet, we have not been able so far to find any archival evidence hinting at this nuclear planning process. None of the central planning documents that we have seen, includes the Estonian nuclear power plant. Neither were we able to find the report that the limnology centre is said to have written concerning the environmental damage that would be caused by the proposed nuclear plant. Moreover, constructing an NPP at Võrtsjärv makes very little sense from the point of view of Soviet Estonian energetics, which predominantly relied on oil-shale and peat.

While the story may sound fishy, it is real for those who remember it. In fact, blocking an NPP construction is part and parcel of a major shift in Soviet Estonia's fisheries management – one that redefined water and fish as a resource to be protected and valued rather than exploited. Within the utilitarian view of nature as a resource and the framework of two important all-Soviet planning processes (water resources and inland fisheries), the scientists managed not only to deter an NPP, but also to reorganise the entire fishery system at Lake Võrtsjärv, recovering the numbers of valuable fish, and restoring the ecological balance at the ageing lake. The planning process of the nuclear power plant roughly coincides with the development of a strong paradigm of ecosystemic nature protection in the late 1960s.

## **A watershed moment: The environmental movement and resistance to the Pļaviņas Hydroelectric Dam Project in Soviet Latvia**

Michael Loader, University of Glasgow

Perhaps the greatest expression of the fledgling civil society under development in Soviet Latvia during the Thaw era of the 1950s was the unusual wave of protest aroused by the proposed construction of a 40-metre-high hydroelectric power plant on the River Daugava at Pļaviņas in 1958. Endangering a particularly scenic valley of prominence in Latvian folklore, the project aroused opposition principally among intellectuals including eminent scientists, writers, educators, and members of the cultural and artistic community. Based on environmental concerns, the proposed dam also caused an unprecedented outpouring of popular opposition from the general public. With support from reformers in the Latvian Communist Party leadership, the Seven-Year Plan for Latvia was amended and construction was cancelled until Stalinists regained control of the Party and restarted the project in 1961. The Latvian public's temporary victory over the Pļaviņas dam represented an extraordinary triumph for peripheral interests over the Centre. This paper examines how, under the circumstances of the Thaw, the Pļaviņas affair was the first instance of a genuinely broad, grassroots public debate in post-war Latvia.



## **Dark umwelts, species extinction and literary imagination**

Timo Maran, University of Tartu

The species extinction events are perceived in human culture in different degree from “celebrity extinctions” to “quiet extinctions”. Many species live and disappear outside the reach of human awareness and attention. Such species can be described as having “dark umwelts”, that is, their perceptual worlds and living are largely inaccessible to us.

Umwelts of different species can come into contact by overlap (there is a “similarity base”) or by fitting (there is a feature of a species that becomes a sign for another species). Consequently, we can name dark umwelt such umwelts that “do not have contact to human umwelt through overlap or fitting”. Like dark matter in physics, dark umwelts become evident through the contact with the other living and non-living agencies of the environment.

The problem with most scientific approaches to species extinction is, that they do not evoke human empathy and compassion. Especially in contemporary era of sixth mass extinction, extinction events tend to remain mere statistical counts. Here combining von Uexküll’s umwelt analysis (2010) with tools of semiotic modelling and literary creativity could result in productive and interesting approach (Maran 2020).

Umwelt analysis provides theoretical principles for constructing meaning structure of species umwelt. Semiotic modelling makes it possible to convey animals’ view of the world to human linguistic sign system, whereas literary creativity could result in fiction that evoke empathy and compassion towards vanishing species. Some guidance can be found from fictional works that depict the life of human-animal hybrids from the first person perspective: e.g. Jaan Kaplinski’s trilogy “Lahkujad” (*Leavers*, 2009).

## **Inherited animal: Domestic animals in Livonian wills and probate inventories (14th—16th centuries)**

Anu Mänd, Tallinn University

In legal terms, (domestic) animals in the Middle Ages were treated much like material objects: they were bought and sold, donated and stolen, and also inherited. The aim of this paper is to discuss in which context domestic animals are mentioned in late medieval Livonian wills and probate inventories.

The surviving wills can roughly be divided in two categories: those of the nobility and of the city dwellers. What kind of animals were or were not recorded in the wills? Who else besides the direct heirs were given an animal and why? What kind of ambitions and strategies were hidden behind the animal gifts? How were the animals described or characterised by the testators? What can we detect about local animal breeding on the basis of wills?

Another type of source, closely connected to wills were probate inventories. A probate inventory was a list of movable goods of the deceased, compiled shortly after one's death. However, these inventories do not list all the goods but only the more valuable ones. With regard to domestic animals, these lists include mainly horses and cattle, but no dogs or chicken. Unlike wills, probate inventories have predominantly survived from the urban context, thus offering us a valuable insight into what kind of animals were kept by various social groups. The information that can be gathered from the wills and probate inventories ranges from spiritual to material values, and can tell us a lot about medieval attitudes towards animals.

**Maps and reference points in the Baltic: A study of landscape in  
Henning Mankell's *The Dogs of Riga***

Aratrika Mandal, Somdatta Bhattacharya  
Indian Institute of Technology Kharagpur

The following paper looks at the prospects of the Rigan landscape and its literary representation in the work of the Swedish author, Henning Mankell, titled *The Dogs of Riga* (1992/2001). This novel portrays a case of espionage and gang-war set in Latvia, which detective Kurt Wallander from Sweden leads after two unidentified Yugoslavian men wash up to the Swedish shore. Conventionally, in the sub-genre of police procedural, the detective is required to traverse through the city(s) in order to find the assailant and resolve the case. Mankell's works are mostly set in Sweden, but its close geographical proximity with the Baltic countries is central to facilitating the investigative work in this novel, positing the Swedish detective in Riga, and exposing much of the realities of totalitarianism in the Eastern Bloc. Even though both the assailant and detective map the same *topos*, their engagements with the landscape differ vastly. The underpinnings of the geographical boundaries give rise to an imaginary map for the detective, while the deviant negotiates and alters the spatial elements to suit their need. This leads to a moment of transgression where the known maps are problematised. This paper addresses this incongruity and shows how the collapse of the referentiality of place and maps is caused by the ideological iron-fist, the social and political determination of space and landscape. Finally, this paper will examine how the specifics of the Baltic environment enable the genre of detective fiction to question the bureaucratic and jurisdictional bodies of the Latvian society.

## **Give peas a chance! Environment, animals and vegetarianism in the Beatles' repertoire**

Dario Martinelli, Kaunas University of Technology

Certainly better known for their role in the pacifist movement, The Beatles have been often active in issues of environmental concern, as musicians but also as private citizens. It is probably fair to state that their ecological conscience developed during their mediation period in India, in 1968: the self-titled album released after that journey (known as *The White Album*) had more than one reference to nature, environmental conservation and even animal rights. More hints of environmentalism popped up in The Beatles' songs until the end of their career, but after their split, more definite attention to certain topics became more central in the repertoire and lifestyle of George Harrison and most of all Paul McCartney, who also became a spokesman for the animal rights movement and for environmental awareness in general.

The presentation will focus on the "green" repertoire of The Beatles, as a band and as solo performers, aiming particularly at two goals, within the context of environmental humanities: (a) to increase knowledge on an area in arts and humanities (music, and particularly popular music) that is not often covered in this new discipline; and (b) to bring to attention the values of environmentalism and animal advocacy within the realm of songs of social protest – two themes that, all considered, are underestimated by existing literature (where, basically, only The Smiths' "Meat Is Murder" and very few others are granted the "protest songs" status).

## **Pre-modern Estonian peasants' relationship with the lakes and rivers**

Merili Metsvahi, University of Tartu

In my presentation I am going to introduce folk beliefs that reflect peasants' relationship with the bodies of water in the Middle Ages and Early Modernity. Since my aim is to get closer to the ways Estonian peasants perceived the world, I am not using the concept of 'nature'. Nature as a separate category distinct from humanity has not existed in most societies. Such a dualistic way to conceptualize the world appeared among European intellectuals in the 17th century.

Rivers and lakes reacted to peoples' behaviour. The unacceptable behaviour could influence the environment in such a way that a lake could move from one place to another, or an entirely new lake could come into being. E.g. in 1489 monk Siegbert wrote down a story about the creation of the lake Valgjärv, that appeared in the place where the people were celebrating marriage between the brother and sister.

The ability to punish people was attributed to rivers, as well. When the flow of the holy river Pühajõgi was blocked because the manor owner had ordered to build a dam and a mill on the river in 1642, weather turned terrible after this. For the peasants living along the banks of the Pühajõgi blocking the normal flow of the river and continuous bad weather were undeniably connected. In order to please the river, the peasants organized a revolt and destroyed the watermill. Although these peasants were harshly punished, the final result was beneficial for them and for the environment – a watermill was never built on this river anymore.

In my attempt to discover the ways how Estonian peasants understood their relationship with the environment, I am using the neo-animistic approach.

## **Shifts in the environmental and social context of the Cold War military infrastructures on the coastal areas of Lahemaa National Park**

Ave Paulus, ICOMOS Estonia; Tartu University

Kati Lindström, ICOMOS Estonia; KTH Royal Institute of Technology

Robert Treufeldt, ICOMOS Estonia

Lahemaa coastal environment has undergone drastic changes during the 20th century, both cultural and environmental ruptures. The present paper focuses on the difficult legacy of the traces of the Soviet military activities in the region during the Cold War and after the Estonian Restoration of Independence. In this paper, we will not focus on the exact military contents of the bases but their social and environmental context, which will be analysed from three different aspects: how Lahemaa's military infrastructure around Hara Bay is seen from the point of view of local Estonian-speaking population, those who served or hired in the (semi-)military institutions around Hara Bay (Suurpea naval base, signal units of the navy, air defence units, border troops, Loksa Shipyard) and state institutions of the Estonian SSR and the Estonian Republic, including Lahemaa National Park established in 1971 and environmental surveys of the Estonian Republic after the restoration of independence.

Mutual relations between these three groups and environmental use have been far from uniform through the Soviet period and beyond. There have been serious paradigmatic changes in the 1990s with the restoration of independence and dismantling of Soviet military presence in the Baltics and 21 century when the military heritage came to be re-evaluated as a resource or a site of memory, but even around the 1970s when the everyday relations between the locals and the military personnel had become settled and Lahemaa National Park was established.

## **Encountering presence of de-carbonisation and related b/orderings**

Tarmo Pikner, Tallinn University

The ambitious aims of green transition are reconfiguring perspectives on existing built environments, energy matter and human agency. These dynamics pose diverse questions on durations and trajectories of change bound to urbanisation and environmental legacies. The current paper scrutinises anticipatory politics and entangled b/orderings as complex spatial-temporal assemblage towards climate neutrality. This approach can provide fresh perceptives on landscapes of energy transition by addressing diverse tensions like presence/absence, value/waste, rural/urban. The paper engages with thematic processes in Ida-Viru (North-Eastern) region of Estonia. This region situated next to the EU and Russian border is framed as primary node of post-oil-shale and just transitions on the national and EU scales. On the other hand, the political goals need to be translated into contexts of industrial legacies, of Soviet-era city structures and of ethnic minorities. Therefore, this region can reveal diverse contradictions and potentials in forming spaces of adjustment and of durations entangled to climate crisis. The study will connect discourses of transition and anticipatory politics with vignettes of situated encounters.

## **Baltic climate memory, climate consciousness and climate activism in early modern times CANCELLED**

Ulrike Plath, Tallinn University; Estonian Academy of Sciences

Climate memory and a rising climate consciousness are phenomena typical not only for the 21st century. Looking back into history, we can see a clear rise of interest in climate issues in the 17th century, which is known as the harshest time of the Little Ice Age, the so called Maunder Minimum. Throughout the enlightenment, the question of how to describe and how to deal with changing weather conditions is getting more and more attention.

In this paper I present research made on the Baltic climate database first started by Andres Tarand in the 1970s and amended by Ulrike Plath et al. since 2017. I am going to show the rising interest in climate issues by analysing climate memory, climate consciousness and climate activism as different forms of societal reaction on changing climate. Climate memory is defined as the way how weather extremes were interpreted on a transpersonal scale (harshest winter in the last 50 years). Climate consciousness is defined as the rising interest in measuring weather and adopting everyday life matters according to it. The interest in these questions exploded in the late 17th and 18th century under the influence of the enlightenment. Climate activism is defined as a movement with certain religious elements. The case of the regional mass at the Holy Võhanda is an example for this.

Climate memory, rising climate consciousness and climate activism can be seen as social reactions to changing climate conditions. Looking into history we can compare contemporary 21st century forms of reactions with early modern ones.



## **Estonian environmentalism in the long 20th century CANCELLED**

Ulrike Plath, Tallinn University; Estonian Academy of Sciences

Environmental activism and environmental concerns are a part of different political and ideological beliefs, social practices and discourses. While the history of institutionalised environmentalism (nature protection etc) has been analysed in many part sufficiently, environmentalism as a social movement has not been described so far.

In an ongoing project financed by the Estonian Research Foundation (PRG908, 2020–2024) we are going to analyse the basic premises of Estonian environmentalism as a social movement during the long 20th century. Bringing together scholars from history and art, literature, religion and social studies we strive to emphasise the analytical voice of transdisciplinary environmental humanities in the often emotionalised debates about Estonian environment and put them into ideological, historical and international context.

In the project we are delving into the following topics: 1) typologisation of environmentalism in Estonia throughout the long 20th century, 2) climate history and climate change, 3) environment, religion and identity (forest people), 4) industrial heritage and art, 5) military landscapes and the environment, 6) animal welfare and animal activism.

Delving into these different topics, we are analysing the deeper local, regional and global goals of the movements, their common grounds and different ideologies, and the persons and social groups with their shifting and multiple identities and interests.

# **Same, same but different? The 'right' kind of gardening and the negotiation of neoliberal urban governance in the post-socialist city**

Lilian Pungas, Friedrich Schiller University of Jena

Bianka Plüschke-Altöf, Tallinn University

Our paper analyses the ways in which urban gardening projects relate to neoliberalisation processes in the post-socialist city. Based on fieldwork conducted between 2017 and 2020 including on-site observation and in-depth interviews with gardeners, activists and urban decision-makers in several Estonian cities, it seeks to understand the unequal treatment of community gardens and dacha allotment gardens. Despite equally fostering urban sustainability, dacha gardens are often negatively associated with a (post)socialist 'survival strategies of the poor' while community gardens are embraced for their transformative potential in regards to health, active citizenship, social cohesion, and environmental learning. Taking a neoliberal urban governance approach, we explore the adherence and/or resistance of both gardening projects to post-socialist urban neoliberalisation dynamics on three analytical levels: socio-spatial discourses, spatial materialities and cultivated subjectivities. As a result, the chapter conveys that dacha gardens rather quietly maintain the system, while community gardens contribute to its thriving process, by being visible, actively engaging with and supported by neoliberal urban governance. This preferential treatment, however, comes at a price of higher vulnerability to cooptation attempts and neoliberal control of space, to which dacha gardens have hitherto quietly resisted.

## **Āraiši cultural landscape**

Indra Purs, Latvian Association of Landscape Architects

Mara Urtane, Latvia University of Life Sciences

Āraiši Lake area is recognized as a cultural heritage and protected as a cultural landscape. It is located in Vidzeme, the northeastern part of Latvia and has been included in Gauja National Park since 1965. Its territory displays a rather hilly geomorphology with the lake in its centre, and an abundance of archaeological and cultural heritage sites.

This paper presents a successful research project organized by Amatas municipality and financed by Latvian Culture Foundation. Part of the activities consisted in meeting with local inhabitants who manifest strong belonging to this beautiful landscape and readiness to take part in keeping, developing and creating the landscape in future. The participants characterized their own views about the values of this landscape, pointed out their “special places” and discussed how they would want to live in this landscape. They also expressed a need for cultural landscape maintenance guidelines and local ethical rules. In addition, the project carried out an architectural and visual study of the Āraiši cultural landscape.

The study of the landscape structure was carried out via readings of its spaces and elements, their composition, centres, views, character of materials, colour, texture, light, buildings, vegetation, perception of spaces. Landscape values were described through aspects such as centres, necropolis, time scale, light and darkness, composition of spaces, borders, skyline, mounds and valleys, roads, fields and meadows, trees, lakes or houses. As a result, we recognized 3 important centres in the area. First, an archaeological monument complex with the reconstruction of a medieval palace at the lake and the new information centre (museum). Second, the church with a manor on the opposite coast of the lake. And third, Drabešu manor house with a park on the highest part of the coast. We tested the landscape field survey materials and the identified layers of cultural landscape through digital maps. In addition, we carried out a study on secondary landscape perception through art works starting from 18th century.

The lifestyle of the local inhabitants and the economical and political aspects of the society created landscape in two ways: via active involvement or by leaving the natural processes to take their course. We find both of these ways in the Āraiši landscape. It will be useful to use this as research and education aspect.

## **Sustainability, technology and international institutions**

Florian Rabitz, Kaunas University of Technology

Various technological interventions, such as climate engineering, bioinformatics or synthetic gene drives, might provide significant leverage for managing human impacts on the global environment and environmental impacts on human societies. At the same time, such technologies are likely to have severe side effects, such as transboundary harm or distributional inequities. Based on a research project funded by the Research Council of Lithuania, I develop a broad conceptual framework for assessing the co-evolution of technology and international institutions within the domain of environmental sustainability.

On the one hand, I conceptualize technology as a driver of institutional change, when institutions respond (in often inadequate ways) to novel technological developments in their respective spheres of authority. Typological differences in institutional responses result from the mediating effects of scientific knowledge and interest distributions between states. On the other hand, I understand international institutions as driving technological change, with specific mechanisms, such as institutionalized horizon scans and strict separation between scientific advice and political decision-making, being required for ensuring the safe, responsible and effective development of technology for environmental sustainability. I will use the case of synthetic gene drives for illustrate this theoretical argument in greater depth: here, novel biotechnological interventions in principle allow for high-speed, high-efficiency genetic engineering of entire species, with significant potential consequences for the protection of vulnerable ecosystems, for combatting invasive alien species, for disease vector control and even for reversing evolved antimicrobial resistance. International interest constellations and the politics of scientific knowledge have so far prevented adequate institutional responses to synthetic gene drives in the relevant forums, notably the Convention on Biological Diversity and the World Health Organization, yet institutional options exist which, in principle, would allow for their controlled deployment subject to multilateral oversight and precautionary regulation.

## **Tracing the impact of 1783 Laki eruption in Estonia.**

### **Demographic point of view**

Priit Raudkivi, Tallinn University

The present paper seeks to answer the question whether the 1783 Laki volcano eruption had an impact in Estonia. There are no daily descriptions of gas pollution (dry fog, damaged flora, human health problems etc) because there were no periodicals here. However, if we read a book by Jakob Benjamin Fischer published in 1791, it becomes evident that the eastern shore of the Baltic Sea was not spared. In his general account on the local natural conditions, there are a few pages dedicated to the weird weather the locals had to face in 1783. In Fischer's account we learn of the same weather anomaly as one can find on the pages of Swedish, Dutch and English periodicals: it was hot, foggy and cloudy throughout the summer, flora was damaged, sulphur smell was in the air. But the scholar, student of the famous Carl Linné does not give a hint whether the weather anomaly had any impact on human health.

The only way to find out the possible consequences of the pollution on human health is to follow whether death rates of the year 1783 are in correlation with other countries. Fortunately, we have seasonal death rates of 54 congregations in France and 13 congregations in England. In both cases, seasonal death rates of 1782 and 1784 are given for comparison. Preparing this presentation the same pattern was in use. On the basis of death registers seasonal mortality of 11 Estonian rural parishes was calculated. In many Estonian congregations (but not in every parish) the results correlate with those of France and England. Mortality was high in the summer of 1783 and low in the previous and following years. In some cases (parishes of Otepää and Kambja in the southern part of Estonia) summer death rates are especially high. The only difference is that high mortality is registered in Estonia already in June but in France and England massive deaths are recorded from August. The deviation is difficult to explain because we do not know the causes of death in Estonia. At the same time there is no reason to doubt that the unusual weather conditions (high temperature and gas pollution) triggered physiological stress, which resulted in mortality much higher than normal.

## The old and the new: Curating the Age of Stuffocation

Libby Robin, Curator at Large

Museums face new challenges in our age of ‘stuffocation’ (James Wallman). What do they keep? What do they discard? How do they keep faith with donors who have entrusted precious things with them “in perpetuity”? This paper reflects on the value of Old and New Things and what stories each can tell. Museums are places *where stories come alive*, to pick up the tag-line of the National Museum of Australia. Yet the questions of whose stories are allowed to come alive (and, therefore, whose stories are overlooked) is fundamental to ethical practice. Most would agree that keeping objects of wonder that stimulate curiosity and deep thinking is the job of a museum. But this is not a straightforward task: curiosity and wonder shift rapidly. What is curious or not is shaped by historical context and the age and circumstances of the viewer.

Curating for future generations demands imagining what they will care about and why, in a world that is already rapidly changing. Creative artists are joining museum curators in building new exhibitions about the Anthropocene, drawing on the environmental humanities in its broadest and most inclusive sense. Such exhibitions provide a way to frame a future, through imagined ‘future fossils’ (David Farrier), through play (Nina Möllers) and through opening museums themselves to learning from the participatory responses of visitors of all ages and backgrounds. Such practices can also be used to rethink equity and inclusion in a world of injustice where small stories that matter too often get lost.

## **The weather anomalies of 1815–1818 as reflected in the German-Baltic newspapers**

Dorin-Ioan Rus, University of Graz

This paper shows how climate change and extreme weather events generated by the Tambora volcano explosion in April 1815 were reflected in the German-language papers from Reval and Riga. I analyzed publications such as Dörptsche Zeitung, Rigasche Stadtblätter, Zuschauer, and Rigasche Zeitung. The authors of these press reports were informed about the events in the world by the press in Germany, Russia, Swiss, England, France, Holland, Austria, and Italy.

I analyzed the reports in terms of media studies with the help of the theories of “news value” and “news factor”. In addition, I also analyzed the reports from the perspective of cultural studies, because the selection of the news can be influenced by culture. Furthermore, it is essential, in order to enable subsequent interpretation, to analyze aspects of such reports, or the reports as a whole, from a cultural studies perspective.

For this purpose, some questions were designed, such as:

- \* What does the coverage of the disaster in daily newspapers of Riga and Reval look like in general?
- \* What are the main points of emphasis in the daily newspapers, or on which topics do the newspapers focus?

The length and conception of the individual articles as well as the overall coverage are also considered, as well as the strategies that the daily newspapers pursue. Through the strategies, the characteristics of the genre of the daily newspapers are also revealed and analyzed.

I start from the hypothesis that the reporting on the consequences of the extreme natural phenomena of 1815–1818 was realised in the same way in various German-language newspapers. My aim is to analyze the focus of the daily newspapers in the period from April 1815 to 31 December 1818.

## Looking for ethics of care in the built environment of the transition era

Ingrid Ruudi, Estonian Academy of Arts

The proposed paper looks at the period of transition from Late to post-socialism in Estonia, asking if an increased consideration and care for the community and the surrounding environment may be seen as a characteristic feature of the changing social milieu of the second half of the 1980s, and if and how did this sense of care manifest in the built environment. The theoretical framework is the feminist ethics of care as developed in the works of Nel Noddings and Joan Tronto, and the applicability of their ideas to aspects of architecture and built environment related to consideration of marginalised user groups, social responsibility and community engagement. In contrast to the strong motivations of communality in civic activism for environmental or heritage protection, the mainstream discourse of Estonian transition-era architecture continued to be very focused on authorship and design as an artistic expression. However, some projects by less acknowledged (women) architects testify of the growing sense of social responsibility.

The paper searches for the beginnings of acknowledgement of special needs and disabilities in architectural and spatial context, from the launch of the discussion in a groundbreaking documentary „Ratastoolitants“ (*Wheelchair dance*, Hagi Šein, 1986) to the first accessible projects (Ahtme care home, Maire Annus 1986; Tallinn care home for the blind and deaf, Saima Truupõld, Tõnu Hilep, 1988; Sõmera care home, Elo-Liis Toomik 1992; Tartu boarding school for disabled children, Helmi Sakkov 1993), long before relevant legal norms were introduced with adoption of the European construction regulations. Ethics of care was also considered in advanced designs for maternity wards (Kohtla-Järve, Tiivi Torim 1986) or orphanages (Narva-Jõesuu, Maie Penjam 1990). These subtle advances were mostly overshadowed by a masculinist mainstream architecture culture but nevertheless marked a changing mindset in society.



## **A river within an urban area: On the ground and underground**

Elena Salmina, Archaeological Center of Pskov Region; Laboratory of Socio-humanitarian  
Regionics of Pskov State University  
Sergey Salmin, Pskov Archaeological Center

Among the factors affecting the ecology of urban areas, an important role is played by reservoirs, currently hidden under anthropogenic layers. One of the natural reservoirs of Pskov was the Zrachka River, which flowed in east-westward direction.

In the 14th century, the bed of the Zrachka River was used as the basis for the city moat. Until the end of the 17th century, the moat remained part of the city fortification. At the same time, in of the city trading area, the moat was being littered with waste from handi-craft and commercial use. In the 18th century, the moat deteriorated, it was blocked by dams, which included complex drainage structures. In the second half of the 19th century, the riverbed in its middle part was covered with a "pillow" of raw clay, and in the early 20th century, signs of the river presence disappeared from the daytime surface. However, un-derground the watercourse remained and the closure of the main channel usually led to flooding, which still occurs today.

In the course of archaeological excavations in 2011–14 and 2018, a significant length of Zrachka riverbed was uncovered at two sites. Information about the natural topography of the banks was obtained, artificially leveled in ancient times areas were identified, the role of this river in the composition of the urban layout from the 10th to the 18th century was researched, the drainage system of the 18th dam century was studied.

It is from the riverbed that a number of unusual artifacts associated with different periods of the use of the river came. Among them are boat oars, probably marking the places of the river crossing, and broken wooden shields that served as shutters for the loopholes in the wall of the 14th century.

## **Political space, abjected matter: Living with wildlife in post-Soviet spaces**

Anne Sauka, University of Latvia

In this article, I propose to explore the onto-genealogy of human-wildlife relationship in Latvia, tracing the philosophical background of the discussions on rewilding and the return of wild animals to their past territories. The theorization of non-human-human relationships is here informed by the new materialist and feminist posthumanist discussions in environmental humanities, as well as the approach of environmentally minded phenomenology of Michael Marder. It is an onto-genealogical approach that posits genealogical inquiry in the context of a lived materiality and explores the politics and biopolitics of large predatory animals, and, in particular, bears within their enmeshment with the bio(il)logical lived materialities and ontological presuppositions.

The first part of the article addresses the onto-genealogical embeddedness of bear-human relationships, tracing imagined and real bear encounters. I first explore the “face to face” experience of bears via Julia Kristeva’s concept of ‘abjection’ in terms of material affect theory that allows re-envisioning this concept in a non-essentialist genealogical context as ‘affective abjection’, and then turn to the discussion of spatial human-bear relations in context with the underlying substance ontology in the understanding of human self as radically alienated from the environment. In the second part, the article focuses on bear-human relationship in post-Soviet spaces, in the context of environmentally minded approaches of the policies of the European Union, broader Global Northern contexts and the affectual atmospheres of post-Soviet spaces.

The aim of this article is to facilitate a philosophically informed political discussion as well as a politically informed philosophical discussion of environmental issues and in this sense the task is twofold: first, to explore the onto-genealogical perceptions of bodies and environments, by thinking *with* the poignant example of bear-human relationships, and, second, to examine the political realities within the onto-genealogical context that theorizes the enmeshment of materialities and social constructs.

## **Lightning fatalities in Estonia, 1880–1940**

Mait Sepp, Taavi Pae, Evelyn Uemaa

University of Tartu

It is estimated that up to 24,000 people die and nearly a quarter of a million are injured by lightning strikes worldwide each year. Currently, there is a tendency of steady increase in lightning victims in developing countries, while in developed countries this is a much less probable event. The last lightning fatality in Estonia (by 2020) was in 1998 in an oil shale quarry in North-Eastern Estonia.

The aim of present study is to find out how many people died of lightning strikes in Estonia from 1880 to 1940. Data about lightning victims was mostly searched for in digitalised old newspapers. The journalistic reports were verified with the help of death records available in church registers.

A total of 498 potential victims were reported from various sources. Of these, 350 deaths were considered reliable. This means that during the observed 61 years, an average of 5.2 people per year died in the Estonian region. As the number of fatalities may be underestimated, the actual number of victims could have been 7–8 per million inhabitants. The annual average number of fatalities remained practically unchanged during the period, but the share of women and deaths in buildings decreased to some degree. These changes can to some extent be explained by some of the economic and cultural changes that took place during the period under review. For example, by changes in residential construction practices. The sex and age structure of the victims corresponds well with the respective divisions of an agrarian society. The correlation analysis showed that the relationship between the number of lightning victims and the number of people living in the parish is high, as is the relationship with the area of the parish. However, the correlation with population density and land use is virtually non-existent.

**The country, the city and the weather:  
Jaan Kaplinski's seasonal and ephemeral landscapes**

Ene-Reet Soovik, University of Tartu

One of the most comprehensive frameworks for approaching literary cities in the framework of literary urban studies has been suggested by Hana Wirth-Nesher (2008) who starts her account by highlighting the city's natural aspect that comprises both elements in the material environment as well as a meteorological dimension. The presentation will observe the perceptions of urban nature embedded in the Estonian author Jaan Kaplinski's (1941-2021) autobiographical novel *The Same River* (2007) and discuss the related awareness of the passing of the seasons (also in connection with the habitual relocation to the countryside in summer). The focus is on the weather, phenological observations, and seasonal practices of the people inhabiting the landscapes in "a region of highly marked seasonality" (Jones 2007).

The novel is seen as having affinity with the literary genre that Ashton Nichols traces back to Henry David Thoreau's *Walden* (1854) and that, according to him, may display the features of the journal, the diary, a naturalist's field book, the philosophical essay (or even an account book) and is structured around an informed observer's notes on the seasonal changes in the nature of a particular region. The choice of the spaces evoked in the novel has been dictated by the work's documentary, referential dimension, while their representations have been created using the filter of the viewpoint character's immediate sensory perceptions and consciousness, combining the seasonal element with features of ephemeral nature, to employ the terms suggested by Michael Jones. At the same time, the seasonal changes and weather phenomena transcend the immediate situations as well as the repressively closed, circumscribed locations of mid-20th-century Estonia. The presentation seeks to find out how these elements contribute to the work that has been characterised by the author and critic Jan Kaus as simultaneously seeking refuge in the intimate and reaching out for the universal.

## **Current state of waterbodies and surrounding vegetation as reflected in surface lake and pond sediments in Latvia**

Normunds Stivrins, University of Latvia; Tallinn University of Technology

Liva Trasune, University of Latvia; University of Helsinki

Laimdota Kalnina, Agrita Briede, Jurijs Ješkins, Nauris Jasiunas, Dace Steinberga, Aleks

Maksims, Zigmars Rendenieks

University of Latvia

Climate and anthropogenic activity are two of the most significant factors affecting freshwater lakes and ponds in the Northern Hemisphere. Biotic processes are changing both in the aquatic and the terrestrial ecosystems through the human-induced activities (e.g., eutrophication, sewage, soil erosion, fertilization, agriculture, forest clear cuts). From the point of view of the sedimentary environment, waterbodies trap information on aquatic and terrestrial landscape processes. Sediment accumulated in the first few cm at waterbodies represent recent (last 5–30 years) or present status of the landscape and aquatic ecosystems. A key requirement of understanding past environmental dynamics is to successfully link the fossil record to the distributions, tolerances, and associations of living organisms in modern-day ecosystems. Knowledge on past vegetation and environmental conditions are frequently used to validate variety of climate and human-impact-related future projections. To fulfil the knowledge gap on current state situation, 78 lake and pond surface sediment samples are now taken evenly covering the whole territory of Latvia including gradients – oceanic–continental, lowland–upland, rural–urban, open–closed landscape. In course of microscopic analyses, not only pollen and non-pollen palynomorphs (algae, fungal spores) are analysed, but also waterbody, sediment, and landscape characteristics. Our results reveal substantial differences between waterbodies located in the urban and rural areas with higher eutrophication in the first ones reflecting anthropogenic pressure on aquatic ecosystems. Higher vegetation biodiversity is in rural areas with human impact as reflected by the results of pollen analysis.

## **Nuclear Fiction within Nuclear Knowledge Management: Towards Energy Literacy**

Inna Sukhenko, University of Helsinki; University of Jyväskylä

While being on the edge of science and humanities, energy humanities reshape the geopolitical and ecological factors of the energy policy at various levels as well as develop new dimensions of energy-related phenomena and methodological tools to map the energetic history of the humanity and predict the future energetic scenarios. Being studied within interdisciplinary perspectives, it is *nuclear fiction* that is regarded as a response to the political, ecological and technological agendas of the Nuclear Anthropocene (Carpenter, 2016).

My presentation, focused on the literary dimensions of 'nuclear energy' figurations in the contemporary nuclear fiction (on the example of the writing practices from the late Cold War till nowadays) demonstrates that 'fabulously textual' (Derrida, 1984) component of 'the nuclear' discourse went under transformations by shifting its references from the past (the Cold War atomic bomb literature) and from the future (the apocalyptic fiction) implications to the present one, emphasizing 'nuclear energy' in the context of sustainable development (nuclear policy, technology production, energy transition, nuclear explosions, uranium mines, nuclear waste management etc). Under such circumstances nuclear fiction can be regarded as a component of nuclear knowledge management (IAEA, 2020), in the aspect of its role in shaping nuclear awareness – a critical thinking about the possible benefits, risks and challenges of nuclear energy and contributes to a critical perception of nuclear energy issues – as a component of energy literacy.

On the example of nuclear fiction of the post-Chernobyl age – in particular: K. Hesse's *Phoenix Rising* (1994), A. White's *Radiant Girl* (2008), J. Reich's *Bombshell* (2013), A. Blackmann's *The Blackbird Girls* (2020) – my paper intends to demonstrate how through the 'fictional/factual' balance of nuclear fiction can be not only a tool of nuclear knowledge management, but also a part of reflective discourse in the context of developing critical societal assessment skills on nuclear energy-related issues. The focus on literary figurations of nuclear energy is based on a rising interest in framing 'literary energy narrative' (Goodbody, 2018) within energy humanities' agenda (Szeman, Boyer, 2014). Such perspective can providing a narrative toolkit of 'energy storytelling' in terms of implementing critical thinking skills towards nuclear narratives. Also in my submission the multidisciplinary approach to the literary analysis is based on contemporary academia's expertise in energy history (Smil, 2017), critique of en-

ergy (Bellami, 2018) and econarratology (Erin, 2015) together with nuclear criticism studies (Cordle, 2017), and ecocritical studies (material ecocriticism, Oppermann, 2018; dark ecology, Morton, 2016), which overwhelmingly create the methodological platform for studying the tools of narrating the nuclear within nuclear knowledge management nowadays.

## **Conflicts of values and ecological solidarity:**

### **The case of Kemer National Park**

Artis Svece, Anita Zarina

University of Latvia

The concept of ecological solidarity has been introduced in the debate on nature conservation relatively recently. Originally used to describe certain principles of national park management in France, the concept has been applied by Raphaël Mathevet and others to characterize the interdependence of organisms coexisting at a given time and place and to emphasize not just human belonging to this network of interconnections but its social nature. It seems to us this concept helps to address certain conflicts of values that can be observed in case of a variety of ecological issues like flood mitigation, biodiversity conservation, multi-functionality of protected areas, or rewilding projects. Hopefully, the reflection on ecological solidarity could provide some prospect for mitigation of these conflicts.

In our paper we will characterize the basic framework for the application of the concept of ecological solidarity to the analysis of ecological issues and conflicts of values involved. Our take on conflicts of values is based less on ethical evaluation or critical analysis of different value judgements but rather on the interpretation of competing discourses that are used in the articulation of ecological issues. In the paper, we will demonstrate how this framework can be applied to a particular case, namely, the debates surrounding Kemer National Park. It is an important eco-tourism and recreational hotspot in Latvia but also a topic of debates about practices and aims of nature conservation, as well as the potential of creating a nature-compatible society there.



## **Sea bear, storm flood, tsunami –**

### **The impact and perception of a historical Baltic Sea flood event in 1497**

Laura Tack, University of Greifswald

Storm floods are well-researched in the North Sea area – but what about the Baltic Sea? Upon closer inspection, the Baltic coasts, especially in the South, have also had their share of storms, waves and floods. My envisioned PhD project investigates historic floods in the area, including the Danish, German and Polish coast, from the 14th to the 19th century. The questions of where and how these are mentioned in the sources, as well as how the narratives about these catastrophes change over time, I aim to answer.

Since the region knows no tides, the floods have to have other causes, while at the same time – unlike the North Sea – the area is unfamiliar with regular flooding. Therefore, the events made their mark on collective memory. This becomes visible through the sources, which range from chronicles and sermons to reports by eye witnesses. How the catastrophes were perceived can also be seen through novels, poems and legends from the Baltic Sea region, which cover the topic of storm floods. Interpretation heavily relied on the religious aspect, and reactions were therefore tied to belief: Acts of repentance – in the example chosen for the presentation, processions – showed the wish to avoid a repetition of what was believed to be a divine punishment.

Even though the term suggests that all these events were caused by wind, in the case of the 1497 flood, which affected mainly the present-day Polish coast, research points towards a wave resembling a tsunami as the actual cause. This phenomenon, due to the roaring sound it caused, became known as a “sea bear”. In my contribution to the conference I would like to present this incident as a case study from my research and give insight into the corresponding sources as well as into the present-day relevance of the topic.

## **The travel and weather map of a political refugee from the Baltics from the early 20th century**

Elle-Mari Talivee, Marin Jänes

Under and Tuglas Literature Centre of the Estonian Academy of Sciences; Tallinn University

Autobiographical texts, diaries and correspondence are intriguing sources for researching environmental history. In 1906, a young Estonian writer Friedebert Tuglas became a political refugee, officially returning to Estonia only in 1917, after the February Revolution, although he visited his homeland every year having various false passports.

In the 1930s, when he began to write his memoirs, Tuglas first sketched out his autobiographical notes, in which one of the frequent keywords is weather (storm, rain, drought, etc.). Another immediately intriguing question in the travel notes is transport and its history: by what means of transport and how fast did people travel at the time? Tuglas's collections include maps and travel tickets, which he must have also used when he wrote the memoirs and had to remind something to himself. He had a keen eye for spotting changes in landscapes. For example, he has sketched the characteristic features of the Ruhr industrial area from a train window, or a chilly evening in the Italian Alps while wandering on foot. Travelling light made him climate-dependent but fast train connections enabled to travel from winter to spring in just a few days.

By adding memoirs and a few other shorter autobiographical texts written at different times to these notes, the result is a map of the young man's long journeys in continental Europe, reflecting, among other things, his impressions of the (often very extreme) weather he experienced here and there. The map also reflects the state of transport history in the early 20th century. The focus of his wanderings was still the Baltics: visiting secretly home or travelling through it on the way from Central Europe to Finland.

We would like to submit a virtual poster presentation to the conference. Technical solution is still under consideration but will probably be carried out as a kind of virtual exhibition. The multimedia poster presentation will give an overview of the young refugee's map of Europe and shows what the writer experienced during his travels – from modes of transport to the vagaries of the weather. The poster presentation is illustrated with materials from the Under and Tuglas Literature Centre's photo collection.

## ***Nihil sub sole novum?* Some thoughts about similarities between human response to COVID-19 and human response to malaria**

Dan Tamir, University of Zurich

At first glance, it seems that COVID-19 and malaria are as far away and remote as epidemics can be: the former was caused by a pathogen brand new to humans, which broke into our lives less than 2 years ago; the latter has been accompanying humanity for eons. But leaving aside the biological differences between the pathogens causing these diseases, there are several similarities in the way modern human societies cope with them. This paper presents and discusses three of these similarities, and finally contemplates their meaning to human coping with transmitted diseases.

The first similarity is the tension between two human strategies of coping with the diseases: learning to live with them on the long-term, as opposed to attempting to stop them totally. Malaria has seen an old debate between those trying to control its spread to those who try to eradicate it altogether; COVID-19 caused vociferous clashes between those aiming at reaching gradual herd immunity, and those calling for stopping exposure until a vaccination is developed. A second similarity is the clear gap between rich and poor unveiled by these diseases and human coping with them, as both diseases had and have different and even contradicting impacts on different social and economic strata. A third similarity is the use of a combination of highly innovative techno-biological methods – vaccines with COVID-19 and – among other things – genetically modified mosquitoes in malaria, side by side with old and even ancient methods to keep the disease at bay: for instance, quarantines with COVID and draining of standing water with malaria.

This paper's concluding methodological argument is that understanding similarities in these diseases' pathogen-society-environment nexus may teach us very little about the diseases. It may, however, teach us quite a few things about human societies, and their attitude to their environments and their recurring, systematic response to widespread, transmitted diseases.

## **Eco-nationalism? Artistic manifestations of environmental concerns in national protests**

Kadri Tüür, Tallinn University

In the presentation, I will focus on Estonian protests of 1988 and Belorussian protests of 2020. By looking for the environmental aspects in the artistic expressions (both texts and images) of those protests, my aim is to find out, to which degree the struggle for independence contains environmental concerns.

Ramachandra Guha has pointed out in his seminal book *Environmentalism: A Global History* that a turn to environmental consciousness is often related to social justice, or more precisely to the lack of it. In Estonia, the „singing revolution“ of 1988 was triggered, among other processes, by a plan from the central government in Moscow to establish extensive phosphorite mines in North-Eastern Estonia. The protests, initially aimed against degradation of nature, led to national awakening and to the claims of restoring the independence of Estonian Republic. The patriotic songs sung during these events contain concerns about Estonian nature. When a closer look is taken, it becomes evident that the lyrics heavily rely on romantic imagery and evoke pastoral sentiment rather than project the looming local ecological collapse onto a global background.

In Belorussian protests, environmental topics are present perhaps less directly, but they are no less grave than were the dangers of mining in Estonia 30 years ago. I will take a look at two protest songs that address the misuse of natural resources, as well as a photo project *Сухой протест* by an artist who comments on the lack of democracy by staging scenes where the missing of water forms an ironical comment to the main character, a girl in spotted swimsuit.

Performance-like actions, such as protests against a new factory in the form of public pigeon feeding or a folklore-based „pumpkin walk“ can also be considered as engaging environmental themes into the general struggle for freedom. Last but not least, the trees felled because of the national flags attached to them, are to be commemorated.

## **Developing environmental responsibility to students of technical university at classes of foreign language**

Iuliia Valentinovna Goman, St. Petersburg Mining University

Environmental accountability is gaining more significance in today's world; it is demonstrated by citizens who care about the environment, being aware of the problem or mitigating relevant actions. The issue of environmental accountability is connected with attitude to other generations, which will follow yours. The concept of environmental accountability is closely connected with environmental citizenship. Hence, it is necessary to demonstrate the importance of environmental accountability to young people and teach them to become environmental citizens of our planet.

The aim of research is to question the effectiveness of ways to teach environmental accountability to would-be engineers. We mean engineers of different specializations such as engineers in oil and gas, construction, mining.

Methods of research include study of best practices, environmental cases, discussion of actors' positions, justification of decisions made. By best practices we mean study of green economy foundations which have developed in Scandinavian countries since the 60s of the 20th century.

The outcomes are a set of criteria to assess environmental awareness of risks in a profession such as ability to identify negative factors of the project, compare attitudes of different countries based on the accepted approaches.

## **Weather forecast and observations in the St. Peterburgischer Calender in the 1780s**

Kaarel Vanamölder, Tallinn University

Krister Kruusmaa, École Nationale des Chartes (Paris)

In our presentation we focus on a particular case-study – the Early Modern annual almanac published in St. Petersburg by the The Imperial Academy of Sciences and Arts. As it was quite common for almanacs of this period, it contained, among other information, weather forecast for the whole upcoming year. By analyzing the weather predictions of a specific time frame (1780-1790), we try to describe the concept of “ideal weather”, as it was seen by the authors at the Academy of Sciences.

The issues of the same almanac were used in the Palmse manor in Northern Estonia as a handy notebook for many years - the empty pages of the almanacs were filled with regular notes on the actual current weather conditions. Thus this valuable and well-known source for historical climatology – the so-called Palmse Diary – was created.

The fact of having two parallel approaches to climate (predictions and actual observations) in the very same source is fascinating, but has been ignored until now. In our presentation we try to look into these two connected and competing facets of how weather was understood. What can the predictions tell us about the observations and *vice versa*?

## **Towards a sustainable plant-based diet: Rethinking the practice of animal consumption**

Jonė Vitkauskaitė-Ramanauskienė, Kaunas University of Technology

Consumption of animal products plays a vital role in sustainability. It shares a big part of the responsibility in environmental degradation, it is related to various non-communicable diseases and is directly linked to the suffering of animals. Therefore, the adoption of a plant-based diet has been identified as one of the most effective strategies for a sustainable diet. However, despite the sustainability promise of a plant-based diet, the consumption of animals is on the rise. Scholars working in the field identified various individual factors hindering the reduction of animal products in one's diet - taste, convenience, lack of knowledge, denial, scepticism and habits.

Meanwhile, this inquiry acknowledges the importance of individual actors by also emphasising the socially embedded nature of much food-related behaviour. By employing this perspective, it seeks to resolve the puzzle of why people continue eating animals, despite its adverse effects. It looks at the practice of animal consumption through the lens of symbolic interactionism. Representatives of symbolic interactionism tend to ask “how?” instead of “why?”. Therefore, the first concretised research question is “how is the practice of animal consumption maintained?”. It is argued that through interpersonal communication, consumption of animal products acquires and maintains its positive symbolic meaning as well as renders itself socially endorsed. Meanwhile, the opposite process is happening with a plant-based diet – it holds negative symbolic meaning and is socially sanctioned. The inquiry suggests that in order to reduce the consumption of animal products, three changes need to happen. First, the dichotomy between symbolic meanings of both eating patterns needs to change. Second, appropriate symbolic meanings regarding the environment and animal welfare need to be created for both eating patterns. Third, a plant-based diet should acquire the symbolic status of a socially acceptable eating pattern. It moves on to discuss tools to achieve these outcomes. By doing so, it addresses the second research question – “how to give up the practice of animal consumption?”.

## **Bioregion in the field of literary research: The ecology of place**

Indrė Žakevičienė, Vytautas Magnus University

The aim of the paper is to ponder upon the concept of bioregion and its validity in literary research and at the same time to emphasize the importance of the functions of geographical space in fiction. Can the place be inscribed in the work of literature and gain new values, provoking the readers to rethink its importance and become more attentive to the environment in general? What is bioregion for ordinary Lithuanian – his yard, his city or native village? It is not so difficult for small literatures to find the answers.

Contemporary Lithuanian literature has been characterised as rather static having in mind the plot, but during the last two decades the geography of spaces inscribed notably widened; particular liminal spaces became more important than geographical ones, thus making the reader reshape his/her own concept of bioregion and look at the place differently – more philosophically, with more responsibility and care. Literary maps, suggested by Barbara Piatti, could clarify the problem of so called spatial ecology and explain the functions of particular places inscribed in the texts of fiction, at the same time expanding the net of associations of the reader and making the reader more friendly to his/her environment or more attentive to his/her bioregion. Such assumptions could be supplemented with the results of two quite different Lithuanian research projects, related to literary and geographical places (<https://www.atmintiesvietos.lt/>; <http://www.vilniusliterature.flf.vu.lt/>); one of them is not completed yet, but both projects reveal two different attitudes towards space, which can turn into a place or bioregion. Other illustrations used in the paper – Lithuanian literary texts of different periods (the first part of the 20th century, Soviet period and the beginning of the 21st century).



## **Spaces of post-nature: Reterritorialization of wetlands**

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Modernist transformations of nature, which took place mainly in the Soviet era in Latvia, has left us a very complicated environmental heritage: thousands of hectares of reclaimed lands, taken from the rivers and lakes, drained and often converted into polders (which functioned as highly technical and industrial agro-units), with no possibilities of reverting to the untouched natural state there. Nevertheless, these wetlands with their multifaceted environments have become the spaces of interest for nature conservation and the key spaces for post-nature developments. Mostly, it is because of their intrinsic location close to or within the limits of nature parks or other protected areas, and therefore their linked ecologies. But also because of the possibility to experiment and produce natures (or post-natural entities) that cannot be possibly assigned to either nature or society. For example, the tamed wilderness landscapes in drained wetlands with Konic polski and heck cattle. However, such actions of restored or reinvented nature usually fall within the two directions of thought in the Anthropocene, be that the “dream of mastery” or the “dream of naturalism”, as Paul Wapner puts it, and preserve the Nature-Society binary.

Our paper focuses on thought, politics and action that underlie the reterritorialization of drained wetlands by nature conservation in Latvia. Of interest here are various discourses that surround these actions and reveal the controversies between Nature as domain untouched by Society and rational environmental management. We argue that transformed wetlands is a remarkable example of hybrid natures that has a potential to overcome the Nature-Society divide and catalyse modes of “stewardship” based on nature that is always intertwined with humans.

**Towards the sustainable forestry in interwar Lithuania:  
The power of paradigm, the reason of compromise and  
the significance of commitment**

Loreta Zydeliene

The purpose of this presentation is to share the research findings about the history of Lithuanian forest: the impact of the forestry practices on the conditions of forest during interwar period viewed within the framework of the sustainable forestry.

Assessment of interwar forestry has always been a contested issue. Soviet authors accused the interwar foresters of devastating forest practices, while post-Soviet scholars moderately praised them for building the foundations of a national forest science. Historical evidence suggest that the interwar forest administration did both: cut timber to supply forest dependent economy with its major raw material, and it also applied a wide range of science-based silvicultural methods to mitigate the impact.

My research shows that forest resilience was substantially weakened by the high frequency of anthropogenic disturbances, consistent with a forest dependent economy and culture, which was evident in the failing natural regeneration and the decline of biodiversity. However, it also strongly suggests that specifically targeted mitigating measures, when considered within the framework of forest ecology and sustainable forestry, very likely, were able to improve forest resilience. The implementation of these measures was also gradually building a framework for and commitment to sustainable forestry practices, which suggests that forest transition was taking place.

What is the significance of this? A distinctive feature of Lithuania's forest transition was that it correlated less with economic growth or technological transformation, as proposed by the forest transition theory and the Environmental Kuznets Curve, and more with the consistent growth of the quality of institutions, education, and the engagement of civic society. The improved economic conditions accelerated the forest transition, but it did not set it off. By that time, sustainable forestry principles were already embedded in forestry's concepts and objectives. The case of Lithuanian forestry highlights the relevance of social capital theory and necessity to pay more attention to the role played by social and political institutions in forest transition theory.