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Synchronizing Spatiotemporal Modalities in Fictionalizing Nuclear Energy: Literary Imaginaries of Solastalgia in U.S. Nuclear Fiction

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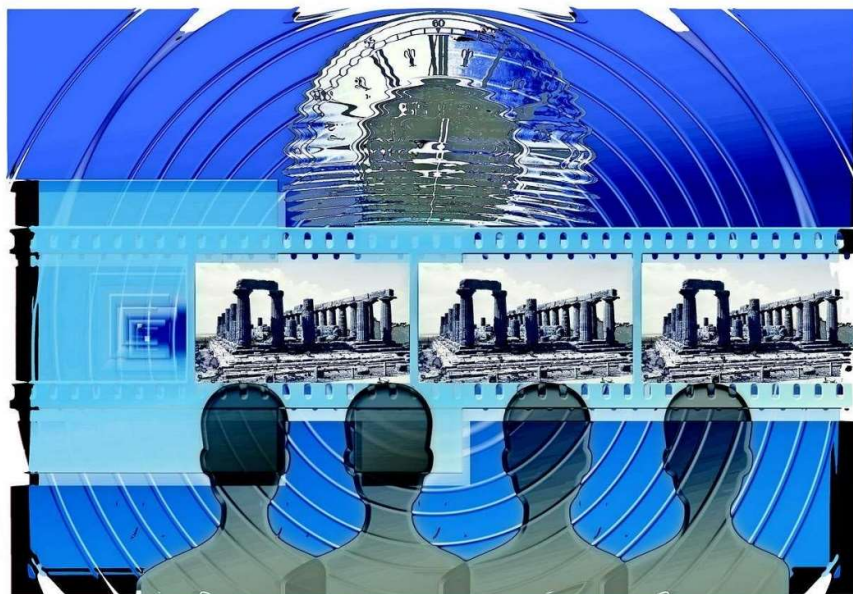
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PROGRAM AND BOOK OF ABSTRACTS

The concluding international conference of the LIFETIMES project

9-11 August 2023

Sophus Bugge hus, University of Oslo



WEDNESDAY 9 AUGUST

9.00	Coffee and Registration			
9.45	Welcome by Helge Jordheim, Lifetimes Project Lead Auditorium 1			
10.15	Break			
10.30	Parallel session 1			
	<i>Lifetimes Roundtable</i> Auditorium 1	<i>Seasonality</i> Room 2	<i>Contesting Colonial Times</i> Room 3	<i>Biology, Wildness, and Civilization</i> Room 4
	Helge Jordheim Brita Brenna Leonoor Zuiderveen Borgesius	Scott Bremer: "Practicing the Beekeeping Season in Western Norway"	Sanskriti Chattopadhyay: "Exploring Subaltern Time: Constructing the Decolonial" (online)	Ciro Miguel: "The Trees at the Brasília Palace Hotel"
	Stine Alling Jacobsen Einar Wigen Alp Eren Topal Moderated by Emil Flatø	Laura op de Beke: "Dark Seasonality in Gaming Rhythms"	Srideep Mukherjee: "Revisiting Political Temporality through Vernacular Theatre in India" (online)	Henrik Sinding-Larsen: "Sustainability and Life's Mysterious Synthesis of Linear and Cyclic Time"
		Wanxian Zhang: "The [Uncertain] Four Seasons" (online)	Arash Dehghani: "Photographic Temporality: Crafting the Meta-Narrative of Petroleum Landscape" (online)	Lisette Jong: "Diffracting Colonial Temporalities: Non-Human Primate Bodies and the Science of Human Evolution"

		Chair: Laura op de Beke	Chair: Heather McKnight	Chair: Michelle Bastian
12.00	Lunch			
13.00	Parallel session 2			
	<i>Generating Sustainable Futures</i> Room 2	<i>Care Temporalities</i> Room 3	<i>Disaster Time</i> Room 4	<i>Scientific Temporalities Past and Present (1)</i> Room 5
	Salvatore Paolo De Rosa: "Pollution and Climate Breakdown: A personal journey in time, space and struggle"	Halvor Hanisch: "Temporalities of Care"	Inna Sukhenko: "Synchronizing Spatiotemporal Modalities in Fictionalizing Nuclear Energy: Literary Imaginaries of Solastalgia in U.S. Nuclear Fiction" (online)	Julia Nordblad: "Biodiversity and the Temporalities of Planetarity"
	Gregers Andersen: "Green Visions: Fictional and Commercial Fantasies of Sustainable Futures"	Ada Arendt: "Temporalities of Care"	Nabanita Samanta: "Re/con/figuring 'Disaster' as Temporal (Dis)order: Crisis, Chronopolitics, and Agential Assemblages" (online)	Marit Ruge Bjarke: "Alien Species Futures"
	Heather McKnight: "From the Micro-Utopian to the Nano-Utopian – Chaos and Hope in Activist Self-Organisation" (online)	Giulia Carabelli & Dawn Lyon: "The time and Rhythms of Plant Care: New Trajectories" (online)	Yunjeong Joo: "Living with Slow Disaster: Concept and Practice"	Staffan Bergwik: "Scientometrics as a Time-Binding Technique: The history and growth of science in the 1950s and 1960s"
		Janike Kampevoll Larsen: "A Matter of Time: Empetrum Nigrum vs Indigenous Landscape Practices in a Warming Arctic"	Jill Stauffer: "Beginning and Ending: Law, Territory, and the Possible End Times of Settler Colonialism"	

	Chair: Trym Rødvik	Chair: Ingrid Eskild	Chair: Helge Jordheim	Chair: Staffan Bergwik
14.30	Break			
14.45	Parallel session 3			
	<i>Digesting Times: Exploring the Temporalities of Food</i> Room 2	<i>Time and Performance</i> Room 3	<i>Scientific Temporalities Past and Present (2)</i> Room 4	
	Workshop hosted by Linda Lapina and Kristine Samson	Anne Klara Bom: "Time and Timeliness in Framings of The High School Song Book" (online)	Emma Hagström Molin: "The Multiple Timescales and Origins of Nineteenth-Century Archives"	
		Janne-Camilla Lyster: "Resuscitating Temporalities from Timeless Storage"	Erik Isberg: "Oceanic Timemaking: Scientific Temporalities and Deep Sea Core Drilling During the International Decade of Ocean Exploration (1971-1980)"	
		Sarah Bro Trasmundi: "Reading, Breaks and Living Pauses"	Adam Wickberg: "Temporal Environing Media: the Case of the International Geophysical Year 1957-58"	
			Kristin Asdal: "The Little Tools: of Timing: Co-Modifying Nature-Times with the Times of Politics"	
	Chair: Nalan Azak	Chair: Staffan Bergwik		
16.15	Break			
16.30	Keynote by Mark Rifkin "Temporality, Coloniality, Indigeneity" Auditorium 1			
17.30-	Reception: Drinks and canapés			
18.30	HF-12 (Niels Treschows hus, 12 th floor)			

THURSDAY 10 AUGUST

9.00	Keynote by Laura Watts “MoonFlyer: A Solarpunk Choose Your Own Energy Future Adventure” Auditorium 1		
10.00	Break		
10.15	Parallel session 4		
	<i>Living Geological Time</i> Room 2	<i>Blursdays, Busyness, Boredom</i> Room 3	<i>Strange Attunements</i> Room 4
	Leander Diener: “Deep Future Decisions: Geological Time in Alpine Settlement Planning”	Christian Parreno: “Boredom as Time, Space and Modern History”	Hugo Reinert: “My Friend, the Nodule: Some Notes on the Deep Time(s) of seabed mining”
	Sophia Roosht: “The Zebra Finch in Alice’s Restaurant: Ediacaran Paleontology & Dreamtimes in the Flinders Ranges, South Australia”	Clare Holdsworth: “The Social Life of Busyness and Relational Temporalities”	Małgorzata Zofia Kowalska: “Stonewort stories for the polyrhythmic world”
	Lachlan Summers: “Touched by Deep Time: The Ungrounding Earth of Mexico City”	Lauren Erdreich and Deborah Golden: “The Time of Intimacy – Parenting, Class and Family Life”	Anna-Katharina Laboissière: “Fallow Soils and Exhausted Attunements”
		Rachel Loewen Walker: “Covid Time: The Blursday Effect and the Stories we tell about Coming Back from a Global Pandemic”	Laura McLaughlan: “Intergenerational Atunements: Embodied Remnants of Relations-Past in Openings and Closing between Kinds”
	Chair: Emil Flatø	Chair: Sabiha Huq	Chair: Brita Brenna
12.00	Lunch		

13.00	Parallel session 5			
<p><i>Speculative Worlds</i> Room 2</p> <p>A creative writing workshop hosted by Laura Watts</p> <p>This workshop lasts until 16:45.</p>	<p><i>Temporalities of Urban Natures (1)</i> Room 3</p>	<p><i>Epidemic Temporalities</i> Room 4</p>	<p><i>Time in Natural Histories</i> Room 5</p>	
	<p>Mathilda Rosengren: “Temporalities of an Urban Commons: bird-times, waste-times, and in-between-times at Spillepengen in Malmö, Sweden”</p>	<p>Hanne Amanda Trangerud: “Making Sense of the Pandemic: The Passover Prophecies and the Glorious Future”</p>	<p>Ingar Stene: “Morals and Temporalities in Early Modern Geology”</p>	
	<p>Elena Ferrari: “Making time for street gardens (soil) care”</p>	<p>Tony Joakim Ananiassen Sandset: “The Multiple Temporalities of HIV in Global Health: From Fatal to Chronic and from Crisis to the End of AIDS”</p>	<p>Roos Hopman: “Thinking Speed with Snails: Digitization, Data, and Loss in the Natural History Museum”</p>	
	<p>Henriette Steiner: “How Architecture Comes into Being: The Hybrid Collaborations that Shape Our World” (online)</p>	<p>Wenjia Zhou: “Temporality and Emotions in Chinese Women’s Engagement with HPV Vaccinations” (online)</p>	<p>Erik Ljungberg: “Writing Down Nature’s Rhythms: Gilbert White and the Naturalist’s Journal”</p>	
	<p>Jan van Duppen: “Half an hour can feel like an afternoon: Conflicting and intersecting temporalities at a community garden in Berlin”</p>	<p>Ahmed Ragab: “Plague Time: Epidemics, Memory, and Clinical Culture in the Medieval Islamic World”</p>	<p>Elisa Storelli: “A Parachronology of Atoms and Stars”</p>	
	<p>Chair: Michelle Bastian</p>	<p>Chair: Einar Wigen</p>	<p>Chair: Leo Borgesius</p>	
14.30	Break			
14.45	Parallel session 6			
	<p><i>Historiographies of Time</i> Room 2</p>	<p><i>Whale Extinctions</i> Room 3</p>	<p><i>Temporalities of Urban Natures (2)</i></p>	

			Room 4
	Hilbrand Wouters: “The Beginning of a Helix: Deep Time Narratives in Alfred Crosby’s Environmental Histories”	Espen Ytreberg: “The Moment, Eternity and Time Running Out: Vernacular Photography from Norwegian 20th Century Industrial Whaling”	Johanna Just: “Drawing a vital milieu: an approach towards representing more-than-human relations”
	Jacob Tom: “Twentieth-Century Temporality: Positioning Moderation in Opposition to the Idea of Progress”	Sonia Åman: “Back from the Brink: International Whaling Commission and the Revitalisation of the Gray Whale”	Chero Eliassi: “‘A Culture of Place’ in Swedish Allotments: Gardens as Therapy and Threat in Holma, Malmö”
	Nitzan Lebovic: “The Time of Complicity”	Sadie Hale: “Haunted by Extinctions: The Temporal Dimensions of Contemporary Whale Tourism in São Miguel, Azores” (online)	Linda Lapina: “The dirtier, the better? Temporalities of regenerative agriculture at a farmer’s market in Copenhagen”
	Mauro J. Caraccioli: “Natural History as Political Thought: Chronologies of Crisis and the Politics of Planetary Time”	Kristin Asdal: “Assembling-Time, Document-Procedures and the 19 th Century’s Extinction Rebellion”	
	Chair: Einar Wigen	Chair: Michelle Bastian	Chair: Kristine Samson
16.15	Break		
16.45	Keynote panel with Liisa-Rávná Finbog and Mark Rifkin: “Indigenous Temporal Sovereignty and the Truth and Reconciliation Process in Norway” Auditorium 1 Moderated by Helge Jordheim		
19.00	Pizza night at Peloton Skøyen		

FRIDAY 11 AUGUST

9.00	Helge Jordheim and Michelle Bastian: Journal of Time and Society editors' talk - Auditorium 1		Isabella Martin: "My Body is a Clock: visualising Internal Temporalities" Artistic program item Room 2	
9.45	Break			
10.00	Parallel session 7			
	<i>Temporal Landscapes</i> Room 2	<i>Life Cycles and Death Cycles</i> Room 3	<i>Medieval Temporalities</i> Room 4	<i>Philosophies of Time</i> Room 5
	Hanna Kristine Lunde: "The Legendary Timespace of Selja: Interpretations of the Sunniva Legend as Multi-Temporal Narrations"	Ana Maria Delgado: "Living: Microbial Materials and Future- Makings"	Eivor A. Oftestad: "Integration of Christian and Rural Temporalities"	Johanna Sjøstedt: "Submission title Augenblick and Revolution: Temporal Openings, Gender, and Change in the Philosophy of Simone de Beauvoir"
	Julia Marinaccio: "The Politics of Time: How Time- Consciousness Has Informed Environmental Policymaking in the History of the People's Republic of China"	Camelia Dewan, Elisabeth Schober and Johanna Markkula: "Perilous Life Cycles: Studying the Transformations of Ships as both Theory and Method" (hybrid)	Kristin B. Aavitsland: "The Crucifixion of Christ and the Ultimate Entanglement of Lifetimes"	Marius Timmann Mjaaland: "Time, Earth and Climate Change: Reconsidering Philosophies of Time in the Anthropocene"
	Robert Hume: "Time, Archives, and Colonial (Un)bordering on the Russia-Japan Border, 1850s-1940s"	L.Sasha Gora: "Best Before: Time and Other Ingredients"	Line Cecilie Engh: "Imagining the Future. Liturgy, Typology, Prophecy"	Sabiha Huq: "Entangled Temporalities in Tagorean Philosophy"
	Tone Huse: "Active Past: Re-thinking Temporality in Studies of Postcolonising Land"			

	Zeynep Irem San and Sevgi Türkkkan: “A State of Becoming: Dalyan and its Spatial Potentials”			
	Chair: Laura op de Beke	Chair: Nalan Azak	Chair: Ingrid Eskild	Chair: Emil Flato
12.00	Lunch			
13.00	Parallel session 8			
	<i>Green Transitions</i> Room 2	<i>In-Between Time</i> Room 3	<i>Toing and Froing (Time and Migrations)</i> Room 4	<i>Presence and Rhythms</i> Room 5
	Stine Engen: “Turning the Climate Issue into Transition Risk”	Henriette Rørdal: “Hey, What Do You Think’s Going to Happen to Us Now?” Temporal Stagnation and Working-Class Identity in John Steinbeck’s <i>The Grapes of Wrath</i> and Raymond Carver’s “Preservation”	Lu Chen: “Temporality in Reterritorializing under State-Led Urbanized Development: A Case Study of Time Space Productions in Villages in Zhejiang, China”	Lise Amy Hansen and Janne-Camilla Lyster: “More than Now – Placing an Experience of Co-Temporality in Movement”
	Mads Ejsing: “Democracy, Climate Change, and the Problem of Time in the Anthropocene”	Katharina Wuropulos: “Doings in Times of Violence and Crisis: When Different Understandings of Time Collide”	Alejandro Miranda-Nieto: “Aspirational Return among Migrants: Ambivalence, Temporality and Sense of Home”	Rupert Griffiths: “Sensing the Luminous Night: Innovations in Capturing and Communicating Observations of Light Pollution in an Area of Natural Beauty”
	Stefan Gaarsmand Jacobsen: “Negotiating Justice and Temporality: Danish Climate Urgencies”	Aleksandra Bartoszko: “The Time is Always Now: Philosophies of the Present and Future Imaginaries in Opioid Substitution In Norway”	Ben Grafstrom: “Vanishing Temporalities in Rural Japan”	Astrid Schrader: “Rhythms on the Beach: Microbial Mats as Sentient Symphonies”
	Hedda Susanne Molland: “Temporal Friction in Climate		Derek Basler: “Live Long Like the Mountains: Hope,	Scott Thrift: “One Year at a Time: Reframing the

	Politics: The Case of Carbon Capture and Storage in Norway”		Pessimism, and Conceptions of the Future in a Northern Albanian Village”	Meaning of the Moment”
	Chair: Stine Engen	Chair: Trym Rødvik	Chair: Ingrid Eskild	Chair: Laura op de Beke
14.30	Concluding remarks by Michelle Bastian, Auditorium 1			
15.30-	<i>Uchronia</i>			
17.30	A workshop about embodied rhythms by Helga Schmid Room 2			
19.00	Party at Månefisken			

Book of Abstracts

Abstracts are arranged after panels

KEYNOTES

Mark Rifkin: “Temporality, Coloniality, Indigeneity”

What does it mean to say that Indigenous peoples exist in the present? If they routinely are portrayed as in the process of vanishing, and as ceasing to be authentic if their practices deviate from a stereotypical model implicitly pegged to a particular moment in the past, the answer seems to be to insist on their coevalness with non-Indigenous persons and populations. However, this inclusion often entails being inserted into a present defined on colonial terms. This presentation seeks to trouble the pursuit of such temporal recognition by examining the dynamics and imperatives of settler time. Asserting shared modernity or presentness casts Indigenous peoples as inhabiting the current moment and moving toward the future in ways that treat dominant settler colonial frameworks as given, including within processes of “truth and reconciliation.” Instead, pluralizing time opens possibilities for engaging with forms of temporal sovereignty -- Indigenous self-articulations, collective orientations, and expressions of self-determination -- without first translating them into settler frames of reference.

Mark Rifkin is a professor of Indigenous studies, queer studies, and U.S. literature at UNC Greensboro, primarily researching Native American literary and political writing and their encounters with colonial legal and administrative regimes. Rifkin has written a series of books elaborating concepts of indigeneity as a source of profoundly decolonizing challenges, including *Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination* (2017), *Fictions of Land and Flesh: Blackness, Indigeneity, Speculation* (2019), and *Speaking for the People: Native Writing and the Question of Political Form* (2021)

Laura Watts: “MoonFlyer: A solarpunk choose your own energy future adventure”

Imagine a dirigible, an airship, powered by the Moon, and filled with air warmed by the ashes of people’s data. Moonflyer. We, the island few, the frustrated, and the often forgotten by centralised government, can make this happen, if you let us. You are an EU Agency, tasked with making a difficult decision for this island’s energy future. You will hear the argument and you will be asked to make a choice, you choose how this story will end. This part performance, part speculative fabulation, is inspired by the last four years of my ethnographic collaboration to build an integrated renewable energy system in the islands of Orkney, Scotland. Choose your own energy future adventure.

Laura Watts is an ethnographer of futures and Professor in Energy & Society at University of Edinburgh, whose research explores the effect of ‘edge’ landscapes on how the future is imagined and made, as well as methods for

writing futures otherwise. As a Science & Technology Studies (STS) scholar she has collaborated on energy futures for the past decade in the Orkney islands, Scotland. Her latest book *Energy at the End of the World: an Orkney Islands Saga* (MIT Press) won the 4S Rachel Carson Prize, was Shortlisted for the Saltire Research Book of the Year, and Longlisted for the Highland Book Prize. In 2017 she won the International Cultural Innovation Prize with the Reconstrained Design Group for a community-built energy storage device designed from scrap parts. More on her research at www.sand14.com.

Keynote panel with Liisa-Rávná Finbog and Mark Rifkin: “Indigenous Temporal Sovereignty and the Truth and Reconciliation Process in Norway”

On June 1st, the Truth and Reconciliation Commission on the Norwegianisation policy and injustice against the Sami people, Kven people, and Forest Finns presented its report to the Norwegian Parliament. Based on more than 100 formal and informal meetings with relevant parties, as well as the collection of more than 760 personal testimonies, the report concluded that Norwegianisation is an ongoing process, and called for a broad civic mobilization against the undermining of Sámi, Kven and Forest Finn culture and language. At the same time, the conduct of Truth and Reconciliation processes raises challenging issues about what Mark Rifkin has called “indigenous temporal sovereignty;” fraught, as it is, with the needs of colonizing states to make their guilt tractable, compensable, and ultimately, relegate it to the past.

In this keynote panel, Rifkin will discuss issues of temporal sovereignty as they have played out in the Norwegian context, alongside the Sámi scholar and duojár Liisa-Rávná Finbog. What next for the decolonization of Norwegian statecraft in its relations with historically oppressed minorities? Whose truth and whose reconciliation was promoted by the process in Norway? Is the process an attempt to break with the past, or a new way of establishing continuities? What is the relationship between memory-work and present or future politics? Is Norwegianisation a new grand narrative, only with a different moral quality? And how has the process of the commission’s work engaged with indigenous voices and communities?

Mark Rifkin was introduced above.

Liisa-Rávná Finbog is an Indigenous scholar and duojár at Tampere University. A long-time practitioner of the Sámi craft and storytelling practice of duodji, her PhD in museology broke new grounds elaborating duodji as a Sámi system of knowledge. In addition to her scholarship and activism, Finbog is a curator and part of the team behind The Sámi Pavillion at the Venice Biennale in 2022.

WORKSHOPS

“Digesting Times: Exploring Temporalities of Food” - Linda Lapina, Kristine Samson and Marcella Arruda

NB: Participation in the workshop requires signing up through the link on the online webpage. Participants are encouraged to bring some (washed) fruit and vegetables to the workshop.

This sensory, interactive workshop explores the temporal dynamics that emerge as we come together to share food (hi)stories, practices and materialities. We approach foods and culinary practices as the media through which time comes to matter, connecting human and more-than-human bodies, species, soils and naturecultures. We engage with local foods and the participants' diverse culinary cultures in order to imagine and manifest alternate food pasts, presents and futures. Acknowledging food inequalities, we want to explore whether and how sensory, embodied culinary encounters between human and more-than-human bodies can facilitate temporal ruptures and transitions towards more just food futures.

We invite the participants to bring vegetable(-s) or fruit for sharing with the group- please wash these before the workshop. However, if you do not have the chance to bring vegetables or fruit, you are still welcome to attend.

Bio: The workshop has been developed by Linda Lapiņa (llapina@ruc.dk), Kristine Samson (ksamson@ruc.dk) and Marcella Arruda (marcella_arruda@hotmail.com). It will be facilitated by Linda and Kristine.

Linda Lapiņa (she/her; they/them) works as an associate professor of Cultural Encounters and Global Humanities at Roskilde University. I am also a dancer, a psychologist, and a migrant. Informed by intersectional feminist thinking, my research explores entanglements of bodies, affectivity and place, with a focus on urban naturecultures. As a facilitator of this workshop, I am inspired by my interest in food (as) heritage, linked to remembrance, care and relational labour; and by my family history of relating to soils and sharing food origin stories.

Kristine Samson, she/her is an associate professor in the Department of Communication and Arts, Roskilde University. She is an urbanist and environmentalist interested in societal and environmental change through arts-based and embodied methodologies. Working specifically with co-creation, she is preoccupied with collective knowledge production across different communities and seeks to cultivate social and environmental care through participatory processes.

Marcella Arruda, she/her, is a transdisciplinary artist, urban researcher and architect of ways of being involved. Through urban interventions, performances, curatorship of encounters and pedagogical programs, she explores the relationship between body and environment. She works with temporal spatialities and social sculptures as matter of agency and belonging. Currently, she is doing a Master Program in UFRJ Universidade Federal do Rio de Janeiro, is part of The City Needs You Institute and of the Ecocidade project in Brasília, periurban area of São Paulo, Brazil

“Speculative Worlds” - Laura Watts

Donna Haraway, feminist historian of technoscience, has repeatedly pointed to, “the tight coupling of writing and research—where both terms require the factual, fictional, and fabulated; where both terms are materialized in fiction and scholarship.” Writing is a world-making practice, always both factual and fabulated. Writing is part of the apparatus we use for world-making experiments known as research.

This is a practice-based writing workshop for participants to explore diverse writing methods. Participants will produce experimental pieces of writing based on their research. This will be a supportive place for PhD researchers

and other scholars to generate speculative writing, using techniques drawn from literature and poetry, and then to consider how these speculative worlds can diffract and alter their empirical research. What futures might be materialised otherwise?

Laura Watts was introduced above.

“Uchronia: Temporal Topology” - Helga Schmid

Topology is about the curvature of spacetime; and time, conversely, has a topological dimension, according to philosopher and physicist Karen Barad. But time is not only mathematical (topo-logical) but personal: time is what matters to us, individually and collectively.

Inspired by the research generated by the Lifetimes project, I would like alter the collective chrono-topology of the conference to put some of these ideas into practice. We talk a lot about time and timing, but rarely step outside of the structured temporal environment of societal clock time to experience the here and now arising from our own internal clocks, and the natural timegivers of daylight and environmental rhythms. As an artistic researcher, I explore alternative temporalities through practice-based research, and I developed Uchronia (temporal utopia) to offer a new way of thinking and experiencing time.

By removing yourself from societal time, in this workshop you will go on a sensory journey to explore alternatives to clock time. First, you will safely store your phone, watches, laptops and other clocks. You will be given a new ‘Zeitgeber’ (timegiver) and a set of instructions to explore the local environment in an uncommon way – by following different (human and more-than-human) rhythms. This experiment will be followed by a collective conversation on how each of us can develop our own individual Uchronia, our collective time together, and change our experience of time in the now, and the long now.

Bio: Dr Helga Schmid is an artist and researcher, and founder of Uchronia, a platform for critical and imaginative thought on the contemporary time crisis, challenging current perceptions, and offering alternative ways of being in time. Uchronia explores the multifaceted nature of time in an academic and public context. She opens up a new world of temporality (lived time) situated at the intersection of design, sociology and chronobiology. She advises, promotes and lectures on technological acceleration processes, the politics of time, alternative temporal systems, and deep time. Helga also leads the Graphic and Media Design programme at London College of Communication, University of the Arts London, and is a resident artist at Somerset House, London. Previously she taught and conducted research at the Royal College of Art, London, and was a researcher at the Museum of Modern Art, New York.

ARTISTIC PROGRAM

“My Body is a Clock: visualising Internal Temporalities” – Isabella Martin

This artist talk explores visual strategies for imagining the body clock and the friction between the internal time of the body and the external time of the world. It takes as its starting point recent exhibition BODY CLOCKS, which consisted of a series of artworks installed throughout the Novo Nordisk Foundation Center for Basic Metabolic Research in Copenhagen and was developed in collaboration with circadian researchers at the Centre.

The science of chronobiology reveals how we are both made of and subject to time. Our circadian rhythms are driven by environmental cues which tell our brain what time it is and tune our body clocks to the world around us. Our internal rhythms are intimately entangled with the temporalities of our external environment, but this entanglement is complex, affected by multiple factors in and out of the body. We contain our own time, which doesn't always sync with the external time regimes we exist within.

The metaphor of the 'body clock' is a powerful tool for sharing the science of circadian rhythms with the public, it is often imagined as mechanical timepiece, time ticking with a circular regularity. These visualisations affect how we relate to our internal temporalities, and shape our understanding of how they function. 'My Body is a Clock' dissects the impact of these interpretations on our perception of the bodies' circadian systems, using the exhibition artworks as visual prompts to propose alternative ways for imagining our complex temporal entanglement with our environment.

Bio: Isabella Martin (UK) is a visual artist with a research-based, interdisciplinary practice, driven by collaboration with the sciences to explore the friction and entanglement between our bodies and the world. Her ongoing research focuses on external and internal temporalities. Over the last two years she has worked on Z TIME, a project exploring the experience of time in the body through the study of circadian rhythms in the laboratory, in collaboration with researchers at the Novo Nordisk Foundation Centre for Basic Metabolic Research in Copenhagen. Her solo exhibition BODY CLOCKS recently opened at the Centre. Isabella holds a BA(hons) in Sculpture from Brighton University and an MFA from The Royal Danish Academy of Fine Arts. She has exhibited internationally, with recent works shown at Kunsthall Charlottenborg, Medical Museion, Udden Skulpturpark and Kurz Film Festival.

Ancillary Events

“Journal of Time and Society editors' talk” – Helge Jordheim and Michelle Bastian

Time and Society is a leading journal of temporalities studies. In this session, editors Michelle Bastian and Helge Jordheim will discuss the contours of a multiple temporalities field from the vantage point of the journal. What tendencies are evident in the submissions? Are there different traditions of time scholarship in play, and are there tensions between them? And what makes a good Time and Society piece? There will be time for questions from the room.

“Lifetimes Roundtable”

Funded by the research council of Norway, the Lifetimes project ran from 2018-2023. Lifetimes presents a new way of studying time across the socio-natural divide, using concepts like synchronization, entanglement, materiality, and futurity. Emerging from discussions in postwar theories of history, our framework draws on approaches to time in anthropology, STS, and critical time studies. Time is approached both as part of the real, and as analytical lens through which we study objects, practices and events. In this roundtable, Lifetimes researchers will discuss how the project enabled them to do their research and how they each benefitted from thinking through notions of time in their different disciplines.

PANELS

Seasonality (Contesting seasonal orders: polyrhythmic seasons in a time of change)

Panel abstract: In changeable times, seasons can feel like dependable coordinates for dividing up the year and setting order to annual cycles, providing reference points to tell the passing of the time and coordinate our activities. Seasons have come to be institutionalised temporal patterns and symbol systems, as ubiquitous and taken-for-granted as language, and held in place by history, culture, routines and norms, and science. Some seasonal frameworks – like the four-season model of spring, summer, autumn, winter – have become prominent and spread globally, displacing other ways of thinking about seasons to the extent that they are seen as natural or universal categories. This panel problematises such a totalising understanding of seasons, arguing that it minimises the cultural origins of seasonal categories, glosses over the contestedness of these categories, and precludes a meaningful analysis of the myriad ways in which seasonal patterns change each day. Whose seasons prevail is a political question of who has the power to set them. Talks on this panel encourage people to reconsider seasons as polyrhythmic and undergoing constant renewal. They make visible the multiple ‘seasons’ that are concurrently playing out, the different ways in which rhythms are configured and reconfigured into meaningful seasonal patterns and acted on. Talks give accounts of encounters between different seasonal patterns – how they clash or sync or run in parallel – and how seasonality is renegotiated or recalibrated through these encounters

Miriam Jensen: Cultivating Temporal Attunement: Unfolding the Seasonal Mismatches of an Unsettled River Landscape

Divergent worldviews and interests often clash in participatory processes around natural resource management. Focusing on the case of water resource management, while drawing on insights from scholarly literature on critical time studies, I investigate how seasons clash in actors, between them and across them. Taking a point of departure in an ethnographic and action-research study of the Danish river infrastructure in Gudenåen, I find that seasonal mismatches tell a broader story about clashes between times, which are continuously renegotiated within broader temporal interactions and power structures.

Bio: Miriam Holst Jensen is an Industrial PhD Candidate at the Department of Planning at Aalborg University, WSP Denmark and Skanderborg Water Utility. Her research interests lie within the temporalities of deliberative planning with a particular focus on temporal conflicts and mismatches. Her current PhD project is focused on investigating what role time and temporalities played in the conflicts and deliberative malfunctions that occurred within the intermunicipal planning process for the Danish river Gudenåen.

Scott Bremer: Practicing the beekeeping season in Western Norway

This paper is about how a group of beekeepers in Western Norway are maintaining and changing the bee season through their individual and shared practices, in the face of climatic and other changes. We present empirical research conducted in 2022 with a group of beekeepers from around Bergen, Norway. We found that beekeepers have divergent understandings of the bee season that can sync or clash, but also share common reference points that enable the coordination. As beekeepers perceive changes in the environment, they are adjusting the bundles of practices that define their year.

Bio: Scott Bremer is a senior researcher at the Centre for the Study of the Sciences and the Humanities at the University of Bergen, and research associate at NORCE Climate. He has a background in environmental governance, with a focus on the science-policy-society interface. Bremer's current work focuses on climate adaptation governance, with a focus on how science and other knowledge systems are used to support adaptive decisions and actions in institutions, with case studies in Africa, New Zealand and Norway. His current interests are to uncover the often-overlooked influence of cultures on seasonal patterns of thought and action.

Laura op de Beke: Dark Seasonality in Gaming Rhythms

In his book *Gaming Rhythms* (2011), Apperly draws on rhythmanalysis to demonstrate that games and game genres have rhythms, and that the same goes for the digital game ecology as a whole. In my article, I discuss these rhythms in light of the planet's changing weather patterns as a result of the climate crisis. First, I sketch an image of the videogame industry as polyrhythmic and explain how it is beholden to rhythms set to the pacing of hardware and console development. Then, I look at videogames themselves and an emerging trend called dark seasonality, describing the thematization of unseasonal and dangerous weather.

Bio: Laura op de Beke is a doctoral fellow at the Department of Culture Studies and Oriental Languages at the University of Oslo. She is a scholar of games and gaming, with her research looking at temporal affects associated with what she calls "Anthropocene temporalities" in video games in order to understand a new structure of feeling particular to these times, characterized by a sense of protracted crisis, anxiety over the future, apocalypticism as well as techno-futuristic hope. She is active in leading work of the Oslo School for the Environmental Humanities.

The [Uncertain] Four Seasons

This presentation will introduce the case of the [Uncertain] Four Seasons, a global project that recomposed Vivaldi's famous work 'The Four Seasons' to reflect the potential impacts of climate change. By utilizing computer modeling and data from the Coupled Model Intercomparison Project (CMIP5), including soil moisture content, precipitation, sea surface temperature, and air temperature, the project generates unique compositions for specific locations, depicting the consequences of the climate crisis. This innovative form of knowledge production aims to bridge the gap between scientific metrics and embodied, emotional ways of understanding.

Bio: Wanxian Zhang is pursuing a master's degree in Development, Environment, and Cultural Change at the Center for Development and the Environment at the University of Oslo. She has a background in anthropology and science and technology studies. Currently, she is researching the seed system of small-scale farmers in Southwest China, focusing on knowledge exchange within informal seed networks. Her research interests center on agroecology, agrobiodiversity conservation, and climate adaptation in agriculture.

Contesting Colonial Times

Sanskriti Chattopadhyay: Exploring Subaltern Time: Constructing the Decolonial

Abstract for individual papers or for panel themes (3000 characters max.) For Matilda Mroz cinema provides the ideal domain to engage with temporal flow. But what happens when one aims to delineate, define and deploy a

strategy for constructing a decolonial, artisanal, craft-led cinematic image? If decolonial image is rooted in the reclaiming of other worldviews, ancestral memories and ways of being in the world, then what role may 'time' play there - as a tool, method, and structural element, and how do we engage with it?

To explore these questions this proposal seeks to take a deep dive into one of India's most unusual filmmaker Ritwik Ghatak's *Titas Ekti Nadir Naam* (A River Called Titas, 1973). Centred around the fishermen 'Malo' or 'Mallabharman' community, separated from the mainstream society by the caste-class-economy boundaries, this film not only tells a story of the community but curiously embeds in its body the worldview and cosmology of time as experienced by this community. In doing so, Ghatak draws a parallel between the visual culture of a community and the ritualised, ancestrally received, community-led perception of time. This proposal seeks to study, analyse, and fathom this relationship.

Bruce Kapferer's exploration of the Deleuzian time-image and cinema's relationship with ritual, Agamben's gestural, and Mroz's temporal flow would be the primary theoretical triad for this proposal. A special focus will be given on the form of 'epic melodrama' (which in many ways threads the Muti-faceted cinematic temporality of the Global South).

Bio: A doctoral staff at the Faculty of Fine, Applied and Performing Arts, HDK-Valand Academy, University of Gothenburg, Sweden, Sanskriti Chattopadhyay has degrees in Film Direction and Screenplay Writing from Film and Television Institute of India, and masters' in Literary and Cultural Studies from English and Foreign Language University, India. She is the recipient of the Adlerbertska stipendier 2022 and the Adlerbertska Scholarship for Research 2022. Her video art has been curated in various festivals, like - VAICA festival for contemporary video artists, 12th international Documentary and Short Film Festival of India. She has received the PIFF Special Award (2019). She has received video art grants from India Foundation for Arts and Kolkata Center for Creativity. She has been a part of various artistic research projects like - 'Globe Playhouse' (2020) and "Transmedia Storytelling: Camilla Plastic Ocean Plan" (2019) at Film University Babelsberg, Konrad Wolf (2020), Artistic Research project of BRICS in collaboration with WITS Film and Television and Valand Film Programme, India Chapter (2018). She was also invited to Vision Splendid Outback Film Festival and Filmmaking Bootcamp in Winton, Australia (2019). Her contact detail is - sanskriti.chattopadhyay@gu.se; sanskritichattopadhyay222@gmail.com.

Arash Dehghani: Photographic temporality: crafting the meta-narrative of petroleum landscape

Petroleum history's imagined linearity from the perspective of global energy denigrates the profound onto-epistemological transformation brought about by oil in what is now known as the petroleum landscape. The material presence of oil in the lives of the people, changing social structures, worldviews, and even deaths around the extraction of oil are buried under the grand narratives of global energy politics. Using Azoulay's theory of multiple co-existing temporalities as a stepping stone, this proposal would use photography to deconstruct the trajectory of petro-modernity in Iran, whose other side hides the persistence of colonial violence, long after the departure of colonial power. This proposal challenges the term 'suspended temporality', meaningful in the rise of nation-state where that 'present' served as a catalyst to reach a future that was a restructuration of the imaginary of 'Persian Empire'. Therefore, the influence of the colonial temporality did not simply impose its notion of time and history through explicit violence but implicitly supported the formation of this 'suspended temporality' echoing the Persianized nation-state's historical anxiety to revive its forgotten past glory. This proposal seeks to

reactivate the 'taken' and 'untaken' photographs as bodies with multiple temporalities that continue generating questions to provide a nuanced understanding of the relationship between colonial time, energy politics, marginalisation, and visual representation in Iranian petroleum history.

Bio: An artist-researcher, Arash Dehghani is currently completing his PhD studies in Arts Plastiques at the Université de Lille, France. The focus of his artistic research is the archives and histories of marginality in Iran. His scholarship includes essays and introductions to two books that he edited as well, *Archive and Photography*, Akshaneh Press, Tehran (2020) and *Visibility and Photography*, Akshaneh Press, Tehran (2021). He is the recipient of multiple international grants and fellowships. Some of these are Adlerbertska Hospitiestiftelsen, Sweden; Barrande Fellowship, Czech Republic; Interreg project TRANSUNIV grant, Belgium; Bourses de mobilité internationale de recherche of Fondation I-SITE ULNE, France.

Srideep Mukherjee: Revisiting Political Temporality through Vernacular Theatre in India

The noted historian Ramachandra Guha recently observed that post decolonisation in 1947, history writing in India made way for political scientists to examine the evolution of the new democracy, and for anthropologists to delve into social formations of caste in the post-colony phase. In Indian academia, the Social Sciences have therefore maintained disciplinary demarcations with reference to timelines, insofar as their respective ambits are concerned. Having completed seventy five years of independence in 2022, we are now told that India has stepped into its Amrit Kaal (a term from Vedic astrology considered auspicious for new ventures) as we commence the run up to the final twenty-five years of a century of national independence. In reality however, one observes the unfolding of an electoral autocracy that redefines nationalism by making subversive meanings of the canonised pedagogy of classifying Indian history into Ancient, Medieval and Modern periods; with the last culminating in 1947. The absence of a living tradition of history beyond independence, as Guha laments, has in effect led to the rise of a political temporality that challenges both a syncretic past and the continuum of cultural assimilation, which in unison have always formed the idea of India. The turn towards this political temporality was evident since the 1990s which decidedly mark a transition from post-colony to the neo-colonial by a set of paradoxical incidents. On the one hand the economy opened up to liberalisation, and on the other, the nation remained mute spectator to the vanquishing of the iconic Babri mosque at Ayodhya by right wing activists. While the former catapulted India on its globalising mission, the latter was perceived as a pyrrhic victory of right wing majoritarian rule over centuries of shared syncretic history. This paper is an attempt to debunk this political temporality manifest in the rise of extreme right-wing politics through two vernacular plays of the time, Girish Karnad's *Tale Danda* (*Death by Beheading*, 1990, Kannada) and Utpal Dutt's *JanatarAphim* (*Opium of the Masses*, 1991, Bengali). Using literary exegesis, I propose to analyse how the confounding gyre of history creates cleavages in the body politic of the nation, and thereby the very idea of India.

Bio: Srideep Mukherjee is Associate Professor of English at Netaji Subhas Open University, Kolkata, India. He holds a Ph. D. in postcolonial Indian drama from Visva-Bharati, Santiniketan. His areas of interest include Nation and Narration, Cultural Studies, and South Asian Literature.

Biology, Wildness and Civilization

Henrik Sinding-Larsen: Sustainability and life's mysterious synthesis of linear and cyclic time.

Our Zeitgeist buzzwords are changing from progress/growth towards sustainability. A metaphor for growth is an ascending line while the metaphor for sustainability is a circle. The standard depiction of time in the natural sciences is a line, a single irreversible timeline. Non-living phenomena may also oscillate, rotate, and repeat themselves in cycles. But the central cycles of life are qualitatively different. Life's cycles are realized by means of memory systems that can be "replayed" and give rise to both exact copies and variants of copies that still preserve a heritable "family resemblance". Life's memory or inheritance systems enable learning and adaptive evolution that are absent from series of events in geophysical or cosmological history. A series of hurricanes or galaxies resemble each other but inherit nothing from each other.

The critical difference is that non-living systems have only access to one past that gives rise to one future. By means of memory, inheritance, and copying mechanisms, living processes can access alternative patterns of the past in situations of choice or selection. Alternative pasts become templates for alternative futures. To realize this, dynamical patterns of the past must materialize as static (timeless) sign-vehicles in space that, through interpretation, can re-enter life's dynamics in the future.

The paper will present elements of a new school of thinking within biology called biosemiotics, that places signs and their interpretation (in a broad sense, from genes to human language) at the center of what life and evolution is about. Genetics and molecular biology have hugely contributed to our understanding life. The subfield systems biology is about simulating life on the molecular level in computers. In spite this, surprisingly little progress is made on biology's most fundamental questions like: What is life? How did memory and other inheritance mechanisms emerge? Can computers, at least in theory, become alive, or are there insurmountable differences between organisms and machines? For a better understanding of these questions, I argue we need to understand more of the relation between linear and cyclic aspects of time and also of the relation between time and space. Some believe science already understands life's cyclicity through our understanding of cybernetic loops in computers. I argue that at least some of life's most fundamental cycles, at the heart of sustainability, seems to be built on a paradoxical integration of linear and cyclic time (or on the integration of the historically unique and the generic, repeatable) that fundamentally defies cybernetic simulation. To achieve a better understanding of the mysteries of life and sustainability, we need the best from both biological and humanistic scholarship. With signs, interpretation, and a respect for paradoxes as a possible bridge, the time is ripe for a new synthesis based on mutual curiosity and respect from CP Snow's "Two cultures".

Bio: Henrik Sinding-Larsen, multidisciplinary oriented social anthropologist, researcher, Department of social anthropology, University of Oslo. Currently working on a book project in collaboration with biological anthropologist Terrence W. Deacon, University of California, Berkeley on an integrated understanding of cultural and biological evolution inspired by biosemiotics

Linde De Vroey: Back to the future: rewilding as challenge and transformation for modern time concepts

Rewilding has been praised for its revolutionary practice of biodiversity conservation, for reconnecting humans to nature, and for providing a philosophical alternative to modern anthropocentric world-views. But rewilding is

also criticized as merely the next revival of the romantic movement, founded on the nostalgic longing for an idealized past. While many of its advocates defend it as a future-oriented vision, the call of the past is never far off in rewilding. The past is present in ecological projects aiming to restore ancient landscapes and eco-systems, following historical baselines as the blueprints for future ecosystems. It is arguably even more forthcoming in cultural aspects of rewilding or 'human rewilding', that often invoke a revival of traditional, local or indigenous pasts as a way to re-connect humans with nature.

While rewilding's preoccupation with the past is easily criticized as nostalgic idealization or re-enactment, I argue that the role of the past appears to be much more complex if we assess rewilding as a philosophical challenge to modern ideas, including fundamental notions of linear time and progress. Rewilding does not necessarily strive to return to a 'primitive state', but mainly refuses to adopt the unilateral modern obsession with progress, erasing all memory. Through adopting a nostalgic stance, rewilding insists on remembering past ecosystems and (indigenous) cultures that have been erased under the cover of 'progress'. As such, rewilding denounces the very notion of modern progress itself: solely perceived of as the progress of modern civilization.

Moreover, rewilding draws attention to alternative (non-modern, indigenous and more-than-human) perspectives on time. Rewilding encourages reflection on the ways in which humans and non-humans have perceived nature through time, and may even show us glimpses of what it means to live in 'seasonal time', 'wild time' or 'tree-time'. Additionally, cultural rewilding in particular acknowledges that places and landscapes are steeped in layers of memory and tradition. The acknowledgment of ancient and non-modern traditions can rekindle a near-forgotten relationship between humans and nature that has been preserved in the interplay between language, culture, art, ritual and place. Recovering traditional, indigenous or primordial notions of time is part of these efforts to reconnect humans with nature. Cultural aspects of rewilding are therefore no mere additions to ecological rewilding, but a crucial factor in determining rewilding's baselines, guaranteeing people's support, and challenging modern mind-sets. Ultimately, rewilding might mean to adopt intergenerational and interspecies perspectives on time, to foresee a future in which wild nature, ancient traditions and modern civilisation can exist side by side.

Bio: Linde De Vroey (she/her) is a PhD researcher at the University of Antwerp. She investigates the relevance of local and indigenous cultures, history and knowledge in place-based approaches to rewilding. Her research project includes nostalgia, historical baselines, wild(er)ness ideals, decolonial approaches, and the role of place-based worldviews and spirituality in rewilding. She holds a special interest in the emancipatory potential of (place-based) rewilding, re-indigenization and re-enchantment in modernity. Outside academia, Linde co-hosts the podcast *Wildernissen* and co-founded the creative start-up *Wilderhistories*, an organisation that aims to bridge the gap between nature and culture by offering immersive historical audio-tours in nature.

Lisette Jong: Diffracting Colonial Temporalities: Non-Human Primate Bodies and the Science of Human Evolution

In 1925 Dutch anatomist Lodewijk Bolk wrote the municipality of Amsterdam and the Amsterdam University Association for funds to buy a collection of thirteen gorilla skulls from the Parisian trading house Tramond-Rouppert. These skulls were prepared to show the dental development in gorillas at different ages, from young juvenile to mature adult. Driven by the anticipated extinction of the gorilla, in his letter Bolk stressed the need for

acquiring the series now, before it would be too late. The skulls were of gorillas shot in the wild. Their bodies transported and transformed into specimens through the networks of European colonialism. Bolk studied apes in light of his fetalization theory: he believed that the human is in form a sexually mature primate fetus. While Bolk's theory of evolution has since been refuted, to this day developmental patterns of non-human primates are implicated in the study of human evolution. Skeletal and dental growth patterns of in particular chimpanzees figure for example as models in the analysis of early hominin fossils. Because primates are now protected species, much present-day research into their skeletal development involves the bodies of captive instead of wild animals. However, captive apes show accelerated growth compared to their wild conspecifics, complicating the use of such data as a proxy for understanding early hominin development. Such "noise" in evolution science, reminds us of the colonial practices that enabled the enrollment of apes in European scientific projects through logics of extraction and extinction. In this paper I further explore the diffraction of colonial temporalities through non-human primate bodies.

Bio: Lisette Jong is a postdoctoral researcher based at the Department of Anthropology at the University of Amsterdam. Her current work on the remains of non-human primates in scientific collections is part of the project Pressing Matter: Ownership, Value and the Question of Colonial Heritage in Museums.

Ciro Miguel: The Trees at the Brasília Palace Hotel

The Brasília Palace Hotel was one of the first buildings to be constructed in Brasília in 1958. Together with the presidential residence and a chapel, they were samples of Oscar Niemeyer's architecture and a testing laboratory for constructing the new capital. As the architect presented them in *Módulo* magazine in 1956: "They will not be temporary buildings in the exact sense of the word: on the contrary, the idea is that they will meet all the requirements of modern technology, so that they can become a landmark or starting point for new buildings to be erected there."

While not mentioned in the project's description, two *Ficus elastica* trees were planted next to the south facade. As young seedlings, they are barely visible in the building's first photographs. After the hotel's fire in 1976 and the building's abandonment for many years, it re-opened in 2005 with a brand new renovation by 98-year-old Niemeyer himself. Ignored throughout the building's lifespan, the trees are now the main protagonists. Their overwhelming spatial presence, impossible to be edited out by photographers, destabilizes and confronts modernist architecture's timeless and autonomous image. The trees, as elements that record time with their growth, attest that buildings are not static, and are part of history.

Today, the enormous trees host more guests and species on their branches than the hotel's 180 rooms could ever imagine. While everyday maintenance keeps the 64-year-old trees' wilderness under control, it seems inevitable that, over time, they will also physically engulf the hotel itself with their branches. This is a visual essay mixing archival material and my photographs, followed by a paper that explores and defies the stable temporalities of architecture in its confrontation with nature.

Bio: **Ciro Miguel** is a Brazilian architect, photographer, and doctoral fellow of the Institute for History and Theory of Architecture at ETH Zurich. His research revolves around alternative narratives to the built environment through photography. He holds a professional diploma from the University of São Paulo FAU USP and a Master's degree from Columbia University GSAPP. **Ciro Miguel** was co-curator of *Todo dia/Everyday*, the 12th

International Architecture Biennale of São Paulo (2019), and co-editor of the book "Everyday Matters: Contemporary Approaches to Architecture" (Ruby Press, 2021).

Generating Sustainable Futures

Salvatore Paolo De Rosa: Pollution and Climate Breakdown: A personal journey in time, space and struggle

In this performance, I will use words, sounds and moving images to guide the audience into a narrative journey through the layered and contradictory timelines of environmental pollution and climate breakdown, searching for trajectories of escape from the end of times. Partly autobiography, partly conceptual reflection, partly a call to arms, this story begins in the town where I was born and ends on the frontlines of the battles to come.

From early on, I had to confront pollution as an uninvited guest of daily life, in the form of waste of various sorts contaminating soils and souls of my town. Activism led me to writing, and writing led me to research. Finally, I met activism again, this time to confront a more pervasive and more consequential form of pollution: carbon dioxide.

Waste and carbon dioxide are both by-products of production and consumption. Their effects on ecologies are slow to manifest, but build up continuously and then, seemingly suddenly, become manifest and accelerate. I will delve into the "timelines of victimization" of both and their intertwinement with "thresholds", revealing how the proliferation of both presupposes the availability of sinks, of an "outside to production", in both space and time. Of somewhere that can be colonized. Such appropriations are a result of unequal social and ecological relations. Any imagined "outside" is still inside life, and specifically certain lives in particular places. To ensure life and lives go on requires taking responsibility of relations. And wherever one happens to be, there it is the place one is responsible for.

Bio: I am a political ecologist with a background in anthropology and human geography. My overall research objective is to provide a better understanding of how collective action drives socioenvironmental transformations towards sustainability and justice. I hold a PhD in human geography from Lund University and currently I am about to start a postdoctoral position the Centre for Applied Ecological Knowledge (CApE) of Copenhagen University. I am a member of several collectives of independent research and write often on activist media and independent journalism platforms.

Gregers Andersen: Green Visions: Fictional and Commercial Fantasies of Sustainable Futures

Not a single day seems to go by without a new commercial telling us what the future will look like. From AUDI's high tech fantasy "The Next Sphere of Future Premium Mobility" to WWF's vision of future biodiversity "Future Visions of our Planet" we are constantly bombarded by companies and NGOs eager not only to sell us their products, but also their version of the future. And if it is not private companies or NGOs guided by expensive PR firms, who seek to include us in their version of the future, it is the usual guests of televised news programs: politicians, journalists, and experts or it is tv-series, film, and literary fiction. In this paper, I will therefore look closer at some of the many visions of green futures that are present in contemporary popular culture. More concretely, I will compare visions produced by the companies Google, Kalmar, and AUDI with the visions of

future sustainability in the film 2067 (directed by Seth Larney) and in Ida Aukén's short text "Welcome to 2030: I Owe Nothing, Have No Privacy, And Life Has Never Been Better". This will enable me to demonstrate how the imagination of future sustainability tends to fuse with extremely technooptimistic fantasies despite the considerable ecological footprint of computers and other forms of artificial intelligence.

Bio: Dr. Gregers Andersen is assistant professor in environmental humanities at the Department of Communication and Psychology, Aalborg University. He is the author of the monograph *Climate Fiction and Cultural Analysis. A New Perspective on Life in the Anthropocene* (Routledge, 2020) and has published articles in several journals (e.g., ISLE, Symplok, The Journal of Popular Culture, and Deleuze Studies) on how literature, film, and philosophy can shed light upon human and non-human conditions in the Anthropocene.

Heather McKnight: From the Micro-Utopian to the Nano-Utopian – Chaos and Hope in Activist Self-Organisation

This paper presents the idea of a nano-utopian moment as a mode of prefigurative analysis for spontaneously arising acts of resistance. First, it introduces Ernst Bloch's concept of utopia as a disruptive process, one that is forward-facing and aims to create a better world. This theory contains within it the normative assumption that a better world is possible given the right conditions, but that this must also be an unclosed system of ongoing critique. It then looks at some of the existing theories on modes of process-based activist utopias, exploring how these arguments are productive in developing the field of activist utopian studies as micro-utopias. These micro-utopias mainly describe events and projects that are small, planned resistances and social experiments with their own pluralistic legal schemata. However, there is scope to examine further descriptions of brief and unexpected utopian moments that may happen within, as a result of, or that are generative of the order and planning that lead to these micro-utopias.

Building on this, the new nano-utopian category aims to describe unplanned or spontaneous activist moments, viewing them as accelerated processes of self-organisation that appear to arise out of chaotic situations or breakdown. It draws on the work of Prigogine and Stengers. They note how under certain circumstances "entropy itself becomes the progenitor of order". Likewise, the nanoutopian moment while disrupting one system has within it the possibility (not a certainty) of creating a "higher level" of order, i.e. one that reaches towards a new horizon of hope for a fairer ordering of the world for the participants. Finally, this paper looks at an example of nano-utopian activism, the initiation of the Umbrella Movement in Hong Kong in 2014, where student protestors were holding up umbrellas to protect themselves from teargas went viral on social media, triggering massive spontaneous self-organisation.

Bio: Dr Heather McKnight completed her PhD in Law Studies at the University of Sussex Law Department, studying resistance to the marketisation of higher education through the lens of a reimagining of academic freedom. She is a critical utopian scholar and activist with research interests in unions, protest, education, feminism, gender, aesthetics, utopian analysis of science fiction television, and speculative fiction. She has been involved preserving the archives of the National Union of Students (UK) and has been involved in relocating them to the Modern Records Centre in Warwick where they will be available as a public interest archive. She has recently completed a research project into the precarious work in Higher Education across Europe with the European Society of Social Anthropologists.

Care Temporalities

This open panel, titled 'Temporalities of care,' wishes to address the ongoing discussion of temporality. Care is understood in its broadest sense, as any relation that requires care and consideration outside the confines of symmetry. This includes of course what we traditionally consider care relations, but also other social, environmental, historical or bodily relations that somehow involves care. The panel invites reflections on the intersections of time and care in environmental humanities and environmental ethics, disability studies, history of concepts and cultural history, among others. Overall, we wish to examine how contemporary care studies tackle problems of time, how the latest research working with the concept of care reframes our understanding of time, and how these areas of research engage with different philosophical traditions studying the human experience.

Ada Arendt

My paper offers a comparative overview of temporality in the two influential discourses centred around the notion of care: the Heideggerian tradition and the feminist ethics of care in order to examine their points of contact. Those two schools of thought rarely engage in dialogue, but share interest in the widely discussed antique anthropogenic myth of Cura, the female personification of care molding the first human from muddy clay. In my paper, I will discuss different interpretations of this myth with their temporal implications.

Bio: Ada Arendt is a historian of culture and postdoctoral fellow at the Institute of Archaeology, History and Conservation at the University of Oslo, currently engaging with early modern environmental history, temporality and the concept of care.

Giulia Carabelli & Dawn Lyon: The time and rhythms of plant care: new trajectories

This paper draws on the results of "Care for Plants", an ongoing project about plant-care during the Covid-19 pandemic. "Care for Plants" gathered original empirical data on the 'plant-craze' to explore mundane practices of plant care, the impact of caring for plants for everyday life, the experience of living in social isolation with plants in domestic space, and novel engagements with plants and nonhuman life at a planetary scale (in time and space). Central to these new human-plant relations was a concern with time – including taking time to care, attuning to the rhythms of plant life, establishing the temporal belonging of plants, and envisaging the future anew. In our paper, we analyse how time spent caring for plants shape human-plant affective relations to discuss the meanings of making time with plants at home. Specifically, we reflect on the ethical and political potentials of plant care during lockdowns. We draw on Maria Puig de la Bellacasa's and Anna Krzywoszynska's work on soil-care to discuss caring for plants as the manifestation of radical trajectories that shape through time to comment on the emergence of new understandings of time that refuse neoliberal rhythms and tempos.

The paper draws on data generated through qualitative interviews with plant carers at two points in time - during and after lockdowns in 2020 and 2022. First, we discuss plant-care as the practice of re-making time in lockdown. Second, we discuss time with plants as the making of affective bonds between species that depend on practices of care to focus on how "affective inhabitation can generate forms of attentiveness, connection and care that transform sensing into an activity which has a range of political and ethical implications" (Pedwell 2021, 27). We look more closely at the legacy of lockdowns to understand what humans learnt from living with plants in social isolation and beyond. Here, we explore plant-care as a practice that instructed new responsibilities towards the

plants: something one needs to make time for, which results in a different understanding of time and its value. In the final part, we position our empirical data within the broader literature on the transformative potential of everyday life in dialogue with the work of Lefebvre (2004), Manning (2016), and Pedwell (2021). This leads us to explore plant care as the making of new habits and routines that can reshape our understanding of the present or, following Manning (2016) and Pedwell, “social change in a minor key” (Pedwell 2021, 8). Responding to Myers’ (2021) urgent call to learn how “to conspire with the plants” in order to build together a better future, we consider everyday rhythms as the ground from which to envision multi-species worldmaking practices that decentre human agency in favour of more-than-human appreciation and collaboration.

Bio: Giulia Carabelli is a lecturer in sociology at Queen Mary, University of London. Her current research investigates human-houseplants relationships during the Covid-19 pandemic. Dawn Lyon is reader in sociology at the University of Kent. Her research is in the sociology of work, time and everyday life.

Halvor Hanisch

The relation between temporality and disability – and, likewise, the relation between temporality and care – are still underexplored. Nevertheless, recent research has provided at least two analytical terms that have gained prevalence: Crip time and care time, respectively. However, these research frontiers rarely interact: While crip time is individualized, the issue of care and temporality is almost exclusively investigated in the lives of carers who are themselves not considered persons with disabilities. It is also worth noting that research on crip time mainly deal with people with physical and sensory impairments, and often emphasize the experiences of adults.

However, people with disabilities are often carers. Hence, crip time and care time do co-occur. In this autotheoretical paper, I try to unpack this interaction. As a person with physical disabilities – and also the father of a boy with severe cognitive impairments – I have three aims with such an exploration: (1) to conceptualize a notion of care woven time – a notion that can hopefully illuminate how otherwise different structures of care hold together various temporalities; (2) to outline how the knowledge gathered here can further the theoretical work on crip time and care time, respectively; and (3) to make a few suggestions on how the multiple significances of care can give a dialogue between disability studies and care studies.

Bio: Halvor Hanisch is professor of citizenship, disability, and rehabilitation (VID Specialized University), and research professor (Work Research Institute, Oslomet). Trained as a literary scholar, and later as a sociologist, Hanisch has been engaged in disability studies for many years. Hanisch is also former editor-in-chief of Scandinavian Journal for Disability Research and engaged with the disability field in Norway in numerous ways.

Janike Kampevold Larsen: A Matter of Time: Empetrum Nigrum vs indigenous landscape practices in a warming Arctic

Abstract for individual papers or for panel themes (3000 characters max.) Native and indigenous landscape practices are founded in century-long traditions of care for the landscape harvested from. A well-measured outtake of berries, burning wood, meat and fish have contributed to well-balanced ecologies of human and non-human actors. These practices unfold in a cyclical seasonal time, and the human practices is attuned to this temporality. The Sámi concept of meahcci speaks of landscape, not as a visually configured tract of land, but as a temporal constitution of landscape as valuable and resourceful. It refers to practices that unfold a relational and temporal

space, to a relational fluidity where the human and the non-human meet in a doing of landscape, both by reindeer and people, that is characterized by a moving through. In this paper this temporal doing will be contrasted to another temporal doing, by a plant that is threatening to disrupt the cyclical practices in the Finnmark landscape.

As climate change is propelling and temperatures rise, some species 'misbehave': *Empetrum nigrum* (en: crowberry, no: krekling) is one such species and is triumphantly winning the competition for habitat and progressing to deteriorate reindeer grazing pastures all over Finnmark, the northernmost county in Norway. The cyclical time of balanced ecosystems seems to be disrupted by the more linear time of a species that seems to have reached an apex in its lifecycle. This paper discusses its impact on indigenous landscape practices and its possible impact on municipal management of area. It argues that care-taking as an attentive action is necessary, and discusses prescribed fire as 'hard' management of *Empetrum* in relation especially to Annemarie Mol's idea of tinkering as an experimental care practice where efforts to find solutions to health issues sometimes is a process that involves failing and suffering. Prescribed fire represents an acute involvement with *Empetrum*'s timeline and prompts a discussion of the temporality of ecosystems out of joint in relation to notions of time in care practices.

The paper is written by a landscape and environmental humanities researcher on a biology project, To Manage or Not: Assessing the benefit of managing ecosystem disservices (MONEC). Preliminary scientific finding by MONEC indicates that *Empetrum nigrum* is thriving so well with rising temperatures that it seems to out-compete other species, herbs and berries alike. This deteriorates foraging condition as well as grazing pastures. Surveys are based on source material established by Finnish biologist Mattias Haapasaari in 1970 and show that *Empetrum* has increased from 20% till 80 % in the Hapaasaari plots over the last 50 years, and the biomass of the plant has doubled over the last two decades. This implies that one species may have the capacity to change an entire region, upend indigenous landscape practices, and deplete ecosystems that are important CO2 sinks. A species that seeded itself 150 years ago, has now reached a point where it grows faster than ever, both because it has multiplied its points of growth and because it seems to respond better to increasing temperature. It is clonal, poisonous and growing extremely quickly, which means its mass is expanding as a product of propelled growth time and is forming a material layer in the terrain that is changing it profoundly.

Within an environmental humanities context this article discusses how care practices in a manifest ecosystem might foster endurance both of ecosystems in a changing climate and of the landscape practices that are part of them

Bio: Janike Kampevold Larsen is professor of landscape theory in The Oslo School of Architecture and Design, Institute of Urbanism and Landscape. For the last ten years she has been researching the changes in and materialities of Arctic landscapes. Currently she is working on a circular and balanced management of areas under pressure in the Varanger region.

Scientific Temporalities of the 19th and 20th Century (1)

Scientific knowledge builds on, and investigates, multiple temporalities. It envisions and explores timescales in nature and society – from eons to nanoseconds, from repeated cycles to sweeping changes, from the tempi of nature to alterations in cultural life. Yet research also has its own multifaceted rhythms. Knowledge can be seen

as cumulative or radically shifting, yet any idea of knowledge presupposes temporal ideas. This panel contributes with historical analyses of multiple temporalities of scientific knowledge in the 19th and 20th centuries.

The papers discuss how scientific knowledge has produced and conceptualized timescales, paces and rhythms of change in nature and society. How have temporalities been represented and envisioned in scientific data, discourse and imagery, e.g. through ideas of chronology, origin, archives or timelines? Moreover, the papers explore how temporal notions have structured science as a cultural practice. What are the rhythms of knowledge making? Importantly, the papers explore how scientific temporalities have emerged at the intersections of science, nature and political institutions. How do scientific temporal regimes intervene in debated concerns like the environment or the state of the knowledge society.

Julia Nordblad: Biodiversity and the temporalities of planetarity

Dipesh Chakrabarty has been a central figure in the recent “planetary turn” in the humanities. This paper starts from his suggestion that the planet is a useful category for understanding the escalating ecological crisis, and suggests a new empirical focus to develop that category. The paper examines the successful attempt by some conservation biologists to popularize their concerns for the destruction of nature by inventing the concept of biodiversity in the 1980s. Actors laid out temporal aspects of biodiversity loss, and reframed environmental concerns by proposing a distinct idea of a planetary temporality that circumscribed the place of humanity in the history of Life.

Bio: Julia Nordblad is a lecturer at the Department of History of Science and Ideas, Uppsala University.

Marit Ruge Bjærke: Alien species futures

This paper explores the production of “knowledge of the future” in discourses on invasive alien species. Through a close-reading of Norwegian guidelines for risk assessment of invasive alien species, the paper investigates the consequences of these future oriented practices, the role they play in turning the alien species from uncontrollable threats into manageable entities. The paper discusses the temporal scales on which alien species are understood, and how temporal understandings in the alien species discourse tie in with and differ from those of other environmental problems.

Bio: Marit Ruge Bjærke is a researcher in Cultural Studies, University of Bergen.

Staffan Bergwik: Scientometrics as a time-binding technique: The history and growth of science in the 1950s and 1960s

Scientometrics was launched in the 1950s to apply a scientific method to science itself. This paper investigates scientometrics as a time-binding technique. It explores images of periods and rhythms in the past, as well as the current state of science and its progress, produced in scientometrics. The science of science was described as regulatory knowledge and a policy instrument. Which temporalities were created through this envisioned relation between scientific knowledge and political institutions?

Bio: Staffan Bergwik is a Professor in History of Ideas, Stockholm University

Disaster Time

Inna Sukhenko: Synchronizing Spatiotemporal Modalities in Fictionalizing Nuclear Energy: Literary Imaginaries of Solastalgia in U.S. Nuclear Fiction

The variety of emotions in narrating the nuclear history of humanity overwhelms the range of concepts such as eco-grief, tierratrauma, anxiety, radiophobia etc within debating the Nuclear Anthropocene's agenda (Schuppli 2016) and distinguishing the transformations of the value paradigm of the nuclear energy dependent society via its behaviours, priorities and values (Szeman 2018). Contextualizing the range of emotions in fictionalizing nuclear history (a nuclear disaster, in our case) appeals to the amalgamation of factual and fictional narratives, where framing the spatiotemporal setting of nuclear events helps switch from over-emoting a nuclear trauma to nuclear knowledge (via curiosity, investigation, hope) that helps to reconsider 'nuclear' traumatic experience from the perspective of transiting scientific facts to the public in the context of deemoting toxic geographies (Mahtani 2014) but emoting the scientific knowledge (nuclear literacy, energy literacy, health literacy etc). Such perspective on fictionalizing the nuclear disaster and 'nuke' trauma experienced community helps frame 'spatiotemporal modality' (Elleström 2020: 48), where the spatiotemporal parameters of the events not only define its historical, cultural, and social circumstances of its representation/reception a disaster but synchronize the transformations of emotions and the transition of scientific knowledge (nuclear knowledge management) via emotionalizing and personalizing ('scientific knowledge [has] to be personalized and emotionalized' (Bruhn, 2020)) the nuclear related traumatic experience within the social and historical contexts in fictional writing practices. On the example of studying the literary figurations of 'solastalgia' – 'a distress of environmental changes' (Albrecht 2006) in the context of narrating the nuclear (post)- apocalyptic settings under the ecocritical perspectives (intermedial ecocriticism, Bruhn 2020) reveals the synchronization of spatiotemporal modalities in narrating the nuclear disaster with its premises and aftermath. It is the reference to solastalgia, which contributes to synchronizing the range of emotions towards the nuclear energy and the transformations of environmental settings of a physical/spiritual survival and situating the transmission of scientific knowledge in order to communicate 'spatiotemporal modalities' of 'nuclear trauma'-related narratives. The literary implications of 'solastalgia' as a synchronizer of spatiotemporal modalities within nuclear postapocalyptic narratives are studied here in U.S. Chernobyl fictional writings, such as Andrea White's *Radiant Girl* (2008), Anna Blankman's *The Blackbird Girls* (2020) and Rachel Barenbaum's *Atomic Anna* (2022), which contributes to avoiding over-emotionalizing 'nuclear energy' and switching to critical thinking on nuclear energy related issues within further facilitating discussion on the temporalities of energy culture.

Bio: Inna Sukhenko, PhD, is a visiting research fellow of Helsinki Environmental Humanities Hub, the Department of Cultures, the University of Helsinki. Her current project is focused on researching the literary dimensions of nuclear energy within energy literary narrative studies and energy humanities. She teaches courses on nuclear narrative studies and Chernobyl studies. After defending her PhD in Literary Studies (Dnipro, Ukraine), she has been a research fellow of Erasmus Mundus (Bologna, 2008; Turku, 2011-2012), Cambridge Colleges Hospitality Scheme (2013), SUSI (Ohio, 2016), Open Society Foundation/Artes Liberales Foundation (Warsaw, 2016-2017), JYU Visiting Fellowship Programme (Jyväskylä, 2021), PIASt Fellowship Programme (2021), PIASt Fellowship Programme (Warsaw, 2022). She is among the contributors of *The Routledge Handbook of Ecocriticism and Environmental Communication* (2019). Her general research interests lie within

environmental humanities, energy humanities, petrocultures, ecocriticism, nuclear criticism, literary energy narrative studies, nuclear fiction, energy ethics. She is a member of the Association for Literary Urban Studies (Finland), HELSUS (Finland), the Finnish Society for Development Research (Finland), and Nordic Association for American Studies (NAAS).

Nabanita Samanta: Re/con/figuring ‘Disaster’ as Temporal (Dis)order: Crisis, Chronopolitics, and Agential Assemblages

‘Disaster’ as a multi-vocal term continues to be frequently-invoked as much in popular lexicons as in policy discourses; and such discourses are surely going to endure with further momentum amidst the multiple and mutually reinforcing risks and vulnerabilities transpiring into disasters. While ‘disaster’ as an analytical conceit might help us in understanding and unpacking the complexities of the contemporary world, attending to the temporalities entrenched to the framing of disaster can prove to be fruitful for rearticulating the conceptual repertoire of critical disaster studies – this paper while attending to the temporal politics of disaster attempts at treading some preliminary moves towards this direction. The paper problematizes different conceptual framings of ‘disaster’ – including the often-invoked event-versus-process, realist-versus-constructivist, slow-onset versus rapid-onset distinctions etc, – and tries to reinscribe the temporal coordinates of disaster to render intelligible the complexities underlying its causal intricacies as well as its afterlives. Drawing on ethnographic vignettes from an ongoing research on coastal transformation, the paper underscores how the framing of disaster – and often the political appropriation of the same – encapsulates disruptive temporal spaces insofar as interventions such as ‘disaster risk reduction’ and ‘resilience building’ intrude into the present and (re)shape the future. This might operate in two ways – recasting the past as vulnerable and/or anticipating the future as risky – thereby controlling the making and unmaking of temporality at a ‘disasterscape’. Centering time as a matter-of-concern as well as a matter-of-care, the paper argues how temporal dynamics remain very much primal in the process of recovery, resilience and rebuilding particularly against the backdrop of the emergent and ongoing poly-crises in the wake of the Anthropocene. Furthermore, the paper presents conceptual moves towards arriving at a nuanced iteration of disaster wherein the temporal scaffold of disaster is not plotted along a linear register of time with demarcated beginnings and ends; instead an attempt is being made to trace plural and polymorphous renderings of time as embedded in the specific social, political, economic, material, scientific, and discursive practices and imaginations that give way to certain forms of disasters-in-the-making. A term like ‘disaster’, far from a neutral descriptor, remains deeply and inextricably infused with ideological and political intentions; hence discursive potency of disaster is highlighted by way of attending to the processes of politicizing time. Furthermore, bringing attention to the bearings of time and its multitudes on the question of agency, the paper engages with the exercise of reassembling agency as it attends to how the agential realm of a disaster is being animated by a wide array of situated practices that are mediated socially, politically, and ecologically.

Bio: Nabanita is a PhD candidate in Sociology at the Indian Institute of Technology Bombay (Mumbai, India). As a passionate student of social sciences, Nabanita posits her research-interests at the intra-section of ‘ecology’, ‘society’ and the ‘self’. Some of her current academic engagements span across the transdisciplinary fields of political ecology, ecological anthropology, critical agrarian studies, blue humanities, marine and coastal governance etc. Nabanita’s PhD project dwells on the processes of making and unmaking of ports in view of the

proliferating 'blue growth'; and the project seeks to forge conversations across political ecology, anthropology of infrastructure, STS and Anthropocene studies.

Joo Yunjeong: Living with Slow Disaster: Concept and Practice

This presentation aims to provide a sociological exploration of slow disasters and will discuss the key elements of slow disasters as well as relevant methodological approaches. Borrowing from Nick Robson's concept of 'slow violence', slow disaster refers to the disaster that does not occur as a single, spectacular event, but develops slowly and is catastrophic by the time it is finally noticed. 'Slow disaster' is a way of thinking about disasters not as discrete events, but as long-term processes linked across time." (Knowles, 2020) Disasters are often presented as a single event, when in fact there is a significant accumulation of pressures that manifest as an event, or a significant post-event process and aftermath. Therefore, when trauma is studied alongside disaster research, it can be seen as the lasting repercussions of a single catastrophic event on individuals and societies.

In addition, slow-onset disasters are currently being discussed in the context of the climate crisis. These are events that occur gradually over a period of time, such as drought, desertification, rising sea levels and the spread of infectious diseases, overall environmental degradation. For this reason, we sometimes discuss fast and slow disasters separately. However, the concept of slow disasters can be seen as an attempt to go beyond the dualism of clock time and lived time, to construct a plurality of time, and to understand the layering of temporality as a process.

For this, I will explore the meaning of 'slow' in slow disasters. Slow does not simply mean slow clock time, it can also mean invisibility, not a fixed point in time or a single event, referring to the layered nature of experienced time and the complexity of multiple temporalities. To fully grasp slow disaster, it is essential to combine the historical and sociological imagination, and I would like to consider how the process of temporality can be analysed as a lived experience, including long-term duration, the deep history in the Anthropocene, and sociological longitudinal qualitative research and life course analysis.

To this end, I will present the case of a slow disaster in a nuclear power plant village and explore the application of the concept. Busan is the second largest city in South Korea, home to 10 nuclear reactors and a population of 3 million people within a 30km radius. People in the surrounding villages have been exposed to the risks of environmental contamination, strange diseases, mutations, sea level changes, increased earthquakes and typhoons since 1979, when the plant began operations. The time of the half-life of radioactivity, the time of geological zones and fault lines, the time of climate crisis, the time of the local history of the village of Gori, the time of colonisation and modernisation, the time of the dispersal of the villagers, the time of the sea and currents, the time of marine life and the time of development have all been intertwined to form the time of slow disaster.

Bio: Yunjeong JOO is an Assistant Professor(Sociology, Pusan National University, South Korea) -> Tenure Track Assistant Professor Sociology of human rights, multi-species justice, disability, disaster studies Principal Investigator for PNU SSK Living with Slow Disaster Project(10 year project(2023-2033), funded by Korean National Research Foundation) : livingwithslowdisaster.net.

Jill Stauffer: Beginning an Ending: Law, Territory, and the Possible End Times of Settler Colonialism

A structure of temporal lapse runs through the legal argumentation, reconciliatory language, and everyday life of settler colonial subjects: how settlers are trained to see and the stories they tell about the passing of time distort or render invisible enduring indigenous presence. This failure of perception makes it difficult for settlers to see their implication in ongoing harm. Relying on phenomenology—philosophical description of how we live in time and space—as well as examples from disputes between settlers and indigenous groups over land, water, and history in North America (Delgamuukw v. British Columbia, Standing Rock, etc.), this talk traces how settlement gets lived as an unquestioned reality by settlers, and how different accounts of temporality and of storytelling might open that reality to questioning and to the possibility of radical transformation. Is it possible for us to imagine the end times of settler colonialism? To unsettle what seems to be settled? World-building is always a joint enterprise (world-ending is too, but less definitely so). As such, I'll end the talk by considering how we might begin an ending—working together jointly to end one world for the sake of creating another.

Bio: Jill Stauffer is associate professor and director of the concentration in Peace, Justice and Human Rights at Haverford College. Her book *Ethical Loneliness: The Injustice of Not Being Heard*, was published by Columbia University Press in 2015. She is on the editorial board of *Voice of Witness*, a non-profit oral history book series illuminating human rights crises by amplifying the voices of those who suffer through them. Her edited volume (with Bettina Bergo), *Nietzsche and Levinas: After the Death of a Certain God*, was published by Columbia University Press in 2009. She is currently working on a book on the relationship between time and law called *Temporal Privilege*.

Time and Performance

Anne Klara Bom: Time and timeliness in framings of *The High School Song Book*

The High School Song Book is a piece of material cultural heritage with an overall purpose to “reflect the contemporary culture of community singing” in Denmark. Since the book was first published in 1894, it has been subject to several political, educational, and mediated framings and debates related to Danish identity, values and ideas. In research, its lyrics and the use of them have been approached as sources to Danish cultural history on how singing is used to remind the Danes of a common past, of common traits and values in the present, and to express common aspirations for the future. Both in research and in debates, *The High School Song Book* is frequently situated in temporal contexts, but it has not been examined how the abstract units past, present, and future are constructed, expressed, and negotiated in debates about the book and the ways it is framed and used for community singing. By use of concepts from critical time studies and science and technology studies, my aim with this paper is to examine how and with what effects different configurations of time have played vital roles in media debates about revisions of the songbook, and in political framings of the book and songs from it. On a theoretical level, the paper seeks to explore “the distinctive contributions that time itself might make to work on community” (Bastian 2014) within the field of critical heritage studies. It is argued that the fields’ current focus on the discursive and affective dimensions of heritage practices can benefit from in-depth analysis of how time works as an actant in the entangled processes where heritage is connected to social contexts such as class, race, nation, and gender (Smith 2021; Smith, Wetherell & Campbell 2018).

Bio: Anne Klara Bom (PhD) is an associate professor and Head of Cultural Studies at The Department for Language, Culture, History and Communication at the University of Southern Denmark. Her fields of research are critical heritage studies and cultural studies, and she has worked with approaches to and uses of cultural heritage in many different contexts. Recent articles are published in *International Journal of Cultural Policy* (2021), *Childhood & Philosophy* (2021), and *Journal for World Literature* (2019), and she is author of the monography *H.C. Andersen som kulturelt ikon [Hans Christian Andersen as a cultural icon]* (2020). She is PI of the research project *Samklang: Højskolesangbogens sociale fællesskaber [Harmony: The Social Communities of The High School Song Book]* (2022-2024) funded by Danish Arts Foundation and Arts and Culture Norway.

Janne-Camilla Lyster: Resuscitating temporalities from timeless storage

Dancers and choreographers are confronted with past attempts to store movement through notation in the shape of systems for movement notation – such as Beauchamps-Feuillet notation, Laban notation and Eshkol-Wachman movement notation. Either approaching movement in a mimical way (“drawing” movement), such as Beauchamps-Feuillet, or through symbolic signs (“writing” movement), such as Eshkol-Wachman, the sensorial aspect of performing the movement, and in particular its temporal aspects, slips the notating and, in turn, the process of resuscitating it, i.e., recreating movement from scripture.

This paper addresses efforts to store time in timeless mediums, and to resuscitate these temporalities in the field of choreography. Moving beyond choreography, it asks how temporalities are created when sensorial experiences are recreated from timeless – in a literal sense – formats such as written or drawn material.

Bio: Janne-Camilla Lyster an associate professor in choreography at the Oslo National Academy of the arts. She is a choreographer, performer, researcher, and writer. In 2019 she completed her artistic doctoral project "Choreographic poetry: Creating literary scores for dance". She is working currently with internationally renowned choreographers such as Deborah Hay (US) and was recently commissioned to make and perform a choreographic work based on the archive of Noa Eshkol (IL), which was shown at the National Museum (NO) and Norrköping Konstmuseum (SE). Lyster has a special interest in prefigurative practices, notation systems and transdisciplinary artistic work.

Sarah Bro Trasmundi: Reading, breaks and living pauses

Education should enable individuals and societies to prepare for the future. European educational systems have a long tradition of assessing the quality of learning in terms of products and functional value (e.g., scores on a test of information retention). Currently, teachers train reading skills such as fluency, speed, vocabulary knowledge and word comprehension, and reading pedagogy is designed to avoid breaks during reading and only engage in imaginative processes post festum, e.g. by means of literary analysis. This focus leaves aside the function of breaks during reading, and at worst teachers train students to avoid them. While breaks can be detrimental for reading maintenance, as when a reader is interrupted, or when motivation and attention decline, they could also fuel imagination. This idea stems from a recent study that shows how readers continually initiate multiple micro-breaks to link texts to experiential and imaginative processes. The gallery below provides a few examples of such breaks in natural (i.e., non-experimental) reading situations. The few examples indicate that the readers do not disengage when they elicit breaks. In fact, the breaks do not seem to relate to decline in attention or task switching.

Rather, the readers use gestures (such as pointing in the text), which allow them to resume the ocular scanning efficiently.

An important theoretical backbone that gives flesh to this work on breaks is the theory (and dramaturgy) of living pauses from the Japanese Noh theatre, established by Zeami in the 14-15th centuries. The Japanese concept for a living pause is *ma*. In the Noh theatre, such silent moments are performed as maintaining silence, and in experiencing the deepened chronotope. The concept gives weight to the idea that breaks are not just empty voids, but meaningful because of their transition potential, and breaks have been described as the most intriguing moments because they disturb anticipation, habitual thinking, and prediction. When flow is broken, the break constitutes a threshold for new beginnings. A break during reading can be an imaginative incubation phase where everything becomes possible. In sum, the breaks fuel imagination, they are cognitive-affectively saturated which provides memory with the best conditions. In this talk, I show how readers change the pace of rhythm when they encounter riddles, or they zoom out and 'pause' the symbolic scanning; that is, how they create temporal loopholes to integrate multiple thought processes over time. Currently, there is no systematic understanding of what prompts such breaks or how they relate to thought processes. Testing the function of breaks systematically and empirically will reveal the untapped potential of breaks for education by showing how temporal adaptivity matters for motivation and learning. Such results would radically alter expectations in reading and enrich the imagining power of readers by allowing them to engage more creatively with texts.

Bio: Sarah Bro Trasmundi is Associate Professor of Cognitive Ethnography at the University of Southern Denmark and Researcher at Oslo University in the research group 'Literature, Cognition and Emotions'. She focuses on the intersection between cognition, imagination, and language in domains such as literature, interaction, reading, and education.

Scientific Temporalities of the 19th and 20th Century (2)

Scientific knowledge builds on, and investigates, multiple temporalities. It envisions and explores timescales in nature and society – from eons to nanoseconds, from repeated cycles to sweeping changes, from the tempi of nature to alterations in cultural life. Yet research also has its own multifaceted rhythms. Knowledge can be seen as cumulative or radically shifting, yet any idea of knowledge presupposes temporal ideas. This panel contributes with historical analyses of multiple temporalities of scientific knowledge in the 19th and 20th centuries.

The papers discuss how scientific knowledge has produced and conceptualized timescales, paces and rhythms of change in nature and society. How have temporalities been represented and envisioned in scientific data, discourse and imagery, e.g. through ideas of chronology, origin, archives or timelines? Moreover, the papers explore how temporal notions have structured science as a cultural practice. What are the rhythms of knowledge making? Importantly, the papers explore how scientific temporalities have emerged at the intersections of science, nature and political institutions. How do scientific temporal regimes intervene in debated concerns like the environment or the state of the knowledge society.

Emma Hagström Molin: The Multiple Timescales and Origins of Nineteenth-Century Archives

In the nineteenth century, archivists started to arrange files according to provenance in the centralized archives of nation states. My talk focuses on how this emblematic change in the organization of historical records interplayed with the different temporalities of nations and sciences. New national time, and the provenances it governed, interplayed with the far more planetary timescales of nature and Christianity. I argue that the provenance principle challenged the scholarly understanding of what scientific order is. Multiple timescales were synchronized and provenance harmonized with the scientific needs of historiography.

Bio: Emma Hagström Molin is an Associate Professor in History of Ideas, Södertörn University.

Erik Isberg: Oceanic timemaking: Scientific temporalities and deep sea core drilling during the International Decade of Ocean Exploration (1971-1980)

In this paper, I seek to explore how the ocean sciences have produced and conceptualized time in the postwar era. I specifically focus on deep sea core drilling. The paper traces how the temporalities of deep sea cores could be enrolled to different scientific and political projects. Even though deep sea cores are often described as “natural archives”, this paper seeks to highlight the interplay between the scientific production of time on the one hand and the political and geographic frameworks in which this production takes place on the other.

Bio: Erik Isberg is a PhD student at the Division of History of Science, Technology and Environment, KTH Royal Institute of Technology.

Adam Wickberg: Temporal enviroing media: the case of the International Geophysical Year 1957-58

Environmental data is fast becoming the default resource to assess, manage and even steer global developments. To critically engage and historicize the temporality of environmental data, this paper presents the theoretical concept enviroing media. I will develop the concept to account specifically for the role of data in the making of environmental temporality, using the coordinated enterprises of the International Geophysical Year 1957-58 (IGY) as my empirical example.

Bio: Adam Wickberg is a historian of Media and Environment at KTH, Stockholm and Visiting Researcher at the Max Planck Institute for the History of Science in Berlin.

Kristin Asdal: The little tools: of timing: Co-modifying nature-times with the times of politics

Politics of nature is inextricably linked to time-work: Not only is it a time-issue, but also a timing-issue; about working upon time and about having different modes and versions of time to meet: nature-times in encounters with the times of politics and the ‘little tools’ that do such co-modification work. In combining environmental humanities and the history and politics of science, this paper suggest turning into one of our key-objects of inquiry, - and to take this to include the means and tools that set nature-entities on the move and enable them to become part of political procedure, parliamentary settings and democratic as well as economic practice. In showing this, the paper argues that parliaments are not such exclusively human affairs as they are often thought to be. Empirically the paper delves into these issues by analyzing the controversy over whaling which surrounded these large animals in the late 19th century as well as the more contemporary efforts at seeking to time the Atlantic cod to transform it into a farmed species. More overridingly the paper argues that we cannot understand the history and politics of nature without grasping the time-work that it involves.

Bio: Kristin Asdal is center director and Professor in STS at TIK Centre for Technology, Innovation and Culture, University of Oslo.

Living Geological Time

As John McPhee wrote in his monumental *Annals of the Former World*, geologists inhabit time differently, traversing geological time by “averaging about ten thousand years per step,” billions of years travelled on a successful field day. Yet earth scientists are not alone in their capacity to experience and apprehend seemingly mind-boggling temporal scales, and the way these scales concretely shape and intrude upon people’s quotidian sensibilities demonstrates that geological time is not simply an intellectual abstraction. As Leander Diener will discuss, inhabitants of certain Alpine regions applied geological knowledge about the deep time of rock formations from the late nineteenth century onwards in order to minimize the dangers of landslides and alpine mass movements. Lachlan Summers will illustrate how Mexico City’s 2017 earthquake made some of the city’s residents so attuned to the ongoing signs of geological processes that they became sick with the everyday presence of geological time. And in the Flinders Ranges of South Australia, as Sophia Roosth will describe, paleontologists studying the fossils of megascopic fauna that lived during the Ediacaran period more than five hundred million years ago rely upon embodied connections to the landscape forged over decades of fieldwork. As she reports, their understanding of geological landscapes as places marked by specificity, repetition, and synchronicity run parallel to indigenous Adnyamathanha Dreamings of the same mountain range, which are similarly attuned to topographic transformations as indelible marks of ancient ancestry. Throughout, this panel will address how people make sense of the entangled scales of geological and lived time, thinking through the material, affective, embodied, and narrative dimensions of geological time occasioned by phenomena such as landslides, earthquakes, and fossilized sea-beds.

Sophia Roosth: The Zebra Finch in Alice’s Restaurant: Ediacaran Paleontology & Dreamtimes in the Flinders Ranges, South Australia

In this talk, I will describe paleontological fieldwork conducted by geobiologist Mary Droser and her lab members in the Flinders Ranges of the South Australian outback. After chronicling how long histories of settler colonialism and resource extraction (particularly mining) in South Australia have made possible paleontological discoveries in the Flinders, I will then explain how Droser and her students reconstruct ancient Ediacaran sea-beds in order to learn about the taxonomy and ecology of fossilized Ediacaran biota, megascopic fauna that lived more than five hundred million years ago prior to the Cambrian Explosion. I draw parallels between paleontological storytelling and the Dreamings of Adnyamathanha people, the indigenous community whose ancestral home is the Northern Flinders Ranges. In Yura Ngawarla, Adnyamathanha derives from Adnya, “rock,” and matha “people” – their name expresses the relationship of Adnyamathanha to the Flinders themselves, whose presence in and attachment to the mountain ranges is chronicled in their Dreamings. I am here curious about the productive entanglements of Dreaming and paleontological storytelling about the Flinders Ranges, and aim to read geological narratives as refracted through the narrative logics of the Dreaming, which accounts for the human and natural worlds as shaped by ongoing ancestral phenomena – what Tony Swain termed “rhythmed events” – that continue to shape the physical landscape and can be read indexically through signs impressed topographically in the land. I scrutinize how Adnyamathanha conceptualizations of landscapes forged via both storytelling and embodied connections to land and Country as (1) “lived in and with” rather than represented at a remove, as (2) entities in which life and land are mutually constitutive, and as (3) temporally synchronous, or “everywhen,” can be

mobilized toward a more fine-grained understanding of how geologists learn to think about landscapes as places marked by specificity, repetition, and synchronicity.

Bio: Sophia Roosth is an anthropologist who writes about the contemporary life sciences. From 2020-2021, she will be a Cullman Center Fellow at the New York Public Library. Roosth was the 2016 Anna-Maria Kellen Fellow of the American Academy in Berlin and in 2013-2014 she was the Joy Foundation Fellow of the Radcliffe Institute for Advanced Study. She was previously a postdoctoral fellow at the Pembroke Center for Teaching and Research on Women at Brown University and a predoctoral fellow of the Max Planck Institute for the History of Science in Berlin. She earned her PhD in 2010 in the Program in History, Anthropology, and Science, Technology, and Society at the Massachusetts Institute of Technology (MIT)

Leander Diener: Deep Future Decisions: Geological Time in Alpine Settlement Planning

In geologically active areas like the Alps, the earth has been moving since time immemorial. Landslides, debris flows, and mass movements were part of everyday life. For this reason, locally specific bodies of knowledge and practices existed on how to deal with the processes in the earth. In the late nineteenth century, the interpretation of alpine hazards changed. Against the background of new models about the formation of the Alps, geologists stepped in and contributed their expertise regarding the geological hazard situation. Geology explained the deep time of the threatened settlements and villages because the mountain dwellers were confronted with exactly that: the invasion of deep time into the present. Geological knowledge about the origins of geological formations was not only in demand because it could explain current danger situations. It was at least as much in demand because it had prognostic capabilities. The specialists of deep time were at the same time experts of a deep future. Indeed, geologists used the medical vocabulary of etiology, diagnosis, prognosis, and therapy to discuss the "probable course and outcome of the mountain's disease" (Heim, 1932). This paper explores the role of geologists in the alpine space who brought deep time and deep future as applicable knowledge (symptomatology of mountains) to the planning of alpine settlements and villages. One consequence of this safety infrastructure, which was formed from the late nineteenth century onwards, was a confidence and serenity of the threatened population in the face of real dangers. This can still be felt today in villages that are under imminent threat of evacuation. And today, as in the past, deep time diagnosis contributes to risk management in the Alps.

Bio: Leander Diener is a visiting postdoctoral fellow at the Max Planck Institute für the History of Science in Berlin.

Lachlan Summers: Touched by Deep Time: The Ungrounding Earth of Mexico City

In Mexico City, earthquakes make people sick. Called being *tocado* [touched], the illness might be considered part of the 'culture-bound syndrome' known as *susto* throughout the Americas, where acute experiences of shock – such as being trapped in a shaking building – induce chronic negative health outcomes, like anxiety, migraines, wasting, insomnia, and diabetes. Since the city's 2017 earthquake, innumerable residents deal with the long-term health fallout of seismic exposure. Where most studies explain fright sicknesses as a maladaptive individual psychology, an idiom of social distress, or a cultural interpretation of a universal biomedical affliction, I draw on thirty months' ethnographic research with earthquake victim advocates across Mexico City to suggest we might better understand *tocado's* symptoms by following the fright itself. Because corrupt developers sign off on dangerous construction blueprints and earthly motions never cease, destruction is seldom an absolute condition

for buildings in Mexico City. I examine the signs that los tocados discern in the space between relative and absolute destruction: puckering potholes, sidewalk fissures cutting into building foundations, cracks spiralling through apartments, and gaps opening between subsiding buildings. Using feminist STS studies of toxicity to bring together medical and environmental anthropologies, I follow the knowledge that fear assembles to argue that los tocados' sense of vulnerability to ongoing geophysical processes might be understood as an embodied attunement to Mexico City's deep time present. Instead of collapsing the human and geological scales through material semiotic frameworks, or holding them distinct with concepts like "withdrawnness" or "hyperobjects", I show how a city riven with abyssal scalar difference sickens people with everyday deep time.

Bio: Lachlan Summers is a PhD candidate in anthropology at the University of California Santa Cruz.

Whale Extinction (Convenors: Kristin Asdal and Espen Ytreberg, Discussant: Michelle Bastian)

At the face of it, the extinction of species such as the whales presents a time-arrow from the past, via the present, to the future; from plenty via scarcity and to (a possible) extinction. It also seems to involve finality, an end of time which is what Deborah Bird Rose calls "double death"; the death of the final individual from which the species can never reemerge. These versions of temporality are real, but they are also never the full or whole picture, indeed they are not always the main forms of temporality. Other temporalities may run alongside these, and in opposition to them. For instance, conservationists propose measures of renewal and balance, envisioning futures that avoid fatality, and researchers have pointed to the temporal grey zones that emerge between a species being pronounced scarce and extinct. Moreover, the whole idea of extinction is a contested issue, linked up with procedures and tools that have aimed at both knowing and steering a species' own version of speed, reproduction and timing. This panel investigates the encounters, tensions and clashes between multiple temporalities involved in the contested issue and practices of producing and knowing the temporal trajectories of extinction. This panel is set up chronologically as Asdal addresses 19th century Norwegian whaling, Ytreberg 20th century industrial whaling in the south Seas and natural waters. Åman examines the situation for the indigenous Makah whalers of Northwestern USA within the International Whaling Commission's framework of the 1990s, while Hale addresses contemporary temporal multiplicities of whale tourism in the Azores. On top of this rough chronology the papers aim to trace how the plural times and temporal contestations of extinction recur and change.

Espen Ytreberg: The moment, eternity and time running out: Vernacular photography from Norwegian 20th century industrial whaling

The industrial whaling that took place in the South Seas and international waters during much of the 20th century, and that brought the Great Whales to the brink of extinction, included a number of workers and professionals who were also amateur photographers. The rich photographic archives that exist today thus provide a vernacular and visual history of industrial whaling as seen from the viewpoint of its foot soldiers. One might say those photographs were taken with the specter of extinction as a backdrop, since this was a theme in Norwegian public life already before industrial South Seas whaling started in 1904.

The photographs can thus be seen in light of the extinction context, as a response to the uncertainties and risks of a future extinction event. Based on archive collections mainly from the Sandefjord Whaling Museum and the

Norwegian Polar Institute, the paper examines temporal dimensions of some recurring photographic motifs. It finds in heroicising images of whalers a preoccupation with the exalted and decisive moments of catching and processing. In other images, the idealization of workers is combined with an ideal of permanence visually expressed in whale bones and developed in what one might call a bone iconography. Other, more unsettling photographs show time running out, literally and figuratively, as whalers are caught at work surrounded and submerged in the waste matter of animals they have killed.

Bio: Espen Ytreberg is Professor of Media Studies at IMK, UiO.

Sadie Hale: Haunted by extinctions: The temporal dimensions of contemporary whale tourism in São Miguel, Azores

This paper draws on recent fieldwork undertaken on the island of São Miguel, part of the mid-Atlantic Portuguese archipelago of the Azores, where whale watching is a popular tourist activity. Before people paid to see whales alive, whaling had constituted a significant industry on these islands since the 18th century, with sperm whales especially targeted. These and other whale species were hunted close to extinction at the global peak of 20th-century industrial whaling, a fact that constitutes a tangible part of the local heritage in São Miguel today through the display of former whaling boats and use of lookouts (*vigias*) by whale tour companies. Nowadays, 'resident' sperm whales live around the islands and can be observed year-round, shot not by harpoons but by tourists with cameras.

This paper explores the multiscalar temporalities at play in the work of a contemporary whale watching company in a small town on São Miguel. It investigates the notion that whale watching in itself collapses – and attempts to manage – different temporal modes, including the haunted time of extinctions that never (but almost) happened, the seasonal comings and goings of different whale species, the working hours of tour guides versus the fleeting visits of tourists, the 'sacred time of transcendental contact' with nature (Szczygielska 2022: 643) and the unsettled timescale of rapidly rising temperatures which is already altering the Atlantic Ocean around the Azores.

Bio: Sadie Hale is PhD Candidate at the Department of Anthropology, UiB

Sonja Åman: Back from the brink: International Whaling Commission and the revitalisation of the gray whale

In 1994 the gray whale (*Eschrichtius robustus*) was removed from the list of endangered species after a period of revitalisation which brought a population back from the brink of extinction caused by industrial whaling some six decades ago. While the announcement was received with jubilation in the news, for the Makah it meant the beginning of what would become a long and arduous process of affirming their treaty protected rights. The Makah, who call themselves the *qidiaa-tx* meaning "the people who live by the rocks and seagulls", are a people indigenous to the Northwesternmost point of today's United States. For thousands of years, they have secured a livelihood from their customary waters by fishing, sealing and, crucially, whaling.

This paper examines what happened at the International Whaling Commission (IWC) when the Makah applied to resume their whaling practice following the re-categorisation of the gray whale. The debate, dubbed a "chronology-controversy" by Matthew Brigham, illustrated some of the complexities of negotiating across temporalities, as timescales of bureaucracy and natural resource management collided with timescales of colonialism and intergenerational boundness. This paper investigates how different conceptualisations of extinction and time were

negotiated by the IWC and how the impacts of the negotiations reverberated through communities who live with and by the whales in comparison to those who govern human-whale relations.

Bio: Sonja Irene Åman is PhD Candidate at IKOS, UiO.

Kristin Asdal: Assembling-time, document-procedures and the 19th century's extinction rebellion

It is sometimes suggested that it is the invention of the steam-engine that ought to mark the beginning of the Anthropocene. In that case modern whaling can serve as a case in point: It was precisely the steam engine in combination with the grenade harpoon mounted on the ship that enabled whalers to hunt these large animals down, bring them to shore, and initiate the oil age that preceded ours. (The whale gained its commercial worth first and foremost from the oil that could be extracted and manufactured from the blubber under their skin) Hence, the very event of modern whaling can be directly related to 'coming on' of the Anthropocene.

The hunting down of the large whales is inextricably linked to the Anthropocene also in the meaning of the human capacity to have other species go extinct. As it was put before parliament, the Norwegian Storting, in 1879: "It is commonly known ... that in later years a war of extinction has begun against the species of whales present in the Varanger Fjord in the east of Finmarken" (Document No 31, 1879). Confronted with this unsettling issue, these once so lively and massively present huge creatures, the extinction issue, the weapons with which these mammals were caught, the flesh of nature, its very material, its sounds and smells

What on earth could be the interest and relevance of those entities that are in the title of this paper? It traces document-acts and procedures in the 19th century's extinction rebellion, namely the fight against whaling. It investigates how the politics of nature is inextricably linked to the question of time: not only as a time-issue, but also a timing-issue; about working upon time and about having different modes and versions of time to meet. The paper argues that documents are sites as well as tools through which nature-times and human times meet and confront one another.

Bio: Kristin Asdal is Professor and Head of Department at the TIK Centre, UiO

Blursdays, Busyness, Boredom

Christian Parreno: Boredom as Time, Space and Modern History

Boredom, unwanted and avoided, is usually described as the slow passing of time that derives when the environment and its events are meaningless. It is an experience of both time and space. Although similar conditions have existed in the past — including horror loci in Antiquity, acedia in Medieval times and melancholy in the Renaissance — boredom became prevalent with the consolidation of modernity, as an effect of the French and Industrial Revolutions. In English, the term emerged in the nineteenth century to denote moments of annoying pause amidst a way of living characterized by the desire for busyness, high velocity and constant change. To Martin Heidegger, in a series of lectures of 1929-1930, titled *The Fundamental Concepts of Metaphysics*, the reciprocal relationship between boredom and excitement unveils the disposition of the modern individual and, with that, the reasons behind cultural and social decline. Portraying boredom as 'a dense atmosphere' and 'a fog',

Heidegger observes that the condition is omnipresent in all dimensions of the everyday, with different levels of intensity — from superficial boringness to existential boredom. This has produced a temporal ‘lag’ that locates the modern individual in the ‘back of the present’ rather than ‘on the front’, awaiting directions from the norms of science instead of proactively seeking the truths of philosophy. By the same time, extending the qualities of personal boredom to a larger scale, Walter Benjamin, in the convolute ‘Boredom, Eternal Return’ of the unfinished Arcades Project, extends the condition as a historical meta-structure. Through the many fragments by many authors and his own aphorisms, Benjamin exposes a repetitious concern about the reliance of progress on the exhaustion with what has already been consumed. Boredom thus provides an environment of sameness so the new can emerge; it is ‘a grey fabric lined on the inside with the most lustrous and colourful of silks’.

Through the juxtaposition and interpretation of the temporal and spatial aspects of boredom in the writings by Heidegger and Benjamin, this paper explores how boredom not only entails the experiential and the historical but also embeds the negotiation of the future. This temporality is dependent on the qualities of the modern environment, defined by architecture and an urban realm that respond to capitalist economies.

Bio: Christian Parreno is assistant professor of history and theory of architecture at Universidad San Francisco de Quito, Ecuador. He holds a PhD from the Oslo School of Architecture and Design, an MA in the Histories and Theories programme from the Architectural Association, and a BA from Universidad San Francisco de Quito. He was a Visiting Graduate Researcher at University of California, Los Angeles, and a student of the PhD programme at the Bartlett School of Architecture, University College London. His research explores conditions of boredom and exhaustion in the modern built environment, with an emphasis on experience. He is the author of *Boredom, Architecture, and Spatial Experience* (Bloomsbury, 2021); and his writings have appeared in *Architectural Histories*; *Architecture & Culture*; *Emotions: History, Culture, Society*; *Log*; *Revista de Occidente*; *The Journal of Architecture*; *The Journal of Architectural Education*; *The Journal of Boredom Studies*; *Textual Practice*; and several edited volumes.

Clare Holdsworth: The Social Life of Busyness and relational temporalities

Busyness is a defining temporality of the 21st century. The rush of everyday life is matched by equal intensity to manage time efficiently and learn to slow down. This imperative to manage time is most commonly interpreted as an individual matter. In this paper I make the case for an alternative approach with starts from the principle that temporalities, and particularly the anxieties we experience about time, are essentially relational. Drawing on feminist writings about time and relationality, phenomenological interpretations of temporality that foreground the synthesis between past, present and future, and a bricolage of qualitative data; I consider how the study of time in everyday contexts can be considered anew through a relational lens. The bricolage of data includes one day diaries about time, texts on time management, interviews about family and working time, which were all collated from Anglo-American cultural and social contexts. Indeed, the design of this research project also challenges the temporal intensity of much academic research through seeking out available data in different formats to interrogate how busyness is experienced and managed. These data reveal how individual anxieties and experiences of time are inevitably shaped by intimate and professional relations. Moreover, the tactics that people are encouraged to adopt to make the most of time are implicitly framed by gendered, classed, heteronormative, able-bodied and racialized assumptions about who can and who cannot manage time.

Bio: Clare Holdsworth is Professor of Social Geography at Keele University, UK and author of *The Social Life of Busyness* (Emerald, 2021). This book concludes the findings from a three-year Major Research Fellowship funded by the Leverhulme Trust. Clare's research explores different expressions of busyness and how these are formed by and through social and intimate relationships.

Lauren Erdreich: The time of intimacy – parenting, class and family life

In his seminal work *Minding the Time* (2001, 2), Daly argued for the “central importance of time for understanding the way that families are organized and live their lives”. Setting out from this premise, this paper forms part of a broad conceptual project (together with Kari Stefansen and Ingrid Smette) exploring how time is implicated in everyday classed parenting practices and social reproduction. In this paper, we focus on one such practice - the creation of intimacy between parents and children. We ask, what concepts of time emerge from the literature related to intimacy? The value attached to the family as a seat of affection is a major aspect of the shift in the late 17th century towards what Charles Taylor called the “affirmation of ordinary life”. This shift saw a “growing idealization of marriage based on affection, true companionship between husband and wife, and devoted concern for the children” (1989, 289). The nurturing of these relationships requires dedicated time. The importance attached to this time continues to resonate in contemporary discourse about proper family life, particularly among middle-class families. Parents view time spent with their children as associated with warmth; as the basis for psychological well-being; as crucial for undivided attention to children's uniqueness, and to the success of their educational trajectory. Hence, parents invest resources into creating different modes of intimate time. These practices of intimacy create a relationship of “co-presence” in the here and now, at the same time as they are oriented towards an unknown future.

Bio: Lauren Erdreich (Ph.D.) is a senior lecturer in the School of Education at the Hebrew University of Jerusalem. Her major areas of research and teaching are anthropology of education, parenting and education, mothering in cross-cultural perspective, the relationship of marginal groups with dominant educational institutions, nonformal education, and ethnography. In her research, she brings both educational and anthropological theories together into the analysis of the cultural experience of learning and being. She is co-author of *Mothering, education and culture: Russian, Palestinian and Jewish middle-class mothers in Israeli Society*, together with Deborah Golden and Sveta Roberman and co-editor of a special issue of *British Journal of Sociology of Education*, 'Education and parenting: Cross-cultural perspectives' with Deborah Golden, Kari Stefansen, and Ingrid Smette.

Rachel Loewen Walker: Covid Time: The Blursday Effect and the Stories we tell about Coming Back from a Global Pandemic

Few would disagree that “Covid time” has become a very significant part of the cultural imaginary in the months and years following the various lockdowns of the COVID-19 pandemic. Our subjective experiences of time reveal a great deal to us about ourselves, as well as about the content of what is happening in the world around us. For example, during instances of extreme crisis and fear, time can slow down, a factor which is linked to psychological distress. Likewise, studies have demonstrated that time seems to speed up as we get older thanks to the blurring together of repeat experiences. When we think about our sensations of time in relation to Covid lockdowns, it is not surprising that the various health and socio-economic impacts, periods of heightened anxiety, social isolation,

and a forced sedentary lifestyle, all impacted our subjective experiences of time, including both slowing down the timeline and ever distancing us from a future that could change at a moment's notice.

In a study about the impact of the pandemic on experiences of time, researchers developed what they call the “Blursday” database: a repository of data from 2,840 participants across nine countries who completed various behavioural tasks during the pandemic (Chaumon et al., 2022). Their goal was to explore the impact of the pandemic on people's sense of time and their findings demonstrate that during periods of covid lockdown, participants experienced time very slowly and had difficulty determining the days of the week (hence coining the term “blursday”). As someone with a background in philosophy and gender studies, I have largely relied on theoretical explorations of time, though I am increasingly curious about the interplay between scientific and philosophical perspectives. Consequently, this paper explores “Covid Time” at the interstices of the Blursday dataset (its expanding collection of resulting research) and my own explorations of the living present (2022). Deeply influenced by Henri Bergson, Gilles Deleuze, and Claire Colebrook, the living present refers to a non-linear concept of time where the present always stretches to the future and the past through anticipation and memory. My work explores the ways that we “make time” through various methods of storytelling, memorialization, anticipation, and documentation. Thus, I am particularly curious about the non-linear making of time that occurred during and after experiences of lockdown, as well as the ongoing “covid-time” that characterizes the present day. Is “blursday” to blame for the HR difficulties that plague many organizations whose staff won't return to the office? Are heightened levels of social anxiety connected to time speeding up again? Has the loss of many “milestone” moments (birthdays, holidays, coming out experiences) forever changed our storylines? I explore these and other questions alongside COVID-19's continued living present.

Bio: Rachel Loewen Walker is Assistant Professor in Women's and Gender Studies, Political Studies, and Law at the University of Saskatchewan. Prior to this, Loewen Walker was the Ariel F Sallows Chair in Human Rights with the College of Law (2020-2022) and the Executive Director of OUTSaskatoon (2013-2020). She holds a PhD in Philosophy from the University of Alberta and works primarily on gender, sexuality, philosophies of temporality, and human rights through community-engaged scholarship. Loewen Walker's recent book *Queer and Deleuzian Temporalities: Toward a Living Present*, was published by Bloomsbury in 2022.

Strange Attunements

Hugo Reinert, "My Friend, the Nodule: Some notes on the deep time(s) of seabed mining"

Taking as its focus and point of departure a small, deep-sea polymetallic nodule retrieved from the “abyssal plains” of the Cook Islands Economic Exclusion Zone (EEZ), at a depth of five kilometers, the paper explores some of the strange, intersecting temporalities of deep seabed mining: a mode of resource extraction, as yet mostly prospective, premised on industrial-scale “harvesting” of mineral nodules from the deep ocean environment.

The practice is controversial, both locally and internationally. After decades of regulatory uncertainty and delay, matters have recently come to a head and over the course of July 2023, in the weeks leading up to the Lifetimes conference, global talks will be held that finally settle its status. In the blink of a geological eye, mineral deposits

that have formed in the light-less deep over millions of years may (or may not) suddenly become available for capitalist extraction and transformation into goods and commodities such as batteries, solar panels, or paint.

Stood at this temporal juncture, holding a small nodule in its hand, the paper asks: what tools, methods and imaginal resources may exist to help us make sense of this moment—to attune to the depths that are in play, and respond adequately?

Bio: Hugo Reinert is Associate Professor in the Cultural History of Nature at the University of Oslo. He dabbles in time studies, critical heritage studies and environmental humanities.

Małgorzata Zofia Kowalska "Stonewort stories for the polyrhythmic world"

Stoneworts are engineer species in the Natura 2000 site where I conduct my research. They form communities of benthic meadows that indicate but also induce high clarity of water. They play a vital role in oligotrophic, calcareous ecosystems and attract growing interest in hydrobiology and limnology. Ancient and evidenced as close precursors of all land plants (and therefore enjoying an honorary status of macrophytes), Charophytes are complex-structured algae. Vulnerable and endangered by anthropogenic pressure, they might simultaneously be destined to outlive humans.

Fascinating as they are, stoneworts are virtually unknown beyond the expert circles. Although some are red-listed, they remain elusive and unrecognised by the local community. My research focuses on drawing attention and experimenting with different forms of attuning to underwater engineers while challenging the dominant understanding of nature conservation as environmental management. Stoneworts here are understood as cocreators of the common world and "generative and agentic co-constituent(s) of relationships and meaning in the society" (Krause and Strang 2016: 633). I am interested in ways we can represent different times and different "world-making projects" (Tsing 2022) in more-than-human ecologies – and how these representations can serve to create a more polyrhythmic, relational, and regenerative social reality.

Anna-Katharina Laboissière

The practice of intentional fallowing, edged out by the advent of synthetic fertilisers in the 19th century, nevertheless continues existing as an object interest in agricultural policy and microbiology in recent years; it responds to a growing concern with the depletion and regeneration of soils in agricultural and environmental policy. Fallowing variously functions as a technique for agricultural productivity through improved soil fertility, an additional arrow in conservation biology's quiver of potential restoration tools, and as a promising resource of micro-organisms that could be used to engineer novel plant holobionts. In the process, fallowed soils emerge as sites where a variety of interests and projects converge and where these take up, replay, and extend questions of productivity and idleness, growth, and alternatives to economic expansion.

This paper takes a poetic detour through fallowed ground, asking what kinds of attunements or mis-attunements to exhausted and extracted temporalities are forged at the confluence of technocratic soil management and microbiological attention.

Laura McLauchlan, "Intergenerational attunements: embodied remnants of relations-past in openings and closings between kinds"

What does it mean to open to other beings, or to close oneself off from them? Returning to snippets of a decade of ethnographic moments with humans variously in love with and disdain for a range of other organisms, this presentation will trace strands of attunement that variously render human and other beings strange or idealised, including those labelled and labelling others as ‘crazy cat people’; hedgehog ladies variously loved and suspected; children weeping over their hand-raised steer sold for slaughter; rodeo men weeping for a stampede of Broncos; and a love of chickens that may or may not make human loves and rhythms easier. With a particular interest the ancestral or intergenerational as well as contemporary embodied forces in these pulls and repulsions, this presentation will consider the implication of other-than-human attachments for our ways of moving through the world, as well as for what it might mean to meet with generosity.

Bio: McLauchlan is visiting fellow at the University of North South Wales. Her area of speciality is transformative change, particularly with respect to environmental and interspecies care and connection. She is trained in multispecies anthropology, informed by material feminisms, environmental humanities scholarship, medical anthropology and trauma studies. Her work, which ranges from studying hedgehog-human relations, to tree-planting and pedagogical practice, pays ethnographic attention to emergent and marginal ontologies and practices that might allow for greater responsiveness to the interconnection of life.

Time in Natural Histories

Ingar Stene: Morals and Temporalities in Early Modern Geology

In this paper I explore three early modern works on geology, looking at how their authors dealt with the separation of what we today would call the biological and the geological, and how they developed, or failed to develop, temporal and moral schemes in order to both overcome the challenges of entanglement, or to capitalize on the opportunities it presented.

During the years 1657-1677, three very different works on geology were printed in Europe, all by authors living in or coming from Scandinavia. While these works had very different scopes, and ambitions, they all struggled to synchronise and integrate long geological processes, with the shorter cycles of observable life and human history, within the limits of a biblical timeline of 6000 years. But rather than succumbing to these difficulties, the early modern authors found strategies to face them not simply as problems, but also as opportunities. The prospect of time being etched into the strata of the earth offered a rich opportunity to craft new histories and meanings that reflected on the geological stratification of time, morality and history. As such, the emerging field of early modern geology was no stranger to the moral and historical implications of their studies.

In the Anthropocene we are once again becoming familiar with the early modern language of moral, temporal, and historical entanglements between the geological and the biological. If we are experiencing a continuity of, and a return to, ways of viewing the cosmos that blend these realms, how might this alter the way we conceptualize our own present? What might we learn from past endeavours into the muddled realms of geology, biology, temporality and morality?

Bio: Ingar Stene is a PhD candidate at the Department of Archaeology, Conservation and History at the University of Oslo, Norway. His research focuses on the early modern history of natural, cultural and social entanglements in Northern Europe, looking at how concepts of nature, climate theories and the far north travelled in the early modern history of knowledge.

Roos Hopman: Thinking speed with snails: digitization, data, and loss in the natural history museum

In natural history museums worldwide, museum staff are working on making their collections of specimens (such as insects on pins, dried plants, or mounted birds) digitally available through online platforms. While the digitization of collections is not an entirely new phenomenon, current efforts are undertaken at a larger scale than in the past, with museum management promising digitization processes that are faster than ever in particular. Speedy digitization is of the essence especially now, so museum actors and biodiversity scientists stress, as natural history collections provide a crucial resource for understanding and circumventing effects of climate-change induced biodiversity loss. This speed, then, is promised to be achieved through the purchase of novel technologies, such as 3D scanners and a conveyor belt system, as well as the outsourcing of labor and the introduction of workflows. This paper takes an interest in the work of digitization – the labor required to make specimens and their metadata digital through the taking of photographs, scans, and the transcription of labels – to upset these stories of speed. Building on ethnographic fieldwork conducted in the malacology (mollusk) collection of the Natural History Museum in Berlin, I in particular bring into view the importance of hesitation and pause in digitization. With this collection of snail shells and the workers digitizing them, the paper questions the promise of speed for natural history collections and their data, proposing alternative times of the digital. Doing so, it furthermore opens up the question if speed may deliver what it promises; namely a digital infrastructure of biodiversity data that serves to circumvent the effects of climate change.

Bio: Roos Hopman is a postdoctoral researcher at the Humboldt University/the National History Museum of Berlin. Her current project focuses on the politics, promises, and practices of the digitization of natural history collections.

Erik Ljungberg: Writing Down Nature's Rhythms: Gilbert White and the Naturalist's Journal

This paper examines how Gilbert White (1720-1793), an 18th-century natural historian and parson-naturalist, used his Naturalist's Journal to record and investigate the punctuality of natural rhythms in his parish in England. White was part of a small group of naturalists who attempted to make calendars of nature by observing and noting the annual appearances of hundreds of species. His journal, which contains 70,000 entries spanning over two decades, was a novel temporal-semiotic artifact that materialized natural durations and enabled their comparison and communication within networks of naturalists. I argue that such artifacts not only co-produced natural rhythms but also embodied specific temporal orders that reflected underlying cultural codes. Thus I attempt to articulate a notion of a relational structure whose ability to constrain the appearance of phenomena emerges from interconnected chains of circulating reference.

Bio: Erik Ljungberg has a masters degree in history of knowledge and a second bachelors in cultural anthropology from the University of Oslo. He is currently a doctoral student the Division of History of Science, Technology and Environment at the Royal Institute of Technology in Stockholm. Currently he is part the project "The Mediated Planet" which looks the global environment as emerging through practices of collecting environmental data. His

current research focuses the digitization of Swedish forestry between 1980 and today with a special focus on the importance of machine learning and artificial intelligence. His disciplinary homes are located in science and technology studies, media theory and the environmental humanities.

Elisa Storelli: A parachronology of atoms and stars

Temporal clusters are mind maps of my artistic practice and are used as a tool in my artistic research *chronomorphology*: the study of how time changes shape. I use this form of diagrammatic writing to navigate through my thinking and to describe a possible correlation of ideas about the change of time over time.

I would like to present my ongoing work on an iteration of a temporal cluster that I started to develop during my residency at the institute for theoretical sciences in Bangalore and at CERN Geneva. I am interested in the impact that quantum gravity have on how we perceive the world around us, and how this might influence the human understanding and feeling of time. I am especially interested about its effect on our understanding of continuity and chronology. The reality we live in nowadays is not chronological anymore, at least not in a timeline based chronology.

My goal is to create a story, a scientific narration, not a fiction though. The work will tell a relative and relational tale, anecdotes and theories from non-western traditions will appear associated in the fortuitous present of an image, rather than along a timeline. Inspired by the image of particle collisions, I want to produce an image of collision myself. Instead of particles' tracks, my image will reveal historical facts about the (de-/re-)construction of chronology from all around the world, from the past and from various domains. The story will be an iteration of the image.

Bio: Elisa Storelli (1986) is a swiss italian artist based between Brissago and Berlin. Her practice – *Chronomorphology* – is dedicated to the artistic investigation of time. Storelli holds a diploma from the UdK Berlin. She has been a research fellow of the DiGiTal graduate program in Berlin 2020- 2021. In 2021 she completed a *Meisterschüler:innen* year with Prof. Dr. Rosa Barba and she is a PhD research fellow of the binational program for artist at the HfK Bremen. Storelli's work has been shown at GAK, Bremen; Kunstraum am Schuplatz, Vienna; Haus am Lützowplatz, Berlin; CCA Ujazdowski Castle, Warsaw; Hamburger Bahnhof, Berlin; and La Rada, Locarno among others. <http://elisastorelli.ch>

Christina Nadeau: Tipping the Narrative on Climate Change: An Interdisciplinary Review on the Role of Tipping Points on the Temporality of Climate Change

Climate change fundamentally deals with time and temporality. Climate change often refers to future long-term projections of the state of our Earth system while drawing from evidence from the past to understand how the climate system functions. We do this to connect our present-day actions with future consequences in the face of anthropogenic climate change. Temporal dimensions of climate change are one of the main contributing factors to the lack of agency to mitigate its current and future impacts. Efforts to reduce emissions have been slow on-set and disjointed across nations, leading climate scientists and communicators to resort to more extreme narratives to emphasise the urgency required to avoid the collapse of multiple complex natural systems. Amongst the increasingly urgent narratives, the term “tipping point” has emerged as a research topic of growing concern and interest in the climate sciences. Climate tipping points (CTPs) in particular serve as a warning of nonlinear,

irreversible changes to elements of the Earth's system that could destabilise our climate system within human timescales. This research seeks to investigate the role of tipping points across multiple disciplines on the temporal dimensions of climate change. This was achieved firstly through review of the literature on tipping points and climate change temporalities. We investigated this further using a survey with 851 respondents in Norway, in which the respondents were randomly presented with a scientific text either on CTPs or traditional climate change. The results will be discussed further in the full paper

Bio: Christina Nadeau is a PhD research fellow at the Biology department at UiO. Initially beginning their academic career in the Geosciences but most recently graduated with an MSc in Climate Change: Environment, Science and Policy. Her PhD research at UiO revolves around the concept of “tipping points” and seeks to address linkages between climate feedbacks and societal perception of climate risks. This involves interdisciplinary research investigating the convergence and understanding of the relationships between climate tipping points and social perceptions of climate change.

Temporalities of Urban Natures (1)

What does it mean to learn to live with time beyond human scales in today's rapidly expanding cities? What possibilities for exploring temporal ruptures, alignments and dis-synchronicities emerge when we juxtapose “the urban” and “nature”? And how do these “times out of joint” offer ways for re-thinking the very categories “urban”, “nature” and “human”?

More-than-human explorations of urban space-times illuminate complex challenges, but also possibilities for being, becoming and co-existing otherwise in contemporary cities. While emerging scholarship shows that time and temporalities matter in multiple ways for understanding multispecies co-existence, much urban nature scholarship still focusses singleheartedly on spatial tensions and entanglements. Such focus leaves temporalities underexplored, while risking to implicitly reinforce anthropocentric worldviews. As such, urban nature scholarship risks (re)producing perspectives which omit integral parts of more-than-human urban life – an omission that becomes particularly problematic within the new contested, geological era of the Anthropocene (or Capitalocene, Plantationocene, or Chthulucene).

Delving into the realm of the seasonal, cyclical, circadian, and so forth, temporalities of urban life, this panel seeks to explore that which lies far beyond linear and mechanical time in the urban landscape. By broadly addressing how we understand, approach, and make use of times and temporalities of so-called ‘nature’ in urban environments, the panel examines how different temporal articulations shape and affect urban landscapes, and by proxy the more-than-human city. Featuring urban nature scholars and practitioners from various disciplinary backgrounds (the humanities, social sciences, landscape architecture, as well as artistic research and practices), the panel provides numerous perspectives of how to approach our co-existence with urban natures through the lens of more-than-human temporalities.

Mathilda Rosengren: Temporalities of an Urban Commons: bird-times, waste-times, and in-between-times at Spillepengen in Malmö, Sweden

If, as anthropologist Tim Ingold (1993:152) would have it, any “landscape is constituted as an enduring record of ... the lives and works of past generations who have dwelt within it”, how are we to understand perhaps the most slippery of urban landscape iterations – the commons?

While the concept of the urban commons has been extensively debated – be it through specific examples (land use, ownership, and appropriation) or in greater abstraction (justice, materialities, and atmospheres) (Borch & Kronberger 2015; Dellenbaugh et al, 2015) – the basis of these inquiries has been predominantly spatial and, with some exceptions (see Metzger 2015), centred on human needs and actions. As such, the possible temporalities and other-than-human agencies of the urban commons remain underexplored – encouraging a narrow, acutely anthropocentric notion of this urban landscape.

In this paper, by positioning more-than-human temporalities as central to the very notion of this landscape of urban peripheries, in-betweens, and justice, I propose an alternative reading of the commons as a relational and pluralised landscape defined as much by multiple temporalities and beings, as by entities of space.

Empirically situating this proposition at Spillepengen in Malmö, Sweden, which throughout the centuries has enacted various versions of commons for the city, I trace bird-times, waste-times, and in-between-times to paint a landscape where past and present generations’ appropriations are distinctly more-than-human, and always temporally as well as spatial defined. Finally, looking forward, I make a tentative suggestion on how this multi-temporal and multispecies picture may be used to sketch a commons for a future, less anthropocentric, urban existence.

Bio: Mathilda Rosengren is a visual anthropologist and human geographer with a particular interest in more-than-human entanglements, ecologies, and ethnographies of the urban Anthropocene. She completed her doctoral studies at the Department of Geography, University of Cambridge in 2020 and is currently a postdoctoral researcher at the Institute for Urban Research, Malmö University. Her work straddles the intersection of critical urban and landscape studies, urban geography, and the environmental humanities and it is especially informed by more-than-human geographies and multispecies ethnographies. Beyond this, she is also interested in integrating various visual methods as part of research methodologies and for broader dissemination purposes. In 2021-2022, she coorganised the Urban Studies Foundation-funded seminar series, Temporalities of Urban Natures, together with Dr. Lucilla Barchetta (Ca’ Foscari University of Venice).

Elena Ferrari: Making time for street gardens (soil) care

In areas undergoing urban densification processes, permeable soils and vegetation in the street environment play a key role in the design of liveable cities and their management is becoming an essential matter in urban agendas. In Berlin, small roadside areas, such as tree pits, are managed by citizens as gardens: Places of sociality and creativity, where the work of human with soil, plants and urban animals is noticeable. Despite the multiple benefits of citizens' engagement in the streetscapes care, such practices are often neglected in urban strategies and embedded in neoliberal urban governance schemes as voluntary labour. In this article, I employ a feminist angle, drawing on Maria Puig de la Bellacasa's work 'Making time for soil care: Technoscientific futurity and the pace of care' (2015), to examine the role of care and time in Berlin's street gardens. The study unfolds around a multi-perspective investigation of the street gardens' soil, as a lens for discussing the unity of social and ecological

matters and the different temporalities underlying them. The contribution outlines how citizens' work can influence the protection of street natural assets, suggests new design trajectories and relates to cultural narratives.

Bio: Elena Ferrari is an urbanist and landscape designer based in Berlin. She recently completed her PhD in Urbanism (Iuav University of Venice) with a research entitled 'In-between Nature', which addressed the concept of hybrid urban landscapes in contemporary Berlin. She is interested in the interconnection between humans and nature in cities, a topic she addresses in her work through different methodological sensitivities and collaborations in a multidisciplinary perspective. Currently, her research focuses include marginal urban landscapes, urban gardens and citizen science. In recent years, she has been researching the transformation of urban gardens in Berlin and Warsaw (Humboldt University of Berlin and University of Lodz) and she has been engaged as a co-creator in 'Open SoilAtlas', a Berlin urban soil counter-mapping project led by citizen scientists (project co-funded by the European Commission under the Horizon 2020 programme, coordinated by Feld Food Forest, Action, King's College London).

Henriette Steiner: How Architecture Comes into Being: The Hybrid Collaborations that Shape Our World

The material structures of the built environment that emerged during the post-war period in Denmark reflect a society which was undergoing a rapid and all-encompassing transformation. The architecture reflects a society, which strived for high moral standards of equity and equality. Yet the design ethos of the Danish post-war welfare state was a grey form of welfare constructed out of bricks, concrete and asphalt, and, overall, it was mindful neither of the ecological toll taken by its expansive building programme nor of the extractive and unequitable capitalist regimes that brought it into being. Histories of architecture of this period which is often called the Golden Age of Danish architecture design tend to focus on a few master architects, although this massive transformation was one which was facilitated by numerous collaborations between many different people with different disciplinary skills. Yet, we may say, these collaborations also involved the material context such as the building materials used (brick, mortar, concrete, iron, glass, steel etc.) and the surrounding natural world (trees, plants, grasses, soil, animals, etc.). Echoing the words of political philosopher Alyssa Battistoni, we may call this a form of 'hybrid work' which includes relations of dependency not just between humans but also between human and non-human species; which I will rephrase and replace with the notion 'hybrid collaboration'. Exploring this notion, I will discuss examples of hitherto invisible economies of collaboration, cooperation and conflict that underlay the common effort of how architecture came into being in the context of Danish post-war welfare state architecture. It does so by following some central protagonists around the construction of Kildeskovshallen, a swimming pool and sports and cultural facility in the suburban municipality of Gentofte, just north of Copenhagen. When reading this project in this way, alternative themes such as empathy, compassion and quasi-ecocritical formulations of dependencies between different human beings and with the natural environment, as reflected in different ethics around collaboration and sustainability, all snap into focus. It shifts our focus on Danish architecture and design in the emerging mid-century welfare state away from questions of equality and equal opportunity for humans – for example, in Kildeskovshallen's case, the provision of sports and cultural facilities to all citizens – and towards broader questions of equity and justice, both harnessing and critiquing the expansive post-war growth of the urban built environment.

Bio: Henriette Steiner is Associate Professor in the Section for Landscape Architecture and Planning at the University of Copenhagen. She gained her PhD in Architecture in 2008 from the University of Cambridge, UK,

and was Research Associate in the Department of Architecture at ETH Zurich in Switzerland for five years. She has been a visiting Associate Professor at the Department for Urban Studies and Planning at Massachusetts Institute of Technology (MIT), and in 2021 she was Visiting Professor at the Institute of Landscape Architecture at the University of Natural Resources and Life Sciences (BOKU) in Vienna. Henriette works on the history and philosophy of architecture, landscapes and cities. Through her research and teaching, Henriette strives to inspire more self-reflective, diverse, equitable, and compassionate spatial practices for designing cities and landscapes. Her research investigates how shifting historical structures – morals, ethics, politics and cultural practices – shaped and continue to shape the buildings, cities, landscapes and cultural imaginaries we have inherited from the 19th and 20th centuries' Western industrial culture. Henriette is joint project leader (with Svava Riesto) on Women in Danish Architecture 1925–1975, a three-year research project that aims to provide a more just and complete understanding of architecture history by highlighting women's contributions to the architectural disciplines in Denmark.

Jan van Duppen: 'Half an hour can feel like an afternoon': Conflicting and Intersecting Temporalities at a community garden in Berlin

Jonathan Crary argues that one of the forms of disempowerment of the 24/7 capitalist economy is its 'incapacitation of daydream ... that would otherwise occur in intervals of slow or vacant time' (Crary 2014, p. 88). This begs the question: what sort of space could be helpful in resisting the restless demands and continuous interface of the new digital economy? Urban gardens, for instance, can offer citizens the opportunity to tune into the cyclical rhythms of the seasons, allowing for the multi-modal sensorial explorations of naturecultures, a slowing down, a temporary escape from the pressures of paid work and social obligations (Crouch and Ward 1997, Schoneboom and May 2013, Odell 2019). Following on, this paper does not understand cities solely through the prism of 'neoliberalism', nor does it want to idealise community gardens as spaces of restorative escape. Instead, it develops a nuanced understanding of the intersecting, overlapping and conflicting temporalities enacted whilst volunteers garden together at the Prinzessingarten in Berlin. It discusses the shaping and falling apart of more-than-human collectives, and the new temporalities that emerge in the intricate processes of this 'becoming-with' (Haraway 2008, Phillips 2020), whilst responding to that other temporality of the climate emergency.

Bio: Jan van Duppen is an Alexander von Humboldt Foundation Research Fellow at the [GeoGender Lab - Humboldt Universität Berlin](#). His work stretches across cultural geography and urban studies and weaves together the themes of the commons and the multispecies city, play and work, and mobility and travel. He has experience in ethnography, photography, and participatory design processes. Jan holds a PhD in Geography from the Open University (UK). A selection of his published works: 'Caring for Foxes at the Allotment' (chapter in the ed. vol. *Urban Natures*, in print with Berghahn Books), 'Daydreaming of Ping-Pong Publics' (2021) in ['Anachoresis: Upon Inhabiting Distances'](#), 'Seeing Patterns on the Ground' (2020) in the [Open Arts Journal](#) and 'Picturing Diversions' (2019) in [Roadsides](#).

Epidemic Temporalities

Hanne Amanda Trangerud: Making Sense of the Pandemic: The Passover Prophecies and the Glorious Future

On March 13, 2020, President Donald Trump declared a national emergency in the United States. To prevent the spread of COVID-19, states soon began to implement shutdowns, mask mandates, social distancing, and public gathering restrictions. While troublesome to all, the situation brought its distinctive challenges to Christian groups that consider in-person gatherings essential to their service. Some pastors—predominantly conservative Evangelicals supporting Trump’s reelection bid—disobeyed orders, kept their churches open, and decried the measure as religious persecution from leftist socialist political elites. Others reframed the situation as a part of God’s plan to save the nation. This paper focuses on one such story, in which time—past, present, and future—and the parallel of times played important roles.

In the Charismatic Evangelical community, divine revelations are commonplace, and prophecies are often used to make sense of events and difficulties. In this community, Chuck Pierce is a recognized prophetic voice. When the United States shut down, a Charismatic publishing house encouraged him to share his story, and his book hit the market a few months later. In *The Passover Prophecies: How God is Realigning Hearts and Nations in Crisis*, Pierce explains that God had told him about the pandemic several months before the new coronavirus was discovered: in September 2019, God allegedly revealed that “plague-like conditions” would “infiltrate the earth” in the spring of 2020. The plague would test the nations, but after the trial, there would be a “time of celebration” and a “glorious future” for God’s faithful people.

In addition to this linking of past (prophecy received), present (prophecy fulfilled), and future (prophecy’s effects), Pierce drew parallels between the current situation and a much older event: the Israelites’ exodus from Egypt (c. 15th – 13th century BC). According to Pierce, the two events were similar, both in content and in timing. It was no coincidence, Pierce asserted, that the Christian Easter overlapped with the Jewish Passover in 2020. Rather, it was a part of God’s plan to bring the Christians closer to the original Passover, when the Israelites were delivered from slavery in Egypt. According to the biblical story, God had to strike Egypt with ten plagues before the king allowed them to leave. During the tenth plague, when all the firstborn in Egypt died, the Israelites had remained in their houses. They were spared from the plague because they, on God’s command, had marked their doorposts with the blood of a lamb. In Pierce’s narrative, Christians experienced a similar situation when the COVID-19 measures forced them to stay in their houses during Easter. This was to make them recognize the power of the blood, which in this case was the blood of Jesus. The subsequent forty days were presented as a test for Christians; if they responded properly, they would experience a spiritual revival.

This paper explores the message of Pierce’s Passover Prophecies, how he uses time and parallels of times to promote it, and possible political implications.

Bio: PhD candidate in the study of religion, IKOS, UiO. Scholar of religion + registered nurse.

Tony Joakim Ananiassen Sandset: Submission title *The Multiple Temporalities of HIV in Global Health: From Fatal to Chronic and from Crisis to the End of AIDS*

The global HIV epidemic have seen dramatic shifts in the last 30 years. Going from a fatal disease to a chronic disease for people living with HIV who adhere to daily antiretroviral treatment (ART), the new drive within the global HIV efforts is now to ‘end the AIDS epidemic’ within 2030. Within this field there are multiple and at times competing temporalities. Building on Adia Benton et.al. I will argue that understanding the multiple temporalities of the HIV epidemic is politically important in order to realize the goal of ‘ending AIDS’ within 2030. Temporal

framings of HIV range from how HIV now in many instances is seen as a chronic disease signaling a shift in the temporality for people living with HIV. Yet, this is contingent upon what we can call ‘adherence time’, that is, the clock time of adhering daily to ART. Moreover, it also gloss over the long term survivors of HIV, many of whom very much still remember and lived through AIDS as a temporality of fatality. Another example of temporalities within HIV is the political calendar time of the UNs goal of ending AIDS within 2030. Juxtaposed with the lived temporalities of people living with HIV, the ‘end of AIDS’ which might be a far cry for those who live in ‘chronically’ underfunded health systems. Finally, the end of AIDS presupposes a form of ‘universal global health time’, a linear arrow towards 2030. Yet, this clashes with the multiple and local temporalities and local epidemic contexts.

Bio: Tony Sandset is Research Fellow at the Center for Sustainable Healthcare Education at the Faculty of Medicine, University of Oslo. His work focuses on the intersections between biomedical HIV treatment and prevention and their social and political implications and contestations. Moreover, his work is concentrated upon the many paradoxes and tensions when sustainability thinking meets healthcare and global health policy

Ahmed Ragab: Plague Time: Epidemics, memory, and clinical culture in the Medieval Islamic World

What happens to time when the world is living under a pandemic? Looking at Black Death as a critical and quintessential pandemic, I investigate the epidemic’s medical temporalities by analyzing the works of the physicians who encountered the Black Death. I will investigate medical understandings of the disease’s etiology, progress, and treatment, as well as of contagion and predisposition. Second, I will look at piety and the place of religious temporality in governing plague time. There, I will address the religious history of the plague and its place within Muslim religious writings and imaginaries. I will also address questions related to the permissibility of medical care and the notion of despair as a temporal structure seen from a religious perspective. To conclude, I will address how and why epidemic temporality is connected to clinical and medical temporalities—in other words, why epidemic temporalities are a topic of the history of medicine and medical humanities. It will also address how Western historiography, rooted in linear temporality, can account for the repetitive and circular nature, the finality and repetition that constitutes epidemic temporality.

Bio: Ahmed Ragab is a historian, physician and a documentary filmmaker. He is the founding director of the independent Center for Black, Brown, and Queer Studies, and co-founder of Pinwheel Productions—a film production studio dedicated to supporting Black, Brown and Queer artists and stories. He received his medical degree from Cairo University School of Medicine in 2005, and PhD from the Ecole Pratiques des Hautes Etudes in Paris in 2010.

Temporalities of Urban Natures (2)

What does it mean to learn to live with time beyond human scales in today’s rapidly expanding cities? What possibilities for exploring temporal ruptures, alignments and dis-synchronicities emerge when we juxtapose “the urban” and “nature”? And how do these “times out of joint” offer ways for re-thinking the very categories “urban”, “nature” and “human”?

More-than-human explorations of urban space-times illuminate complex challenges, but also possibilities for being, becoming and co-existing otherwise in contemporary cities. While emerging scholarship shows that time and temporalities matter in multiple ways for understanding multispecies co-existence, much urban nature scholarship still focusses singleheartedly on spatial tensions and entanglements. Such focus leaves temporalities underexplored, while risking to implicitly reinforce anthropocentric worldviews. As such, urban nature scholarship risks (re)producing perspectives which omit integral parts of more-than-human urban life – an omission that becomes particularly problematic within the new contested, geological era of the Anthropocene (or Capitalocene, Plantationocene, or Chthulucene).

Delving into the realm of the seasonal, cyclical, circadian, and so forth, temporalities of urban life, this panel seeks to explore that which lies far beyond linear and mechanical time in the urban landscape. By broadly addressing how we understand, approach, and make use of times and temporalities of so-called 'nature' in urban environments, the panel examines how different temporal articulations shape and affect urban landscapes, and by proxy the more-than-human city. Featuring urban nature scholars and practitioners from various disciplinary backgrounds (the humanities, social sciences, landscape architecture, as well as artistic research and practices), the panel provides numerous perspectives of how to approach our co-existence with urban natures through the lens of more-than-human temporalities.

Discussant: Kristine Samson, she/her is an associate professor in the Department of Communication and Arts, Roskilde University. She is an urbanist and environmentalist interested in societal and environmental change through arts-based and embodied methodologies. Working specifically with co-creation, she is preoccupied with collective knowledge production across different communities and seeks to cultivate social and environmental care through participatory processes.

Johanna Just: Drawing a vital milieu: an approach towards representing more-than-human relations

Understanding how organisms, including humans, relate to soil, water, air, climate, and to each other is crucial for developing more sensitive spatial design and research projects. However, effectively highlighting the significance of these perspectives remains challenging without accurate ways to represent them. This paper introduces a method for drawing a vital milieu, an innovative approach for visualizing more-than-human temporal and spatial relations, that diverges from anthropocentric and flattening drawing modes. The proposed method begins with the life cycle of a non-human protagonist, serving as the foundation for a circular calendar. This calendar depicts an organism's milieu in a plan surrounded by a series of sections showing the elements the organism inhabits over time. It displays the quality of soil, water, and air as well as climate information to convey complex environmental processes and to show an inhabited, vital environment utilizing a fractal-based visual language developed in Rhino and Grasshopper. The representation method provides information to support design and decision-making processes in architecture, landscape architecture, and related fields, and encourages exchange between designers and experts from the natural sciences. By advocating for a reorientation towards more-than-human temporalities and modes of inhabitation, the approach seeks to inspire more caring and inclusive spatial practices.

Bio: Johanna Just is an architect and doctoral fellow at the Institute for Landscape and Urban Studies at ETH Zürich. In her work, she traces relationships between more-than-humans and the environment in the Upper Rhine Plain and explores new modes of spatial representation. Currently, she is guest editor of the 2024 special issue of the gta papers on Amazônia together with Ciro Miguel and Santiago del Hierro Kennedy and founding editor of DELUS, the journal of the LUS institute, together with Sara Frikech. Johanna studied Architecture at the University of Hanover and IUAV Venice and holds a MArch Architecture degree with distinction and Bartlett Medal from the Bartlett School of Architecture. Johanna has worked in architecture and art practices in the UK and Germany and taught at the Bartlett and Oxford School of Architecture on architecture and landscape architecture programs.

Chero Eliassi: ‘A Culture of Place’ in Swedish Allotments: Gardens as Therapy and Threat in Holma, Malmö

In the modernist Swedish welfare landscapes constructed during the Million Programme, outdoor spaces were designed in a rationalised manner, following governmental research guidelines. While spaces for cultivation did not exist in the original drawings, allotments can now be found in almost all suburbs built during this period, which have also become sites where many migrants to Sweden have settled. Today, the sociocultural and international diversity of plot-holders and their gardening techniques makes these gardens unique. Further, as bell hooks (2009) describes it in ‘Belonging: A Culture of Place’, relocated people – who were once connected with the soil – often seek to reconnect with nature for healing purposes.

Many suburban gardeners understand allotments as spaces for therapeutic experiences, especially because the majority of the plot-holders have, in their previous ‘lives’ abroad, had a connection to gardening and lived on ‘plant time’. Yet these feelings among gardeners have met different municipal responses where the gardens and the plants’ therapeutic role are alternately supported or questioned. This paper studies the approach toward allotments in the diverse welfare landscape in Holma, Malmö, where the municipality of the city aims to use the allotments as educational and interactive spaces, but on the other hand, has threatened demolition by municipal authorities because of a lack of maintenance by plot-holders.

Drawing on semi-structured interviews with plot-holders, site analyses, and published materials, I present narratives of these important suburban landscapes and explore the differences and similarities between both cultivation practices and municipal responses to them in Holma and other Swedish allotment gardens in welfare landscapes. Unwrapping layers of cultural values and histories related to gardens as restorative spaces for migrants in different landscapes, I ask: How do cultivation practices and their material manifestations relate to notions of identity, nostalgia, belonging, and municipal control in Sweden?

Keywords: allotment garden, welfare landscapes, belonging, municipal control, Malmö

Chero Eliassi is a landscape architect, researcher, and since 2021, a doctoral student at the Royal Institute of Technology (KTH). She researches how the outdoor environments of the Million Programme neighbourhoods, built between 1965 and 1974, have – through a social, ecological, political, and spatial perspective – transformed and been used after their construction. In recent times, Eliassi has written about the material object of sand in a playground, and various changes that have shaped the welfare playground since its construction in the late 1960s in Kalmar. Further, Eliassi has written a paper on cultivation and the collective belonging among migrants in Swedish welfare landscapes, as well as the cultural and spatial practice of ‘Newroz’ in a Stockholm suburb in

comparison with the practice in a Kurdish-populated city in Northern Kurdistan (Eastern Turkey). Eliassi also investigates how these diverse outdoor environments can be considered a part of the Swedish landscape cultural heritage.

Linda Lapina: The dirtier, the better? Temporalities of regenerative agriculture at a farmer's market in Copenhagen

Focusing on Grønt marked, an outdoor farmers' market in Copenhagen, this paper explores the temporalities that emerge in intra-actions (Barad, 2007) between locally grown vegetables, eaters, growers and other bodies in gentrifying urban space.

Grønt marked is a part of a growing regenerative agri-food movement in Denmark. Started in 2019 by a group of volunteer international food professionals and activists, the market blossomed during the COVID-19 lockdowns as a "safe" outdoor social event. In 2023, the market has grown from a monthly event to a weekly Sunday market from May to December in three different locations. The market offers affordable stalls to producers of local, regenerative foods, on the condition that the food is sold by the producers.

Based on fieldwork and conversations with organizers, eaters and growers since 2021, I explore the temporalities that emerge around the locally grown vegetables sold at the market. These vegetables are often unusual, smaller, dirtier, strangely shaped and more expensive than supermarket produce. This brings up questions of food justice and access, echoing existing critiques of "slow food" and "slow living" (see, for instance, Sharma, 2014). However, the slowness also entails that labour otherwise undertaken by (underpaid) manual laborers, like distribution and cleaning of the vegetables, is now performed by the eaters themselves. Shopping and preparing food takes time in a different way. In addition to rhythms and tempos of food access and preparation, the market also enacts certain seasonalities. In addition to the vegetables reflecting the changing seasons, the market takes place outdoors, exposed to sun, rain and wind. In addition, for many eaters, the soil on the vegetables embodies proximity to soils and "nature" outside the city, hinting to urban-rural and sometimes intergenerational temporalities. The paper inquires how these different temporalities (re-)articulate urban spaces and ecologies, and how they gesture towards food presents, futures and politics in and beyond the city.

Bio: Linda Lapiņa (pronouns she/they/it) works as associate professor of Cultural Encounters and Global Humanities at Roskilde University in Denmark. They are also a dancer and a psychologist. Linda grew up in Latvia, where she learned to speak with plants and soil from her grandmother. They work with affective, embodied methodologies, drawing on affect theory, intersectional feminisms, environmental humanities; more-than-human and arts-based approaches. Linda seeks to foreground plurality in knowledge production, exploring potentialities for transformation of knowledge systems, ourselves and the world(s) we seek to (un)know and know otherwise. Linda's research focuses on urban ecologies; cultural/environmental encounters; race, whiteness and intersectionality; intergenerational and more-than-human embodied memory.

Everyday Apocalypse

This panel explores how we might tackle the expansive scale and affective overwhelm of future environmental temporalities by working with familiar, everyday objects. Rather than thinking of environmental crisis as a remote and impassable point in the future, we consider how environmental crisis is already weaved into the habits, routines, and practices of everyday life. By bringing critical attention to everyday routines that are often disregarded as trivial or prosaic, we will examine familiar, everyday objects (the freezer, the time capsule, and the hearing aid) to find out how they might make future temporalities tangible, familiar, and graspable. To do this, we strategically connect insights from Everyday Life Studies (the examination of everyday routines and habits within mass culture), Material/Cultural Object Studies, and the environmental humanities. In working across this theoretical terrain, we will ask: how might these everyday objects break with routine, make the familiar unfamiliar, challenge capitalist synchronicities, invent new ways of timekeeping, and push back on narratives of capture & containment? As such, this panel aims to rework and redefine ideas of 1) environmental apocalypse (in Sarah Bezan's work on extinction and critical temporalities of cryo-conservation); and 2) aging and epochalization (in Jade French's work on auditory senses and aging populations, and Antonia Thomas's work on archaeological temporalities of the time capsule).

Antonia Thomas: Time capsules in art and in archaeology

In 2020, two surfers found a metal time capsule washed ashore in Donegal on the west coast of Ireland. It contained a collection of photographs, letters and ephemera which had been assembled by passengers of the 50 Years of Victory ship, a Russian nuclear powered ice-breaker used for luxury cruises. Unlike most time capsules however, this was not an assemblage from an unfamiliar past. The capsule had been placed at the North Pole just two years previously, but unexpected ice melt had led to it being washed out well before its time. This story was immediately picked up by news outlets across the world, unsurprisingly seen as a powerful allegory for the way in which the climate emergency is disrupting not only the present, but also the future.

Such a discovery invites the question, if there is to be no future, what is the point of capturing the present in a time capsule? Once designed to capture the quotidian, the disrupted chronologies of the Anthropocene make time capsules seem apocalyptic. Using examples of time capsules in visual art and in contemporary archaeology, I will explore how these contrived assemblages can be seen to bear witness to the failings of past futures and serve as politically engaged cultural critique on the present.

Bio. I am the Programme Leader for the MA Contemporary Art and Archaeology, and Lecturer in Archaeology, based at Orkney College, part of the University of the Highlands and Islands, Scotland, UK. My research explores Art and Archaeology in its broadest sense, from the interpretation of prehistoric visual culture to the intersections between contemporary art practice and the archaeological imagination. I am currently Co-Investigator on the Royal Society of Edinburgh funded International Network for Contemporary Archaeology in Scotland (INCAScot), which is developing inclusive, future-oriented approaches to cultural heritage management through interdisciplinary case studies linked to the United Nations Sustainable Development Goals (SDGs).

Jade French: Ageing in a Surreal Apocalypse: Leonora Carrington's 'The Hearing Trumpet' (1977)

This paper will examine climate change and the time of crisis in Leonora Carrington's novella *The Hearing Trumpet* (1977). The novella follows 92-year-old Marian Leatherby as she liberates herself and her fellow residents from an ominous religious institution for older women by finding the Holy Grail to combat a New Ice Age. This

paper uses a 'material cultures of growing older' framework (Lovatt, 2021; Höppner and Urban, 2019; Alftberg, 2018) to examine the more-than-human objects and spaces at play in Carrington's novella in relation to her fantastical representations of older age and time. I examine how the material-spatial arrangements in the novella allow for a new perspective on how Marian, as narrator, circumvents the chronological life span. Older age becomes a building block for the future through a hybrid post-human perspective, reinscribing the older body with cultural power and social visibility in the face of crisis. Overall, I read the novella as a productive narrative from which to imagine new expectations of the future through the site of a surreal apocalypse

Bio: Dr Jade Elizabeth French works on ageing, care and intergenerationality. She is currently a Doctoral Prize Fellow at Loughborough University developing the project 'Imagining the Care Home in Post War British Literature'. Previously, she was a research fellow as part of the ESRC-funded project 'Reimagining the future in Older Age'. She has written on modernism and ageing in articles for *Feminist Modernist Studies*, *Women: A Cultural Review* and *Modernism/modernity Print Plus*.

Sarah Bezan: Everyday Apocalypse: Time, the Quotidian, and Mundane Narratives of Environmental Crisis

In a cryo-conservation age, the freezer is an everyday object that contains a wide range of potentialities for species preservation and revival. In this paper, I reflect on the freezer in relation to what Charlotte Kroløkke calls "CryoTime": the conflation of somatic temporalities with institutional timelines (2019). Focusing particularly on the use of freezers by marine scientists in the Irish Cetacean Genetic Tissue Bank (a project that freezes samples of beached whales in Ireland for study and future revival) along with the Frozen Zoo and the Frozen Ark (members of the Cryo-Arks conservation group), I will explore how the simple technology of sub-zero temperatures can have an impact on how we think about mitigating the climate crisis. Central to this analysis is examining how the freezer serves as a site of inanimate suspension, where time and more importantly fluid habitats and marine bodies are frozen in time. Following Joanna Radin, who argues that the freezer functions as a site of "latent futurity" and "planned hindsight" (2017), I will investigate how the everyday phenomena of whale strandings roots cryotemporal narratives of crisis in the lived, routine present.

Bio: Sarah Bezan is Lecturer in Literature and the Environment in the School of English and Digital Humanities at University College Cork, Ireland. As a founding member of the Radical Humanities Lab, Sarah's interdisciplinary work intersects science and technology studies, environmental humanities, and ecofeminism. She is currently working on a project that explores species revival (de-extinction science) in settler colonial literatures and digital media/arts.

Historiographies of Time

Hilbrand Wouters: The beginning of a helix: Deep time narratives in Alfred Crosby's environmental histories

The most controversial aspect of the Anthropocene is undoubtedly its beginning. Historians have bickered endlessly over the question whether it should start at this or that revolution, one discovery or another. But, at the very least, the Anthropocene offers the idea of beginnings in deep time; each distinct beginning providing points

on a timescale from which countless stories can erupt, entangle and contradict. This paper reviews one such point, 1492, through Alfred Crosby's *Columbian Exchange* (1972). Crosby's book (and concept) powerfully revealed that supposed 'human' histories in the Old and New World had been mere fragments of an enormous picture, the unintentional, but often dreadful global biological homogenization following Columbus' journeys. By considering the narrative dimension of Crosby's work, this paper not only adds to the oft-neglected historiography of the Anthropocene, but also develops insight into narrative as a key methodological aspect of temporal expressions.

First, building on recent scholarship in historical time studies, this paper situates Crosby's ideas within contemporary views on deep time, addressing both relevant historical and natural scientific contexts of his interdisciplinary environmental history. Next, Crosby's explorations into uncharted historical timescapes are traced. While Crosby wandered into many dead ends as he 'loped where even scientists fear to tread', his narrative effectively gained a helical temporality along the way, currently viewed as the hallmark of multiscale history. It is this development that distinguishes Crosby's from earlier temporalities. He showed that large timescales, like Braudel's usage of the *longue durée*, were not necessarily flat and continuous, but could crumble and fold. Along with other methodological innovations, Crosby's work thus contained an inventive type of narrative, allowing him to frame existing small-scale histories in larger perspectives without slipping into relativism. The integration of multiple temporalities has recently been identified as a primary challenge for environmental historians to shake off their anthropocentrism, a challenge that emerges wherever storytellers aim to construct narratives doing justice to the diversity of the (non-)human world. By exploring the close relation between temporality and narrative through the development of an influential concept, this paper argues for scholars to become more engaged with the archive of existing narrative frameworks and actively explore the beginnings and ends our collective past offers.

Bio: Hilbrand Wouters recently graduated from the Utrecht University master program History and Philosophy of Science, with a thesis on time in post-WWII environmental histories.

Jacob Tom: Twentieth-Century Temporality: Positioning Moderation in Opposition to the Idea of Progress

Twentieth-century progress manifested in the continuation of the 'abstract universalism' of the Enlightenment and a push toward a relative outlook in response to this absolutism. In terms of temporality, the Enlightenment transition away from the antique cyclical outlook was dictated by the idea of historical development; an interpretation of past events as being a less actualized version of humanity. Reinhart Koselleck has commented that this drive toward actualization, fueled by the "technical-industrial transformation" of the world, had accelerated the decoupling of past and future, resulting in an increasing rate of progress away from the present into a continually better future due to "ever briefer intervals of time in which to gather new experiences." By the end of the century, Italian sociologist, Franco Cassano had claimed that the idea of moderation could be used to reclaim peripheral cultures seen as 'backward' in comparison to the progress-driven West. At the heart of the idea of moderation is dialectic potential, the possibility of resolution between two opposing realities. More specifically, moderation is constituted of three features: coexisting contradictions that create a dialectic, a sense of equidistance in relation to extremes, and a slowness that is created by these former features. These are positioned directly against the conditions for the idea of progress which champions a collective singular (or universal history), the proliferation of extremes (as opposed to being in between them), and an acceleratory speed (as Koselleck has expressed). This opposition distinguishes moderation as a resource to fight back against a modernity which values

acceleration above all and the possibility of expressing a distinct peripheral history of temporality in the twentieth century.

Bio: Jacob Tom is originally from Milwaukee, Wisconsin, but has been residing in Stavanger, Norway for six years. Jacob received his MA in Literacy and Language from the University of Stavanger in 2019 and has continued onto a doctoral program in history, which includes his current work in progress about the idea of moderation in twentieth-century Norwegian literature.

Nitzan Lebovic: The time of complicity

Climate change in general, and the Anthropocene in particular, require a recalibration of all temporal relationships. My paper distinguishes complicity as the most important political-temporal form of our time. Since 1945, this concept shows our politics and ethics, neo-liberal economy with climate change, presentism with acceleration, to be entwined. The history of complicity proposes an alternative to the standard post-1945 story of democracy. Complicity will be understood here as a model for what is, but should not be, the anti-democratic moment that defines democratic politics: At worst an agent of obedience and violence, at best a support for passivity and docility. A history of the concept shows it grew from the entwinement (, plék: weave, tangle) of social unity, cultural symbols, and political legitimacy; individual, cultural and political forms all come to rely on a short-term, present-oriented, benefit that holds them together. In the brief time I'll have I hope to discuss Complicity in four cases: The term is mentioned only briefly, and retroactively, in the Genocide Convention (1948); reports of the Truth and Reconciliation Commission (1990s); The UN Human Rights Council special report of Human Rights in the Palestinian Territories (2014); and the Intergovernmental Panel on Climate Change (IPCC, 2021).Retroactive judgment, however, has failed to acknowledge both their ambivalent nature, and historical conditions. Instead, I suggest the cases mentioned above should be reconsidered based on what the historians Dipesh Chakrabarty and François Hartog have recently called ideal types of “short-termism” and “presentism.”

Bio: Nitzan Lebovic is a Professor of History and the Apter Chair of Holocaust Studies and Ethical Values at Lehigh University. Nitzan is the author of three monographs, two collections of essays, special issues and articles. His first book, titled *The Philosophy of Life and Death: Ludwig Klages and the Rise of a Nazi Biopolitics* (2013) focuses on the circle around the Lebensphilosophie and anti-Semitic thinker Ludwig Klages. His second book, *Zionism and Melancholy: The Short Life of Israel Zarchi* (2015, 2019) shaped an alternative history of Zionism as “left-wing melancholy.” His third book, *A German-Jewish Time: Martin Buber, Walter Benjamin, Hannah Arendt, and Paul Celan* (under consideration) follows the temporal theories of four key thinkers from the Weimar Republic to the 1970s. Nitzan also edited volumes and issues about concepts such as Catastrophe, Nihilism, Political Theology.

Temporal Landscapes

Hannah Kristine Lunde: The legendary timespace of Selja: interpretations of the Sunniva legend as multi-temporal narrations

How are stories referring to historical and legendary events applied as narrative framings for the present-day experience of cultural heritage sites? The presentation explores this question through the case of the contemporary “re-storying” of the island of Selja through the legend of St Sunniva, the saint whose martyrdom and shrine are associated with this island. The narrative events unfolding in the Sunniva legend take place in the late 10th and the 12th centuries. Furthermore, the reception history of the legend of St Sunniva, that is, the narrating events created by different agents in historical time, stretches from the 12th century to the present. The different temporalities in the storyworld and in the various timespaces this story is interpreted in, thus become multi-temporal and dialogical. To analyse such practiced approaches to time, Barbara Adam’s notion of “timespace” are combined with Mikhail M. Bakhtin’s “chronotope”. The aim of the presentation is to shed light on ways in which these multi-temporal narrations provide notions of historical depth to geographical place, and to exemplify how this affect the experience of the historical shrine of St Sunniva in the context of the ongoing heritagisation of religious history and sacralisation of heritage.

Bio: Hannah Kristine Lunde (PhD) is a cultural historian affiliated with the University of Oslo. Her doctoral thesis, "Pilgrimage Matters: Administrative and Semiotic Landscapes of Contemporary Pilgrimage Realisations in Norway" (IKOS, UiO, 2022) explores the emergence of pilgrimage as a contemporary phenomenon in Norway, through the parallel processes of heritagisation of religion and sacralisation of heritage.

Julia Marinaccio: The Politics of Time: How Time-Consciousness Has Informed Environmental Policymaking in the History of the People’s Republic of China

Over the past twenty years, historians and political scientists have explored extensively how structures, institutions, coalitions and recently also information have affected China’s environmental governance. Much less is known about how time consciousness has informed political action. This paper draws on theories of historical times to analyse key party and government documents on forest management published between 1949 and 2021. Two research questions are tackled. How has time been negotiated in programmatic ideas of forest development? And how has time-consciousness connected to forest policymaking in different historical periods? The findings demonstrate that environmental policies in China were not only informed by ideological struggles over programmatic ideas and how (i.e., by which governance mode and instruments) to best manage natural resources. The policies were also affected by ideological struggles over temporalities and time horizons. The findings draw attention to an underresearched factor in political processes in China and across societies and political systems.

Bio: I am a political comparatist with a regional focus on China and Taiwan, holding a PhD in China Studies from the University of Vienna and an MA in Political Science from National Chengchi University in Taipei. Currently, I work as a postdoc fellow at the Department of Foreign Languages at the University of Bergen. My main research interests lie in environmental governance and environmental policy narratives in China and transnational political mobilisation in Taiwan.

Robert Hume: Time, archives, and colonial (un)bordering on the Russia-Japan border, 1850s-1940s

This paper explores the temporalities of colonial development on the islands that straddle the historically contested Russia-Japan border from the 1850s until the 1940s (Sakhalin, Hokkaido, and the Kuril Islands). These

were islands where imperial borders were drawn, re-drawn, and re-drawn again. They were also islands where the Russian empire, the Japanese empire, and the USSR articulated competing visions of the future – visions that often involved increasingly exploitative interventions into the natural world. Yet as nature grew to be ever more entangled with the material and rhetorical processes of imperial expansion and collapse, the Russia-Japan border came to be increasingly temporally fragmented. Existing timelines of imperial rule were fractured, multiple new times were created, and the border itself came to be permeated by multiple non-linear temporalities. This paper explores this history of overlapping colonial borders, environmental exploitation, and temporal fragmentation, while also considering the ways in which these myriad temporalities can be found in the archives today. In doing so, it argues that a focus on the temporally transient nature of colonial development narratives can illuminate the ways in which they were tied not only to colonial construction, but also colonial collapse.

Bio: Robert Hume is a PhD student in the Department of Japanese Studies at the University of Manchester, United Kingdom. His research focuses on the history of empire-building and colonial development on the Russia-Japan border

Tone Huse: Active Past: Re-thinking Temporality in Studies of Postcolonising Land

Taking studies of the Arctic as its empirical starting point, the paper launches the concept of ‘active past’ as an intervention into social science studies of postcolonising land. Through an extensive review of published research, the paper shows that Arctic studies constitute a thematically, theoretically, and methodologically diverse research field. It is characterised by a shared concern for the pronounced effects that climate change is having on the Arctic, and how this will affect social, economic, political and/or cultural development. Only to a limited extent have studies considered how colonial histories play into current developments and intersect with ongoing efforts to increase and maintain Indigenous sovereignties. With ‘active past’ we draw attention to this gap in social science research, and to how the past is activated in and works upon the present. Rather than see the past as simply an object of history, a passive background, or neutral context, the active past concept encourages scholars to re-time their studies by shifting attention towards also considering the histories of the Arctic and how these continue to act in the present. Through an interdisciplinary reading of literatures on time and temporality, including contributions from Indigenous Studies, Critical Whiteness Studies, STS, geography, and history, the paper begins to develop a framework for how to do so. Consequently, in putting forward the active past concept we seek not simply to make social scientists more aware of ‘history’, but to develop ways of engaging with the past and the present at the same time and with an eye to how the past is activated in, negotiated, and resettled in the present. The paper is co-authored by Tone Huse and Prashanti Mayfield.

Bio: Tone Huse is an associate professor at the Department of Archaeology, History, Religious Science and Theology, UiT The Arctic University of Norway. Her current research focuses on the geographies and materialities of urban politics, economies, and planning in Nuuk, Kalaallit Nunaat. Her work spans historical as well as contemporary research, is radically interdisciplinary, and committed to experimenting with new means for interacting with broad publics. Huse is the author of *Everyday Life in the Gentrifying City. On Displacement, Ethnic Privileging and the Right to Stay Put* (Ashgate 2014), and co-author (with Kristin Asdal) of *Nature Made Economy: Cod, Capital and the Great Economization of the Ocean* (MIT Press 2023).

Zeynep Irem San & Sevgi Türkkan: A state of becoming: Dalyan and its spatial potentials

Dalyan is a delicate but durable structural typology of the traditional Mediterranean fishing culture which is built on the sea and connected to the coast to hunt migratory fish. Dalyan structures are formed by the entangled and dynamic interactions between geography, surface and submarine topography, climatic conditions, wind, wave intensity, roaming of fish species, fishing culture and logistic needs of fisherman. Such intertwined and continuous relationship between these agents renders its construction a never-ending act of space-making, as they are constantly assembled and dis-assembled in temporal and seasonal cycles. These local traditional fishing structures are strong typological examples of the spatiotemporal change, dynamism, entanglement as well as continuity that characterize space as a state of becoming.

The question of how to decipher and work with the dynamic notion of time-space variability, as in the case of dalyan, is an issue that this article aims to address. The article argues that the production of the dalyan structure, by establishing a dynamic spatiotemporal relationship with human and non-human actors and the place being in a continuous state of becoming, has potentials worth exploring in terms of liberating architectural design from its static, disconnected and isolated norms.

In order to discuss the spatial potentials of the dalyan typology as a state of becoming, the article resorts mainly to two theoretical frameworks: new materialism (Bennett, Cheah, Orlie, & Grosz 2010) and assemblage theory (DeLanda, 2006, Robbins & Marks, 2010, Anderson & McFarlane 2011, Tsing 2015). The study of the new materialism in terms of change, causality, agency, time, and place relations through the disentanglement of matter from its fixed, static, and predictable patterns provides a methodological guidance for the study of dalyans. Meanwhile, the theory of assemblage is instrumentalized to consider dalyan in an intertwined environment of flow, like the water that contains various moving bodies and the air that shapes atmospheric events and creates entangled temporalities through time. In addition to the literature review, the study aims to create and discuss representations of the spatial condition of becoming through on-site observations and interviews of the dalyan of Uçmakedere in Tekirdag, Turkey supported by various architectural representation tools such as collage, photography, drawings and model. Keywords: dalyan, becoming, assemblage, new materialism, representation.

Bio: Sevgi Türkkan, PhD, architect and researcher, completed her dissertation in 2017 entitled “Making and Breaking Authorship, Potentials in Architectural Design Studio” in Istanbul Technical University, Architectural Design Program. She has been teaching architectural design studio and theory courses in ITU Faculty of Architecture since 2004. Her published works in international books, journals and conferences, as well as research and curatorial projects mainly dwell on architectural theory, architectural design education, questions of authorship and use in architecture. In 2009-2010 she was granted Fulbright visiting scholarship to attend Columbia GSAPP in New York. Completed her Post-Doctoral Research on the “Pedagogy of the Loge” in 2018-2019 at Research laboratory IPRAUS UMR3329 in Paris. She has been invited to international conferences as keynote speaker, lectures and attended jury reviews in universities such as Columbia GSAPP, ENSA Belleville, ENSA Val de Seine, University of Cambridge. She has also contributed to EAAE Education Academy’s Scientific and Organization committee as a member.

Zeynep rem an, architect, completed her bachelor's degree in architecture at Istanbul Technical University and spent an academic semester studying at the Universidade Fernando Pessoa in Porto, Portugal, on an Erasmus scholarship. After her education, she participated in an independent research center called Aura Istanbul and

conducted an architectural study for four months. She is currently studying for her Master's degree at ITU in Architectural Design.

Life cycles and death cycles

Ana Maria Delgado: Living: Microbial materials and future-makings

This presentation invites a reflection about the temporalities of microbial based living materials, and the concrete practices that enable their future existence. I will explore how people imagine, experience, and intervene the “living” in living materials such as fermented foods and newly engineered living materials (ELMs).

Fermenting food has traditionally been a way of preserving it. Using microbial metabolisms, air-control, water and salt, one can slow down natural processes of material decay. I will provide insights on the array of practices that people deploy in their home experiments with fermentations when trying to keep their microbial cultures living, growing and to make them develop towards future desired states. In contrast, engineered living materials as developed in laboratory practice, rely on design, algorithms, and mathematical models for growth control and to optimize properties of the living such as the capacity to self-repair. I will contrast these two practical domains to explore how people may engage in making futures in relations with living things, and to ask: How would it be to live with living materials? What do people need in order to keep them living and evolving over time? What expectations are they inscribed with? What kind of new socio-technical ecologies do they trigger into being? I draw on the concept of “informed materials” (Bensaude-Vincent and Stengers, 1996) to explore those interventions in living things by which they are projected into the future. The presentation is based on collaborative work in the Fungateria project and on my current ethnographic work on grassroots experimentation with fermentations. References: Bensaude-Vincent, B and Stengers, I. (1996). *A History of Chemistry*. Cambridge MA: Harvard University Press.

Bio: Ana Delgado is an Associate Professor of Science and Technology Studies working at the TIKCentre for Technology, Innovation and Culture (University of Oslo). Her research is concerned with how people know, make and own living things, including the political ecology of biodiversity data. She has collaborated with scientists in the field of microbiology, and she is currently investigating a growing public interest on fermentation. Her research has also explored the intersections between activism, and science. She is the author of articles such as “Assembling Desires: Synthetic Biology and the Wish to Act at a Distant Time” published in *Environment and Planning D*; “DIYbio: Making Things and Making Futures” published in *Futures, the Journal of Policy, Planning and Future Studies*; and “Microbial Extractions: Sequence-based Bioprospecting, Augmented Promises and Elusive Politics”, published in *Science, Technology and Human Values*, among other.

Camelia Dewan, Elisabeth Schober and Johanna Markkula: Submission title *Perilous Life Cycles: Studying the Transformations of Ships as both Theory and Method*

In the maritime industry, the temporal concept of the “life cycle” is a widespread notion used to flag how, in our day and age, ships need to be considered from their production stage until the end of their purported utility. Such

a holistic perspective on cargo vessels presumably also allows for a clearer focus on sustainability and the gradual greening of a notoriously polluting maritime industry.

The "life cycle" concept, with all its anthropomorphic connotations, is particularly suitable to the context of ships, which have traditionally been thought of as being "born", having "a life," and eventually being sent to their spectacular "death" on the shipbreaking beaches. Importantly, these stages in the "life" of ships map onto current geographies of production that span the entire globe. The construction of large-scale cargo vessels today primarily takes place in East Asia. These ships then sail worldwide under various flags and are manned with international crews drawn predominantly from South-East Asian nations, before they are sent to be "broken up" and recycled on beaches in South Asia.

Building on our collaborative ethnographic work on the container ship where we relate to three different temporal moments in the life course of cargo vessels (that is, shipbuilding, shipping, and ship-breaking), in this paper we investigate the notion of "perilous life cycles" as both a methodological tool and a theoretical contribution to the study of temporality and material assemblages that we seek to develop. By taking the emic industry term of the life cycle of container ships as our starting point, we seek to unpack how these ships are (dis-)assembled amidst high-risk labour processes that also relate back to the human temporalities and the frailty of life of the diverse work-forces involved throughout the ships' life cycle.

Bios: Camelia Dewan is a Postdoctoral Fellow at the Department of Social Anthropology, University of Oslo, Norway.

Johanna Markkula is Assistant Professor at the Department of Sociology and Social Anthropology, Central European University, Vienna, Austria.

Elisabeth Schober is Associate Professor at the Department of Social Anthropology, University of Oslo, Norway

L. Sasha Gora: Best Before: Time and Other Ingredients

In 1496 John Cabot received King Henry VII's permission to sail westward to Asia and claim non-Christian lands. One year later, his ship coasted the shores of what is now Newfoundland and Labrador where he witnessed "codfish so thick they slowed the progress of our ship." Upon his return to England, he promised the sovereign enough fish "to feed this kingdom...until the end of time"—an example of how fish claims land and creates wealth. In 1991, *Historica Canada* documented this history with a one-minute video. Ironically, however, time ended the following year: Newfoundland's fishery collapsed on July 2, 1992. Cod should have lasted forever, but the entanglement between human appetites, fish as commodities, and technological developments overthrew the order of nature in the northwest Atlantic. It stopped time.

This vignette introduces the two stories that my paper proposes to narrate. The first weaves together resource temporalities—as exemplified by environmental exhaustion—in dialogue with multispecies timescapes and the second reflects on, and perhaps reconsiders, time as a means of marking an end. This can be the end of a resource, or the end of a recipe, or perhaps even the end of an ending. My paper will draw from my research project 'Off the Menu: Appetites, Culture, and Environment,' but will also push beyond its thematic focus on the relationship between cuisine and extinction to more generally consider how culinary perspectives can contribute to understandings of time in the era of the Anthropocene. Jenny Linford, for example, calls time "the missing

ingredient” (2018), and as the “fast” and “slow” food binary introduces, the speed of a clock often defines a dish just as much as its ingredients. Like a film or a song, the headnotes of many recipes list the amount of time required to turn plants and animals into dinner. Furthermore, commercial food products wear their lifespans on their sleeves, warning buyers when they are “best before.” In short, “Best Before: Time and Other Ingredients” will contribute to the 'Lifetimes Conference' and its consideration of the contemporary complications of collectively speaking about time.

Bio: L. Sasha Gora is a writer and cultural historian with a focus on food studies, contemporary art, and the environmental humanities. Her doctoral dissertation at Ludwig Maximilian University of Munich chronicled the history of Indigenous restaurants in the lands now known as Canada, and received the 2021 Bavarian American Academy Dissertation Award. After a fellowship at Ca' Foscari University of Venice, she is currently a fellow at the Institute for Advanced Study in the Humanities (KWI), Essen, and will join the University of Augsburg in May 2023.

Medieval Temporalities

This panel is brought to you by "Translatio," an interdisciplinary research group studying notions of time and history and temporal arrangements in medieval Europe. Its members have backgrounds in intellectual history, theology, and art history. The group aims to achieve a richer understanding of how medieval people constantly created and explored potential pasts and futures in textual and visual media, negotiating the present through such explorations. We look to medieval time constructions with a contention that the past is a resource of sustainable knowledge. And through case studies and comparisons, we seek to deepen our understanding of medieval Europe, but also to contribute to shed critical light on time constructions in contemporary society. In this panel we explore time before mechanical clock time thinking. The medieval period offers rich possibilities for exploring the entanglements of timescales. An important premise for these entangled scales of time was the concept of eternity which was based outside time itself.

Wim Verbaal: Before the Invention of Time

The introduction of the mechanical clock changed life in European society. It imposed a regularity on time that had been foreign to it, but also deprived it from its organic character. Organic time was more manipulable, allowing the experience of a much more lasting present. This contribution wants to highlight some of the aspects that were inherent to a world without mechanical clock and to their written or imaginative expressions.

Bio: Wim M. Verbaal is a Latinist and medievalist, who graduated from Ghent University, where, in 2005, he got the position of Professor of Latin Language and Literature. His research focusses on Latin as a cosmopolitan language, on the consequences for the poetics of the literature in a cosmopolitan language, and on the historical background for Western-European classicism and its consequences.

Eivor A. Oftestad: Medieval temporalities and the celestial bodies

Modern science teaches us that the universe is 13,4 billion years old. As species inhabiting the earth, we are dependent on our star, the sun. All human cultures have however experienced this dependency on the celestial bodies. The main question of this paper is how premodern Christianity was based on entanglements between the human life cycle and the time scales of the universe. The dependency of the times of the Sun within medieval liturgy is the starting point of the discussion.

Bio: Eivor A. Oftestad is a church historian and medievalist. She defended her PhD at the University of Oslo in 2010, and was appointed Professor of History of Christianity at Innland University of Applied Science in 2022. Her research explores religious thought, liturgy and devotional practices, crusade ideology, and concepts of births and deaths, in the medieval and early modern periods (12th-17th centuries).

Kristin B. Aavitsland: The crucifixion of Christ and the ultimate entanglement of lifetimes

At the heart of Christian medieval (and postmedieval) culture lies the Golgotha event: the death of Jesus Christ on the cross. This executed man claimed to also be God, and the implications of his death collapsed the temporal order in which it took place. Medieval thinkers, artists, and religious practitioners repeatedly and creatively processed the consequences of the Golgotha event for human and non-human life and for the whole created cosmos. This paper offers some striking examples of this and suggests a model for understanding the multitemporality of medieval time constructions.

Bio: Kristin B. Aavitsland is an art historian and medievalist. She graduated from the University of Oslo in 2002 and was appointed Professor of Medieval studies at MF Norwegian School of Theology, Religion and Society in Oslo in 2014. Since 2021 she holds the position as Director of the Norwegian Institute in Rome (Istituto di Norvegia). Her research explores visual rhetoric, religious thought, liturgical art, and devotional practices in the medieval and early modern periods (12th to 17th centuries), with two geographical foci: Rome and Scandinavia.

Line Cecilie Engh: Imagining the Future. Liturgy, typology, prophesy

How did medieval people imagine the future? This paper argues that in medieval intellectual cultures the temporal categories of past, present, and future were entangled and their boundaries permeable and contingent. Time was not only non-chronological but coinciding: medieval monastics spoke of remembering the future. Hermeneutically and liturgically, the past and the future were contained in a “thick present”. The paper interrogates how writers such as Bernard of Clairvaux, William of St. Thierry, and Joachim of Fiore explored possibility spaces, immersing and blending themselves into open-ended narratives and potential selves.

Bio: Line Cecilie Engh is a medievalist and intellectual historian. She was awarded her PhD from the University of Oslo in 2011. In 2017 she was appointed Associate Professor in the Department of Philosophy, Classics, and History of Art and Ideas at University of Oslo. Her research interests and publications focus on monastic writing, hermeneutics, rhetoric, liturgy, drawing on gender perspectives and cognitive theory.

Philosophies of Time

Johanna Sjøstedt: Augenblick and revolution: Temporal openings, gender, and change in the philosophy of Simone de Beauvoir

The aim of this paper is to bring the philosophy of time of French thinker Simone de Beauvoir (1908- 1986) into conversation with contemporary interdisciplinary discussions on modernity, temporality and gender. Here I will focus on the concepts of *Augenblick* and revolution in the essays Beauvoir published in the 1940s, including her major study *The Second Sex* (1949). While *Augenblick* has its origin in the Ancient Greek word *kairos*, revolution belongs to the modern temporal register. Both concepts describe temporal openings implicating change, in individual and collective perspectives. I will discuss how Beauvoir utilizes these concepts to theorize the oppression of women and how their different meanings and histories are brought into play in relation to each other in her thought. I argue that we can enrich our understanding of the relationship between modernity, temporality and gender through reading her texts, and reversely that we can deepen our reading of Beauvoir by focusing on the temporal concepts in her work.

Bio: Johanna Sjöstedt is a research project assistant at the Centre for Gender Studies at Karlstad University in Sweden. She has obtained degrees in the history of ideas and gender studies from the University of Gothenburg, specializing in the history of feminist philosophy and theory. Her work has appeared in journals such as *NORA*, *Slagmark*, and *Ideas in history*. She is the editor of *Vad är en kvinna? Språk, materialitet, situation* (Daidalos 2021) and *Feminist philosophy: Time, history, and the transformation of thought* (Södertörn studies in intellectual and cultural history 2023)

Marius Timmann Mjaaland: Time, Earth and Climate Change: Reconsidering Philosophies of Time in the Anthropocene

I will set out from the following hypothesis: The climate crisis has rendered the dominant philosophical theories of time and temporality in the 20th century obsolete. I will thereby revisit two philosophical debates in particular. The first is the analytic controversy on the unreality of time, initiated by McTaggart and Russell around 1900 and continuing as a debate on time and tense until the end of last century. The second is the phenomenological discussion of being and time, most prominently represented by Edmund Husserl, Edith Stein and Martin Heidegger, but including the French phenomenologists Henri Bergson and Simone Weil and continuing up to the late 20th century.

The two approaches have fundamental differences in their understanding of change: how we perceive change and how we relate to it. Strictly speaking, the analytic debate has difficulties explaining change in the world otherwise than a difference in the state of affairs at time T1, T2 and so forth. The phenomenological theory of (inner) time consciousness is definitely open to change, since change is presupposed in every moment, and from one moment to the next. However, when it comes to relating this flux of changes in human consciousness to some objective point of reference such as levels of CO2 in the atmosphere or degrees of overheating, the theory seems rather inadequate. Hence, for rather elementary reasons, both theories and the debates they have raised seem to be more or less irrelevant when it comes to the acute questions of a climate crisis that humanity is facing today.

In the epoch of the Anthropocene, marked by anthropogenic climate change, I will argue that we ought to rethink the philosophical notions of time, in particular what we perceive as the “reality” of time. In order to understand the consequences of human influence on the climate, and the possibilities of changing attitudes, consumption, production and pollution, I will argue that we need to reconsider the notion of time, both ontologically and epistemologically (cf. Chakrabarty 2018). The 20th century discussions may thereby be helpful for further

understanding and clarification, but I am afraid they will also turn out to be the opposite. Rather than trying to adapt the 20th century theories to the new situation, I suggest starting with a reconsideration of the sources of philosophy of time in Aristotle and Augustine.

Bio: Marius Timmann Mjaaland is Professor for Philosophy of Religion at the University of Oslo. Published widely on philosophy, ethics, environmental philosophy, philosophy of religion and systematic theology. PM of the UiO:Nordic project Ecodisturb since 2020. PI at UiO:Life Science convergence environment 3DR since 2019. Currently visiting scholar at the University of Oxford.

Sabiha Huq: Entangled Temporalities in Tagorean Philosophy

In Western (read European) culture, the discourse on ‘time’ is rich because of the philosophical deliberations of Immanuel Kant and Martin Heidegger. While Kant’s ideas could have influenced the Bengali Nobel laureate Rabindranath Tagore, Heidegger was a close contemporary who was conceptualizing time in a quite similar way as Tagore. Evidently Tagore’s concept of Nataraj, the deity of creation and destruction whose “ever-flowing rhythmic dance of creation”, is reflected in Heidegger’s fourfold “mirror-play and cosmic dance of earth, sky, mortals and gods”. Tagore connected time with objects and existence as Heidegger did, but again his idea of intuition matches with Kantian idea of time as the intuitions of self of our internal state. In Indian culture, both time and existence are mingled with metaphysics borrowed from major religions. Lalou, a folk poet calls existence “an ancient caged bird” drawing upon the Hindu cosmology that conceptualizes time as Kala or the eternal. The unit of time in Indian civilization embraces billions and trillions of years. Hinduism envisages the universe as having a cyclical nature, in which the end of each kalpa that equals to 4.32 billion years, is brought about by the dance of Nataraj who also ushers the next; as in the recursive process destruction is followed by rebirth. Thus, Tagore’s concept of time stands somewhere in between Western (due to his close orientation with Western cultures) and a mix of Brahmo and Vaishnava concepts that were further influenced by Islam that connects time with dahr (fate) that is responsible for happiness or distress. In some of his writings, written in a lighter vein, Tagore even challenges the course of time. This paper proposes to trace the entangled temporalities in Tagore’s oeuvre and show how he has propounded a unique concept of time in relation to existence.

Bio: Sabiha Huq is Professor of English at Khulna University. She completed PhD in theatre as a researcher of the KULTRANS project of University of Oslo, Norway. She has proven interest in postcolonial literature and women’s writings, theatre, translation, film, cultural studies, education, digital and environmental humanities. Her latest publication is *The Mughal Aviary: Women’s Writings in Pre-modern India* (Vernon, USA, 2022 and UPL, Bangladesh, 2022). She has jointly edited *Ibsen in the Decolonised South Asian Theatre* (forthcoming, Routledge UK). She occasionally writes short stories and poems. She is also the editor of *Dead Metaphor*, a bilingual literary magazine (<https://deadmetaphor.net/>).

Green Transitions

Stine Engen: Buying time: Using carbon markets to manage the risk of the green transition

Carbon markets are oftentimes taken to be the epitomal financialization of the climate issue – its proposed solution boiled down to finding “the correct price”. This paper argues that the world’s largest carbon market, the EU Emissions Trading System (EU ETS), is currently undergoing a form of financialization where financial actors are operating in the market both in increasing numbers and in a *new* way. Financial actors have for a long time been criticized for buying up carbon credits for speculative purposes, using them as an asset like any other without ties to actual emissions. Through a case study of a portfolio created by a Norwegian insurance company, this paper shows how the recent, and significant, rise in carbon prices have led the EU carbon market to take up a greater and different role in the financial mind. Specifically, carbon credits are here used as a *hedging* tool, that is, as security against financial losses because of anticipated higher emission prices. The central argument of the paper is that this new use of carbon credits is a further form of financialization of the carbon markets geared towards getting rid of what is called “transition risk”, or the “political risk” of new regulations coming in from the EU and affecting emission prices. Using the EU ETS to deal with such risk consequently changes the aim of the market from minimizing emissions to minimizing “political risk”. Fundamentally, the paper argues, managing this risk is about managing and extracting financial value from time, shifting the focus from what stands still (emissions) to what changes in time (risk). In this sense, the paper argues that we are witnessing a financialization that aims to extract financial value from time, or to “buy time”. The paper explains the financial logic behind the procedure to open the question to broader critical examination.

Bio: Ph.D. candidate at the TIK Centre at UiO, studying the how the finance sector has come out as an environmental agent, and how it is both introducing new practices into the financial sector itself, and how it is positioning finance in a new role in the green transition. I’ve done my studies within both the natural sciences and humanities, and enjoy widely transdisciplinary thinking. I’m also part of the Value threads project, led by Professor Kristin Asdal at TIK, UiO, which is carried out in collaboration with Centre de sociologie de l’innovation (CSI) at Paris Mines.

Mads Ejsing: Democracy, Climate Change, and the Problem of Time in the Anthropocene

The fate of democracy looms large in debates about climate change. Slow procedures and shrewd negotiations have prompted many to question whether it really has the power needed to save the planet from disaster. In support, skeptics point to the yearly meetings in the Conference of the Parties (COP) on climate change, which have become a public demonstration of the inability of existing democracies to respond with the appropriate urgency. Meanwhile, the yearly emission gap reports that track the goal fulfillment of the member states in accordance with the Paris Agreement from 2015 sounds like a broken clock stuck in the same place. The result is a creeping sense that we, as citizens and as members of large-scale societies, are running out of time. No wonder, then, that many, both inside and outside of academia, have begun to ask whether democracy must go to secure our childrens’ survival. Is now the time to give up on democracy as the preferred mode of government?

In this article, we explore how the roots of this question are both more fundamental and more open to change than existing approaches to democracy and climate change are willing to acknowledge. On the one hand, we argue that skepticism about democracy arises not only from a concern about its efficacy but also from a fundamental shift in temporal orientation. As climate change expands the scales of temporality from a purely societal concern to both planetary and microscopic processes (and everything in between), democracy is thrown into crisis due to its own image of time as linear and progressive. At the same time, however, we also argue that future-oriented responses to this crisis are beginning to emerge in a manner that often gets sidelined in the critique of democracy. Here, we focus specifically on three democratic responses to climate change, which have gained increasing

attention in recent years: climate citizens' assemblies, community organizing, and more radical types of green activism. While these responses entail different political logics, we see them all as experiments in extending democracy's image of temporality beyond its current remit. We do not deny that the contours of this image remain blurred, but we also find it plausible that this can be seen as a whole new organization of democracy. Grappling with how this might be the case – and with what consequences – seems crucial to any discussion of democracy's role in responding to the climate crisis.

In what follows, we begin in section 2 by outlining the links between democracy, climate change, and temporality. Sections 3, 4, and 5 bring out the images of time associated with, respectively, climate citizens' assemblies, community organizing, and radical activism. Finally, section 6 discusses the tensions between them, as well as their shared contributions to a layered and complex organization of democracy appropriate for the challenges posed by climate change.

Bio: Mads Ejsing is a postdoctoral researcher at the department of political science at the University of Copenhagen, where he is affiliated with the research projects 'Democratic innovations in a Green Transition' and 'Climate Justice Temporalities in Denmark'. His research interests lie at the intersections of democratic theory and the politics of climate change. NB: The paper in question is co-authored together with Lars Tønder (University of Copenhagen) and Janus Hansen (University of Copenhagen), who unfortunately won't be joining the conference.

Stefan Gaarsmand Jacobsen: Negotiating justice and temporality: Danish climate urgencies

The Danish Climate Act of 2020 states that Denmark has a "historical and moral responsibility to take first steps" in leading global climate change mitigation. Alongside this abstract connection between time concerns and justice concerns, the Act included a new reduction target with a 2030 deadline, which was the result of pressure from a large alliance of grassroots and NGOs in Denmark that had pre-negotiated the deadline and succeeded in making the question familiar to a wider public.

Since 2020, changing governments and parliamentary situations have failed to provide a trustworthy pathway to reaching the goal (Climate Council 2023). This has prompted new and radical temporal discourses to emerge within different climate political groups. These discourses are divided in terms of justice orientations, providing a local case for ongoing international debates on mitigation pathways. While civil society forces in this field are explicit about their commitment to climate justice and solidarity with poorer countries, scientists and think tanks have suggested taking inspiration from temporary covid-legislation to suggest crisis management with urgency and a strong precautionary principle.

The paper investigates the recent historical background of the temporal discourses in the Danish context with a focus on the interpretation of global developments and debates on climate emergency framings. Drawing on recent research in discourses of climate delay and justice (Lamb et al. 2020, Jacobsen & Hunt 2022, de Moor 2023), the paper will use the Danish case for providing new insights on the connection between emergency climate politics, risky technological fixes, and depoliticization.

Bio: Stefan Gaarsmand Jacobsen is director of the Center for Applied Ecological Thinking, Faculty of the Humanities, University of Copenhagen. His research interests center on ecocultural climate futures and the history of environmental movements. He has worked with the political development of the global climate justice

movement with a focus on economic, cultural and political ideas emerging from campaigns and grassroots mobilization.

Hedda Susanne Molland: Temporal friction in climate politics: The case of carbon capture and storage in Norway

In this paper I will investigate temporal friction in politics for technological climate change mitigation. I ask how the Norwegian government's vision of carbon capture and storage (CCS) is shaped by different time frames and how this temporal entanglement affects how it can be imagined as a major, future climate measure. The friction expresses itself forcefully when it comes to the timeliness of innovation. Over the last decade, Norwegian governments have repeatedly postponed innovation goals and ambitions for CCS, sometimes with and sometimes without new deadlines, while maintaining an expressed faith in the climate measure. These temporal shifts and extensions have been justified through political, financial, and industrial concerns – but all are fundamentally grounded in specific notions of the temporalities of innovation and climate change. In a sense, there exist a tension in my material between two ways of imagining timeliness and progress in climate politics: an emphasis on urgent action and political commitment versus an emphasis on the reliability and safety of established courses of action. In theoretical terms, my analysis is therefore an investigation into temporal concepts such as delay and deliberateness, rush-jobs and accelerated action, and, most fundamentally, what temporal speeds and time frames are considered primary for climate action.

The paper is based on parts of my PhD project, which explores the Norwegian government's effort, from 2014 to 2020, to launch what eventually became the CCS project Langskip. I study the climate measure, which in Norwegian politics is known as “CO2 handling”, as a temporally organized imaginary, expressed through document practices – from parliamentary debates and white papers to regulations and expert reports. My approach combines STS studies on sociotechnical imaginaries with contemporary humanities research on time. This is operationalized through a focus on document practices and discursive nodal points.

Bio: Hedda Susanne Molland is a PhD candidate in Cultural Studies at the University of Bergen. In her research, she focuses on how scope of action on climate change is imagined in climate policies, with a specific emphasis on the role of time and the future. Her case study is how the previous Norwegian Government (2013-2021) promoted carbon capture and storage as a climate measure to Parliament. She is currently writing on how the government in 2016 justified postponement of its carbon capture and storage ambition, with a focus on the temporal notions at play.

Beyond her case study, she is very interested in interdisciplinary research on climate change, the environment and sustainability, including approaches in intellectual and political history, STS, and the environmental humanities. She has a BA in the History of Ideas and an MA in Environment and Development Studies from the University of Oslo.

Toing and Froing (Time and Migrations)

Lu Chen: Temporality in Reterritorializing under State-Led Urbanized Development: A Case Study of Time Space Productions in Villages in Zhejiang, China

Under the state ideology of rural urban integration in China, villages have been observing dramatic transformations not only in terms of increasing built environment but also of rural societies in general due to migrations to the cities. Based upon ethnographic fieldwork in three villages in Zhejiang Province, I explore villagers' responses towards such state-led deterritorializing process with a focus on their forms of time space production. In this case study, the impacts of the state's rural urban integration differ in these three villages respectively. In the first village, the local government imposed urbanized and individualized time through concentrated resettlement in town seat for disaster reconstruction. Villagers appropriated the state-planned time space for socializing to synchronize villagers' time and attended to rural productive routines to add their own rhythm. In the second village, the road construction company contracted by the local government damaged the stairs to access to the step stone bridge across the village river. Villagers protested to demand restoration by associating the long duration of the step stone as tradition and also a possible mode of leisurely time-spending for potential tourism in the future. In the third village, its peripheral position in local economy has left it only with the elders, which greatly affected villagers' social life and aroused emotions of anxiety. Villagers kept the rhythm of rural productivities attending to the multiple temporalities in their surroundings, but also adapted and acquired new meanings aligned with cherished values such as freedom, sense of control, as well as mobility and health. Villagers thus exert their agency through time manifest in rhythm and pace to produce, contest and reproduce their own territories embedded in the large-scale urbanizing time space.

Bio: Lu Chen is a PhD candidate in the Department of Culture Studies and Oriental Languages at the University of Oslo. Her PhD research explores the impact of, and adaptation to environmental and climate change in rural China. She has recently published her two co-authored articles on themes of gender, environmentalism and rural revitalization.

Alejandro Miranda-Nieto: Aspirational return among migrants: ambivalence, temporality and sense of home

The experience of home has a variety of spatial and temporal connotations. People's sense of home, for instance, can refer to several other places apart from the actual dwelling place. The geographical dispersion of a sense of home is particularly evident among migrants, whose home tends to be identified with different places at once. Yet, the experience of home among migrants not only spreads out across locations, but also across temporal dimensions. In discussing temporal dimensions of migrants' sense of home, this paper focuses on aspirational return. That is, the tension that comes from aspiring to move out or stay in the place of immigration. In reflecting about the ways in which anticipation shapes the present experience of home, this paper illustrates how planning, desiring, intending and vacillating between staying or leaving inform migrants' sense of home. I draw from participant observation and interviews with highly qualified migrants living in Oslo to argue that anticipation shapes the present experience of home, producing an ambiguous attitude towards the place of residence.

Bio: Alejandro Miranda-Nieto is a Postdoctoral Research Fellow at the Diversity Studies Centre Oslo, Oslo Metropolitan University. His current research looks at homemaking, dwelling and dynamics of integration among

migrant professionals in Oslo. He is the author of academic articles on mobilities, home, migration, music and ethnography. His monograph *Musical Mobilities* has been published in the Routledge Advances in Ethnography series, and the co-authored book *Ethnographies of Home and Mobility* in the Routledge Home series.

Ben Grafstrom: Vanishing Temporalities in Rural Japan

Japan is in the midst of a massive population decline that is putting centuries-old traditions at risk of disappearing. Given that shared senses of time and temporality are essential to society and culture, the question I address is: how is population decline in Japan's rural regions affecting individuals' (and whole communities') sense of temporality? The folk religious festivals I am examining are connected to cycles of mountain worship traditions and to agricultural practices in the Tohoku region.

Bio: Ben Grafstrom earned his MA in East Asian Languages and Civilizations (Japanese literature) from the University of Colorado, Boulder. He is currently a PhD research fellow in the University of Oslo's Department of Cultural Studies and Oriental Languages. He is part of the "Religious Festivals in Asia: Power, Aspirations, and Play" research group. For his thesis research, he is examining the effects that mass depopulation in rural Japan is having on the ways residents interact with their local folk religious festivals. He is on the steering committees of the Japanese Society for Time Studies (JSTS) and Anthropology of Japan in Japan (AJJ), and is also a member of the International Society for the Study of Time (ISST).

Derek Basler: Live Long Like the Mountains: Hope, Pessimism, and Conceptions of the Future in a Northern Albanian Village

Once one of the most prosperous villages in the northern Albanian mountains, Curraj i Epërm has experienced a dramatic period of depopulation following the collapse of the communist regime in 1991, from around 600 individuals to about twenty, nearly all of whom now live there on a seasonal basis. Failing infrastructure, an unstable state, and precarious economic conditions were the primary motivations for leaving. As one resident said, "Democracy began and people left, because what is there to do here?"

This question, rhetorical in nature but delivered with an unmistakable tone of pessimism, implies a future state; that there is something unsettled and bleak in the present that yields a precarious imagination of future possibilities, one that is perhaps less so elsewhere. On the one hand, those who have left Curraj seem to have been spurred by cynical outlooks towards economic and social opportunities. On the other hand, a sense of hope for a viable future in the village has emerged among those who have remained, manifest in the modest tourism industry that residents have been developing in recent years.

This research examines the temporal imaginaries of those who leave and those who stay, how they are shaped by the social and economic conditions (both real and perceived) of the village, Albania, and abroad, and how they encourage (im)mobility. Moreover, it aims to understand how conceptions of the future shifted following the collapse of the communist regime, when mobility, which before was almost entirely limited, became a possibility coupled with a new overarching economic logic.

Bio: I am a Ph.D. student at Central European University in Vienna. My research examines the forces behind rural depopulation, experiences of migration, and attachments to home among the villages of the northern

Albanian mountains. I have also conducted research revolving around the reemergence of blood feuding as an urban phenomenon in post-communist Albania

In-Between Time

Henriette Rørdal: “Hey, What Do You Think’s Going to Happen to Us Now?” Temporal Stagnation and Working-Class Identity in John Steinbeck’s *The Grapes of Wrath* and Raymond Carver’s “Preservation”

Capitalism’s constant call to live in the present expels notions of a mediated past or envisioned future. Our retreat to the “here and now” results in a sense of near timelessness. Through the aesthetic imaginaries of John Steinbeck’s, *The Grapes of Wrath* (1939) and Raymond Carver’s, “Preservation” (1983), this paper considers how the shift from linear time to timelessness has impacted the American working-class identity. Afflicted by the new temporal paradigm is, among many other things, the way we work – members across professional spheres find themselves the victim of increasingly temporary, fragmented, and makeshift positions. For the working classes, this shift has been particularly severe, as work no longer provides the temporal stability and horizon that once girded working-class identities. Steinbeck’s *Wrath* follows the Joads, a poor working-class family who, like many other tenant farmers, have their crops fail due to a series of dust-storms ravaging the countryside. When the plots no longer turn out a profit, the landowners see no need for the tenants. But for all the Joads have lost, they know who they are. Although faced with impossible injustice, they are part of a working-class community. As for the way forward, the Joads knowing who they are also know what they must do. Like their neighbors, they will continue working the land, setting out for California to do so. 40 years later, Carver’s “Preservation” explores how neoliberal temporalities change the prospects blue collar Sandy and her unnamed husband. Returning from work one day, the husband announces he has been “canned,” and as the narrative unfolds, the statement proves not only factual, but a metaphoric echo of the story’s title. Unable to do anything, the husband grows increasingly lethargic, it is as if he has been canned in the literal sense of the word, stuck in a jar like a pickle or readymade soup. Without a sense of community or belonging, and now without financial security, the husband’s unemployment pushes the family into a limbolike status of insecurity. In *Wrath*, losing work did not mean losing oneself, nor did it mean losing direction. In fact, the migration toward California becomes a metaphor of mass movement toward the hope of a better future. The young couple in “Preservation,” however, find themselves stuck in an in-between, moving neither backward nor forward. The space of temporal opportunity has for Sandy and her husband become impossibly snug, like the sides of a tin can.

Bio: Henriette Rørdal is currently a PhD candidate in American literature at the University of Bergen. Her thesis has the working title: “How Times Have Changed for the White Working Class: Temporal Depictions in American Culture”. The project explores how capitalism is impacting our conceptions of time and time’s passage. In particular, she sees the impact of presentism as a crucial part of white working class-disillusionment. As labor shifts from a long-sighted foundation of everyday life into a series of brief, episodic, and sporadic activities, the white working class is losing its sense of identity and belonging. The project reads the short fiction of Bobbie Ann Mason and Raymond Carver together with a selection of contemporary films. Her work is the result of a longstanding interest in Marxism, ordinary language philosophy, and new approaches to literary critique.

Katharina Wuropulos: Doings in times of violence and crisis: when different understandings of time collide

From phenomena of violence and crisis that are bodily experienced, we can learn about the multiversity of time and its relationship with pain and suffering. Wars, crises, and conflict define how time is imagined and enacted. "Before the war started", "after the war", and "during the war", are important timely categorizations in which people who (have) live(d) through violent times differentiate their experiences.

Psycho-social research shows that although context-dependent social groups do in fact experience time during violence in generalizable specific manners. They can have vivid memories of starting points of violence, and if violence is bodily endured, that experience can change how time (flows) during the violent situation is (are) experienced.

My ethnographic research with people in Europe who are in contact with refugees shows how different understandings of time collide and how international and local organisations and institutions colonise the time of refugees under the guise of managing, organizing, and helping them. Interestingly, refugees who experience themselves as capable of doings fare better than those subjected to waiting. Those people who are involved in organising their time however, often do not have an understanding for how this practice inflicts suffering. Also, in these so-called contact zones international and local organisations and institutions create urgency for specific refugee groups only. In this paper I make the argument that by looking at bodily experienced violence and people's differentiations of time during flight, war, crises, and conflict, we learn much about the importance of the multiversity of time. The multiversity of time is important because when the diversity of lived experience of time is acknowledged, it can contribute to the soothing of suffering.

Bio: Katharina Maria Wuropulos: I am postdoc researcher in sociology at Helmut-Schmidt University Hamburg, Germany. My interests lie in ethnography, STS, sociology of violence, the globalisation of violent conflicts, social theory and postcolonial theory, as well as sociology of social problems, social problematisations, and their so-called solutions. I currently engage in the research project "Solidarity through Security? Discourses, Interactions and Practices of European Solidarity in the Field of Security." For this I research an empirical field that is particularly marked by conflicts between ideals of European solidarity and togetherness on the one hand, and European security interests on the other: places of first arrival in Europe for refugees. In 2022 I thus conducted ethnographic research at Europe's topographical periphery at the Moldovan-Ukrainian border, in Chisinau, Moldova, and in rural Romania, as well as in Athens, on Lesbos, and Chios, Greece. Before my research position at HSU, I was a researcher at Bundeswehr University München and Augsburg University. For the duration of the PhD, I was a fellow at the Research School on Peace and Conflict at the Peace Research Institute Oslo.

Tatiana Fogelman: Messy temporalities of pandemic infrastructuring for homeless migrants' urban citizenship in Copenhagen

Covid-19 pandemic profoundly reshuffled not only spatial but especially the temporal frames of everyday life around the globe. It did so not only unevenly but also in often ambiguous and contradictory ways. In Denmark for example, the pandemic contributed to the long-term destabilization of most severely impacted population - that of homeless, unregistered migrants. Having lost their street-based livelihood (canning) while having to endure higher prices to move across national borders many became more deeply financially indebted. On the other hand, the pandemic also allowed for an increased stability for many of them, through temporary suspension of welfare

bordering they otherwise experience when trying to access resources sequestered in a highly regulated, formal welfare system.

Seeking to contribute to the growing literature on pandemic and crisis temporalities (Loose et al 2022; Harrison et al 2022; Chan 2022; Yarskaya-Smirnova et al 2022; Wedderburn 2020; Antentas 2020), this paper focuses on service providers the homeless migrants in Copenhagen rely on in t accessing basic resources as well as legal and bureaucratic support to help actualize their (at times latent) rights or become registered and exit homelessness. I conceptualize these mostly small-scale providers - a mix of charities and more advocacy-focused ones - as the main elements of the socio-material infrastructure of migrant urban citizenship. Drawing empirically on interviews with such providers conducted in winter 2021/2022, I examine the impacts of the pandemic on their infrastructuring work and analyze the unevenness of providers' temporal experiences of the pandemic, or narratives thereof.

Whereby some experienced the time of the pandemic as a time of suspension of their work that they returned to in a largely unchanged way, others understand the pandemic as the time of great disruption that significantly compromised the planned temporalities of their infrastructural work and in fact invalidated them for the future. Finally, a small number of actors perceived the pandemic as an accelerated time that enabled them to jump scale, by opening up space of experimentation and speeding up the usual pace of their work. Central to that experience was their activism, networked navigation and advantageous positionality in relation to a key municipal actor. While aware of the more micro-scalar temporal dynamics of the pandemic that lasted several years, I pay attention to the narrative smoothing over this time and draw on critical theorizations of crisis-ness, in particular that of slow emergencies (Andersen et al 2020; 2021), to make sense of these narratives vis-a-vis the broader scholarship on migrant urban citizenship.

Bio: Tatiana Fogelman is an Associate Professor at Roskilde University in Denmark, working across urban and migration studies. Her previous work on migrant integration, cultural politics of citizenship and belonging, urban encounters across difference and municipal politics of accommodation of religious difference had appeared (before 2016 under the surname Matejskova) in *Migration Studies*, *Geoforum*, *Social & Cultural Geography*, *Antipode*, *Urban Geography*, and *Urban Studies*, and *Nordic Journal of Migration Studies*. She had also co-edited *Governing through Diversity: Migration Societies in Post-Multiculturalist Times*, published by Palgrave Macmillan, and special issues on the urban dimensions of migration industries (*Urban Studies*) and national-urban lens in migration studies (*Ethnicities*). She is currently co-editing a new special issue on migrants' pandemic urban citizenship (*Cities*).

Aleksandra Bartoszko: The time is always now: Philosophies of the present and future imaginaries in opioid substitution treatment in Norway

In Norway, Patients in opioid substitution treatment (OST) are assigned a specific treatment modality based on their risk profile, with a primary focus on overdose prevention. Medications such as methadone, buprenorphine, buprenorphine–naloxone, and occasionally morphine may be administrated. Patients who are not satisfied with their assigned treatment must negotiate with OST staff to switch treatment modalities. These negotiations reveal inherent paradoxes of the treatment program, particularly with regard to the construction of a meaningful future, which challenges the logic of overdose prevention in OST.

The development of survival logic draws heavily from the logic of risk prevention and management. Public discourse, researchers, clinicians, and industrial actors assume responsibility for imagining possible futures and engage collectively in the construction of possible scenarios to reduce error. Disciplines like science and institutionalized medicine aim to predict and thereby control the future by constantly defining (and redefining), categorizing, and monitoring “risk factors,” “risk groups,” and “risk behaviors”. Minimizing risk, especially the risk of harm and death, and thus prolonging patient’s lifetime, is fundamental to the clinical understanding of sound treatment and prudent reasoning. Therefore, the rationale behind use of “safer” medicines in OST is to reduce the risk of an anticipated bad outcome, possible overdose. However, these outcomes refer to an imagined future with the parameters of risk defined by decontextualized clinical studies on opioids, disregarding other constructions of time.

As present-oriented patients negotiate with the OST program, a future-oriented institution, they contrast living with survival, drawing a meaningful boundary between these two modes of life and times. To patients, life is more than just the number of years survived. Here lies the undervalued paradox of a human being’s construction of a meaningful future. Some patients are willing to risk a shortened life precisely because they appreciate the present time and value it higher than the imagined future. Patients’ dreams of peaceful disengagement from life and the idea of a limited future deserve analytical attention because these dreams influence patients’ choices and the meanings they attach to medications and treatment. Patients’ philosophies about the present illuminate the “life risks” they are willing to take. Therefore, patients’ various engagements with time, the abstract future, and the experienced present are central points of inquiry in this paper.

Bio: Aleksandra Bartoszko is a social anthropologist, professor and Vice-Dean of Research at the Faculty of Social Studies at VID Specialized University, Oslo. She has researched and published on addiction, legality, risk, disability, activism, and social policy, with ethnographic fieldworks in Nicaragua and Norway. Her works appeared in journals such as *Contemporary Drug Problems*, *Nordic Studies on Alcohol and Drugs*, *Health Promotion Practice*, and *Journal of Legal Anthropology*. Her recent monograph is titled *Treating Heroin Addiction in Norway: The Pharmaceutical Other* (Routledge). She has developed a graphic ethnography as genre and published, among others, an ethnographic graphic novel *The Virus* on injecting drug use and hepatitis C. She is deputy editor of *Journal of Extreme Anthropology* and co-leader of a research group HUMANHARM (Human Rights and Social Harms). Currently, she is leading a research project “Human Rights in Opioid Substitution Treatment”.

Presence and Rhythms

Lise Amy Hansen and Janne-Camilla Lyster: More than now – placing an experience of co-temporality in movement

More than now – placing an experience of co-temporality in movement By way of an artistic exploration, we wish to address experiential aspects of the moving body in a heightened technological context whereby physical movement is increasingly available and analysed (Thrift 2008). We study the idea of co-temporality – that we experience, perform and materialise time in a variety of ways - in order to understand an expanded corporeality.

Movement is continuously materialised in our expressive bodies, and as such may form an aesthetic of time. It is now possible to capture movement, and as co-temporalities are synthesised through the body, each capture serves as an example of a temporal, experiential and expressive substantiation.

We will show examples of such material substantiation with a digital tool for dynamic visualisations of movement data. These examples give access to our sophisticated and continuous handling of ourselves and of our bodies, that so often fade into the background by its inescapable nature. These visualisations have a recursive effect, whereby the captured movement visuals inform and influence future movement and our experience of time.

Whilst dynamic visuals are generative, movement is in itself imaginative, conceptual, and metaphorical (Farnell 2011). In this way we may see that, as environments and technological contexts tune our movement (Coyne 2002), our movement are also tuned by their very performance. As they are experienced and performed, they create an instantiation or materialisation that can be seen as poetic as it draws on a rich imaginative, conceptual, and metaphorical experience. We mention the poetic aspect to highlight the agency that comes with the experience of the movement itself.

Our contextualised and experienced movement meet in every single 'now' and by paying attention to how these various temporalities exist and are performed we may shift how they come to matter. By focusing on a single capture of movement, we may see temporalities expressed in a variety of ways. Simply phrased, temporalities are visible in movement that is captured and visualised, which then may be transposed back to a new performed movement and sense of temporality. This flow of time in movement and materialisation is then altered and augmented into an expanded corporeality.

Bios: Lise Amy Hansen is a professor of design research at The Oslo School of Architecture and Design. She has her background from the UK with Central Saint Martins and Royal College of Art and she held a studio in London for several years whilst also teaching at Central Saint Martins. Her research focuses on the engagement of performance and technology, with a particular interest in the rich complexity and diversity of body movement practices, new materialism and ethics. Her work engages with collaborative practice across disciplines and sectors, and a researcher and educator, specialises in participatory and critically engaged design practices such as in the NFR funded 'InnArbeid' with UiA, and the recently Arts Council of Wales funded 'Making Movement Irresistible' with UAL and Cardiff University.

Janne-Camilla Lyster an associate professor in choreography at the Oslo National Academy of the arts. She is a choreographer, performer, researcher, and writer. In 2019 she completed her artistic doctoral project "Choreographic poetry: Creating literary scores for dance". She has a special interest in prefigurative practices, notation systems and transdisciplinary artistic work. She has published novels, plays, essays, and numerous poetry collections. Her choreographic work has been presented nationally and internationally

Rupert Griffiths: Sensing the luminous night: Innovations in capturing and communicating observations of light pollution in an area of natural beauty

Anthropogenic time standards and artificial lighting have enabled humans to challenge the synchronising force of the Earth's rotation and orbit around our star. These interventions help to facilitate the complex choreography of people and processes seen in contemporary societies. They also suggest an understanding of nature and society

as parallel, touching lightly rather than deeply interwoven. Members of urban societies can experience a place in time with little awareness of the wider environments, ecologies, and planetary phenomena within which cities are held. This is a potential barrier to changing attitudes and behaviours to mitigate climate change and environmental degradation.

Through case studies in a nature reserve in Cumbria, UK; a garden in East London, UK; and a botanical garden in Bonn, Germany, this paper will discuss the application of design, creative practice, and technology to situate daily life within local and planetary temporal imaginaries that are attentive to natural and artificial light. It will discuss the design and installation of a network of unattended light sensors and timepieces that uses observations of environmental light to imaginatively situate the day-to-day life of these sites within various temporal scales. Through this, the paper describes a hybrid approach to timekeeping that brings together human time standards and environmental observation to align the temporal imaginaries of human societies with ecological and planetary processes, while highlighting the presence of potentially damaging anthropogenic processes, such as artificial light at night.

Such hybrid forms of timekeeping and environmental observation may help foster meaningful relationships between people and the environment, facilitate day-to-day awareness of the presence and extent of disruptive anthropogenic processes in our environments, and provide an imaginative framework for thinking about time and life in an Anthropocene context.

Bio: Rupert Griffiths is a social and human geographer, artist and designer with a background in architecture, urbanism, and microelectronic engineering. My research considers the cultural imaginaries of urban nature, asking how urban and humanaltered landscapes can be made meaningfully legible as morethanhuman ecologies. This contributes to a recalibration of urban imaginaries—and associated design practices—away from humancentred and towards the more thanhuman. My research draws from practices of close environmental observation, such as photography, phenology, soundscape ecology and nature writing, to propose new imaginaries that capture and communicate the diversity and multiplicity of biological, nonbiological and technological rhythms through which our environments unfold.

Astrid Schrader: Rhythms on the Beach: Microbial Mats as Sentient Symphonies

In their last chapter of “What is Life?”, Lynn Margulis and Dorion Sagan (1995) suggest that life is a “sentient symphony”. The tilted earth orbiting around the sun provides a metronome for daily and seasonal lives. Circadian rhythms enable cells to coordinate their physiology with cyclical changes in the environment such as Earth’s light/dark cycle.

This paper draws attention to temporalities and rhythms in the constitution and knowability of microbial communities in intertidal zones. I argue that microbial mats, the oldest life forms on earth, for which there are fossil records, literalize the metaphor of a “sentient symphony”. Coastal microbial mats are sun-light driven consortia of microbes often found in intertidal zones, where they provide a protection against erosion. Diverse functional groups of microbes intra-act to form dynamic multispecies ecosystems that some researches liken to a macroscopic living entity, others speak of ‘microbial syntrophies’. Syntrophy literally means, “eating together”; syntrophic relationships are symbioses based on metabolic processes. The close coupling of these diverse microbial groups is achieved through the cycling and recycling of elements such as

carbon, nitrogen and sulphur. As primary producers in microbial mats cyanobacteria have been observed to impose their daily rhythms onto the rest of the microbial community through the rhythmic release of metabolic products. Hörnlein et al (2018) liken the complex ecosystem of microbial mats to a choir. How may ways of seeing attuned to the interlocking of bio- and geo-rhythms of microbes challenge anthropocentric frames of time?

Bio: Astrid Schrader is a senior lecturer at the Department of Sociology, Philosophy and Anthropology, University of Exeter. She works at the intersections of feminist science studies, human-animal studies, new materialisms, and posthumanist theories. Her work explores questions of responsibility, care, and agency in scientific knowledge production, new ontologies, the relationship between anthropocentrism and conceptions of time, and questions of environmental justice. Astrid has been particularly interested in scientific research on marine microbes. In her current project “Caring with Haunted Microbes,” she develops new theoretical approaches in science and technology studies (STS), combining “agential realism” and “biodeconstruction.” Working with artists and marine scientists, she also seeks to establish new approaches to and methodologies in cross-disciplinarity.

Scott Thrift: One Year at a Time: Reframing the Meaning of the Moment

This presentation draws attention to the problem of our time—our time—and society's self-imposed perception of its scarcity. The presenter suggests that strict adherence to a single linear dimension of time measurement is a fundamental flaw of our current worldview. Linear time's ubiquity has eradicated the relationship between modern humans and the natural world's cycles, feeding a seemingly intractable nonchalance in the face of climate collapse. Equating the quality of a moment with the indexable linear tick of a second renders the present into a hairline fracture between the past and the future. The outcome of this hyperfixation on industrialized time is manifold. From the crippling anxiety and burnout of manufactured urgency to accelerating quarterly profits no matter the cost. At the same time, modern culture implores individuals to “live in the moment,” freezing humanity's potential in a desperate grasp for meaning in a world moving too fast to appreciate. In search of answers to the problem of our time, the presenter arrived at a question, “How can we live in the moment when the moment changes every second?” The answer to that question is the subject of this presentation: a physical device created to form a meaningful relationship with the moment called The Present.

Bio: Scott Thrift is a media artist, entrepreneur, and autodidactic designer currently reshaping time perception with his life's work, The Present. Utilizing his formal education in film studies, Thrift co-founded the Emmy award-winning production company 'm s s n g p e c e s ' granting Thrift a decade of extensive world travel to six continents—documenting multidisciplinary design processes, the birth of the TED organization, and the effects of globalization on the nature of human experience. This unique lens on the pulse of an ever-changing world inspired Thrift to develop his seminal work, The Present, a transformational artifact designed to guide our thinking and behavior into greater harmony with nature. A bestseller at the prestigious MoMA Design Store, his timepieces are shifting perceptions in thousands of homes in forty-two countries.