

BOOK OF ABSTRACTS



LIVING WITH CLIMATE CHANGE

BERGEN, NORWAY 8-9 May 2023

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#ClimlifeBergen



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PROGRAMME

8 MAY 2023

Venue: The University Aula, located in the south wing of the Natural History Museum, Muséplassen 3, 5007 Bergen

08.15–09.00	Registration, coffee/tea
09.00–09.20	Welcome and opening of conference Professor Kjersti Fløttum, Head of LINGCLIM group and CLIMLIFE project Rector of the University of Bergen, Margareth Hagen Director of the Bjerknes Centre for Climate Research, Kikki Flesche Kleiven
09.20–09.30	Live music: Gabriel Fliflet
09.30–10.15	Views from climate/environment journalists: <i>My Climate Change – Exploring realities and possibilities revealed through nearly four decades on the sustainability beat.</i> Keynote by Andrew C. Revkin , Independent journalist, Columbia Climate School. Chair/comments: Professor Helge Drange
10.15–10.30	Short break
10.30–12.00	Presentation of main results from the CLIMLIFE project by Kjersti Fløttum, Helge Drange, Øyvind Gjerstad, Trine Dahl, Ida Vikøren Andersen, Dag Elgesem
12.00–12.30	Presentation of the Norwegian Citizen Panel, DIGSSCORE , University of Bergen, by Scientific Director, Professor Elisabeth Ivarsflaten
12.30–13.30	Lunch
13.30–14.15	Young people's coping in the face of climate change: On the importance of meaning-focused coping, dialectical thinking, and defiant hope. Keynote by Maria Ojala , Associate Professor of psychology, Örebro University. Chair, Q/A: Professor Trine Dahl
14.15–15.00	Can we overcome the conflicting views on climate politics? Keynote by Håvard Haarstad , Professor of human geography, Head of Centre for Climate and Energy Transformation (CET), University of Bergen. Chair, Q/A: Professor Dag Elgesem
15.00–15.15	Short break, coffee/tea
15.15–16.00	The changing role of journalism in climate change communication Professor Michael Brüggemann, Journalism and Communication Studies, University of Hamburg; Professor Mike S. Schäfer, Science Communication, Center of Higher Education and Science Studies, University of Zurich; Professor Brita Ytre-Arne, Media Studies, Department of Information Science and Media Studies, University of Bergen
16.00–17.00	PANEL DEBATE: What can various generations learn from each other in matters regarding a climate-friendly lifestyle? Panelists: Maria Ojala (Örebro university), Arne Johan Vetlesen (University of Oslo), Mia Cathryn Chamberlain (Natur og Ungdom/Nature and Youth), Sveinung Rotevatn (Norwegian Parliament, tbc) Moderator: Anne Jortveit, Deputy Director of the Norwegian Climate Foundation

9 MAY 2023	
<i>Venue: University of Bergen, Faculty of Law, Magnus Lagabøtes Plass 1, 5010 Bergen</i>	
09.00–09.45	Climate Change temporalities: From science to vernacular culture. Keynote by Kyrre Kverndokk , Professor of Cultural Studies, University of Bergen. Chair, Q/A: Øyvind Gjerstad
09.45–10.00	Short break, coffee/tea
10.00–12.00	Parallel sessions of paper presentations #1
12.00–13.00	Lunch
13.00–15.00	Parallel sessions of paper presentations #2
15.00–15.15	Short break, coffee/tea
15.15–16.00	We are good at setting targets – less so to deliver and implement. How to change our systems, organisations and our behaviour as fast as is needed. Who must do what? Keynote by Connie Hedegaard , Former European Commissioner for Climate Action and former Danish Minister for the Environment and for Climate and Energy
16.00–16.15	Closing remarks
17.30–18.30	Reception at Håkon's Hall , a mediaeval cultural monument built by king Håkon Håkonsson. The reception is hosted by Bergen City Council. All participants are welcome. Read about Håkon's Hall here.



PRACTICAL INFORMATION

CONFERENCE VENUE

8 MAY

Venue address: The University Aula, located in the south wing of the Natural History Museum, Muséplassen 3, 5007 Bergen.

9 MAY

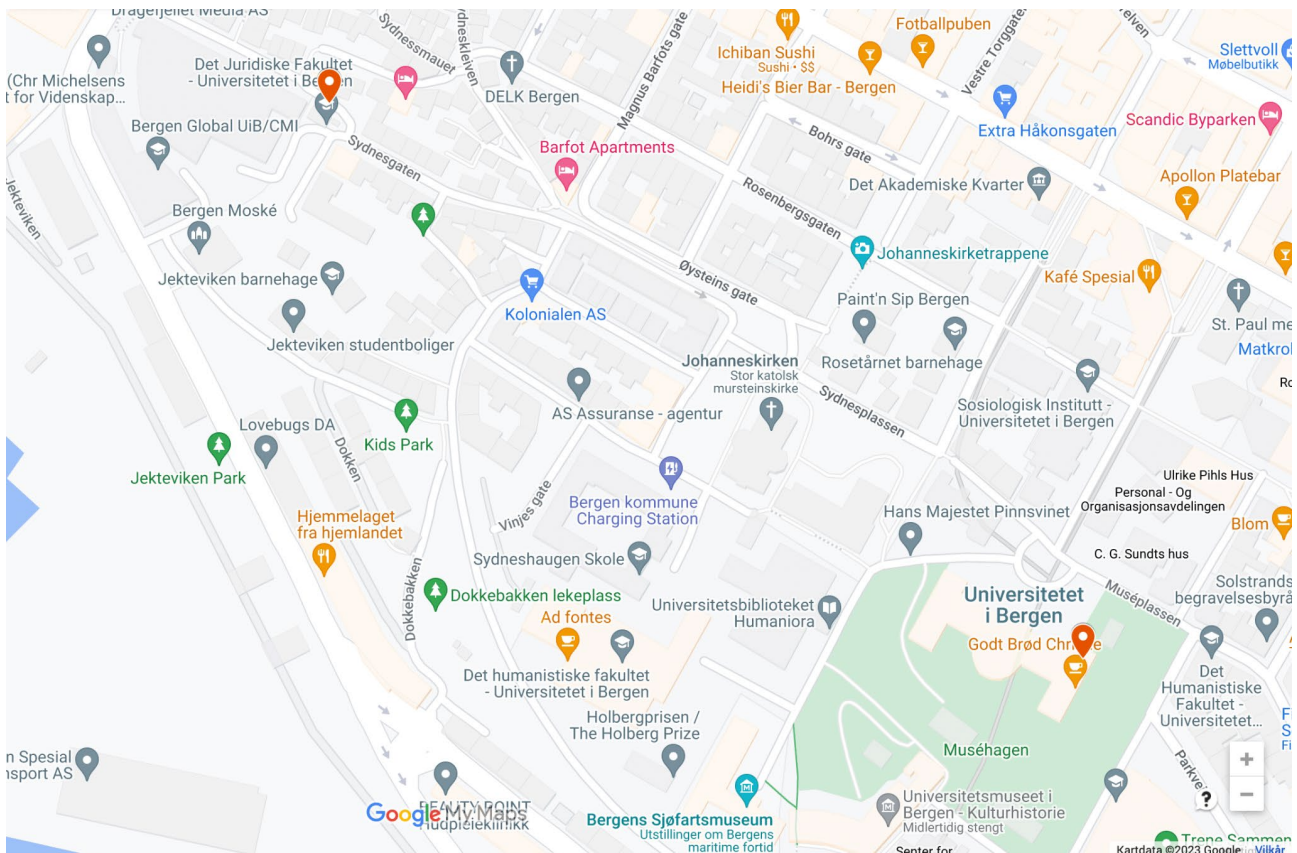
Venue address: University of Bergen, Faculty of Law, Magnus Lagabøtes Plass 1, 5010 Bergen.

RECEPTION HÅKONSHALLEN 9 MAY

Venue address: Håkonshallen (English: Håkon's Hall) Bergenshus 10, 5003 Bergen.

MAP

See the two red markers in the bottom right corner (University Aula) and top left corner (Faculty of Law).





LINGCLIM/CLIMLIFE MEMBERS

The CLIMLIFE project is part of the cross-disciplinary research group LINGCLIM, University of Bergen.

Kjersti Fløttum, Professor at the Department of Foreign Languages (leader)

Kjersti Fløttum is Professor of French linguistics, Department of foreign languages, University of Bergen. Research interests in text and genre theory, narrative structures, linguistic polyphony and discourse analysis. Head of the cross-disciplinary LINGCLIM research group and the CLIMLIFE project. Published in, e.g., Global Environmental Change, WIREs Climate Change, NATURE Climate Change, Journal of Pragmatics. Editor of The role of language in the climate change debate (Routledge, 2017).



Dag Elgesem, Professor at the Department of Information Science and Media Studies

Dag Elgesem is Professor of ICT and society, Department of information science and media studies, UiB. He has worked interdisciplinary on perceptions and discussions of climate change in social and edited media over the last decade, using different types of data and methods. His other research interest include social media analytics, research ethics, and polarization in social media.



Helge Drange, Professor at Geophysical Institute

Helge Drange is a climate researcher at the University of Bergen and the Bjerknes Centre for Climate Research. He has followed the IPCC process from the first Assessment Report in 1990, and he has contributed to some of the subsequent reports. Drange has been in charge of the development of the Norwegian Earth System Model (NorESM), and he has been actively engaged in the public climate debate. He is currently focusing on education related to the Earth system, and on public outreach.



Øyvind Gjerstad, Associate Professor at the Department of Foreign Languages

Øyvind Gjerstad is Associate Professor of French linguistics at UiB. His main research interests are polyphony and societal narratives, from the perspective of linguistics, text linguistics and discourse analysis. He has for several years done interdisciplinary research with linguists, climate scientists, and political scientists, as a member of the research groups LINGCLIM and HUMKLIM at UiB. In addition to his role in the CLIMLIFE project, he is also part of the international project “Overcoming Obstacles and Disincentives to Climate Change Mitigation”, a collaboration between Belgian, French and Norwegian researchers funded by JPI Climate.



Trine Dahl, Professor at NHH Norwegian School of Economics

Trine Dahl is Professor of English at the Department of professional and intercultural communication at the Norwegian School of Economics. Her research fields are discourse analysis and genre studies. In recent years, she has focused mainly on climate change discourse, notably in corporate and media contexts, with particular attention to framing and multimodality. She has published in, e.g., Journal of Pragmatics, Applied Linguistics, Corporate Communication and Discourse, Context & Media.
<https://www.nhh.no/en/employees/faculty/trine-dahl/>



Ida Vikøren Andersen, Post Doctor at the Department of Foreign Languages

Ida Vikøren Andersen is a post-doctoral fellow in the CLIMLIFE project. She has her PhD from the Department of Information, Science and Media Studies at the University of Bergen. Her research interests are rhetoric, media, and public debates. Her current research examines young people’s participation in and reception of public debates about climate change.



Emil Perron, Research Assistant at the Department of Foreign Languages

Emil Perron works as the research assistant to the CLIMLIFE project. He has his MA degree in philosophy from the University of Bergen, and his MA degree in Human Rights and Democratisation from EIUC. Perron has a deep interest in nature, climate and the French philosopher and essayist Michel de Montaigne.

Perron is also a philosophical practitioner (NSFP).
Perron also works as director of the Council of religious and humanist communities in Bergen (STL Bergen).



Runa Falck, PhD Candidate at the Department of Foreign Languages

Runa Falck is a PhD candidate at the Department of Foreign Languages at UiB, where she is part of the multidisciplinary LINGCLIM research group. Her PhD project uses survey data to explore climate change in a lifestyle perspective. In particular, she examines how Norwegian citizens perceive individuals' role when it comes to climate change mitigation. Runa holds a Master's degree in Comparative Politics.

Project title: "Fra fest i Kyoto og Paris til hverdag i Norge - en flermetodisk tilnærming til hvorfor nordmenn (ikke) tar hensyn til kunnskap om klimaendringer i valg av levemåte"



Solveig Lygren, PhD Candidate at the Department of Foreign Languages

Solveig Helene Lygren is a PhD student at the University of Bergen, associated with the LINGCLIM group. She has master's degrees in comparative literature and French literature, and is currently working on a project about the environmental crisis in contemporary literature.

Project title: "The Anthropocene and the Apocalypse: Environmental crisis and motifs of end time in contemporary Norwegian novels"



Johanna Gunn, PhD Candidate at the Department of Foreign Languages

Johanna Gunn is a doctoral student in the LINGCLIM group. She has a master's degree in romance languages, specifically French. Her research interests are French linguistics, in particular discourse analysis, polyphony, argumentation, and scientific discourse. Her Ph.D.-project examines, from a polyphonic point of view, references to sources in three different types of discourse that deal with climate change – scientific discourse, political discourse, and journalistic discourse.

Project title: " La gestion des références dans le discours climatique – une étude de l'article scientifique, de la communication politique et de la presse écrite "



Anne-Kate Ellingsen, PhD Candidate at the Department of Foreign Languages

Anne-Kate Ellingsen is a research fellow in French at IF (UiB) and associated with the LINGCLIM project.

Her PhD project is tentatively titled "Rhetorical strategies in the debate on nuclear energy in France".

The project aims to map the rhetorical strategies and the linguistic practices that are used in the argumentation that has developed in the French debate on climate, especially in connection with the use of nuclear power as an energy source.

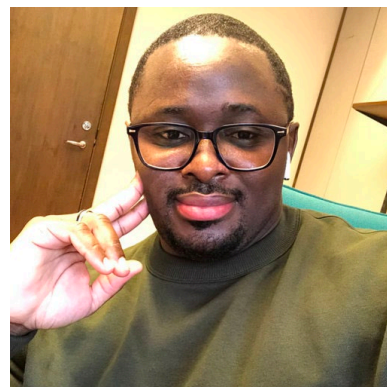
Project title: "Retoriske strategier i debatten om atomenergi i Frankrike"



Francis Badiang Oloko, Researcher affiliated to the LINGCLIM group

Francis Badiang Oloko is a former PhD student at the University in Bergen and researcher at the Department of Foreign Languages. Francis is affiliated to the LINGCLIM group.

Badiang Oloko's PhD project was titled *La polyphonie dans le discours climatique officiel du Cameroun 2005-2017*, the University of Bergen, 2019.



KEYNOTE SPEAKERS AND PANEL PARTICIPANTS



KEYNOTE SPEAKERS

We are good at setting targets - less so to deliver and implement

Connie Hedegaard

Former EU Commissioner for Climate Action

and former Danish Minister for environment and climate/energy

ABSTRACT: The transition to a truly sustainable society within the time limits recommended by science is challenging the way we normally do things. While we know that urgently we have to change energy sources and systems and many countries are now setting ambitious targets for that and also beginning to accelerate innovation when it comes to e.g. Power2X, battery technologies, storage, direct air capture etc. real implementation is lagging behind the grand declarations. And this is not only due to slow technological innovation. Our organisations and administrations are hard pressed to speed up permitting, spatial planning, standards for this and that... And to change behaviour and consumption patterns are maybe the even most difficult part.

Connie Hedegaard gives her take on how we must change our modus operandi in order to get up to the job and avoid (further) polarisation. The answer involves not only help from the natural sciences and technological innovation but as important help from the social sciences. Also in order to avoid (further) polarisation - also among generations.

Connie Hedegaard, former EU Commissioner for Climate Action (2010-2014), Danish Minister for environment and climate/energy (2004-2010), now a professional board member chairing the KR Foundation, the Danish green think tank Concito, and she serves on the Board of Danfoss, BBVA, Kirkbi Holding, Cadeler and the European Climate Foundation. CH worked for many years as a Journalist and TV Anchor and has her Master in History and Literature from the University of Copenhagen.



Can we overcome conflicting views on climate change?

Håvard Haarstad

Professor of human geography and Director for the Centre for Climate and Energy Transformation (CET), University of Bergen

ABSTRACT: The debate on climate change politics has become highly polarized in recent years, with significant political movements both in favor and in opposition to stronger climate action. An influential form of opposition to climate-related policies has come from what may be called a populist reaction, manifested in the Yellow Vest movement, and in Norway, movements against road tolls and wind turbines. These movements have critiqued the mainstream of climate policies for being elitist, undemocratic and removed from everyday life of people. While contributing to polarization and inaction, I argue that they have also reminded us of the need to deepen the transformation.

In the DEMOCLIM project we are studying democratic governance of climate-related policies at the local level in cities. The project examines multiple types of protests that seek to influence climate-related policies of cities – Bergen, Oslo, Stockholm, and Göteborg. We have looked at how both pro-active and reactive protests have played out in conflicts over transport and land use policies, and how city authorities have attempted to deal with them. One finding from the project is that those protest actions that succeed in influencing the authorities rely on a particular social-cultural competence and networks, as well as competence in maneuvering local bureaucratic processes.

In this talk, I reflect on the broader implications of these findings. Has mainstream climate change politics has created a division between an ‘inside’ and an ‘outside’, that is difficult to maneuver for those who fall outside hegemonic networks? Why do so many on the ‘outside’ consider climate governance to be democratically illegitimate – and do they have a point? How can we govern the transformation in a way that overcomes the deeply conflicting views on the climate problem?

Håvard Haarstad is professor of human geography at the University of Bergen. He is also director for the Centre for Climate and Energy Transformation, an interdisciplinary research centre working to advance actionable knowledge on how to meet the climate challenge. His research primarily concerns social change at the local scale, and in particular how cities and urban-level actors govern the transformation towards sustainability. He investigates these issues across a range of projects, funded by the Research Council of Norway, Horizon 2020, and other sources. He is associate editor for the Nordic Journal of Urban Studies.



Climate Change temporalities: From science to vernacular culture

Kyrre Kverndokk

Professor of Cultural Studies at the Department of Archaeology, History, Cultural Studies and Religion, University of Bergen

ABSTRACT: “Climate change” is a concept that moves between science, politics, media, and everyday life, and between different discursive practices. Doing so, it creates various kinds of meaning, which also implies different time scales and temporalities, such as geological time, historical time and the family time of “our children and grandchildren”. Climate change temporalities also implies the various narrative plots and motifs in use when the future is predicted and portrayed.

In this talk, I will argue that the temporal dimensions of climate change are entangled in complex ways, and that an analysis of such entanglements also question the dichotomies that often are implied in valuation of science and scientific knowledge. Science is often contrasted to lay knowledge. Facts are contrasted with fiction and fantasy. Universal with local. Analytical the opposite to emotional and so on. Such dichotomies often operate in clusters, for instance, that vernacular knowledge *also* by implication comes to be considered as affective, local, short-term and so on, while expert knowledge also automatically is conceived of as universal and fact-based. Yet, I will argue that different types of knowledge meet and get entangled, so do different temporalities or timespans. Personal, short-term, local, and embodied knowledge is integrated in powerful political speech and action, while scientific expertise and knowledge may be used as a resource in vernacular understandings of weather and climate. This encounter between the scientific and the vernacular is particularly present in ways of predicting, telling and worrying about a climate-changed future.

The talk will be based on the results from the project “The Future is Now: Temporality and exemplarity in climate change discourses” (2017–2021).

Kyrre Kverndokk is Professor of Cultural Studies at the Department of Archaeology, History, Cultural Studies and Religion, at the University of Bergen, Norway. He has published on topics such as the practice and politics of Second World War memory, the history of folklore studies, the cultural history of natural disasters, and climate change temporalities. Kverndokk was the PI of the research project “The Future is Now: Temporality and exemplarity in climate change discourses” (2017–2021) and is currently the PI of project “Gardening the Globe: Historicizing the Anthropocene through the production of socio-nature in Scandinavia, 1750–2020” (2021–2025).



Young people's coping in the face of climate change: On the importance of meaning-focused coping, dialectical thinking, and defiant hope

Maria Ojala

Associate Professor (docent) in psychology
Örebro University, Sweden

ABSTRACT: Many young people around the world are worried about climate change. This worry could be seen as a rational response to a very serious problem that in best case could lead to an increase in climate engagement. However, studies also show that climate-change worry is to certain degree related to lower subjective wellbeing and feelings of hopelessness. What factors can help young people to cope with climate-change in a constructive way seen from an engagement and wellbeing perspective? In this presentation I will present studies with different age-groups of young people and how they cope with climate change both as a global problem and in the everyday when trying to live in a more climate-friendly manner. The focus will foremost be on meaning-focused coping, defiant hope, and dialectical thinking as positive ways of coping. I will also talk about studies indicating ways of communicating and educating about climate change in order to avoid hopelessness and to increase engagement. Some planned future studies, among them a longitudinal study about climate-change worry, will briefly be presented.

Maria Ojala is associate professor (docent) in psychology at Örebro University, Sweden. She is also research director for CESSS (Center for Environmental and Sustainability Social Science) at Örebro University. Her research concerns young people, from late childhood to early adulthood, and their values, emotions, coping, engagement, wellbeing, and learning processes regarding global climate change. Maria performs both quantitative survey studies (cross-sectional and longitudinal) and qualitative interview studies mostly with different groups of young people. She has also written theoretical papers about climate-change hope and critical emotional awareness. Maria has published her research in for example: Journal of Environmental Psychology, Environment and Behavior, Environmental Education Research, Annual Review of Environment and Resources, Futures, and Current Opinion in Psychology.



My Climate Change - Exploring realities and possibilities revealed through nearly four decades on the sustainability beat

Andrew Revkin

Founding director, Initiative on Communication Innovation & Impact, Columbia Climate School

ABSTRACT: I began reporting on the human influence on climate in the 1980s and have never stopped, although my perception of this momentous challenge and remedies has completely changed. In this talk, I lay out my learning journey, starting when human-driven global warming, coming in the wake of successes on smoggy air pollution and threats to the ozone layer, had the appearance of a basic pollution story.

In the 1990s, it seemed that nations would pass laws and diplomats would shape a package of common, but differentiated, efforts to avoid dangerous human influence on the climate and all would be well. Yet, even as climate science built an ever-clearer picture of societal and ecological risk from unabated heat-trapping emissions, cutting fossil fuel burning, the main source of the gasses, posed too much of a threat to nations' political and developmental priorities - and to industries and ideologues invested in the status quo.

In the first decade of the 21st century, I began to focus my reporting on another role of science - as a driver of innovation for clean energy. But tightening oil and gas supplies propelled other innovations, like hydraulic fracturing, that created a new era of fossil abundance.

Seeing ever more complexity, I sought researchers in entirely different disciplines - from psychology and sociology to geography - who revealed why it was rational for smart people to debate climate danger and why it was unremarkable that people were unrelentingly settling in areas prone to existing climate hazards, let alone what might be coming.

To top things off, even as I was writing about these facets of climate change, the communication climate was disruptively evolving from a centuries-old, one-way process of publication to the fragmented, noisy, multi-directional dimensions of social media.

I'll explain why, despite the challenges this picture presents, the end of top-down models of change is likely a good thing. The end of the climate "story" as we knew it opens us all to the possibility of energy and climate conversations and collaborations that can foster distributed progress, raising the odds of surprises that cut in positive directions.

Andrew Revkin has been reporting on global warming and related issues since 1983 in magazines, books and 21 years of writing for The New York Times as a staff reporter and founder of the paper's prize-winning Dot Earth blog. His journalism took him from the thawing North Pole to the burning violent fringes of the Amazon, from the White House to the Vatican. In 2019 he founded the Initiative on Communication and Sustainability at Columbia University's Earth Institute, which is now Columbia Climate School. In more than 300 Sustain What webcasts produced there he has curated climate and sustainability conversations reaching some 3 million people. He writes a companion [Sustain What newsletter](#). From 2010 to 2016 he was a member of the [Anthropocene Working Group](#), chartered by the world's leading geological organization to assess whether humans have vaulted the planet into a new geologic epoch. He has received most of the top American awards for science journalism as well as a Guggenheim Fellowship. In spare moments Revkin is a performing songwriter. Learn more at <https://j.mp/revkinlinks>.



**Presentation of the Norwegian Citizen Panel/DIGSSCORE,
University of Bergen**

Elisabeth Ivarsflaten is Professor of Political Science at the Department of Government, University of Bergen. She is Scientific Director of the Digital Social Science Core Facility, which runs the Norwegian research infrastructure, *Coordinated Online Panels for the Study of Democratic Government* (the Citizen Panel, the Panel of Elected Representatives, and the Panel of Public Officials). The Norwegian Citizen Panel celebrates its 10-year anniversary this year by releasing open interactive trend data on public opinion on climate change and other central societal challenges.



PANEL PARTICIPANTS

Panel debate: What can various generations learn from each other in matters regarding a climate-friendly lifestyle?

In public debates, there have been discussions about a possible generation gap in climate questions, but we also see that the young and their (grand-)parents are supporting each other in calling on politicians for more and more rapid action. They seem to agree on the urgent need for action to mitigate climate change, but must also go on living their own daily lives, attending to their needs and interests. To what extent do they have common interests, in particular regarding lifestyle questions? To what extent do they use the same language?

In addition to dealing with these issues, the panel will discuss the relationship between politicians and young people. While young climate activists claim that politicians do not pay attention to their messages and are failing to act, the politicians tend to answer that they do listen to them and are prioritising the climate. To what extent do such disputes hinder constructive collaboration?

Furthermore, the panel will consider the role of the media in facilitating intergenerational cooperation. It can be more challenging for young people, who lack experience and confidence, to make their voice heard in the public debate. News criteria tend to favour conflict over consensus, possibly contributing to exaggerate differences between generations. What responsibilities do the media have to contribute to a more conciliatory public debate?

Participants:

Anne Jortveit is deputy director at the Norwegian Climate Foundation and in charge of various programs, including “Climate Breakfast”, “Climate and Finance” and “Municipalities and the transition to the low-emission society”. Anne holds an Executive Master of Management in Energy from BI Norwegian Business School & IFP School as well as a Bachelor’s Degree in Nursing from the University of Agder. She has background as political journalist, host and editor in newspapers, TV and radio.



Arne Johan Vetlesen is professor of philosophy at the University of Oslo. His main areas of interest are ethics, political theory and environmental philosophy. He has published about 30 books, many of them drawing upon psychology, sociology and social anthropology in addition to philosophy, among them "The Denial of Nature" (2015), "Hva skal vi svare våre barn?" (w/ R. Willig; 2018), "Cosmologies of the Anthropocene" (2019), "Det går til helvete. Eller?" (w/ K.I. Bjørlykhaug; 2020) and "Etikk i klimakrisens tid" (w/Jan-Olav Henriksen; 2022).



Maria Ojala is associate professor (docent) in psychology at Örebro University, Sweden. She is also research director for CESSS (Center for Environmental and Sustainability Social Science) at Örebro University. Her research concerns young people, from late childhood to early adulthood, and their values, emotions, coping, engagement, wellbeing, and learning processes regarding global climate change. Maria performs both quantitative survey studies (cross-sectional and longitudinal) and qualitative interview studies mostly with different groups of young people. She has also written theoretical papers about climate-change hope and critical emotional awareness. Maria has published her research in for example: Journal of Environmental Psychology, Environment and Behavior, Environmental Education Research, Annual Review of Environment and Resources, Futures, and Current Opinion in Psychology.



Mia Cathryn Chamberlain is 24 years old and currently writing a bachelor's thesis in psychology about attitudes towards radical environmental actions. Mia is from Bergen, but lives and studies in Oslo. She has been involved in the climate fight since she was 16 and was a board member of Nature and Youth (Norway) between 2017 and 2020. Mia is now one of the parties, together with five other individuals, as well as Greenpeace and Nature and Youth, in the Norwegian climate court case that is being tried in the European Court of Human Rights.



Sveinung Rotevatn, educated in law, politician and first deputy of the party Venstre (liberal). Elected representative for the Hordaland county to the Norwegian Parliament (Stortinget) from 2021. He was elected by the Sogn og Fjordane county 2013-2017. He has been state secretary in different ministries and was minister of climate and environment 2020-2021. **(tbc)**



The changing role of journalism in climate change communication

This session is a conversation about the role of journalism in communication on climate change, between three scholars in the fields of science communication, journalism and media studies. Considering climate change as an essential societal challenge that involves complex communicative issues, they discuss how the issue is communicated in a digital and fast-changing media landscape. Specifically, they focus on the considerable changes to journalistic institutions and user practices, and ask how the role of journalism is currently changing in climate communication.

The conversation starts by asking what climate journalism is, considering possible definitions and delineations, and assessing the current state and challenges of climate journalism. We discuss the idea of designated climate desks or climate journalists, as opposed to integrated climate expertise across newsrooms and media outlets, and consider role perceptions and journalistic advocacy as well as new conditions and intermediaries in a changing media ecosystem. Finally, we discuss the potential impact of climate journalism from an audience perspective, with digital user practices, fragmentation and polarisation.

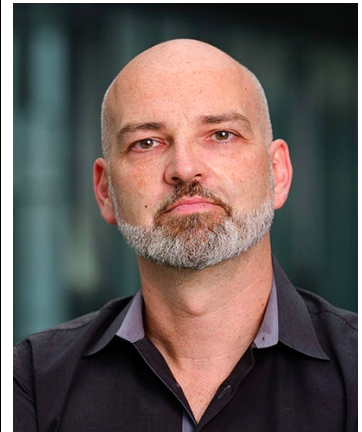
Participants:

Michael Brüggemann is Professor of Communication Research, Climate and Science Communication at the University of Hamburg and Principal Investigator at the interdisciplinary cluster of excellence CLICCS (Climate, Climatic Change, and Society). In his current research, he focuses on the communicative dimension of socio-ecological transformations: exploring how journalism, digital media networks and different social actors coproduce and shape public debates about global ecological challenges. Access to recent publications: www.bruegge.net, blog: www.climate matters.de.

Photo: UHH/Brüggemann.



Mike S. Schäfer is Professor of science communication at the University of Zurich and director of the university's Center for Higher Education and Science Research (CHESS). His work focuses on mediated science communication, i.e. on the production, presentation and consumption of news and social media communication surrounding issues like climate change, health or artificial intelligence. In 2018, he co-edited the *Oxford Encyclopedia of Climate Change Communication*.



Brita Ytre-Arne is Professor of media studies at the University of Bergen, and an expert in qualitative media use and audience research. She has published extensively on news and journalism from a user perspective, and is PI for the project Media Use in Crisis Situations, which studies the COVID-19 pandemic and the climate crisis. Her most recent book is *Media Use in Digital Everyday Life*, published on Emerald in 2023.



PARALLEL SESSIONS: PROGRAMME 9 MAY

Climate change is a many-faceted phenomenon. This has had an impact on the thematic composition of the paper sessions. Some of the papers clearly address the indicated theme, while others may have a slightly different focus but still be relevant to the conference theme.

Each paper is given 20 minutes, preferably divided in 15 minutes for the presentation and 5 minutes for Q/A.



PARALLEL SESSIONS: ABSTRACTS

- [Time schedule, venue, name and title of papers](#)

In alphabetical order:

1. Aasmundsen, Hans Geir, Associate professor, University of Stavanger, Norway
hans.g.aasmundsen@uis.no

Creation Care: *The construction and communication of a Christian narrative in the time of climate crisis*

Globally, Evangelical Christianity, particularly Pentecostalism, in the latest century has grown to become one of the largest religious branches of any religion, with up to 7-800 million adherents.¹ Although neither Evangelicalism or Pentecostalism is *one* movement with *one hierarchical* structure of organization à la Catholicism there are a few networks (of networks) that can be seen as having an umbrella-function, comprising large segments of the Evangelical churches, denominations, organizations and adherents. One of these, The Lausanne Movement, claim to have more than 250 million affiliates. Ecology, climate and particularly the political implications of dealing with such “worldly” matters have kept most Evangelicals and Pentecostals away from addressing such issues. However, a new narrative has come to the fore in the latest decade, establishing *Creation Care* as an Evangelical response to the climate- and ecological crisis, where “caring for God’s creation” (most often referred to as “the earth”) has become of explicit concern. Starting out as a Lausanne Movement initiative, it now also includes The World Evangelical Alliance (WEA) who with its 600 million affiliates globally make could make this a highly influential enterprise – unless it remains a concern for the Evangelical elites only, a “paper tiger” of sorts?! In this presentation I will discuss both the construction and the communication of the Creation Care narrative. The theoretical focus encircles narratives and narratology and, mainly, how this relates to communication. The latter is here understood as both words (oral and written) and all kinds of practices (rituals, ceremonies, political behavior etc.), and that which is communicated through (and within) buildings, statues, objects and various places and spaces.

“I gave the climate minister the finger”: Active non-listening between democratic contempt and democratic dissent

Keywords: activism, dissent, deliberative democracy, rhetorical citizenship.

On 25 March 2022, the daily news programme, Dagsrevyen (NRK), showed a reportage from the first post-pandemic school strike in Norway. Shouting a rhyming slogan outside the parliament, the strikers encouraged the political leaders to listen: “*Støre, du må høre!*”. However, it quickly became clear that the activists did not intend to listen. The camera shows how one of the activists tells the climate minister, Espen Barth Eide, to leave, then turns his back on him before, ultimately, giving him the finger. A few days later, the activist published a debate article, justifying his actions as an “expression of disappointment” and a lack of “confidence in the minister” to deliver anything other than “empty words” (Kolstad, 2022). Similar acts of what I term “active non-listening” have been carried out by Greta Thunberg, as she has dismissed what political leaders have to say as “blah blah blah” before giving them a chance to speak (Thunberg, 2021a; 2021b). In the article, I explore active non-listening as a rhetorical tactic and discuss its democratic implications. I do so by examining these acts and the public reactions to them. Active non-listening involves rejecting the possibility of solving the disagreement through rhetorical action and democratic debate. As such, it challenges the ideals of deliberative democracy as conceived within the conceptual frame of rhetorical citizenship, according to which the adjudication of disputes requires adversaries to be tolerated and addressed rather than antagonists to be silenced (Kock & Villadsen, 2012). Based on Ivie's (2005) “dissenting trickster”, I discuss how the activists’ rejection of the established rhetorical and democratic norms can nonetheless be considered rhetorical counteractions which, by disrupting the established rules of dispute and adjudication, perform democratic functions of challenging and negotiating dominant discourses and existing patterns of discussion.

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Writing for an Uncertain Future: How Journalists and Scientists Cope with Uncertainty in Science News

As the world is beginning to cope with the impacts of anthropogenic climate change, there is an increasing need to understand how science news contextualizes these impacts. Of particular interest is how journalists handle scientific uncertainty in their stories. Scientific uncertainty is a defining characteristic of modern science, which emphasizes the incompleteness of knowledge and need for future revisions (Popper, 2002). There has traditionally been tension between journalists and scientists with respect to scientific uncertainty, with scientists feeling reluctant to talk to journalists for fear of them mishandling uncertainty (Dunwoody, 2021). Journalists, however, have claimed that too many references to uncertainty make the story harder to read for their audiences (Dunwoody, 2021). These conflicts have been understood by scholars in terms of clashes between news and scientific values (Brüggemann, et al., 2020). In this qualitative study, we will explore the ways that scientists and journalists understand and handle scientific uncertainty through their role in the production of news about climate change and other scientific issues.

To understand the construction of scientific uncertainty from the perspective of journalists and scientists, we conducted semi-structured interviews with 19 journalists who write about science and 21 scientists who recently spoke with journalists. An interview protocol was developed to probe the participants' understanding of scientific uncertainty, the importance that they assign uncertainty in science reporting, and how they cope with the truthfulness of science news changing over time as scientists learn more about an issue. These data will be analyzed using Tracy's (2019) phronetic iterative technique for constant comparison, and the results will be presented through a constructivist lens (e.g. Mills, et al., 2006). This work will contribute to the field by showing a role-based understanding of scientific uncertainty from the perspective of the two primary stakeholder groups in the production of science journalism.

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Keywords: journalism, Uncertainty, Qualitative

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How constructive journalism maintained public interest in climate change during COVID-19

COVID-19 has provoked fears that the heavy reporting of pandemic developments may cause climate change to slip from public attention. Views have also converged that the focus should be on the positive lessons of COVID-19 for living with climate change. This paper examined *Guardian Online* and *Positive News* to identify examples of good practice in reporting the synergistic effects of climate change and COVID-19, as both publications are committed to covering climate change and practice solutions-oriented constructive journalism that provides context by explaining relations between issues (e.g., Gyldensted, 2015; Haagerup, 2017). The study sought to identify the types of synergistic effects that were reported and how they were reported through metaphors - widely used tools to discuss and conceptualise complex issues (Lakoff & Johnson, 1980). Critical metaphor analysis (see Charteris-Black, 2004) of 153 news articles published in the first year of the pandemic (01/01/2020 – 31/12/2020) showed that the coverage of synergistic effects was solutions-oriented and synergistic effects were discussed mainly through Movement and Colour metaphors - particularly the colour Green. This can be interpreted as a positive practice. Movement metaphors invoke our familiar and vivid experiences as pedestrians, cyclists, drivers and offer flexible options for discussing the relation between climate change and COVID-19 (movement can be reversed, accelerated, stalled). Green metaphors are closely associated with environmentalism and have positive connotations. Reporting of the synergistic effects of climate change and COVID-19 was also tied to key moments in the COVID-19 timeline (e.g., the release of a conditional plan for lifting the restrictions of the first UK COVID-19 lockdown) when public attention to news reporting would have been high. In both news outlets, the coverage of synergistic effects focused on how responses to COVID-19 might offer solutions to climate change rather than whether (and how) climate change may have contributed to COVID-19.

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Green Marketing as Constitutive Rhetoric: Consuming during Climate Change

Keywords: green marketing, constitutive rhetoric, greenwashing, second persona

Combating climate change calls for efforts on many frontiers – including dealing with the challenges posed by consumption. These challenges can partly be tackled by regulating production, but as consumption is intertwined with people's values, identities, and personal choices, influencing consumption also becomes a matter of rhetoric.

Current studies of corporate rhetoric tend to focus on revealing manipulation, showing how green marketing becomes greenwashing. It is seen not only as influence, but indeed undue influence tantamount to lying; greenwashing is considered a vice – a sin even – and indeed, “the sins of greenwashing” (TerraChoice 2009) has become a standard analytic.

While acknowledging the need for critical studies of corporate rhetoric, this presentation explores the idea that such rhetoric's potential for good does not stop at the corporate bottom line. Green rhetoric has constructive potential. Beyond driving companies to actually become greener, in order to strengthen a market position, green marketing can steer consumption in more sustainable directions. It can function as a form of constitutive rhetoric and contribute to shaping consumer identities with long term effects (Cf. Black 1970, Charland 1987). In other words, there is reason to believe that commercial marketing practices could contribute to climate transition and a more sustainable market economy. The question is how.

Instead of chastising “sins of greenwashing”, I propose that we envisage what virtuous green marketers should strive for. More specifically, I present a theoretical framework for virtue-oriented discussions of green marketing, developed in collaboration with scholar of Law, Oskar Mossberg. The framework provides analytical tools for qualitative analysis of green marketing. It not only highlights the importance of communicative virtues such as transparency, balanced disclosure of relevant aspects, and the use of relevant authorities. It also considers the multiple effects of commercial rhetoric, including its capacity to shape consumer's values and self-understanding.

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“The nature crisis” - a global crisis for local nature

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Keywords: environmental communication, nature crisis, wind power, climate crisis, environmental politics

The words and concepts that are used in environmental debates are of political as well as ethical importance. They are rhetorical tools used to achieve certain purposes, and at the same time they contribute to creating the phenomenon they refer to. Thus, they can be seen as technologies that in themselves change people's understanding of a phenomenon. In Norway, a new crisis concept – “the nature crisis” – has recently appeared. In this paper, we examine how and in which contexts this concept is used in Norwegian newspapers, with a special focus on its use in discussions of land-based wind power. In Norway, plans for the development of land-based wind power have triggered fierce disagreement. Close-reading selected opinion pieces on land-based wind power, we have examined which rhetorical actions are carried out with the use of the term, how these actions invite specific responses from an audience, and what understandings of nature the concept implies. We find that “the nature crisis” has been turned into a collective singular in the same way as the climate crisis, balancing the more well-known crisis in size and spatial range. It provides the opportunity of talking about a global nature, consisting of natural diversity, species, nature types and areas. The concept functions as a scaling concept, turning a number of local events into one global phenomenon. In the debate on land-based wind power, it is mainly used in defense against accusations that opposition to wind power is incompatible with environmental commitment. However, the concept is also used to defend support for the development of land-based wind power. Thus, it seems to be politicized according to the actors' agenda, its primary function being to prove that one's position on the matter is compatible with a double commitment – to issues regarding both climate and nature.

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An Ecofeminist Analysis of Flora and Fauna in Siri Pettersen's *Odinsbarn*

Young adult fantasy literature can play a crucial role in giving to new generations the ecological expertise they need to face environmental challenges. It is therefore important to analyse the view on nature and the concept of nature it conveys, which can involve a true dissemination of knowledge about flora, fauna and environmental protection, also from an ecofeminist point of view. Siri Pettersen's (eco)novel *Odinsbarn* (*Odin's Child*, 2013) is here analysed from an ecocritical and ecofeminist perspective to investigate its message with regard to nature and to understand how nature is understood by readers. This fantasy novel supports the ecofeminist belief that a deep knowledge of botanical elements and animals is typical of a more sensitive and feminine approach, which can be shared through an active interaction with the natural world. Nature is thus gradually transformed into a kind of educator, in order to turn the gap between human beings and nature more intangible and indistinct.

Moving from the assumption that literature can influence humans' behavior and attitudes toward nature, and with the awareness that every cultural work is the result of human actions and ideas –, thus involving gendered constructions of meaning –, this analysis is conducted following two imaginary axes in which cultural and feminine expressions can be discussed in relation both to a vertical continuum, passing from a celebration to a problematization of nature, and to a horizontal continuum, going from an anthropocentric to an ecocentric view of nature, with the aim to emphasize the intrinsic value of the interrelationships between humans and non-humans at the same level.

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Journalism and stories from the future with climate change: student works and reflections on presenting imaginary futures

Keywords: Journalism, environmental communication, liminality, temporalities, narrative theory

This study is based on my PhD work on climate change, journalism and liminality, that addresses how different actors, including journalists, engage in different kinds of narrative work in order to cope with the conflicting and sometimes ambiguous aspects of climate change. As part of the project, I interviewed experienced journalists that had written news/feature stories about climatically changed futures. The aim was to conceptualize this kind of stories in the context of professional journalism and particularly the use of “prior narration” in the stories. Prior narration positions the narrator in the future, and thus talks as if the future is known. This narrative take clashes with the traditional norms of journalistic knowledge production (presenting events in the here and now), yet the journalists chose to “lend” elements from (science) fiction to engage readers about climate change.

As a continuation of this research, I will ask a group of journalism students to go into the field and make their own future stories (with visualizations/in cooperation with photojournalists or graphic designers) and then discuss and reflect on the work in a following seminar. These student works and reflections will make up the data of a research article with the aim to further explore the issue of stories of our future with climate change: professional potentials and pitfalls, engagement potential and justice perspectives. As a dissemination activity, the stories will be exhibited to the public in a suitable venue. The work will contribute to the field of climate journalism, and in particular to recent inquiries into (the troublesome) temporalities of journalism and climate change.

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Sustainability transformation: How and Why lifestyle change towards less consumption is a necessary part of it

Authors: Magnus Boström, Åsa Callmer.

As humanity exceeds or threatens to exceed several of the planetary boundaries, lifestyle change towards reduced volumes of consumption in wealthy contexts and in most consumer areas are necessary in the long run. This paper theorizes *how* and *why* lifestyle change towards reduced volumes of consumption is a necessary part of the sustainability transformation.

The “Why-part” of the paper argues why lifestyle change is necessary. While the importance of considering consumption issues is broadly recognized internationally (see SDG 12), it is less clear to what extent this includes critiquing the *volumes* of consumption. Moreover, policies and studies of sustainable consumption have often rightly been criticized for its tendency to individualize responsibility and assume an overly rationalistic-cognitive assumption of agency. However, there is an opposite trap to ignore the crucial role of “people” as agents in the change process. Thus, in this article we address the importance of agency, while avoiding individual reductionism.

The “How-part” of the paper argues that the change process must be seen as a dynamic interplay between macro and micro; that is, (1) bottom-up (social movements, initiatives, influence via a social-tipping point dynamics) and (2) top-down (politics, planning, policy, regulation) processes. We build on previous literature on the public experience, reflexivity, and transformative learning from both *voluntary* (e.g. sufficiency-inspired agency) and *involuntary* (e.g. the Covid-19 pandemic) examples of reduced consumption. By drawing on such literature we construct three ideal-type responses to calls for lifestyle change: frontrunning, adapting, and resisting. We argue that the interactions between these responses are critical for the activation (or prevention) of change processes.

How seasonal cultures shape adaptation on the Coromandel Peninsula

Scott Bremer and Paul Schneider

This paper is about how communities on the Coromandel Peninsula in New Zealand culturally interpret changes to local seasonality, and how they choose to adapt their everyday seasonal practices. In this sense, we engage with the scholarship on climate and culture, and particularly on the influence of communities' temporal frameworks. We begin from the seasonal cultures and calendars mediating how Coromandel communities live by the seasons; how they perceive patterns in yearly rhythms that they segment into periods meaningful for them, and effect practices that maintain or change these patterns. In particular this paper looks at what happens when the Coromandel's seasonal cultures are strained by climatic, environmental and social changes. Communities on the Coromandel Peninsula are experiencing a destabilisation of their seasonal cultures and calendars. Many perceive a growing arrhythmia to long-held seasonal patterns, and as these communities become increasingly diverse, seasonal calendars diversify and are contested. What consequence this is having for peoples' everyday lives is debateable, but some lament a loss of common seasonal categories as practical templates for living seasonally, and are adopting strategies for recalibrating their practices. There are those who seek to 'season-proof' themselves by detaching from natural rhythms, others who seek to retune their lives to shifting natural rhythms, and others still who strive for a return to traditional calendars, even if these calendars no longer hold with the conditions experienced today. Our work brings seasonal cultures into focus as functional adaptive repertoires, at work in even highly modern contexts, and continuously revised through negotiation and practice according to shifting environmental conditions and society-environment interactions.

Keywords: climate adaptation; seasons; culture; temporal frameworks; practice

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Not talking about a revolution: How Journalism frames our future with climate change

Keywords: Climate futures; journalism; news coverage; framing; international comparison

The question of how we live with climate change is closely interlinked with how we imagine our future with climate change as imaginations about the future have an impact on our current ways of living. For instance, imaginaries of a global doom are found to be paralyzing rather than mobilizing action (O'Neill and Nicholson-Cole 2009) – even though fear appeals do work under certain circumstances (Hornsey and Fielding 2020). Optimistic visions as manifested in the Paris Agreement may also have the effect of appeasement (Brüggemann et al. 2017). These different visions can be understood as frames defined as “interpretive packages” (Gamson and Modigliani 1989) including problem definitions, evaluations, causal analysis, treatment recommendations, responsibility attributions (Entman 1993) and factual assumptions about the future. Media coverage makes certain frames more salient for audiences. This is why we explore the framing of climate futures in media coverage.

Our analysis included countries with high greenhouse-gas emissions from the Global North and the Global South (Germany, India, South Africa, and the United States) drawing on both a qualitative long-term study of news magazine coverage (N = 62; 1980–2019) and a quantitative content analysis of online and print news (N = 1.010; 2017–2020).

We find that journalism follows the approach of climate science and focusses on the distant future with an emphasis on a negative framing. Coverage is surprisingly similar across countries and news outlets. Three frames can be distinguished: A Global Doom Frame, which was more prevalent in the earlier coverage. This became more concrete in a Local Tragedies Frame and more recently in a Sustainable Innovation Frame. What is lacking is a Great Transformation Frame, that would include to substantially change our ways of living. While this is debated in academia, journalists do not seem to engage with theories that substantively question our current economic and social system.

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“Seasonal Journalism as Vernacular Phenology”

Keywords: journalism, lifestyle, seasonality, phenology

Most research on climate change journalism addresses how political or science news impede or foster awareness and (political) action or how such coverage furthers structures of economic and ideological domination. In doing so, journalism often constructs climate change as a political and scientific issue remote in time and space. In a new project hiring two postdocs in early 2023, we shift the lens towards the parts of journalism often seen as cultural, service or lifestyle journalism in which seasonal observations reoccur, e.g. articles on changing elderflower seasons or pieces on the garden, as one in the lifestyle section of the Danish national Berlingske discussing seasonal fluctuations in the unusually warm winter of 2007.

This is what we term seasonal journalism and which we approach as a vernacular form of ‘phenology’, the study in ecology of “cyclical and seasonal natural occurrences” (Barnett 2019: 386). While concepts from geological time have been taken up in the humanities, the notion of phenology has only recently emerged within the environmental humanities (see Bastian and Hawitt 2022) along with a growing interest in climate-change temporalities (Kverndokk et al 2021; Bødker and Morris 2021).

Our study looks at Danish and Scottish online news from the 1996 to 2021 and the data comes from the Danish Web Archive (2005-), the UK Web Archive (2005-) and the USbased Internet Archive (1996-), also containing European data. Based on very preliminary readings, we will sketch the contours of a “cultural public sphere” (Gripsrud 2017) emerging through a sensory journalistic language that transforms climate change from a “hyperobject” to something “experienced within peoples own lifeworlds” (Bastian and Hawitt 2022: 11) and thus signaling a kind of grounded awareness thought so vital for action, especially for people largely insulated (e.g. by wealth and geography) from more extreme fall-outs of a changing climate.

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Citizen's engagement in climate action: The role of emotions

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The public plays an important role in climate change. Individual decisions and behaviors in everyday life contribute to climate change mitigation and adaptation in manifold ways, for example through domestic energy use and transportation choices, through acceptance of technologies, through purchasing of appliances, goods, and services, and through political support of policy strategies and voting choices in political elections. It is therefore important to understand what motivates citizens to engage in climate action.

This talk takes a psychological perspective and looks at the question of how people think about climate change and make decisions concerning climate-related behavior choices. A special focus will be on the role of emotions in shaping judgments and behaviors. This talk argues that emotions are not homogeneous; different emotions, for example fear versus outrage, play different roles in decision making and have different effects. The kind of emotion we experience reflects how we understand and interpret a situation. Emotions in turn influence behaviors as well as policy preferences. As proximate causes of behavior, emotions exert a strong motivational force and can be seen as a prime source of climate engagement. The talk will elaborate how specific emotions and their underlying appraisals matter when explaining climate action.

Keywords: Climate action, public engagement, emotion, risk perception, decision

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Social relations and reduced consumption – obstacles and possibilities

Co-author Magnus Boström

Keywords: sustainable lifestyle, reduced consumption, relations

Social relations play a crucial role when people aim to adopt a more sustainable lifestyle. Our relations are entrenched with norms, rituals, and status orientation surrounding consumption that often act as obstacles if one tries to make sustainable choices. But social networks can also, if supportive, facilitate a transition to alternative practices and lifestyles.

One such alternative sustainable lifestyle choice is to consume less. Voluntary reductions of consumption have mostly been studied in relation to voluntary simplifiers and other committed frontrunners. This study aims to contribute with knowledge about obstacles and possibilities experienced by more mainstream consumers, namely individuals who are planning, or have recently started, to reduce their consumption. Through qualitative interviews and follow-up memory notes from interviewees about their experiences, the study follows around 20 individuals in their attempts to lower their consumption. Their experiences are contrasted with interviews with more committed downshifters, who are expected to already have overcome several obstacles in their processes.

The results of the study point to the relational difficulties encountered by the interviewees, for example in the areas of everyday rituals, social comparisons, and normalization of overconsumption, and show how these difficulties may change over time. However, the results also highlight the potential that is to be found in supportive social networks and suggest that such communities may help individuals aiming to reduce their consumption in various ways. First, they offer a reassuring normative context for questioning and attempting to change unsustainable consumption habits, and second, they facilitate – socially and materially – alternative consumption practices such as refusing, reusing, borrowing, sharing, and repairing. To surmount social-relational obstacles is an essential part of individual transitions to more sustainable lifestyles, and learning more about how these obstacles may be overcome offers opportunities to facilitate for reduced consumption at a larger scale.

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Is there evidence of change in the West's approach to the climate crisis?

Keywords: Press, Environmental Thinking, Climate Awareness, Differences around the World, Discourse Analysis

The news, opinions, and analyses in newspapers such as The Guardian, Le Monde or El País about the climate crisis and the consequences for the world's population have increased, not only the number of articles devoted to this issue, but also the direct appearance of catastrophic references in Western countries. The discourse is more alarming than in the past in relation to our daily lives and even defines the invitations to subscribe to the newspaper, as it is linked to independence and so to the dialectical fight against climate change. In any case, despite the need to raise awareness among the Western population, which is largely responsible for this change through the emissions of its means of transport and its industries, the links with other territories, where the consequences of the crisis have been catastrophic for years, are not clearly established. I therefore propose to present an analysis of journalistic discourses on the climate crisis in three languages, their characteristics, and their evolution over the last period. I start from the hypothesis that climate change is not treated in the same way in the press when talking about Western and Third World countries. Through a discourse analysis focusing on lexical-semantic, morpho-syntactic, rhetorical, and pragmatic studies of a corpus of articles from these three newspapers in the year 2022, I want to show that there are differences in the treatment of the effects of climate change in different regions of the world, what these differences are and how they affect our understanding of the problem.

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Young & Diversified: A segmented analysis of Young People's Profiles related to Climate Change Action

Loup Ducol, Louise-Amélie Cougnon, Amélie Anciaux, Andrea Catellani, Grégoire Lits, Frédéric Nils, Benoît Galand & Benoît Rihoux

Young people form a heterogeneous group among which the drivers of commitment are very diverse (necessity of an “oriented” cause [1], influence of the family... [2]). Disincentives specific to this age also vary: worry, indignation, pessimism, defeatism, helplessness... [3]. There is a need today to identify the range of drivers and disincentives and how they fluctuate between young profiles.

The *Young & Diversified* project has been conducted since January 2022 among 1000 young Belgian people (15-24 y). The aim of the project was to investigate how they plan their future (job, money, studies...) in the framework of climate change. Some of the research questions were: How do young people from all origins perceive climate change? How do they imagine their future in the context of climate change? When and why do they feel excluded from the climate transition? What guarantees are needed so that young people from different social groups can engage? Finally, how can these ideas be translated into communication towards young people?

The relationship between young people's motivations and values has been investigated through a mixed approach, combining a Likert-based form, open-ended questions and focus groups. Results from our segmented analysis of young enabled to draw up a typology of 7 “personae”, i.e. holistic and ideological social types, which includes: the Neets, the Super Committed, the Sweet Sixteen (15-16 years old), the Anxious, the Optimistic, the Opted-Out and the Aware, without conviction.

We will first present our methodology made of several communication strategies (press releases, social media campaigns, incentives, subcontractors...). A combination of a statistical analysis and a young people's discourse analysis will enable us to answer the research questions. Lastly, we will propose recommendations made by the multidisciplinary panel of experts in order to communicate to, empower and commit to action the 7 personae.

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Keywords: young people, climate change, call to action, commitment, disincentives

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Exploring climate change concern and the associated psychological processes of young adults living in the UK

Keywords: Climate change psychology; Climate change concerns; Psychological processes; Classic grounded theory methodology; Young adults

This PhD research project explores how young adults living in the UK are psychologically experiencing and responding to climate change. Aside from constituting a physical threat, climate change has also been described as an existential and psychological threat, with young adults being a particularly important stakeholder group. There is a call to better understand young peoples' experiences of climate change, especially from the perspective of their psychological wellbeing and climate change related behaviours. Therefore, the aim of this research is to increase our understanding of the psychological experiences and processes of this population, to better address their concerns and support their coping. Classic grounded theory methodology will be used to address the questions: what is the dominant, shared concern among young adults living in the UK, in relation to climate change? And how are this population processing this concern? The goal of this research is to inductively develop a theory that accounts for how this population are processing their climate change concerns. Participants have been recruited from community groups, climate change organisations and charities, and universities, and one-to-one interviews are being conducted. Grounded theory procedures are being applied to the qualitative data, such as coding, constant comparison and memoing. The resultant theory will help us to better delineate the major concerns of this population in relation to climate change, as well as how these concerns are being psychologically processed. This theory will be of interest to the population group at hand, potentially acting as a psychologically empowering resource, offering a sense of relatedness, increased self-awareness, and potential action repertoires. This theory may also be of relevance to researchers in the field, wellbeing practitioners, and educational, organisational, and governmental bodies that have a vested interest in either the psychological processing, wellbeing, or climate-related behaviours of this population.

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“Like, I wouldn’t go to *jail* for it” - Inviting students to explore civil disobedience as a protest tool in climate change activism

Keywords: civil disobedience, controversial issues, citizenship, education, climate change

In recent years, environmental activists have increasingly employed civil disobedience to demand attention to the climate crisis. While the public response seems to vary according to the cause and protest form, it has been predominantly negative. This paper will present preliminary results from the project ‘Exploratory teaching on controversial issues’, which is an interdisciplinary research project where three upper secondary classes have been invited to explore the use of civil disobedience as a protest tool in the climate change debate and each other’s opinions on using civil disobedience in exercising citizenship. The project takes an exploratory and student-centred approach to civil disobedience as a controversial issue in climate crisis activism and the researchers involved have gathered observation and survey data from three workshops where students have been invited to explore the issue of civil disobedience in various manners. The project is driven by five researchers from religion didactics, English didactics, and rhetoric at the University of Bergen, whose objective is to develop innovative and exploratory teaching approaches to controversial issues.

Explaining public support for climate change mitigation policies

Keywords: Carbon tax; meat consumption; climate change mitigation; survey

Understanding how individual characteristics explain support for climate policies is important, because policy proposals are more likely to be successful when they have public support. This study employs survey data (N=2001) to examine support for two policies which are central to the Norwegian climate action plan: increased carbon tax and reduced meat consumption. The findings suggest that there is widespread support for increased carbon taxes, as well as widespread willingness to reduce consumption of red meat. Furthermore, the results show that support for both policies are explained by concern about climate change, left-wing political orientation, trust in politicians, low consumption of meat, residing in an urban area, being higher educated, and being female. While age and personal health do not predict support for carbon tax, younger people and people with more positive perceptions about their personal health are more willing to eat less red meat. Conversely, income is not associated with willingness to eat less red meat, but higher income is slightly associated with carbon tax support. The findings to some extent replicate previous knowledge, and shed new light on the nuanced views of the public toward mitigation policies. This knowledge can inform strategies to increase support for climate policies. In doing so, they advance our understanding of the differences in individual characteristics of support for individual policy types.

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Attitudes and perceptions of attitudes about meat reduction

Keywords: meat reduction, public acceptance, climate policy, perceived public opinion

Food systems cause a substantial amount of the environmental pollution originating in human activity. Notable reductions in the consumption of animal-based foods in high-income societies is important to reduce global greenhouse gas emissions. Previous research concerning consumer attitudes toward environmental concerns of meat consumption have focused on people's awareness of the environmental impact of meat production and consumption, their willingness to stop or reduce meat consumption because of environmental concerns, and on the people who have stopped eating meat or reduced their consumption because of environmental reasons. We know less about how the average citizen would react to specific situations they encounter in their everyday lives, and we know even less about how they think others would react. The aim of this paper is twofold. Firstly, it highlights the public support for specific measures to reduce meat consumption. Secondly, it shows how well this support is perceived by citizens. The data are obtained through the Norwegian Citizen Panel. A survey-experimental design asking half of the respondents to state their own opinion, and the other half to assess what the majority of the population thinks, give striking results. A majority of Norwegian citizens agree that canteens should offer meat-free meals and have a meat-free day once per week. However, 7 out of 10 respondents think a minority agrees with these statements. Additional results show that a statistically significant majority of Norwegians also agree with the more general idea that we should eat less meat than we do today in order to reduce greenhouse gas emissions. The puzzle is: Even though a majority agrees that we should reduce meat consumption, and a majority agrees with the specific proposed means to do so, a clear majority of the public still thinks this is the minority view.

The causes and consequences of climate anger

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People's climate change emotions can play an important role in motivating or impeding different types of climate action. This presentation reports on a study focusing on the unique effect of climate anger. The data is collected through the Norwegian Citizen Panel, with participants representing a cross-section of the Norwegian population. The first part of the presentation looks at the level of climate anger among the general public and in relevant socio-demographic groups. Respondents with higher education report more anger than those with high school education, younger age groups report more anger than older age groups, and women report more anger than men. There are further differences based on political affiliation; those voting for political parties typically placed further left on the political spectrum report higher levels of climate anger. The second part of the presentation focuses on the relationship between climate anger and three types of climate mitigation behaviors. Preliminary results show that anger is related to self-reported private-sphere behavior (trying to limit climate emissions in everyday life), policy support (supporting increased taxes on petrol and diesel), and public-sphere behavior (participating in climate protest). When accounting for other climate emotions (hope, fear, sadness, and guilt), climate anger is still the strongest predictor of participation in climate protest but is no longer related to private-sphere behavior. All analyses control for socio-demographics. The third and final part of the presentation gives insights into people's self-reported explanations for their climate anger. Answers to an open-ended survey question will be used to establish categories representing different reasons to be angry.

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Affective negotiation of ecological distress among youth - a critical psychological perspective

Recent psychological research has emphasized the potential of recognizing the deeper affective dimensions of people's responses to anthropogenic climate change in order to facilitate greater mobilization (Adams, 2021). Although evidence linking awareness of ecological degradation and emotional distress is growing, significant efforts to reflect back on categorizations of ecological distress (e.g. "climate anxiety") and their potential roles in society are still lacking (Wardell, 2020). Drawing on critical theory, we acknowledge that categories of distress are socially constructed, and will therefore have implications for how we view personal and societal capacities for adaptation. Through the theoretical lens of affective practice (Wetherell, 2012; 2015), the emotional experience can be understood as a multi-layered process in which bodily processes intersect with culturally accessible ways of meaning-making imbued in larger-scale discourses and power dynamics. In light of this backdrop, the present study aims to shed light on how young people construct and negotiate their affective engagement with the climate crisis, and what subjectivities these negotiations make available. We draw on data from focus group discussions with youth (N = 93, age = 16-30) from a broad segment of the Norwegian population. An in-depth analysis of interactions shows how participants draw on different affective-discursive repertoires located and operating within normative "feeling rules", that shape neoliberal subjectivity. Discursively mediated affect is shown to have both recruiting effects as well as offering possibilities for ambivalence and resistance. Fine-grained empirical affective analysis shows how social change is embodied, enacted, interpreted, and resisted among young people in their ambivalent position in society. As psychological theory and constructs permeate popular culture and our everyday understanding of ourselves, a careful empirical examination of the ways in which affect and emotion are made sense of and enacted in the face of climate change contributes by nuancing our understanding of ecological distress's function in society.

Keywords: affective practice, climate anxiety, ecological distress, youth, climate change

How should we live of/in/with our forests? Polarization and the search for a more nuanced conversation in Swedish forest debate

Keywords: Rhetoric, Forestry, Environmental rhetoric, Place based studies

Rooted in a long tradition of forestry, we are now facing a climate crises that changes our future. The forest debate is described as "trench warfare". My Phd-project aims to understand how identity, temporality and space impacts people's positions in this debate, thereby deepening our understanding of polarization. It also explores strategies that might lead to less polarization. Rhetorical Listening, Invitational Rhetoric and place based environmental rhetorics, inspired by human geography, serve as theoretical framework. Focus groups are used for data collection from conversations that otherwise would not happen.¹

My paper presents findings revealing possible starting points for a nuanced conversation between landowners and environmentalists. I also wish to discuss rhetorical theories on understanding, and the impact of place.

I posit that Rhetorical Listening and Invitational Rhetoric have potential not fully utilized by rhetoricians to develop strategies for nuanced dialogue. Classic rhetorical theory, and modern dialogue centered theory, emphasize the topic, whereas Invitational Rhetoric and Rhetorical Listening emphasize the people taking part in the conversation. This makes communication possible across social structures where people's identity are an inevitable part of the conversation.² This idea, that a conversation should be considerate about participants value as humans, is an important difference.³ However admirable that 3 sounds, I would like to challenge theses theories by putting them into use in the focus groups.

I claim that forest as a place affect people's position in the debate. In this sense, my project answers to Goggin's call for a science within Environmental Rhetorics that takes a place based perspective into account.⁴ The forest plays such a valuable part in the lives of 4 Swedes that Thurfjell calls it a religion.⁵ What is at stake is how Swedes negotiate their 5 lifestyle in relation to the forest, in the light – or shadow – of climate crises.

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⁴ Goggin 2013, s. 5.

⁵ Thurfjell 2020

Understanding opposition to meat reduction

Keywords: meat reduction; survey experiment; policy preferences

Previous research has shown that among a broad spectre of climate policy issues in Norway, opposition is especially strong related to meat reduction, both in terms of national production and personal and national consumption. This opposition is evident among both citizens and representatives. Meat reduction is often discussed in terms of both consumption and production, interchangeably. This makes it difficult to grasp where the opposition actually lies. Consumption is very personal; it is both habitual and behavioural. Production, on the other hand, is more institutionalised, and deals with both nationalism and protectionism, and the market, with international agreements of import and export. However, because these two aspects often are used interchangeably, people might not necessarily differentiate between the two. With aim of disentangling the opposition to meat reduction, I conduct a conjoint survey experiment among Norwegian citizens and elected representatives, measuring support of reduction of meat consumption and production, nationally and internationally. The survey experiment is fielded in the Norwegian Citizen Panel and the Panel of elected Representatives. Preliminary findings show a significant difference between production and consumption. There is more support for reduction of meat consumption, than meat production. When it comes to arena, speaking of reduction on a national level (Norway) significantly decreases support, compared to an international level (Europe; the world). These findings apply to both citizens and representatives. Overall, support for meat reduction is higher among citizens than representatives. For representatives, framing the policy issue as a climate mitigation measure significantly decreases support, as compared to no framing. While the direction of this effect also is present for citizens, it is not significant. Support for meat reduction increases with climate concern, perceived threat, and importance of issue among citizens. Treatment effects of the experiment are somewhat conditioned on climate perceptions.

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Who speaks up in the public hearings on climate issues?

Keywords: Rhetoric, public hearings, democracy, digital humanities

This abstract presents a rhetorical document analysis on three political conflicts in Norway: land-based wind power, resource taxation on aquacultural farming and reduction of meat consumption.

These political conflicts occur in different political fields and involves a range of actors: political parties, bureaucracy, organizations, and private citizens. While all three cases evolve around climate and environmental issues where different interests and values are in conflict. A central part of this study is the processes of public hearings, an institution distinctive to the Norwegian constitutional democracy. In later years the occurrence of this process, open to every institution, civil organization, and private citizen, is increasing, and responses from citizens expressing their personal meaning in a genre similar to social media-commentary fields, has intensified, if not escalated. This phenomenon is to some degree based on hyperlinks circulating in social media, but our knowledge on who these responses come from, how they are handled, and to what degree they are listened to by politicians and bureaucrats, is non existing.

This presentation outlines a hypothesis and early results on private responses to public hearing on climate and environmental issues. The rhetorical policy analysis consists of a combination of traditional rhetorical close reading (genre, topics and framing) and distant reading of a larger text corpus and digital humanities. The overall research goal of this project is to gain knowledge on how democracy handle environmental and climate matters when values and interests are incompatible? The project is a PhD-application process at UiO. Hidle is a lecture in Rhetoric, Language and Communication, at the Department of Linguistics and Scandinavian Studies, University of Oslo. Her master thesis, [*Klimakur vs. klimaku: En retorisk dokumentanalyse av kostholdstiltaket i Klimakur 2030*](#), is published at CICERO Senter for klimaforskning in 2022.

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Cross-Analysis of Climate Change Adaptation Policies in The Netherlands, UK, USA, Turkey & Portugal: Approaches and Policies

Authors: Gamze Kazancı Altınok & João Pedro Costa

Keywords: Climate Change, Climate Change Adaptation, Climate Change Policies, Spatial Planning and Climate Change Adaptation, Urbanism and Climate Change Adaptation

Awaken by extreme events such as the Hurricane Katrina (USA, 2005) or the floodings in the UK (2007), communities around the world started to observe the effects of climate change (CC) more strikingly, concern that it could impact directly on their backyards. New international approaches like the 2008's Dutch Deltacommissie "working together with water" findings, emphasized the need for new bottom-up comprehensive adaptation approaches, reinforcing sustainable concepts like the "living land" and reducing the dependence on heavy infrastructure (Veerman & Stive, 2008). The 2010's observed the development of municipal, regional, sectoral, and national CC adaptation strategies around the world, on an emerging bottom-up spatial agenda complementary to the top-down mitigation internationally driven one.

This study intends to systematize the CC adaptation approaches proposed at these documents, at the different levels of planning, trying to build a conceptual framework on the CC adaptation strategies. It starts by looking at the Turkey and Portugal CC adaptation agendas, as the oriental and occidental southern extremes of Europe, which are compared with two reference cases in north Europe, the Netherlands and UK, and with the USA case. To explore these documents, some questions will be asked including dominant focuses of strategies, major adaptation strategies and tools are used to implement CC adaptation. The result of the study will highlight different CC adaptation policies and approaches by systematizing a conceptual framework.

The paper corresponds to an exploratory research phase, held to support a new research on the contemporary CC adaptation agenda.

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How to transform university students' eco anxiety and climate awareness into action?

There are growing number of evidence that ecological anxiety, fear of others, workload stress and anxiety about the future are widely distributed among young people¹. However, UNESCO report² revealed that, nearly half of national curriculum frameworks of 100 countries reviewed had no reference to climate change. The mindfulness practice is strongly linked to the environment and climate change³. The project “MP4s - Mindfulness Practices for Students in Society” aims to create open resources in different languages that will allow university students to develop other kind of competencies. We are developing and providing an open access set of resources for students and academic staff; to support the integration of mindfulness practices; and training into all types of courses; to support the well-being of students and to encourage them to act for the planet and for others with kindness. We made a mapping of students' emotional challenges and concerns, based on research conducted by the 4 consortium universities (and beyond) by launching a survey targeting students to find out their understanding of the Sustainable Development Goals (SDGs). We just want to know: how do they feel and what do they think about the level of achievement of these goals, plus how do they engage and contribute to achieving them? The results showed that students are mostly concerned on ‘SDG13: Climate action’, and the level of achievement mostly brings sadness and fear. We have developed orientation tool which helps student and academic staff to find the best way to start or continue mindfulness practice using the adaptable SIT4PLANET curriculum. And already have had trainings for Aware Active Ambassadors to experiment the SIT4PLANET tailorable syllabus within MP4s Consortium in France and Italy.

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Media, Publics and the Climate Crisis - Coverage, Cognition and Risk Perception

Keywords: media coverage, public perception, cognitive dissonance, food

Abstract: Some open up their windows and yet see no signs of a climate crisis, while others peek down their basement stairs and find their things floating around in water, and yet others kneel down to the ground crying over another lost harvest caused by drought. Because of this different exposure to a changing climate the mass media coverage is an important window to other realities.

In this presentation I combine talking about my research on how the media cover issues related to the climate crisis, as well as give an insight into peoples' minds and how they perceive risk and deal with the uncomfortable thought that they are contributing to greenhouse gas emissions. This research zooms in on what people chose to eat. The food humans eat are one of the main sources of greenhouse gas emissions. For many, adopting a plant-heavy or plant-based lifestyle is made easy by diverse offerings of plant-based foods. However, changing habits does not come easy to everyone. This presentation explores some of the psychological barriers people report when asked about choosing to eat environmentally friendly foods. These results are put in perspective of how the mass media cover climate change and food related greenhouse gas emissions.

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Mediated citizen-experiences of (non-)climate-friendly living - Exploring experience talk through online news stories and readers' comments

Liisa Kääntä, Merja Koskela & Henna Syrjälä

Keywords: argumentation, climate-friendly living, experience talk, news stories, readers' comments

News coverage of climate change typically ranges from political decisions to advice for energy saving (e.g. Schäfer & Painter 2020). In general, such news are directed TO citizens, while news stories BASED ON citizens and their actions are less frequent. Yet, they are in high demand, because it is important to understand how the lifestyles of citizens are affected by or constructed in relation to climate change issues (cf. Koteyko et al. 2013, Longo et al. 2019). To address this gap, this paper focuses on citizens' experiences of climate-friendly living and utilizes a case study approach to two digital news stories and their comments.

The method of the study is based on the idea of *digital storytelling* with emphasis on different types of experience talk (Kääntä & Lehtinen 2016). The aim is to analyze how citizens talk about their experiences and what they are doing with this kind of talk in the studied cases. The data consists of two news stories and 300 online comments that illustrate citizens' voices in the hybrid media environment (cf. e.g. Ziegele et al. 2018). The stories were created and disseminated by Yle, Finnish broadcast company and largest public media organization, on 17.9.2020 and 24.5.2020. The texts are about how citizens describe their wishes, actions and choices related to climate-friendly living (e.g. heating options).

The preliminary findings indicate that experience talk is mainly used for argumentative purposes. By describing in a minimal manner their experiences (e.g. *I have used an oil heating system*), citizens argue and evaluate the present situation as well as orient for a better living in the future. Respectively, experience talk is intertwined with talking about hopes and futures. In addition, climate friendly living and economic aspects may be in conflict but may also serve a joint purpose in citizens' reasoning.

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Living in anticipation of the catastrophe: Apocalyptic rhetoric in Norwegian contemporary novels

Keywords: Climate fiction, apocalypse, contemporary literature, Knausgård, Bildøen

The climate crisis has given rise to a new wave of literature dealing with the human experience of living with climate change. In the novels of several Norwegian contemporary authors, such as Brit Bildøen and Karl Ove Knausgård, climate change is not necessarily the most obvious subject, but something that may be about to radically change the everyday life of the literary characters. Even though these authors are not primarily associated with cli-fi or ecofiction, Bildøen's novel *Seven days in August* (2014) and Knausgård's *The Morning Star* (2020) both invite for ecocritical readings. Both narratives unfold over a period of a few days in August and depict everyday life disturbed by a change in weather and atmosphere. Rainstorms and heatwaves constitute an apocalyptic backdrop in the narratives, creating a sensation that something is about to happen to life or the world as we know it.

Focusing on weather change as warning signs and the blurred lines between everyday (life) and Doomsday, I will in the present paper discuss the apocalyptic rhetoric of these novels.

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Climate change education: narratives and lifestyle

Golaleh Makrooni & Eero Ropo

Climate change (CC) is one of the best examples of how problems are interconnected to the ways people live around the world. However, one of the biggest challenges in this context is that many changes are not always immediately apparent or visible to us. Yet it is obvious that our individual lifestyle choices, including consumption and production practices, can affect social, economic, and environmental development. One way to impact individual lifestyles is through multidisciplinary approach in education.

An international course on the “Curriculum development for climate change education in global south”, we developed with five key themes, introduces the key organizing principles of education for CC and sustainable development. The different topics focus on causes and consequences of CC (learning to know) and on the necessary skills (learning to do) and how people live together and depend on each other in an increasingly global society.

Methodologically, the question of doing is thereby implemented through the use and consideration of narrative and autobiographical approaches. We assume that to better understand CC and its impacts, it is crucial to understand and consider people's daily lifestyles based on their narratives about relations to nature in their own geographical, cultural, and social contexts.

We base our framework in this course on the assumption that curriculum development is a complex conversation within the society, and that understanding local narratives and their associated values could contribute to understanding and revealing hidden factors that may be critical to changing people's thoughts, behaviors, and positionings. This would then be reflected in their daily lifestyles and actions.

We will provide some theoretical and practical examples that have been taught in this course and that have enabled the participants to implement climate change education and act as educators in their institutions.

Keywords: Climate change education, Lifestyle, Narrative

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Exploring the factors that influence public engagement in pro-environmental behavior: Based on the Cognitive Mediation Model

To address the striking environmental issue of climate change, China government has put forward the policy of “double carbon” to motivate individuals to enact pro-environmental behaviors. However, without environmental concerns and knowledge regarding environmental issues, citizens are less motivated to perform pro-environmental behaviors. Based on the cognitive mediation model (CMM; Eveland, 2001), our research takes a communication perspective to examine (1) how media attention on different social media platforms (i.e., long-form video, short-form video, and text- and graphics-forms media) influence individuals’ information processing (i.e., interpersonal communication and elaboration); (2) how different information processing ways enhance individuals’ environmental concern and factual knowledge about environmental issues; (3) how environmental concern and factual knowledge motivate individuals to perform two kinds of pro-environmental behaviors (i.e., private-sphere behaviors and public-sphere behaviors). The study administered a national online survey in July 2022, using Credamo, a professional survey company in China. The company randomly sent the questionnaire to citizens of Beijing, Zhenjiang province, Hubei province, Shanxi province, and Hainan province. The reason for choosing these five cities was that they serve as the representative geographically (located in northern, eastern, central, western, and southern China) and economically (well-developed/moderately developed/developing). Finally, a total of 500 respondents participated in our survey. The results of the structural equation model demonstrated that attention to long-form and short-form video, text- and graphics-form media positively influenced individuals to engage in interpersonal communication, which in turn enhances the process of elaboration. As a result of elaboration, individuals’ environmental concerns increased and enacted pro-environmental behaviors. The finding highlighted that environmental professionals should make use of different social media platforms to disseminate environmental information to the public, which could arouse individuals’ environmental concerns and motivate them to enact pro-environmental behaviors.

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Can Virtual Reality Stimulate Climate Conversations?

To combat climate change, individuals play an important role by changing their behavior and by having climate conversations. Despite its potential, stimulating climate conversations is however so far largely overlooked.[1] Research furthermore shows that people rarely talk about climate change [2]. The question, therefore, is: how we can stimulate people to talk about climate change? We investigated whether a Virtual Reality experience (vs a regular video or a news article) of climate change consequences could stimulate climate conversations. We looked into the role of the arousal and emotions as underlying mechanisms. [3,4] Furthermore, we investigated reciprocal, downstream effects of climate conversations on pro-environmental behavior over time.

Method

Participants (N = 256; Mage = 20.48) came to the lab in pairs and were assigned to one of the three climate change media experience conditions (VR, regular video, news articles). During this media experience, we measured participants' heart rate variability (HRV). After the experience, participants sat together to have a conversation which was recorded. Then, participants filled-out a questionnaire in the lab about arousal, emotions, and the climate change conversation. At the end of the lab session, participants were instructed to fill out daily follow ups for 14 days which probed for climate conversations and pro-environmental behavior (i.e., plant-based diet).

Preliminary Results

Participants in the VR condition experienced more arousal and emotions than participants in the regular video and news articles condition. Participants in the VR condition indicated that they themselves and their conversation partner talked more about climate change during the conversation in the lab than participants in the news articles condition, but not more than those in the regular video condition. Furthermore, participants perceived their conversation partner to be talking more negatively about climate change in the VR condition than in the news articles condition, but not the regular video condition.[5]

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Youth, climate worries and well-being: A quantitative study of climate worries in a Norwegian County

Aim: Prior research shows that young people experience climate-related issues negatively, which consequently can impact their mental health and well-being. However, few studies have been carried out on this subject in a Nordic context. Thus, the present study aims to examine 1) the prevalence of climate worries among youth in a Norwegian county, 2) whether socio-demographic factors are associated with climate worries, and 3) how such worries are related to youths' mental health and well-being.

Method: The sample consisted of 21.580 youths from the cross-sectional Ungdata survey from 2021 (mean age 16.2, SD=1.61). Prevalence of climate worries was examined through frequency analysis. Relationships between the socio-demographic conditions, age, gender, urban/rural living, and socioeconomic status and climate worries were assessed through Chi-square and One-way-ANOVA analyses. Hayes' four-step mediation analysis procedure was used to investigate the effect of climate worries on mental health and well-being, and whether effects on well-being were mediated through mental health.

Results: 80 % of respondents reported being worried about climate change (37% quite/very worried). Of the socio-demographic factors, gender was most strongly associated with climate worries, with nearly 50 % girls being worried, on the other hand only 26 % of the boys was worried. Those who lived more rurally were less worried (6 % quite/very worried), than those living more urbanely (11% quite/very worried), and socioeconomic status was positively associated with climate worries ($p < .001$, $f = 118.3$, $df = 3$, $\eta^2 .02$). The mediation analysis showed that climate worries positively predicted mental health issues and negatively predicted well-being, and that the latter was partly mediated through effects on mental health (boys: indirect effect $b = .037$, $p < .001$ /girls $b = .043$, $p < .001$).

Conclusion: The high proportion of youth reporting worries related to climate change and the association of such worries with poorer mental health and well-being calls for action. However, more research in the field is needed.

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

Keywords: climate change; temporality; tipping points.

Authors: Christina Nadeau, Manjana Milkoreit, Dag Hessen, Thomas Hylland Eriksen

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 respondents were asked a series of questions on their perception of climate change and their associated risk perception on different spatial and temporal scales. The results show little difference between the two groups, however, a spatial-temporal link in risk perception of climate change was observed. Extended results, limitations of the study, implications for climate change communication and directions for future research will be discussed.

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Mainstream and social media responses to IPCC's presentation of personal lifestyle changes to reduce carbon emissions

Keywords: IPCC; media; lifestyle changes.

Mainstream and social media play a major role in shaping the way policy makers and general audiences interpret the findings of reports by the IPCC. These reports summarize a vast body of climate literature and exert a strong influence on how climate science interacts with policy. In two recent cases, the reports discussed personal lifestyle changes, first in the 2019 report on land, and then in the AR6 WGIII 2022 report on mitigation.

Our aim was to assess the response on mainstream and social media to these two reports with a focus on the IPCC's presentation of lifestyle changes, and particularly the shift to a healthy, sustainable diets including i) the prominence given to this issue compared to others promoted by the IPCC ii) the levels of contestation on social media as measured by sentiment polarity and toxicity, and iii) the differences between mainstream and social media in the discussion of lifestyle solutions and the critiques of them.

We used a mixed method approach of manual content analysis to assess mainstream media coverage in the UK and USA, and computational methods (including CoRex) to assess the relative prevalence of topics and sentiment polarity/toxicity on social media.

Amongst our results are the findings that i) for the 2019 report on land, meat consumption and dietary options became one of the most discussed issues on Twitter, even though it was a relatively minor element of the report; second, this new issue of controversy (meat and diet) had similar, high levels of toxicity to strongly contentious issues in previous IPCC reports; in contrast, ii) demand-side solutions (including 'choice architecture') were often mentioned in mainstream media and on Facebook/Instagram in response to the 2022 report, but rarely critiqued or contested compared to other solutions. We explore the drivers and implications of these results.

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The Global Climate Collective

Keywords: Global, collective, individual, moral, relation.

Global, anthropogenic climate change has ushered planet Earth into a new geological epoch, the Anthropocene, and humanity has become a geological force of nature, effectively breaking away from passive submission to a global climate by emitting unprecedented amounts of GHG emissions since the Industrial Revolution, thus establishing a new, active and moral human-climate relation, binding all human beings under the same atmosphere to a global climate collective. What are we, as individual human beings, to do about this new world order?

From the new active and moral human-climate relation it can be said that all human beings are, in fact, and all moral agents, in moral fact, now part of a collective, an inescapable collective, part of what I call the 'global climate collective'. This is reminiscent of what Augustin Berque speaks of, albeit he talks of the necessary and inescapable relation to what he calls 'the earth'. To Berque, the human being is always *l'être-humain-sur-la-terre*. That is to say, the human being is always human-being-on-earth (or -on-land). The human being is always and necessarily tied to land (Berque, 1996). This way of thinking about the human being and its relation to its environment, is in some ways reminiscent of Aldo Leopold's land ethic (Leopold, 1949). Rather than focusing on the notion of being tied to land, however, I wish to focus on what Berque would possibly call *l'être-humain-dans-l'atmosphère*, or the-human-being-in-the atmosphere. Not just any atmosphere, though. An atmosphere which is effectively and massively influenced by a collective of individual human beings and other entities by way of GHG emissions, thus establishing a new, active and moral human-climate relation, and human-climate-back-to-human relation, and positioning themselves as a new, global climate collective. Despite vast distances in both time and space, the collective binds human beings together across any and all divisive categories imposed or self-imposed on human beings. There is currently no escaping the global climate collective, and that shall have its effect on how the individual ought to live their life.

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Examining the Impacts of Climate Change Misinformation on Lifestyle Choices

Keywords: green consumer behavior, social media, misinformation, climate change

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Impacts of climate change concern all aspects of individuals' lifestyles, including consumption behaviors, transportation, and even eating habits (Tvinnereim et al., 2017). Making production systems as well as consumption patterns more sustainable has long been touted as a necessity in order to begin addressing climate change on a global scale. While some have adopted so-called "greener" consumer behaviors—making environmentally friendly choices in terms of purchasing goods and services (e.g. Agerup & Nilsson, 2016)—less is understood how those behaviors might be impacted by exposure to misinformation, particularly via social media. In a digital age awash in climate misinformation, individuals can be frequently exposed to false claims that climate change is not real, or the issue of climate change is not serious enough, which may in turn impact their decision-making processes. Much of the current research focuses on examining the motivations of individuals of changing their lifestyles in climate change perspective (e.g. Fløttum et al., 2021). This study intends to examine whether people who are exposed to climate change misinformation have less intention to make lifestyle changes via green consumerism. Green consumerism refers to the lifestyle that people adopt more eco-friendly products to support sustainability (Sachdeva et al., 2015). In addition, we also intend to examine whether people who were exposed to climate misinformation but then subsequently were provided fact-checking of those claims would have more intention to consider green consumer behaviors, compared to those do not get exposed to fact-checking information. To address our research questions and hypotheses, we designed a 2 (exposure to climate misinformation vs. no climate misinformation exposure) X 2 (exposure to fact-checking vs. no fact-checking exposure) between subject experiment. Individuals' prior attitudes toward climate change, environmental concern level, green consumerism behaviors were measured. Our study results will expand the research in the area of green consumer behavior and climate change. Specifically, it will not only examine the motivations of lifestyle choices but also the external message factors impacting the lifestyle choices.

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Who benefits from sustainable mobility transitions? Social inclusion, populist resistance and elite capture in Norway

Keywords: populism, social exclusion, sustainable mobility, legitimacy

In a time of proliferating populism and political polarization, sensitivity to social dynamics is crucial for rapidly implementing climate mitigation agendas. Within sustainable mobility transitions, this is leading to a shift from transportation planning and policy as the prerogative of engineers and economists, to an “all hands on deck”, interdisciplinary pursuit of reducing emissions from vehicles, especially private cars. The most environmentally sustainable pathway is reducing car use through, for example, compact city development and congestion tolls. However, automobility is more than a way to get from A to B, it is tightly linked with lifestyles, identities, culture, class, and conceptions of progress and freedom. Thus, electric vehicles are growing in popularity despite their staggeringly high resource intensity.

Tensions between the agenda to displace automobility and to accelerate electric automobility have come to the fore in the Norwegian city of Bergen. The region has the highest number of electric vehicles per capita in the world, thanks to government subsidies and benefits. Simultaneously, the government actively promotes walking, cycling, public transportation and compact development. In 2019, a new populist political party gained (and later lost) broad support in local elections for defending the 'right to drive a car' and opposing road tolls on the grounds they cause social exclusion. Electric vehicles were exempt from tolls and primarily owned by the wealthiest 10% of Norwegians. In addition, funds from tolls partially finance a lightrail that the city has restricted all new housing developments to, driving price hikes and a deficit of family housing - leading many people to wonder, who benefits from sustainable mobility transitions?

In this presentation, Devyn Remme presents the results of her award winning MA thesis on how populist politics mobilized around elite narratives pose a challenge to the legitimacy of transition planners and policy makers.

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Collaborative governance for sustainable urban logistics: the case of Bergen

Keywords: Sustainable freight transport, urban governance.

Research and policy focused on cities has increasingly sought to connect sustainable urban planning and transport, and yet transport of goods and services (urban logistics) has been seen as the remit of the private sector (Akgün, Monios, Rye, & Fonzone, 2019; Cui, Dodson, & Hall, 2015; Fossheim & Andersen, 2017). This paper addresses how urban authorities in Bergen, Norway, cooperate with private actors to arrive at energy efficient and environmentally sustainable urban logistics. As urban citizens have turned to home delivery services and deliveries are carried out on scooters, e-bikes, and other vehicles, cities have seen a need to regulate freight transport. Through a collaborative workshop, expert interviews, and document analysis, this study describes how Bergen's authorities have learned from experiences elsewhere to address local freight challenges. Following previous research on policy experiments and collaborative governance, this study evaluates which form of collaboration local actors appear to prefer. Early results point to a need for formal and more frequent meeting places between public and private actors, as opposed to the current, more ad hoc form of collaboration. Additionally, whilst there is agreement between actors on the need for a transition to a low-carbon society and more space for people in cities, the perception that growing cities automatically need more transport services may prevent the implementation of more radical policies that may align the transport sector with a low-carbon future.

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A climate of dialogue

Keywords: Climate change; sustainability; energy transition; social systems theory; epistemic authority; cultural theory.

The presentation will reflect on a recent dialogue on climate change. Two authors contended there about the urgency of the challenge posed by climate change, and about the different roles of science, policy, media and society in debating how to cope (Saltelli & Boulanger 2021).

One contentent argued that science's epistemic authority is today staked on a sense of urgency of impending climatic catastrophe which he sees as irresponsible; the other considers climatic action urgent in view of our responsibility to future generations. While one contentent considers that an accelerated exit from a fossil fuel dominated energy mix is both unfeasible and undesirable, the other sees it as an objective to pursue with renewed political determination. The reflection also touches on the role of mathematical modelling in climate science (Saltelli *et al.* 2020; Saltelli & Di Fiore 2023) and on the post-truth debate (Saltelli & Sarewitz 2022).

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Environmental values in climate change digital communication: the case of Belgian and French Youth for Climate movement on Instagram and TikTok

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Keywords: Youth for Climate, environmental values, social media, Instagram, TikTok.

Given that novel approaches to climate change communication, as the value-based approach, remain widely understudied (Fage-Butler, 2022), we propose to link together environmental psychology findings and a communication research methodology. Specifically, we investigate how environmental values can play an important role in defining obstacles to pro-environmental behavior. The research is based on a corpus of 514 images and 165 videos from Instagram and TikTok posts published by the Belgian and French Youth for Climate movements since 2021. By conducting a multimodal content analysis, the research focuses on different elements in Youth for Climate's messages: (1) the actions proposed to mitigate the effects of climate change, (2) the actors given responsibility for climate change and for climate action, (3) the listed barriers and obstacles to climate change engagement, and (4) the values emerging in the posts linked to those barriers and obstacles. While the first three categories are inductively extracted from the social media posts, the categories of values are adapted from environmental psychology and include biospheric, altruistic, egoistic, and hedonic values (Bouman *et al.*, 2018). As argued by previous research in environmental psychology from survey data, "widespread climate action seems more likely when biospheric values are endorsed strongly throughout society" (Bouman *et al.*, 2021: 103). In this work, we test this hypothesis on social media data and suggest that the analysis of the relationships between actions, actors, and values will provide a deeper understanding of barriers to climate action presented in social media posts. More precisely, we propose a typology of barriers to climate change mitigation in relation to environmental values that appear in the social media posts. The analysis grid can be further replicated by other research on environmental communication.

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Living up to its promise? Effects of Solutions Journalism on Pro-Environmental Opinions and Behavior

Keywords: media effects, solutions journalism, emotions, political communication, news media

The public receives most of their information about the issue of global climate change from the media. At the same time, news media have an inherent negativity bias and political psychology suggests that people are more attentive to negative news. However, exposure to negativity or fear appeals can make citizens shrink from action (O'Neill & Nicholson-Cole, 2009), especially when such information does not provide cues about possible remedies to the problem. Solutions journalism discusses societal problems in combination with viable solutions, integrating practical solutions as well as explanations of how and why resolving strategies work (or don't work). Compared to conventional journalistic practice, solutions journalism thus not only presents problems, challenges, and conflict but tries to provide a more comprehensive picture by also including information about possible solutions. Empirical research about the effects of solutions journalism, however, is still only just emerging. Findings suggest solutions journalism does have the potential to increase perceived knowledge and interest in the topic (Curry & Hammonds, 2014) and is generally well appreciated by audiences – but does solutions journalism really live up to its promise? Findings regarding possible behavioral effects of solutions journalism are, for example, mixed at best and previous research has called for further research to disentangle the exact conditions under which solutions journalism might have effects, and which underlying mechanisms might explain these (McIntyre & Gyldensted, 2017). The current study is based on an experiment (N=1,006), conducted in Germany, and shows that how solutions are being framed matters and different frames have different effects on audiences. Further, it shows that emotions mediate the effects and that exposure to solutions journalism can reduce negative emotions and make citizens less concerned which, unintendedly, can lead to lower levels of engagement.

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Impending apocalypse, practical action? Discourses of the future in Facebook groups prepping for climate disaster

Authors: Ida Sekanina, Brita Ytre-Arne, Håvard Haarstad.

In this paper, we analyze social media discussions amongst people preparing for societal breakdowns and ecological disasters, contributing to scholarship on climate change and temporality.

Empirically, our analysis builds on digital ethnography in Norwegian Facebook groups devoted to so-called “prepping”, and qualitative in-depth interviews with participants in these groups. Through social networks such as Facebook, thousands of Norwegians share their material and emotional preparations for possible future ecological emergencies: Advising for emergency storages and alternative energy supplies, bringing back traditional ways of growing and preserving food, and advocating for more self-sufficient behaviours. We ask which discourses of the future that are communicated in discussions in these forums, in which practical and individual present-day action is highlighted as the necessary alternative to awaiting societal responses.

Our theoretical approach draws on theories of temporality as essential to human experience: Barbara Adam (2006) argues that humanity’s relation to time is fundamentally embedded in what makes us human, and through history, humans have negotiated our understandings of the future in different ways (Adam and Groves, 2007). In debates on climate change, notions of a distant problem to be dealt with in the future are juxtaposed with ideas of current and impending disasters, and the question of time is connected to moral calls for action (Veldman, 2012). For some, the fatalistic realisation that time may be up inform ideas that the most realistic course of action is to prepare for the inevitable; to start living as one would post the apocalypse. Our analysis contributes to understandings of what people envision that this future will entail.

Litteratur:

Barbara Adam (2006) *Time*

Adam and Groves (2007) *Future Matters: Action, Knowledge, Ethics*

Veldman (2012) *Narrating the environmental apocalypse. How imagining the end facilitates moral reasoning among environmental activists.*

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Why Do People (Not) Worry About Climate Change? Insights From Answers to an Open-Ended Survey Question in Norway

Human activity is causing changes to the earth's climate and nature that can severely threaten both human and non-human life. The extent to which we experience worry about this threat impacts our willingness to change our behavior and take the actions that are necessary to reduce the risk of climate change. This exploratory study aims to investigate why people worry to a different extent about climate change, and what their worries usually involve. Using an open-ended survey question, this study asked a representative sample of the Norwegian population (N = 1690) to elaborate on why they were more or less worried about climate change. The results revealed that the most common reasons for worrying about climate change were related to awareness and concern about possible harmful consequences, as well as barriers to preventing these consequences. More frequently mentioning consequences for humans further separated the most worried from the less worried. The most common reasons for not worrying about climate change were skepticism, faith in solutions, opposition to parts of the climate movement, and disengagement. These findings indicate there are multiple beliefs and motives among the public that can hinder emotional engagement in climate change, and future approaches seeking to increase this engagement should consider targeting these specific mindsets.

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Populist party voters, carbon-intensive jobs, and climate policy

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Keywords: policy, populism, survey, text, fossil

As Europe seeks to wind down its use of fossil fuels and reduce greenhouse gas emissions in the face of climate change, political resistance is emerging in many countries. Populist parties sometimes mobilize against climate policies with reference to issues such as the redistributive consequences of carbon taxes and the loss of employment in fossil fuel-intensive industries. It remains less clear, however, how populist voters themselves think about climate policies, and how important climate policies are for their choice of party. Employment in carbon-intensive sectors is furthermore a variable that could explain both opposition to climate and support for populist parties, but not necessarily at the same time or in the same individuals. Here we report on a study aimed at exploring the perceptions of populist party voters of climate change and their positions on climate policies in several European countries. We rely primarily on open-ended survey questions and employment-related questions from the European Perceptions of Climate Change study, the Norwegian Citizen Panel, and the French ELIPSS panel. The study is part of a larger research project (CINTRAN, funded by Horizon 2020) that will examine the socio-political effects of decarbonization policies as well as provide empirical basis for coping strategies.

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Climate, young people and social media

Keywords: climate change - social media - young people - discourse analysis

In the context of climate change, the media covers lifestyle issues every day. There have been many youth demonstrations (e.g. Fridays for the future) and we can see that young people are taking a stand more and more frequently. Many of them intervene on social media to relay essential information; some call themselves "climate influencers". The objective is then to inform, but also to make people aware of certain problems and solutions concerning daily life styles in the context of climate change. This contribution focuses on a particular type of media: social networks/media (e.g. Instagram, Tik Tok, etc.). The objective is to analyse the speeches that young "influencers" make to other young people. Thus, this presentation presents the themes discussed and highlights how the actions to be taken are presented to the young public: injunctions to act, to condemn, to resist. The types of discourses produced are analysed within the framework of multimodality: oral discourses with sound (illustrated or not), purely visual discourses, etc. Particular emphasis is laid on the lexicon and argumentation that are used. The aim of this study is to be able to see if there is a specific and recurring textual framework to this discourse produced by young people for young people on this type of network. This analysis is contrastive; it applies to show the similarities and dissonances between French and German "climate influencers". The corpus is composed of interventions of the most popular "climate influencers" among young people. These were defined, on the one hand, after interviewing French and German students aged 19 to 29, and, on the other hand, according to the number of "followers" that these "climate influencers" have on social media.

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Climate justice and gender equality - essentials for climate change resilience

In the fight for climate justice, women and girls have taken the lead in organising worldwide climate strikes and protests against the use of fossil fuels, mining, deforestation, and other extractive industries. Young women have also helped to create ambitious climate targets, and they are pressing their governments for reform and transparency. Their demands include climate justice, a rights-based approach that takes into account the unfair burdens and the opportunities for inclusive leadership on environmental resilience, with the aim of addressing both climate change and structural injustices. One of the key components of climate justice is gender equality. The impacts of climate change and environmental degradation will continue to place women and girls at greater risk. The evidences are without dispute: - Women face barriers to leaving climate change and natural disaster areas and they disproportionately high health risks from the effects of climate change; - Only 6 out of 190 countries' initial plans to address climate change refer to women or gender; - Women's representation in national and global climate negotiating bodies remains below 30%. When it comes to climate policy, women's needs, and knowledge are frequently disregarded or overlooked, which undermines both their agency and the efficacy of sustainable management solutions. Gender equality and meaningful political participation by women are essential for achieving climate justice. Despite being excluded from the decisions that have the greatest impact on their life, women and girls are those who are most affected by climate change. To fully and sustainably address the climate crisis, democratic policies and institutions need to better account for women's experiences, invest in the female leaders and activists at the forefront of this movement, and purposefully shift the existing levers of power and inequities at play.

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When men “go solar”: Navigating “green” masculinities across solar panels, care, and technoroticism

Keywords: masculinity – solar panels – energy transition – multimodal discourse – care

I explore climate change as a gendered constitutional moment: planetary crises threaten established caring practices and thereby fundamentally challenge societies to re-situate gendered identities within new socio-technical and nature-cultural landscapes of masculine and feminine action.

Climate change enters the realm of (gendered) identity politics insofar as it raises questions about who or what care is, who should legitimately receive and provide care, who has care-expertise, as well as how, with what, when, and where caring needs to be “done”. I explore the (re)constitution of gendered identities through energy transitions by analyzing corporate video advertisements of companies providing residential solar panel solutions to private homeowners (e.g. SunRun).

Through multimodal discourse analysis, I explore how gendered meanings of energy use arise from the interactions between spoken dialogues, words written on screen and the images accompanying these. Learning to coexist with photovoltaic panels and electric backup batteries under the same roof, male householders navigate their domestic gendered identities within their role of energy-prosumers: the ability to produce energy locally afford them the sociotechnical capacity to protect their communities through acts of energy-soaked generosity (i.e. men share energy resources with neighbors in need) and energy-soaked control (i.e. men play as “The Resource Man”, a masculine actor in control of his energy practices and interested in the management of his energy data).

Overall, energy transitions exist as highly political answers to questions around what types of gendered subjectivities we want to enable-disable and how we want to reassemble gendered domestic roles within policy-driven and scientific landscapes of resource management in times of climate crisis. Hence – once we have established that we want to phase out oil and non-renewable electricity sources – we should start discussing about possible answers to questions of gendered identity and arrangements of gendered relationships below and outside of the domestic roof.

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Mistrust the Officials, Believe the Skeptics: Climate Change Skepticism in Romanian Mass Media

Climate change phenomena generate a global crisis and concerted efforts from multiple actors. At the same time, controversies undermine collective actions to limit environmental damage. Skepticism of climate change is advanced by various groups that reject the mainstream scientific view and contribute to the social construction of opposing realities (Rughiniş and Flaherty, 2022).

The aim of this study was to investigate the skeptical discourse on climate change in traditional media. Despite the fact that there is an increasing interest in social media and online debates, older means of communication are still popular among certain social groups. The messages conveyed in such mediums shape attitudes and can lead to action or inaction.

I searched for climate change skeptical content published in Romanian mass media and I selected two radio show editions and two articles from religious magazines. The radio shows were broadcasted in 2019 and 2020 and the religious articles were published in 2017 and 2021. I studied this content through a thematic content analysis (the radio shows were transcribed). The themes that were common to the radio shows and the religious articles were *skeptical justifications related to mistrust* and *skeptical justifications related to the temporality of climate change*. The participants in radio shows and the authors of religious articles do not trust official experts and public authorities and instead they put trust in skeptical experts, whom they glorify. As regards temporality, the main justification stresses the cyclicity of the climate, which would prove that climate change is a natural phenomenon. Within the distinctive themes that I identified, there are *deforestation over climate change* and *divine protection against natural disasters*. These results highlight the importance of addressing the trust crisis in the Romanian society in order to foster actions that mitigate climate change.

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From excusing to enabling – individual arguments for non-action and action

Authors: Nina Wormbs, KTH Royal Institute of Technology, Maria Wolrath Söderberg, Södertörn University.

Keywords: climate change, internal deliberation, non-action, inertia, enabling

In a recent research project we looked at people who want to live sustainably, but - not surprisingly - still found themselves act against their intentions.[1] We asked them in a survey to tell us how they reasoned with themselves, what Perelman and Olbrechts – Tyteca calls *deliberation intime*. [2] In the material (399 free-text responses), we collected arguments and analysed them with a rhetorical methodology searching for *topoi*, here understood as recurring or prototypical modes of reasoning used to motivate a certain action.[3] Some prominent types of *topoi*, that can be said to sustain inertia, were *account thinking*, where good and bad deeds cancel each other (I bike to work therefore I can fly) and *comparison* (I am better than my neighbour).[4]

Given that flying was the most common occasion when people needed to justify their behaviour to themselves, we proceeded by doing a second study looking at the arguments of people who had given up flying because of climate change. By analysing 673 responses and the recurring motives therein, it was possible to detect a narrative of change, where a few things were more pronounced. Knowledge becoming real through experience, a global perspective on justice, and climate change being a moral issue, were a few examples.[5]

We would like to propose, that even though the two survey studies were made on different groups, the results can be brought together to form hypotheses on how inertia might be transformed into action.

¹ “Understanding the Justification of Climate Change Non-Action,” funded by Riksbankens Jubileumsfond (P18–0402:1), Sweden.

² Chaïm Perelman and Lucie Olbrechts-Tyteca, *The New Rhetoric: A Treatise on Argumentation* (University of Notre Dame Press, 1969).

³ Maria Wolrath Söderberg, *Aristoteles Retoriska Toposlära – En Verktysrepertoar För Fronesia* (Huddinge: Södertörn Rhetorical Studies, 2017).

⁴ Maria Wolrath Söderberg and Nina Wormbs. ‘Internal Deliberation Defending Climate-Harmful Behavior’. *Argumentation* 36, no. 2 (1 June 2022): 203–28. <https://doi.org/10.1007/s10503-021-09562-2>.

⁵ Nina Wormbs and Maria Wolrath Söderberg. ‘Knowledge, Fear, and Conscience: Reasons to Stop Flying Because of Climate Change’. *Urban Planning* Vol 6, no. No 2 (2021). <https://doi.org/doi.org/10.17645/up.v6i2.3974>.

From “Climate Change” to “Climate Crisis”? News Media Nomenclature in the Global South and the Global North between 1996-2021

Climate change is one of the core challenges of humankind and relevant to everyone’s life. Around the globe, news media continue to be important sources of information about climate change for many people. How they portray climate change is important for public awareness and perceptions of the issue and can influence the public’s willingness to take action to combat climate change (Sampei & Aoyagi-Usui, 2009; Happer & Philo, 2016). As research has shown that more urgent nomenclature can motivate behavioral changes (Fløttum et al., 2021), the labeling of the topic in news coverage – which may rely on more neutral terms like “climate change” or “global warming” or more alarming terms like “climate crisis”, “climate emergency” or “global heating” – is important. Outlets such as the British “Guardian” have therefore switched to more urgent terms in their coverage of climate change. But it is unclear, so far, how pronounced this switch is, and which media have followed suit. Relying on an automated content analysis of climate change coverage from 16 news outlets in eight countries that represent the Global South and Global North between 1996 and 2021 (N = 89,887), our study first identifies the lexical compounds used to label climate change such as “climate crisis”, “global heating”, or “global warming” deductively and inductively. Next, we investigate the use and proliferation of these “climate change compounds”. We find that, in general, news media use neutral terms – especially “climate change” – far more often than more alarming labels. However, the use of more urgent terms has increased strongly since 2019 and varies across countries, presumably due to country-specific events and changes in the editorial guidelines of national outlets.

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Leaving or Staying in the Ivory Tower? 15 years of Inhaling Climate Activism

Keywords: climate communication, academia, activism, hope and despair

This paper emerges from a contribution I have been invited to write for the Environmental Communication Handbook, to be published by DeGruyter-Mouton. This is a handbook that “*supports social change* by showcasing environmental communication that enables alternative practices by journalists, activists, political decision-makers, and others.” I have been asked to base it on my personal experience. My story of living with climate change begins with my very first research article – on blog debates of global warming - in 2007. While I have exhaled sufficient books and scientific articles since then to become promoted to a professor, I have also inhaled climate activism, building the Bridge to the Future Alliance, becoming chair of Concerned Scientists Norway and a prolific popular science communicator in both media stories and public talks, focusing on how climate jobs can become a social tipping point for weaning Norway and the World off its oil (Ytterstad, 2021).

So what does it mean to live “in the know” of the climate crisis within the Academia? While eco-grief and qualms about academic flying (Bjørkdahl & Franco Duharte, 2021) appear as growing sentiments amongst researchers, I am less concerned with individual lifestyle choices than the need for scientists to collectively engage in public climate action outside the confines of the Ivory Tower (cf Gardner et al., 2021). But while academic life has its constants (publications, courses, etc), climate activism ebbs and flows. To keep up the ability to communicate hopefully about the future, the optimism of the will showcased by the school strikes of 2019 (Fisher & Nasrin, 2021) can use some tempering by the pessimism of the intellect - an inherent quality of research I argue. What is the best way to *breathe* with climate change?

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