



CONSUMING *the* ENVIRONMENT

Conference Programme



The conference 2017

Environmental degradation and climate change are global concerns that are sometimes neglected as myths or exaggerated threat. Media, new and old, play a crucial and central role as mediators of knowledge about what is actually going on. If we are to believe what the environmental scientists say, and what the media report, the climate change will force us to transform our way of life and stop consuming the planet's resources as if they were endless. Not least the latest reports about stronger and more frequent storms and violent forest fires are alarming. The transformation process into a sustainable society is a long-term goal that many of us will not live long enough to see.

In addition, the number of people on earth increases. Large cities grow even bigger. The World Bank estimates that 70% of the world's population, or 6.2 billion people, will live in cities by 2050. The future consequences, in terms of lack of sanitation, expanding slums and poor health are questions that occupy researchers around the world. The already vulnerable are destined to pay a high price for the transition to a sustainable society.

The focus in this year's international and interdisciplinary conference Consuming the Environment, is on urbanization and vulnerability. Two years ago, the focus was on storytelling, and it is still an issue that manifests itself in this year's contributions from participating researchers. Both environmental degradation and climate changes ultimately affect human health. Hence, in the forthcoming conference 2019, we will focus on health.

Dr Eva Åsén Ekstrand

CONSUMING *the* ENVIRONMENT

December 4 – 5, 2017

Dear participants

It is with great pleasure I welcome all of you, from around the world, to this year's Consuming the Environment conference. The University of Gävle strives to have a leading position in education and research for a sustainable human living environment. This year's focus **urbanization** and **vulnerability**, together with a multidisciplinary approach, goes hand in hand with the aims of our University. Your contributions in research, knowledge production and communication are invaluable in order to meet some of the biggest environmental challenges facing our world today. I would like to express my gratitude to all of you for making this event possible.



Prof. Ylva Fältholm
Vice-Chancellor
University of Gävle

Monday 4 December

Venue: Valhall. Moderator: Martin Hedberg

- 08.00 – 09.00 **Registration**
- 09.00 – 10.00 **Opening of the Conference**
by Vice Chancellor Ylva Fältholm and Governor Per Bill
- 10.00 – 10.30 **Climat Change and human limits**
Martin Hedberg, Swedish Weather and Climate Centre, SWC.
- 10.30 – 11.00 **A global framework - national and local delivery**
Åsa Persson, Stockholm Environment Institute.
- 11.00 – 11.30 **The air we breathe**
Don Kulick, Uppsala university.
- 11.30 – 12.00 **Presentation of the students project with Care of North.**
- 12.00 – 13.00 **Lunch**
- 13.00 – 13.30 **Doses of nature? On communication about nature and health**
Terry Hartig, Uppsala university.
- 13.30 – 14.00 **Social-Ecological urbanism - designing responses to the challenges of the urban anthropocene**
Stephan Barthel, Stockholm Resilience Center and University of Gävle.
- 14.00 – 14.30 **Coffee**
- 14.30 – 16.00 **Session A seminars**
Venues: 31:202, 31:203.
- 17.00 – 18.30 **On the strength of art and the resistance of thought**
Lasse Ekstrand, Sweden and Ackroyd & Harvey, UK.
Workshop. Venue: Silvanum.
- 19.00 **Dinner at Silvanum (for preregistered).**

Video introduction to the conference by artist Robert Månsson, University of Gävle
Simultaneous interpretation Swedish - English available.

Tuesday 5 December

Venues: Valhall or 31:202 and 31:203.

- 8.30 – 10.00 **Session B seminars**
Venues: 31:202 and 31:203.
- 10.00 – 10.30 **Can we trust the media?**
Olle Findahl, University of Gävle.
- 10.30 – 11.00 **The new publishing; or how to take over the world using clever people.**
Rodrigo Lozano, University of Gävle.
- 11.00 – 12.00 **Panel discussion**
- 12.00 – 13.00 **Lunch**
- 13.00 – 14.30 **Session C seminars**
Venues: 31:202 and 31:203.
- 14.30 – 16.00 **Session D seminars**
Venues: 31:202 and 31:203.
- 16.00 – 16.30 **Summary**
Venue: 31:203

For information about our speakers, please consult the conference website <http://www.hig.se/consumingtheenvironment>

SESSIONS

A1 URBANIZATION

4 December, 14.30 – 16.30, 31:202.

Urban landscapes: public park renovation and the quest to sustain green city space.

Kaitlyn Allen.

Green utopian futures- architectural design solves energy, food and housing.

Hannah Johansson, Therese Asplund.

Urban communication and the representation of the global city: A critique of inner city development of EtheKwini-Durban.

Luthando Ngema.

Reconnecting to the biosphere through urban green commons.

Johan Colding, Stephan Barthel, Noah Linder.

Human-environment relations should ground urban sustainability discourse.

Karl Samuelsson.

Chair: Prof Olle Findahl.

A2 VULNERABILITY: ENVIRONMENTAL DISASTERS IN THE RISK SOCIETY

4 December, 14.40 – 16.00, 31:203.

The city of burning lakes: media representation of an environmental disaster in Bangalore city.

Aishwarya Sastry, Niqat Patel, Shubhda Arora.

Internal displacement by disasters in Brazil: from the mediated public sphere to the political scene.

Cilene Victor, Ingrid Matuoka, Tania Lisboa, Victoria Abel.

The missing causal link between climate extremes and social collapse.

Avit K. Bhowmik. VIDEO

A dying reef: is communicating threats to great barrier reef killing it too soon?

Claire Konkes.

Chair: Dr Eva Sahlin.

B1 GLOBAL ENVIRONMENTAL THREATS, LOCAL MEDIA AND STORYTELLING

5 December, 8.30-10.00, 31:202.

Exploring narratives as a bridgebuilding practice between different climate change storytelling practices.

Anna Emmelin, Therese Asplund, Maria Magdolna Beky Winnerstam.

Storytelling and plastic pollution.

Angelina Elander.

How Chinese environmental journalists deal with global environmental threats: an exceptional way of storytelling.

Lin Song.

Cop17 and climate change in two Durban dailies: a quantitative content analysis of local-global mediations and news frames.

Natalie Emslie.

Chair: Prof Olle Findahl.

B2 VISUALISATIONS OF DISCOURSES ON VULNERABILITY

5 December, 8.30 – 10.00, 31:203.

Conceptualizing South African national cinema.

Abulele Njisané, Luthando Ngema.

Landscape through a bureaucratic eye: Lesotho highlands water project and Lesotho's ivory.

Kefiloe Sello.

'Vulnerable' children and war cinema: exploring varying representations of 'childhood in refuge' through the film "Turtles can fly".

Shriya Kuchibhotla, Shubhda Arora, Sarayu Kulgod.

Vulnerable Representations of Urbanization – Rekordåren 1966, 1967, 1968...

(The Record Years 1966/1967/1968). Per Vesterlund.

Chair: Dr Eva Åsén Ekstrand.

C1 CONSUMING THE ENVIRONMENT

5 December, 13.00 – 14.30, 31:202.

Overcoming the vulnerability of older adults in contemporary media ecosystem.

Lilia Raycheva, Nadezda Miteva.

A fashion system without getting dressed? An approach towards understanding how to define a global complex social-ecological system.

Celinda Palm.

Using behavioural insights to promote food waste recycling in urban households - evidence from a longitudinal field experiment.

Noah Linder, Therese Lindahl, Sara Borgström.

Local produced and organic food for sustainable development.

Maria Fregidou-Malama, Sonny Karl Oskar Jakobsson.

Chair: Dr Karin Lövgren.

C2 RISK COMMUNICATION

5 December, 13.00-14.30, 31:203.

Risk education in a radiation decontamination project – A case study of Japan after 2011.

Helena Hansson-Nylund, Karl Östlund.

Climate change mitigation through CDM projects in waste management: a good start but a bad ending!

Mustafa Saroar: Nuzhat Fatema.

Environmental activism and social networking sites in Bangladesh.

Shudipta Sharma.

Indigenous environmental knowledge and challenging dualisms in development: two Kalahari case studies.

Lauren Dyll.

Chair: Dr Eva Sahlin.

D1 MEDIA AND PUBLIC UNDERSTANDING

5 December, 14.30 – 16.00, 31:202.

Conscious use, collaborative research and ‘interdisciplinarity’.

Ernst Hollander.

Public understanding and perceptions of climate change and global warming in South Africa and Zimbabwe.

Henri-Count Evans.

Environmental communication within media and communication academic research in a Swedish context.

Eva Åsén Ekstrand.

Public understanding of the media coverage of environmental risks and threats.

Olle Findahl.

Chair: Dr Lauren Dyll.

D2 STRATEGIC ENVIRONMENTAL COMMUNICATION

5 December, 14.30 – 16.00, 31:203

The dissemination of knowledge as a citizenship instrument in Brazil: the case of the National Institute of Science and Technology for Climate Change.

Ana Paula Soares.

Communication in mining projects in Brazil.

Daniela Correa and Castro de Carvalho.

Civil society interventions in water management: a study of Jal Jan Jodo Abhiyan to protect water bodies in India.

Ram Awatar Yadav, Kanchan K. Malik.

Why urban poor in a coastal metropolis in Bangladesh care more about their exposure to urban ecosystem disservices than getting benefits from ecosystem services?

Nuzhat Fatema; Mustafa Saroar.

Chair: Dr Eva Åsén Ekstrand.

Poster: Planetary boundaries and the human impacts of economies.

Plastic, fashion, and economies for sustainability.

Jennifer Hinton, Celinda Palm, Patricia Villarrubia-Gómez, Sarah Cornell.

ABSTRACTS

A1 URBANIZATION

4 December,
14.30 – 16.30, 31:202.

Urban Landscapes: Public Park Renovation and the Quest to Sustain Green City Space.

Kaitlyn Allen.

Urban spaces tell publics much about the character and culture of a city. In 1868, Atlantic Monthly columnist James Parton described the environmental landscape of Pittsburgh as “hell with the lid taken off.” Heavy smog, polluted waters, and unhealthy and unsafe working conditions characterized industrial city centers like Pittsburgh. Over a century later, following the collapse of the steel industry, Pittsburgh has rebranded itself as “a most livable city,” celebrating its preservation movements, neighborhood renewal projects, and numerous green development initiatives. Among these green development initiatives is a 100 million dollar parks renovation project, set to unfold over the next twenty years. Pittsburgh is home to numerous diverse public parks created throughout the 19th and early 20th for laborers and city denizens to escape the pollution and hardship of industrialization. Today, urban parks are still enjoyed by countless visitors, and continue to serve as markers of sustainable city development as literal green spaces. The initiative aims to restore the parks to meaningful civic spaces with particular attention to their use, ecology, and history. The Pittsburgh’s Regional Parks Master Plan, a proclaimed “living document” that guides restoration projects and responds to changing needs of the urban denizens who use those spaces,

describes the restoration project as: “[Coming] at a time of intense interest in Pittsburgh on issues of sustainability, green development and the need to capitalize on ‘green assets’ of the landscape setting of the city. Preservation of open spaces and green hillsides, expansion of greenways and trail systems, wetland and waterway restoration and a new focus on the opportunities of the three rivers all combine with this plan to argue for a larger view of the City’s ‘green infrastructure.’” (p. 6) In an age where sustainable city development is often focused on architectural advances, what can be learned from the role of landscape design in a city’s material and discursive move to “go green”? This case represents one chapter in my greater dissertation project that examines how memory and identity are negotiated in place across time by studying the material, textual, and visual rhetorical objects that trace the historic creation and modern restoration of Pittsburgh public parks. My research demonstrates the necessity for understanding sustainability not only as a program of industry and politics, but a set of cultural assumptions and practices as well; all of which are intricately bound by identity rooted in location and culture throughout history.

Keywords: landscape, parks, restoration, rhetoric, sustainability

Green utopian futures - architectural design solves energy, food and housing.

Hannah Johansson, Therese Asplund.

A great deal of how media globally has articulated the environment, and ourselves in relation to the environment has been characterized by dystopian scenarios, fearful messages and the

need for precaution to avoid severe and far-reaching consequences (for overview see Asplund, 2014). Headlines and coverage articulating fear, misery, and doom, describing for instance climate change as sensational, alarming and harmful have been dominating the global media landscape. While there is extensive research on negative or apocalyptic framing of environmental problems, there are emergent calls for utopian thinking in contemporary society to critique and explore desired futures (Bradley and Hedrén, 2014; Doyle, 2012). This conference presentation aims to discuss green utopian futures in Swedish architecture. Architecture may be described as "The realization of our spiritual and material values. These determine how we use or waste our resources of soil, air, water, energy and human endeavors" (Dalslandsstugan, 2015). This extended abstract explores how Swedish architectural design suggests alternative ways of organizing green sustainable futures. As such, the presentation engages in how architectural design bridges nature-culture distinctions in contemporary environmental problems and their solutions. Based on the overarching research questions in the international environmental humanities collaboratory - the Seed Box cluster "Green Futures", this project specifically asks:

- What sustainability problems are addressed in architecture, and how can architecture be a part in solving the problem?
- What kind of worldviews does "green" and "utopian" architecture entail? How is nature and humans envisioned in architecture?
- Which groups or humans and non-humans are "in-designed" and "out-designed" in Swedish architecture?

Keywords: green futures, utopias, architecture

Urban communication and the representation of the global city: A critique of inner city development of EtheKwini-Durban.

Luthando Ngema.

Cities like Durban are obliged to move with the economic and cultural changes at a global level (Pieterse, 2008), while crucially having the task to ensure that local issues connected to socio-economics; political instability; financial inequality and race issues are dealt with as part of the development mandate that contemporary society faces. City development forms a fundamental process in a society which contributes to what is valued and institutionalised (Castells, 2009). The social and cultural life within cities therefore forms networks of communicative structures. Urban/City communication as 'communication networks' are patterns of contact that are created by the flow of communicators through time and space (Castells, 2009:20; Monge and Contractor, (2003:3). Noting that city life is constructed; this paper aims to interrogate the communication networks that are formed to increase the notion of urbanity (urban development) through communicated and constructed information found in local (EtheKwini) media platforms. This study wants to interrogate the urban communication that takes place to communicate issues that impact socio-economic situations; culture which speaks to how society understands economic and political discourses. The theories that influence this paper are informed by a multidisciplinary approach which aims to unpack the meanings that urban realities have towards the formation of city life. In a country that experienced structured laws which worked to socially and politically exclude non-white people from benefiting from the eco-

conomic gains of the country: this study on cities in post-apartheid South Africa aims to highlight the cultural (development) gains or non-gains through the lens of urban communication or urban socialization. The city as a context outlines a range of communication practices that can be argued as being mediated and allows research to address how these practices relate to and contribute to producing urban space (Rodgers; Barnett and Cochrane, 2009). In building and developing of cities “considerations about patterns of communication between individuals and communities, the technology and the media uses, the publicity and promotion, and both aesthetics and representation have become progressively fundamental to an understanding of what cities are and, as a consequence, also to urban planning policy making” (Aiello & Tosini, 2016:1253).

Keywords: City development; urban culture; urban communication

Reconnecting to the biosphere through urban green commons.

**Johan Colding, Stephan Barthel,
Noah Linder.**

Reconnecting humanity to nature, and ultimately to the biosphere, is a fundamental prerequisite in the search of planetary opportunities for tackling climate change and the massive loss of biodiversity. This is especially critical in growing urban areas where most people today live. In the environmental psychological literature, a connectedness with nature can be defined as an individual's affective and experiential connection to nature. In this paper we argue that a deep-seated psychological connection with nature in cities is needed for com-

ing to grips with the major challenges of biodiversity loss and global climatic change. There are many ways that reconnection to nature can come about - one being through the systems of property rights. Researchers often miss this dimension in the analysis of urban social-ecological systems. Property-rights are mechanisms that humans use to control the use of the environment and their behaviour toward each other, being part of the institutional repertoire of norms and regulations. In this paper we deal with common property systems, referred to here as “commons”. By commons we mean property rights regimes in which management rights to biodiversity and natural resources are held by an identifiable community or group of users that may craft their own institutions for resource management within given legislative forms of society. The literature dealing with commons provide quite a rich mosaic of different ownership regimes, ranging from more clear forms of private, public and collective ownership systems to more diversified forms of ownership of open spaces in cities. Applying, a property-rights perspective we deal with some major misconceptions of the “commons” as revealed in the literature and ask whether it is possible to link local commons with global commons, questioning the notion of acting and thinking globally and locally simultaneously. We discuss how commons constitute critical learning arenas about biodiversity, ecosystem services and climate change. We hypothesize that the revival of urban green commons is partly a local response to globalization and to a city-activist movement for urban place making and environmental stewardship, elaborating on the pro-environmental benefits that these commons can provide.

Keywords: commons, property rights, climate change, biodiversity, Biosphere

Human-environment relations should ground urban sustainability discourse.

Karl Samuelsson.

As the world will continue to urbanise in the coming decades, cities play an increasingly important role for achieving future worldwide sustainability. In the light of very concrete spatial impacts of urbanisation, urban form has moved to the forefront of the urban sustainability discourse. For the past decades, this discourse has focused on enabling efficient modes of transportation and decreasing energy-spending on heating by promoting compact urban forms. However, with a growing body of literature highlighting the role of urban nature for urban inhabitants' well-being, there is a need to find urban forms that support both qualities of urbanity and ecological qualities within neighbourhoods. Here, I propose that for understanding how urban environments best can support human well-being, human-environment relations must be the fundamental object of enquiry. Out of many conceptualisation of human-environment relations, affordance theory provides one (affordances) that 1) emphasise the role of human bodies and human perception in creating meaningful human-environment relations and 2) disregards the prevalent dichotomy between urban and nature. As such, it provides a unit of analysis that conforms to the human experience of cities, encompassing among other things provision of eco-system services and accessibility to urban amenities. Relying on some recent studies of city environments applying affordance-based methods, I assess the affordance concept's aptness for becoming the foundation of a relational paradigm in urban studies. A well substantiated finding is that affordance theory provides a

theoretical link between systemic properties of urban form and human behaviour, and a methodological link between spatial configuration and human experiences. More tentative components of a relational paradigm in urban studies include neighbourhood affordance diversity as a design principle, cognitive resilience building among urban inhabitants and collective conceptualisations of sustainable cities and sustainable behaviour. I conclude with suggesting three separate questions that future research on human-environment relations in cities should address.

Keywords: Human-environment relations, urban sustainability, affordances, spatial analysis, resilience

A2 VULNERABILITY: ENVIRONMENTAL DISASTERS IN THE RISK SOCIETY

4 December,
14.40 – 16.00, 31:203.

The City of Burning Lakes: Media Representation of an Environmental Disaster in Bangalore City

Aishwarya Sastry, Niqat Patel,
Shubhda Arora.

Media, the fourth estate plays a pivotal role in the dissemination of quick, reliable and timely information. In the event of a disaster, they are also bestowed with the responsibility of presenting a picture of the situation in an attempt to create awareness and provide aid in the best possible manner. This paper elucidates media representation and

coverage of the Bellandur and Varthur Lake disaster in Bangalore city. By solely looking into news websites; Financial Express, The Times of India, Huffington Post and The Guardian, it compares and contrast information as reported by different types of news agencies. The paper has looked at website articles from these agencies due to the sheer difference in their coverage of information; Financial express (national newspaper) focuses on the economic aspects of the events in India where as The times of India (national newspaper) covers information across a large plethora of current topics. In addition to this, the paper analyses media reportage in two international news websites to understand how the same issue is covered on a more global scale. This has been done through a thorough qualitative content analysis of headings, sub-headings, keywords and main images of each of the articles under consideration. By looking into the content of 20 web articles on the Bellandur and Varthur lake disaster between 2015 and 2017 it was found that the media has underplayed its role by only focusing on the foaming and toxicity of the lake. By constantly re-posting this urban and environmental disaster as a burning lake, it has failed to look into the vulnerability of the communities that are affected by it. This can also be seen through image analysis as its focus is centered on visuals of fire, foam, blocked roads and the lake itself. In addition to this, the analysis of web articles shows that there is a large repetition of content over the two year period. While articles of 2015 focused on shock and outrage, 2017 saw a shallow questioning of the action taken to curb this urban disaster. Vulnerability, responsibility, cause and effect were rarely covered making the media reportage more hazard centric rather

than human centric. This has resulted in the audience's superficial and limited understanding of the social and environmental disaster.

Keywords: Media, News websites, Vulnerability, Urban disasters, Toxic lakes

Internal displacement by disasters in Brazil: from the mediated public sphere to the political scene.

Cilene Victor, Ingrid Matuoka, Tania Lisboa, Victoria Abel.

One of the main signs of the humanitarian crisis across the globe, the forced displacements caused by conflicts, violence, persecutions and human rights violations, reached in 2016 the record mark of 65.6 million people, being 22.5 million of refugees, 2.8 million of asylum seekers and 40.3 million of internally displaced people. Although the exact number of those displaced by disasters is unknown, in 2016 only, according to the Internal Displacement Monitoring Centre (IDMC), 24.2 million people were forced to leave their home country due to disasters, 3.5 times more than the 6.9 million of new internal displacements caused by conflicts in that same year. In Brazil, the statistics oscillate. In 2015 were registered 59 thousand new displacements caused by disasters, in 2016 were 14 thousand, and 71 thousand in the first half of 2017 alone. Even though the refugee's drama has not yet achieved in worldwide mainstream media the space and relevance compatible with its gravity and complexity, internal displacements are even more invisible when caused by disasters. In this context, this paper, developed by the research and work group Journalism and Disasters Risk Reduction, has the

purpose of analyzing how the Brazilian press covers the subject, identifying its main reflexes on social media and political scene, set on public policies to reduce disasters risks. The research methodology contemplates the analysis of how two of the biggest Brazilians' newspapers, *Folha de S. Paulo* and *O Estado de S. Paulo*, covered the theme from January 2015 to August 2017, a research pool to measure how much Facebook users know about internal displacements caused by disasters, and a research on how the national political debate approaches the issue. The theoretical reference is supported by Morin's complexity paradigm, the concept of moral panic by Bauman, Habermas' approach on public sphere, Beck's notion of risk society, journalism theories, in Traquina and Souza, and the dynamics of social media, in Castells, Recuero and Santaella. Based on the analysis of newspapers, the partial results indicated that the issue of the people internally displaced by disasters is still invisible, what may hinder the construction of a public opinion aware of the seriousness of the problem, as it will be investigated throughout this paper.

Keywords: Internal displacement. Humanitarian crisis. Disasters risk reduction. Mediated public sphere. Social media.

The missing causal link between climate extremes and social collapse.

Avit K. Bhowmik.

VIDEO: Whether or not climate change and associated extreme events can lead to a collapse of modern societies is an extensively debated question. Climate related extreme events have been identified as a potential confounding driver

of the ancient societal collapse in archeological studies. Modern societies, in contrast, are claimed to be substantially less susceptible to collapse mainly due to high innovation and sophisticated engineering instigated by cheap fossil fuels. Even if temporary disruptions due to extreme events are prevalent, e.g. Hurricane Harvey, modern societies are considered as a highly resilient complex adaptive system. However, evidence indicates that climate extreme events may trigger and amplify societal shocks, e.g. conflicts and epidemics. Hence, a causal link and functional metrics to model climatically triggered social collapse are crucial. We reviewed 250 pieces of scientific literature to provide a systemic causal link between climate related extreme events and social collapse. By bridging theories of complexity and resilient systems, we asked whether climate change and associated extreme events have increased levels of social complexity and cost of problem solving. Here, problem solving is considered as a mechanism of attaining sustainability while costs are considered as metabolic and energy cost of a system. All reviewed literature suggest that climate change and associated extreme events demand increasing complexity, i.e. formation of new social institutions to engineer, mitigate and adapt to climate problems, which, in turn, increased climate related expenditures. The studied zones exhibiting social disruptions are mostly characterised by inadequate resources, e.g. low development index and poor governance, which failed to afford increasing complexity and cost of problem solving with the increasing intensities and magnitude of climate related shocks. We identified two major groups of functional metrics, i.e. structural changes (e.g. migration) and catastrophes (e.g. armed conflicts),

that were used to observe and quantify climatically triggered social collapse. Our results are relevant for the parameterisation and modelling of climatically triggered social collapse as well as for mobilising related initiatives and advocacy on climate change issues.

Keywords: Resilience, Social Disruptions, Social Collapse, Complexity, Climate Change

A Dying Reef: Is communicating threats to Great Barrier Reef killing it too soon?

Claire Konkes

The image of Australia's Great Barrier Reef being a dead or dying reef is a trope that has informed global understanding of the Reef since the first campaign for its protection in 1967. Then environmentalists fought against coral mining by arguing there was 'no such thing as a dead reef' and used emerging ecological science to describe a reef as being more than the sum of its coral. More recently, the image of a Reef dying, or being dead, has been used by environmentalists as a harbinger of the devastation wrought by climate change. Such global messages have led to tourism campaigns pitched at seeing the Reef 'before its gone'. This paper traverses how the idea of a dead Reef informs our understanding of this natural wonder and wider issues of environmental harm.

B1 GLOBAL ENVIRONMENTAL THREATS, LOCAL MEDIA AND STORYTELLING

5 December,

8.30 – 10.00, 31:202.

Exploring narratives as a bridge-building practice between different climate change storytelling practices.

Anna Emmelin, Therese Asplund, Maria Magdolna Beky Winnerstam.

While the field of climate change communication has advanced more recently, there are severe criticism as "communication" in such studies often appear to be reduced to an ad-hoc toolbox to serve the transmission of climate science to a supposed knowledge-deficit public. Hence, the starting point of many climate change communications studies is often based on a traditional science communication model where natural scientific results are communicated, "transferred" or "conveyed" to various audience. At the same time, the assumptions underlying the transfer-model have been criticized for the view on the humans as information processors. In parallel, there is an emergent literature in environmental communication that emphasize the interaction and exchange of meanings. This presentation presents findings from a project "Narratives as a bridge-building practice? Exploring threshold dilemmas in climate maladaptation" – a project that brings together the interactional approach to communication and literature emphasizing associative and experience-based sense making processes

including narratives. The aim of the presentation is to explore and discuss how narratives enable bridge-building between different environmental storytelling practices. Specifically, we ask: How can a narrative approach to climate maladaptation be designed? For the application and analysis of the design, we have performed a narrative workshop and hence, this presentation reports on how workshop participants experience the narrative workshop. As we found workshop participants draw on associative reasoning, personal experience and storytelling, we will show some empirical examples and discuss the use and functions of a narrative approach.

Keywords: climate change communication, narratives, storytelling

Storytelling and plastic pollution.

Angelina Elander.

Plastic is everywhere. It is not only the material of the products we use, it is inside of us. It comes through the water and even the air. Research shows that 85% of the drinking water in the world is polluted by microscopic plastic fibers. Plastic fibers do not biodegrade and there is no technology invented yet that can filter the water from this type of pollution. Microplastics contain toxic chemicals that can cause cancer. The polluted water is released into the nature where it enters the ecosystem and is consumed by animals and humans. This is the content of the information gathered from the website belonging to the campaign DPAPP (Durban Partnership against Pollution). They are referring this information from a journalistic organization called Orb Media. The study I will present at CTE as a paper and a poster

will analyze the content the campaign DPAPP and the organization Orb Media is communication from a source critical standpoint. The reason for doing this study is to find out how reliable the information these environmental organizations are spreading and how they are presenting the claimed facts. To find out how the information is received and delivered to new audiences is important since factual information can become contaminated in the transmission. In the analysis regarding the delivery of the received information I will look at how storytelling is being used as well as semiotics regarding the visual material.

Keywords: plastic pollution storytelling semiotics water

How Chinese environmental journalists deal with global environmental threats: an exceptional way of storytelling.

Lin Song.

China's environmental problems have become a very hot topic that catches the eyes of readers worldwide. More specifically, China's neighbouring countries, Japan, for instance, have blamed China for its increased transboundary pollution (South China Morning Post, 2013). Even the US media has reported that the movement of air pollutants in China has been 'exported' by powerful global winds to Western America (New York Times, 2013). There is no doubt that China's pollution has created global concern. Many Western media organizations have already sent out their own special correspondents, who are now based in China, to track these issues. Overall, environmental disasters that have taken place in China are reflected by the Chinese media. However, these issues are quite often covered with

'Chinese characteristics'. For example, Chinese environmental journalists have been reporting on such issues for a considerable time, but without obviously criticizing the Chinese Communist Party. Under the authoritarian regime, it is understandable that it is not easy for Chinese journalists to disclose the whole story to their readers, especially when they are dealing with environmental disaster news following President Xi's taking office in 2013. As China now sees an increased tightening of control over the media and its social ideology, and the journalists I interviewed during my field research mentioned that the space and freedom for them to report on sensitive issues under President Xi's regime was not as good as it had been under his predecessor. This paper argues that both journalists and the Chinese authorities are confronting a new situation that is facing China, i.e., unfolding environmental disasters. Traditional approaches to journalism must change, the Chinese population has become aware of the level of pollution and it is no longer possible to deny the evidence. This paper therefore demonstrates the complicated relationships that may limit the coverage of environmental issues, and the ways in which journalists have reacted to this situation. The research on which this paper is based offers the argument that it requires a readjustment in style and substance if the media are to be at all credible. The paper also demonstrates how Chinese environmental journalists report the issues using 'Chinese characteristics'. Much of the field work for this paper was conducted in China when these changes were becoming evident, and the fact that the researcher had access to working journalists makes this a potentially important contribution to the critical literature on Chinese journalism.

Keywords: Chinese characteristics; authoritarian regime; censorship; Party journalism

Cop17 and climate change in two Durban dailies: a quantitative content analysis of local-global mediations and news frames.

Natalie Emslie.

Global climate change is often professed to be one of the most important environmental concerns worldwide, whereas studies on news coverage present a more conservative view. Within the context of the United Nations Conference of the Parties (COP), this phenomenon was reported as an anthropogenic problem requiring international solutions. This research examined the storytelling (news stories and visuals) about climate change during a past COP17 conference in 2011 in an under-researched local (Durban) developing country (South African) journalistic context compared to longitudinal past research in a European context. This involved a case example quantitative content analysis of 160 news items across two daily newspapers, The Mercury and The Daily News, circulated in Durban, South Africa. This study produced findings about the perceived mediation of relations about COP17 and climate change for readers using representatives of place on a local to global continuum, and the dominant news frames interpreted from the stories and/or visuals. The newspapers reported mediated relations of place internationally. This corroborated earlier findings that COPs were mostly represented as international, because the media tend to evade reporting climate change as a global phenomenon requiring global action and/or solutions. It was inferred that reporting climate change as a global issue could make it more difficult for readers to relate to an already complex phenomenon where influence and

impact could be hypothetically perceived as 'far away out there' rather than 'right here and close by'. The newspapers second most prominent representation of relations was local. This indicated that future news should report climate change in a local context and/or in a localised way (the second dominant representation of relations), because local stories and/or a local angle may offer a more relatable depiction of climate change perceived to be more relevant to the audience's lives. This research also identified that the two dominant news frames used to tell this COP17 and climate change story were the responsibility and then the conflict news frame. This contrasted with findings in an earlier longitudinal analysis of these same news frames in a European context being the responsibility and then the economic consequences news frames. This was meaningful because the conflict frame being second most prominent was possibly less likely to do with the South African (African) country context and editorial approaches of these newspapers, and more related to the topical debate about threats and solutions to climate change at COP17.

Keywords: COP17, climate change, local-global mediations, and news frames

B2 VISUALISATIONS OF DISCOURSES ON VULNERABILITY

5 December, 8.30 – 10.00, 31:203.

Conceptualizing South African national cinema.

Abulele Njisane, Luthando Ngema.

Film is a communication and entertainment medium that has the power to bring global visibility to issues and personalities that were previously invisible even in their own localities. In a country whose national identity was entrenched in the injustices of its past; film played a critical role in the construction and promotion of nationalism. The South African film industry has seen dramatic transitions at diverse times in South African history. Considering that South Africa is formed out of colonialism and apartheid, mediums like cinema have worked to perpetuate a particular South African identity which is deeply singularly of identities that reflect a minority of South Africans. Failing greatly to express the diverse racial and cultural spectrum that South Africans carry. The post-apartheid film industry has enabled the emergence of new voices and a diversification of narratives. Therefore questions of representation within film production are critical as they pertain to national identity. This necessitates critical analysis of film texts and what Jaqueline Maingard (2003:116), Bill Nichols (1983) refers to as the "voice" of the filmmaker who is the "authorial presence in the film's social statement". This paper also takes into account the global presence and pervasiveness of Hollywood

cinema therefore it proposes a need to define the South African film industry from a national cinema standpoint. It explores the role and consequences of defining national cinema from economic and cultural terms. "The concept of national cinema has been appropriated in a variety of ways, for a variety of reasons: there is not a single universally accepted discourse of national cinema" (Higson, 1989:36). The idea of national cinema has long informed the promotion of non-Hollywood cinemas (Crofts, 2000:385). In a globalising world that seems to promote homogeneity in values, culture, identity and ideologies, it is cultural products and activities that mark out one place from the next. Films are seen as cultural products which project an image of a nation to the world and it also reflects the nation back to itself. This cultural perspective sees film as a shop window to advertise products, goods, culture and values. However, Hollywood film industry has captured the imagination of the world and has a highly sophisticated, tried and tested model for the promotion of its industry" (DFO 2009: 9). National cinema acknowledges the existence and diversity of cinema beyond mainstream cinema. It has served as a means by which non Hollywood films can "be labelled, distributed, and reviewed. These national labels have promised varieties of 'otherness', of what is culturally different from both Hollywood and the films of other importing countries" (Crofts, 2000:385).

Keywords: South African Cinema, National Cinema, Film, Hollywood.

Landscape through a bureaucratic eye: Lesotho highlands water project and Lesotho's ivory.

Kefiloe Sello.

This paper seeks to chronicle the socio-cultural and environmental narratives of Lesotho, tracing the deeds of Lesotho Highlands Water Project to the landscape, the people and the culture of this nation. It focuses on narrating stories of resettlement due to large dam constructions, loss of aquatic life, biodiversity and the picturesque vernacular landscape, eroded authorities and challenged cultures, all because of the need to make the landscape more global through commodifying it. This paper addresses the consequence of bureaucrats who run Lesotho and its rural landscape from red-carpeted boardrooms in urban settings. From the tick of their pens, a vernacular landscape was no more, in its place was sprawls of walls of cement, steel bars and everything symbolic of commodification and contemporary landscape. The story this paper re-counts conveys is that of 'anti-civilization of environment for commercial benefit'. While the trickle-down effect that was spoken about due to water sales, is but a myth for those affected by the dam construction in Lesotho, many livelihoods have been distorted, cultural practices given up, indigenous knowledge snubbed and ecosystem of Lesotho overlooked. Based on recent literature on dam construction and environment, ethnographic studies of expert Scudder Taylor on dams undertaken in Lesotho, World Bank reports, data I had collected by Ntlatfalang Consultants on their socio-economic impacts study of Katse Dam on lives of people of Makhoakheng, this paper will highlight the mediatized success of LHWP, the decayed moral fibre due to corruption,

Katse and Mohale dams as Lesotho's white elephant and how all these are ethno-ecologically driven.

Keywords: large dam construction, cultures, resilience

'Vulnerable' children and war cinema: exploring varying representations of 'childhood in refuge' through the film "Turtles can fly".

Shriya Kuchibhotla, Shubhda Arora, Sarayu Kulgod.

The dominant conception of the child in the middle ages was that of "innocence, naivety and fragility" (DeMolen, 1991) which has persisted over the years. One of the main disseminator of this rhetoric is media. Media and cinema takes into account the economic, social and cultural factors of childhood, yet the child remains to be "the epitome of vulnerability and innocence" (Lemish, 2013). With this narrow comprehension, there are still numerous facets of the child that remain unexplored. Claire Cassidy (2007) identifies this as our shortcoming, as we see children as "becomings" rather than "beings" which often discard their struggles and non-conformances to the overall conception of 'children'. Therefore, a 'prototype' of the child is created- one which eliminates many voices of abused and confused childhoods.

The connection between children and vulnerability is nuanced with various layers of complexity, and its representation in media creates and reinforces a simplistic and reductionist notion of childhood. Children are considered as a vulnerable group for their susceptibility to "systematic rape, abduction, mutilation" in times of war and disasters. (Unicef, 2017). The genre of war films

use children as narrative tools to explore political, psychological and social aspects in extreme conditions. This study explores the anti-war film, "Turtles Can Fly", by Bahman Ghobadi. Set in Iraq under Saddam Hussein's dictatorship, the film explores the experiences of children in a Kurdish refugee camp on the Iraqi-Turkish border on the eve of the US invasion. The predominant character, Satellite, is a 13 year old enterprising leader who mobilizes other children to collect mines and other weapons in exchange for resources. Along with this, the film introduces a gendered child narrative through Agrin, a young refugee girl who was gang raped by Iraqi soldiers. Her disabled brother, Hengov is a clairvoyant who cares for his nephew Riga, Agrin's child from the rape. Ghobadi introduces these numerous narratives to expose the audience to the concept of 'different childhoods' and even highlights the varying experiences of the same war. The purpose of this paper is to explore varying comprehensions and representations of childhood and children as a vulnerable group in the advent of social adversities such as war and disasters. "Turtles Can Fly" understands the 'child in refuge' not just as a monolithic construct of 'fragile helplessness' but a polemic explication. This could progress our mechanisms to help and embrace versatility of children, of tribulations and calamities.

Keywords: Children, Vulnerability, Anti-war films, Refugees, Media representation

Vulnerable Representations of Urbanization – Rekordåren 1966, 1967, 1968... (The Record Years 1966/1967/1968).

Per Vesterlund.

"The human in society. Society is a process. The distance between human beings and the decisions about their life conditions is increasing". These words begin the final voice-over in the Swedish documentary film *Rekordåren 1966, 1967, 1968...* from 1969.

This film was the subject of one of the most intense debates in Swedish film culture in the late 1960s. In her film director Lena Ewert focused the planning of Stockholm. With the national project "miljonprogrammet" (the million program), a mass housing public program supposed to put an end to the housing shortages, as a case Ewert discussed intertwining structures of regional planning, politics and national and international economics. The tendency of the film was overtly political, stating in the beginning of the film that through the "structural change" the institutions of international banking would strengthen their position and thus "influence would lay in the hands of a very few human beings".

The criticism of international capitalism was however not the major theme of the film. Instead Ewert and her collaborators heavily discussed the cooperation between the social-democratic government, local politicians of different ideological colour and representatives of banks, industry and building companies. This was not a very unusual theme in the leftist activism in Sweden in the late 1960s. What makes Ewert's film especially interesting here - beside the fact that the film even nearly 50 years after its release stands out as a well-made, fresh and well informed cinematic statement

of the most critical views of the time – is the way in which the film was discussed. Ewert made the film as a final examination in the national film school of The Swedish Film Institute (SFI). The filmed interviews with politicians, architects and researchers were thus done under the implicit assumption that the film was an internal work not to be shown in public. Short after the theatrical release, the film was withdrawn from public viewings after protests from some of the interviewed persons. Some of these were close friends with head of SFI. In my paper, I will discuss both the themes of the film and these political implications of how the film met (and did not meet) the public life in social democratic late 1960s Sweden. I will also discuss how the concept of documentary filmmaking changed during these years, making the interviewees (with obsolete notions on objectivity and trust) naïve victims of the observational and interactive modes of the then new documentary filmmaking that Ewert represented. The asymmetric relationship between the (filmed) men of power, the powerless (female) filmmaker and the world of Sweden in 1969 viewed in the film, could finally lead to intriguing perspectives of vulnerability – regarding public life and notions of the representation of reality, as well as power and society in a larger sense.

Keywords: documentary, film politics, urbanization, public life.

C1 CONSUMING THE ENVIRONMENT

5 December,
13.00 - 14.30, 31:202.

Overcoming the vulnerability of older adults in contemporary media ecosystem.

Lilia Raycheva, Nadezda Miteva.

Population ageing and the development of modern media digital environment are two interlinked processes in contemporary world. The analysis on policies and practices for traditional and online media presence in the lives of the older people indicates some significant tendencies. The rapid ICT developments influence the transformation of the media - from linear to non-linear services, and the audiences - from passive consumers to active prosumers. And if the processes of politicization of the media and media-tization of politics are most closely associated with the traditional media (print, radio and television), the online media space (social networks, blogs, vlogs, etc.) makes the audiences active participants in the communication process. Thus a new system, parallel to the traditional media one, a media ecosystem, has been formed. Many expert studies and public discussions have focused on the problem of overcoming prejudices and negative stereotypes regarding generation differences as well as on the capacity of older people to take part in, and contribute to intercultural dialogue. The trend of population ageing determines the need for urgent prevention of digital divide, i. e. the social exclusion of older people from the modern information and communication environment. In order to deal with the

challenges to population ageing, it is important to analyze how these issues are presented in the media, and to seek information on the current good practices and deficits regarding media and older adults. For this purpose, some of the activities of the European Broadcasting Union, the European Audiovisual Observatory, and the European Platform for Regulatory Authorities have been studied. The proposed text is also based on a selection of important general and specialized institutional documents of the United Nations, the Council of Europe and the European Union on age discrimination. With the logistic help of the Council for Electronic Media (Bulgaria), a 4-question survey was addressed to the member-states of the The European Platform of Regulatory Authorities, the largest network of 52 broadcasting regulators of 46 countries. The aim was to outline the media practices and the regulatory policies and measures for surmounting the media stereotypes towards the older adults, for overcoming their vulnerability, for hampering the development of their social exclusion. The text has been developed within the framework of two COST Actions of the European Commission: IS1402: Ageism - A Multi-National, Interdisciplinary Perspective and IS1404: Evolution of Reading in the Age of Digitization. The research has been supported by two projects of the National Scientific Fund of Bulgaria: DCOST-01.10-04.08.2017 and COST-01.10-04.08.2017.

A fashion system without getting dressed? An approach towards understanding how to define a global complex social-ecological system.

Celinda Palm.

This thesis views the global Fashion System in terms of hybridity, with the intention of redefining and clarifying the dynamics of fashion as a complex social-ecological system. Developing an understanding of a perpetuated micro-scale activity – getting dressed each day. Informing of risks and opportunities towards sustainable fashion. An awareness of its negative external impacts is motivating the fashion industry to move towards a sustainable fashion with less negative social-ecological impacts. Two frameworks are currently being joined in a science-business collaboration; Firstly; the Planetary Boundaries science-based analysis of risks and resilience of the Earth system. Secondly, Circular Economy, aiming to decouple economic growth from environmental degradation. These proposed solutions do not address the social dimensions or the practice of dress, individual's everyday perpetuated activity through which the abstract notion of fashion is embodied. They exclude the numerous negotiations that happen when individuals get dressed; those between the individual, social norms and values, the fashion system, the social context of usage and individual's habitus. It is not in fashion's nature to go back, thus old clothes are not fashion, one reason for difficulties lifting the second-hand market up from being a niche. Thus, then attempt to transform the fashion system without addressing the essential activity of individual's getting dressed. Using Critical Realism as a meta-theory – where both

material and non-material are recognized aspects of the real world – the fashion system is viewed through four stratified layers; physical, material interaction, socio-economic and culture. A stratified reality captures essential steps in both the value chain and life-cycle of a garment, at the same time enables zooming in on micro, meso- and macro levels in any of the social representations. I argue that individual's everyday perpetuated activity of getting dressed are linked to negative environmental impacts on a global biophysical scale. Furthermore, that transformation of the fashion system towards sustainability, entails acknowledging entities from all stratified layers, and that transformations are unfeasible by mere techno-economical solutions or new business models irrespective of the inclusion of scientific data on biophysical processes. Finally, that key theories of social-ecological resilience, and complex adaptive systems are limited for weaving together the concepts hybridity, modernity and fashion. Individual's desire of neophilia as a driver of the fashion system is an imperative part needed to be acknowledged when developing new business models for prolonged use of clothes.

Keywords: Fashion, Complex social-ecological system, Transformation, Consumption

Using behavioural insights to promote food waste recycling in urban households - evidence from a longitudinal field experiment.

Noah Linder, Therese Lindahl, Sara Borgström.

Promoting pro-environmental behaviour amongst individuals is one of today's greatest sustainability challenges. In

this study we implement and evaluate an intervention, in the form of an information hand-out, designed to increase the recycling of food waste in a Swedish urban area, Hökarängen - a suburb of Stockholm. The design of the intervention and the research approach rests on theories from environmental psychology and behavioural economics, mainly by combining insights from nudging and community-based social marketing. The effect of the intervention is estimated through a natural field experiment and evaluated using a difference-in-difference analysis. The results indicate a statistically significant increase in food waste collected and a significant decrease in unsorted household waste compared to a control group in the research area. The data collected stretch over almost two years (one year before the intervention was implemented and eight months after), allowing us to study potential short- and long term effects of the intervention. Although the immediate positive effect of the hand-out might attenuate over time, there is a significant difference between the control and the treatment group, even eight months after the hand-out was distributed. This study provides a promising approach for fostering pro-environmental behaviour by bridging the scientific fields of behavioural economics and environmental psychology. Insights from this study can be used to guide development of similar interventions for other urban areas in Sweden and abroad, improving chances of reaching environmental policy goals.

Keywords: pro-environmental behaviour, nudging, community-based social marketing, food waste recycling, natural field experiment

Local produced and organic food for sustainable development.

Maria Fregidou-Malama, Sonny Karl Oskar Jakobsson.

This study analyses the perceptions of consumers with regard to local produced and organic food in the region of Gävleborg, Sweden. The aim of the study is to investigate consumers attitudes by giving insight in why consumers buy local produced and organic food and how they conceive them. Quantitative data was collected through the use of structured questionnaire. We approached six hundred seventeen consumers outside twelve grocery stores directly after their shopping. The study shows consumers have the opinion that local produced and organic food have higher quality than other kind of food, their production supports sustainable environmental development and promotes the local society and local business. Consumers older than 65 years are more positive than younger ones to local produced and organic food and women are willing to pay more for purchasing the food. The results illustrate that consumers think it is difficult to allocate local produced and organic food in the stores, the assortment is poor and the prices of organic food are high. The correlations between attitudes regarding Organic, Organic Local produced, and Local produced foods show that the consumers consider them as related, but not identical. It also indicates that consumers have vague attitudes about Local Produced foods and lack knowledge to define them. Differences in price sensitivity demonstrate that consumers are willing to pay more for Organic and Local produced foods, showing there is value in, and demand for reliable guarantee label systems such as KRAV. We suggest a

cooperation between public authorities and business organizations to develop trustworthy guarantee label system for Local produced foods. We see a need for marketing and information campaigns to develop knowledge of what Organic and Local produced foods stand for to increase trust and awareness. By emphasizing on positive partial characteristics such as non-Genetically modified organisms (GMO) in marketing/information campaigns, negative connotation to organic as expensive may be avoided when educating consumers about the definition of organic foods. We propose comparative studies in other regions and countries as well as studies about visibility and availability of organic and/or local produced foods in the shops.

Keywords: local produced food, organic food, consumer, attitudes, sustainability

C2 RISK COMMUNICATION 5 December, 13.00 – 14.30, 31:203.

Risk education in a radiation decontamination project – A case study of Japan after 2011.

Helena Hansson-Nylund, Karl Östlund.

31 March 2017 a new step was taken in a world unique program for resettlement to the decontaminated and restored parts of the evacuation zone outside the nuclear plant at Fukushima Daiichi, Japan, which was hit by a tsunami and earthquake in 11 March,

2011. Thousands of evacuees can now return to their former homes, a process involving questions such as: Is the decontamination enough? What is the risk for lingering contamination in my backyard? How will I consider radiation risks in relation to other aspects of resettlement? (Japan Times, 170403, Edahiro, 2016, Eikemann, 2016) It is the first time for this large scale resettlement project to take place in a region of high population density, similar to the situation we have around the nuclear power plants in Sweden. Now there is a unique opportunity to study the messages that are delivered by authorities to the people from decontaminated areas and how these messages are influencing people's life choices.

Decontamination after nuclear accident aims at resettlement. Public health is given high priority. Beyond physical health, influenced by radiation, people are influenced by anxiety, stress and life limitations caused by the decontamination campaign. The change of life habits – to be forced to move from home, leave friends, school and work causes social unrest, loss of confidence in authorities, bullying and social stigma (Oughton, 2011). Our argument is that the rhetoric of scientific information is a crucial aspect for investigation in order to strengthen the resettlement process after decontamination. Anxiety and stress is not only triggered by scientific facts regarding the decontamination project, but by the whole rhetorical situation surrounding the delivery of factual information. A typical example is the discussion surrounding the "20 millisievert decision", that triggered worries not only about the facts about radiation dose, but about rumors, contradictions and inconceivabilities (Sakai, 2012). The project "Rhetorical messages about decontamination after a nuclear

accident" will further study the relation between traditional norms of scientific information and the rhetorical aspects of communication with focus on a number of issues in the case of Japan after 2011. The aim is to contribute to the existing knowledge about resettlement issues and communication about decontamination projects.

Keywords: nuclear, decontamination, resettlement, Japan, risk

Climate change mitigation through CDM projects in waste management: a good start but a bad ending!

Mustafa Saroar; Nuzhat Fatema.

To halt the increasing trend of carbon emission, the projects labelled under Clean Development Mechanism (CDM) play a dominant role globally. Since the operationalization of CDM in 2004, a growing interest among politicians, policy makers and corporate bodies has been observed to use CDM waste management project to this end. Globally a total 1008 CDM waste management projects have been registered with the UNFCCC, yet only sporadic attempts have been observed to examine this projects across countries. Many earlier works although provide valuable narratives about the CDM projects adopted by a specific country or a group of countries, however, there is a clear lack of research that analyzes the CDM projects from a global perspective. The proposed paper fills this gap. The UNFCCC database and UNEP database are the two main sources of information for this research. The Project Design Documents of all 1008 CDM waste management projects were reviewed and data and information against a number of varia-

bles that require for global comparison are obtained. The investigating variables and the data/information were analyzed through SPSS 21 and MS Excel. Various descriptive statistics including the multiple correspondence analysis is done. The Analysis is still in progress. The initial result shows that highest number of the projects is registered in 2012 (26.7%) followed by 16.6% in 2009 and 14.5% in 2006 respectively. Less than 5% projects are registered in the post-Kyoto period. A total 1008 CDM waste management projects are hosted by 65 countries but 52 countries have less than 10 projects; only 13 countries have more than 10 projects. These countries are Argentina, Chile, Colombia, Brazil (from Latin America), China, India, Indonesia, Israel, Malaysia, Philippines, Thailand, and Vietnam (from Asia). More than half (52%) projects are hosted by only four countries: China (15.5%), Brazil (12.9%), Mexico (12.6%), Malaysia (10.9%). Municipal solid waste management project (35.5%) dominates CDM landscape followed by swine waste (20.2%) and industrial bio-waste (palm oil) (16.7%) management project. About 35% project generate biogas for only thermal energy production, followed by flaring of methane (29.4%) and biogas for both thermal energy and electricity production (18%). The globally average greenhouse gas emission reduction is 83,000 CO₂ eq mt/y from all waste management CDM projects. Highest emission reduction (152446.14 CO₂ eq mt/y) is achieved from the municipal solid waste project and lowest (33680.3 CO₂ eq mt/y) from swine waste management project. Finally, in line with the findings, suggestions are provided.

Keywords: CDM, Climate change; Emission reduction; Sustainability; Waste management

Environmental activism and social networking sites in Bangladesh.

Shudipta Sharma.

This paper aims to explore the current trend of environmental activism and its relationship with social networking sites (SNS) in Bangladesh, the most vulnerable country to climate change in the world. It also aims to contribute to the growing debate on the role of the SNS for the probable emergence of social movements in the country. With the growth of economic and industrial development, awareness of environmental issues and support for action has been steadily growing in the disaster prone country. As environmental issues directly impact people's health and livelihoods, they are becoming concerned about pollution and negative impact of development projects on the environment. To protect the environment by raising awareness, activists regularly organize environmental movements on particular issues in cities across the country. Like in a number of other movements, SNS is increasingly being used in environmental movements and it has a significant impact on activism. In this paper, following empirical questions are addressed. Why are the environmental activists using SNS in Bangladesh? How is it being used? How SNS is helping activists to engage general people to their causes? Are we seeing the emergence of a new public sphere of activism? To explore these questions grounded theory was selected as research methodology and the study engages a multi-level, multi-methods approach to the analysis. Firstly, using the content analysis method a study was undertaken on five top environment based Facebook pages and groups in Bangladesh. Since Facebook is the

most popular SNS in the country, it was selected for data collection through purposive sampling method. Secondly, to supplement the Facebook data, semi-structured interviews of 15 environmental activists were taken. It is found that activists use the SNS platforms to recruit new members, to promote their causes and to facilitate their campaigning activities. The new public sphere helps the activists to engage a wider body of supporters across the world. However, environmental activism through SNS in Bangladesh was not found satisfactory. Most of the environmental groups are not active with regular updates in their SNS platforms. I argue that as like as on the ground, environmental activism in SNS is still limited to urban dwellers in Bangladesh. More specifically, online environmental activism in the country is mostly serving by some individuals rather than groups. But, by using the new interactive tool, there is a huge opportunity to engage general people across the country to different environmental issues.

Keywords: Environmental Activism, Social Networking Sites, Facebook, Bangladesh.

Indigenous environmental knowledge and challenging dualisms in development: two Kalahari case studies.

Lauren Dyll.

The dividing practice of separating indigenous and scientific knowledge should be avoided. The article illustrates how these forms of knowledge are negotiated in development projects where research participant are included as co-researchers. Indigenous peoples, such as the Bushmen who live in extreme environments, hold unique knowledge that can be instrumental in mitigating

the consequences of climate change, and can describe natural systems that once existed and how these systems sustained livelihoods. Data was collected through interviews and participant observation during fieldtrips to the Kalahari. !Xaus Lodge, the first research site, is a poverty alleviation tourism asset built by the South African government and owned by the Khomani and Mier communities. The second research site is Biesje Poort where an intercultural rock engraving recording project was conducted.

Discussion centres on challenging dualisms that are usually evident in development projects. Indigenous people's communion with land leads to a discussion on the nature-culture relationship, usually viewed as a dichotomy in modern western thinking that arose from the "externalization of nature in both productive and cognitive practices". The dualism supports destructive methods of man's relationship with nature as nature is imagined as an external object leading to the products of nature becoming objects of man's use. The nature-culture dualism is ultimately harmful and should be challenged.

Keywords: dualisms, environment, indigenous knowledge, Kalahari, knowledge exchange mechanisms

D1 MEDIA AND PUBLIC UNDERSTANDING

5 December,
14.30 – 16.00, 31:202.

Conscious use, collaborative research and 'interdisciplin- arities'.

Ernst Hollander.

The spark for my paper is a Chinese doll coming to a Swedish day care centre. The doll was conceived in a Vinnova research project related to the toxic contamination of our environments. My part dealt with i.a. political economy and methods.

(See Hollander, E. 2011: *The Doll, the Globe and the Boomerang – Chemical Risks in the Future Introduced by a Chinese Doll Coming to Sweden* - University of Gävle, Sweden. Many concepts used in this abstract are developed there. Important references are also provided). The proposed paper focuses on how the sustainability research community need to integrate the process of doing the research with what used to be called 'the communication phase' of the research. A conclusion in my part of the Vinnova research project was that a number of 'interdisciplinaries' must be used, constructed and/or confronted in order to create images for a political economy of the Environment. My strategy was and is to confront widely different knowledge interests. One of the many families of knowledge interests which emerge through such exercises can be illustrated by today's quest for 'social union environmentalism'. A precursor was visible in Sweden of the 1970s. We can thus

understand the contradictions facing 'social union environmentalism' today and imagine a landscape where new patterns of consumption might be created. Such a vision is needed in spite of the fact that success has as yet been limited. In the proposed paper I try to find methods which provide more room for i.a. 'interdisciplinarity, boundary-spanning, and transparent multiple partisanship'. Interdisciplinarity is of course an accepted concept. It has been an ideal of the academic wing of the environmental movement ever since the dawn of the new environmental consciousness. But many attempts have failed. Fear that immersion in conceptual problems will delay projects, have made research teams reluctant to devote the time needed for 'translating'. Boundary-spanning and the importance of boundary-spanning individuals have been discussed in many disciplines. But the intricacies of bringing boundary-spanning into academia have been poorly understood specifically in the more positivist oriented sciences. Transparent multiple partisanship is a worthy aim for practioners turned academics. Accepting such hybrids might help bringing the academic community into more fruitful dialogues with other actors who want to contribute to a reversal of the global ecological degradation.

Keywords: Interdisciplinarity in sustainability research

Public understanding and perceptions of climate change and global warming in South Africa and Zimbabwe.

Henri-Count Evans.

Despite the global scientific consensus that climate change is happening and its adverse impact on human, animal

and plant lives, there is little that is known about how people in the global south understand and perceive climate change and global warming. Research has shown that countries in the global south have also become heavy emitters of greenhouse gases. Public perceptions and attitudes towards climate change and global warming directly influence peoples' lifestyles and choices, which may not always be in harmony with nature. Hence, the need for collective understanding and effort towards fighting climate change and addressing global warming through a reduction in emissions. Most studies have focused on understanding global north public perceptions. There is dearth in research on the subject in the global south, especially in South Africa and Zimbabwe. As people in the global south grow more vulnerable to climate change, their understanding of the problem is vital. Furthermore, an understanding of public perceptions has the potential to improve policy-making, align climate change policies to the priorities of the people, address their knowledge gaps and help the people participate in policy implementation. By bridging the gap between scientists, decision-makers and the ordinary people all narratives are aligned in a convergent manner, helping people to work together with a collective objective and frame of thought. While policies on climate change and global warming have been made in the name of the people, people's views and priorities are often unknown to the decision-makers. Often there are divergences between 'what people know and want' and 'what those in power think'. The narrative divergences between the ordinary people and experts on these important subjects is not healthy for the implementation of adaptation and mitigation strategies. This study is an attempt to gain

an understanding of the South African and Zimbabwean public's perceptions of climate change and global warming. An online survey is conducted to measure people's perceptions. Data is collected from a sample of 500 participants, 350 from South Africa and 150 from Zimbabwe. The participants are chosen through snowball sampling on Twitter. The researchers send requests to the participants through their Twitter handles. Those who respond positively are given a link to the survey form.

Keywords: Climate change, public understanding, perceptions, South Africa, Zimbabwe

Environmental communication within media and communication academic research in a Swedish context.

Eva Åsén Ekstrand.

In the summary of *Many voices - one world* (1977-1979) Seán MacBride emphasizes the importance of media transmitting accurate information, objective and impartial, and spread to as many as possible in the world. The President of the Commission, MacBride, emphasizes that "human history is beginning to be a race between communication and disaster" (Swedish UNESCO Council Series: No. 3/1981). When the report was written, global warming /climate change had not yet been established as a global issue on the international political agenda. *Quiet spring* (1960) by Rachel Carson as well as *Barbara Wards Who speaks for Earth?* (1973) had already gained some attention, but not until the so-called *Brundtland* report was published in 1987, environmental issues became a permanent attachment to politics, as reflected in the increase of environmental issues in the press. At

the same time as the MacBride report was published, the academic subject of Media and Communication Science (MCS) was established in the Swedish universities (Hyvönen et al 2015). Research on environmental communication within the MCS field has so far not had a prominent place in comparison with cultural studies, journalism, PR and other orientations. The overall task in this article is to describe in a reflexive way how "environmental communication" as a field of research has evolved in Swedish universities since the MacBride report up until the Paris Agreement 2015 and the UN Sustainability Goal 2030. Main source is the recurring Nordic Media research conferences (1972 -) and dissertations.

Keywords: UN, mass media, communication, climate change.

Public understanding of the media coverage of environmental risks and threats.

Olle Findahl.

Media reports is nothing but black dots on paper, sound waves in the air or a pixel pattern on a screen until someone has tried to understand what it all means. Without an audience - a reader, a listener or a viewer - there is no sense. The fundamental subconscious question that has to be answered in people's minds is: What does all this mean in relation to what I already know? In the case of media reports about environmental risks and threats, studies have shown that the communication process is complex with many barriers and comprehension problems far away from a simple injection model. Most people remember event-related information about concrete, and often dramatic

events. Scientific/technical information of a more abstract nature are more difficult to assimilate and an assessment of probability is difficult for experts and laymen alike. In the case of media reports about environmental risks and threats, studies have shown that the communication process is complex with many barriers and comprehension problems far away from a simple injection model. Most people remember event-related information about concrete, and often dramatic events. Scientific/technical information of a more abstract nature are more difficult to assimilate and an assessment of probability is difficult for experts and laymen alike.

In the media coverage of environmental risks there is often a lack of context in the news. No background information but dramatic events. Speculations are common. A majority of the audience regard the information as contradictory and confusing and the credibility of the experts and authorities is questioned. Some people are worried and act to reduce the worry; others are also worried but do nothing. Some people are not worried but act anyway and some people do not care. Examples will be taken from people's comprehension and reactions to the Swedish media coverage of Aids/HIV, Acid rain, poison in the food, radioactive fall-out from Chernobyl, the building of a final repository of nuclear waste and the climate change.

Keywords: Media, news comprehension, environmental risks, public understanding

D2 STRATEGIC ENVIRONMENTAL COMMUNICATION

5 December,
14.30 – 16.00, 31:203

The dissemination of knowledge as a citizenship instrument in Brazil: the case of the National Institute of Science and Technology for Climate Change.

Ana Paula Soares.

This essay presents the Brazilian experience in the co-production of knowledge area, developed within the scope of the National Institute of Science and Technology for Climate Change (INCT-MC). By including the scientific dissemination and popularization of science as one of the INCTs' missions, the Brazilian government brought the transfer of knowledge to society to the same hierarchical level as the research itself, in the calls for proposals. This paradigm shift generated a strong interaction between the INCT researchers and its communication team, which enabled the dissemination of the scientific findings to a wide range of stakeholders, beyond the academic community boundaries. This action has also contributed to the internalization of practices for communicating science to the general public in Brazil.

Keywords: Diffusion of knowledge, Popularization of science, Climate change, Public policies, Public perception of science.

Communication in mining projects in Brazil.

Daniela Correa e Castro de Carvalho.

The proposal of this text is to direct our discussion about strategic communication through political ecology, symbolic interactionism and the communicative action of Habermas in the Brazilian context, where mining, especially iron ore, is one of the economic activities that underpin the economy. Communication is a key factor in the process of social construction carried out by individuals and can generate the perception of sustainability in local social practices, as long as it contributes to the different visions of the world being present and valued. The communication strategies used in the Brazilian environmental licensing process should be analyzed considering this role of communication in society, in specific, in the case of the research developed for the elaboration of the doctoral thesis of the researcher, in the implantation of iron mines. Communication is a key factor in the process of social construction carried out by individuals and can generate the perception of sustainability in local social practices, as long as it contributes to the different visions of the world being present and valued. The communication strategies used in the Brazilian environmental licensing process should be analyzed considering this role of communication in society, in specific, in the case of the research developed for the elaboration of the doctoral thesis of the researcher, in the implantation of iron mines. Considering the relations of power that permeate the relations that will be formed in the territories, understood not only in the political-administrative dimension, but also as multidimensional - material, with political and legal limits; symbolic and cultural, place of life and interpersonal

relations - that receive projects of high socio-environmental impact, we propose in this text to discuss the communication strategy in the previous environmental licensing phases, when Public Hearings are held and during the implementation of the mine. In the evaluation of the environmental viability of a large iron mining enterprise, numerous social actors are involved and mobilized: legal institutions for regulation and process control; the companies that are the owners of the projects presented and discussed; consultants who carry out the studies; associations of residents, organized movements, and populations impacted by the project. All in the struggle to make a dominant point of view before others, in a possible accumulation of symbolic power because "(...) the relations of communication are inseparably always relations of power that depend, in form and content, of the material and symbolic power accumulated by the agents (or by the institutions) involved in these relations ... "(BOURDIEU, 1989, p.11). There is the presence of a central question, which Jünger Habermas (2003, 2012) presents as strategic communication, in this case directly related to the communication of the enterprises, and the communicative action of everyday life, involving social actors, especially those living in the location where a large enterprise is installed. In this way, we propose to deepen the discussion of communication strategies in Brazil.

Keywords: iron mining, communicative action, social dialogue, Brazil

Civil society interventions in water management: a study of Jal Jan Jodo Abhiyan to protect water bodies in India.

Ram Awtar Yadav, Kanchan K. Malik.

The diminishing water resources due to increasing population, rapid urbanization, deforestation, industrialization and others is one of the pressing issues of the today's world. The imbalance caused by the aforementioned reasons in the ecology has resulted in thousands of water bodies, across the world, go dry while many others are battling with issues like pollution, encroachment, erosion and siltation affecting their natural course and flow. As the situation of the water bodies continue to get worse, a community of concerned individuals fighting for the protection of water bodies seem to be growing in India despite all odds in the form of civil society constituted by voluntary organisations, NGOs, community-based organisations (CBOs) and others. While some civil society groups work on their own, with the communities, independent of the governments to address the issues, others serve as pressure groups for the governments and administrations to act and address the problems. With the efforts of civil society many water bodies have been rejuvenated in India. At the recently concluded three-day National Water Convention organized by Jal Biradari (meaning water community) under Jal Jan Jodo Abhiyan (JJJA) (people-water alliance campaign) and Water Resources Department of Government of Karnataka at Vijayapura in Karnataka, India, a declaration was adopted titled, Vijayapura Declaration to act and press for the protection of the India's river basins. JJJA was launched in 2013 with a view to ensure water security for all by protecting ponds, lakes and rivers

through community-participation by motivating society via water literacy campaigns. Led by water conservationist and the prestigious Stockholm Water Prize winner, Dr. Rajendra Singh, the campaign aims at bringing the society, people, governments and other concerned individuals together to understand the complexities underlying water-related issues, which are of different nature in different parts of the country, and then act together for their redressal. This paper would attempt to find out the activities being carried out under JJJA to mobilize and educate people about the prevalent water-related issues. It would also explore the ways in which the campaign is trying to convince the governments to frame policies to protect the water bodies to ensure livelihood for people inhabiting the areas around them. The study would be carried out through in-depth interviews of the post-bearers of the campaign and select activists affiliated with it, observing the events organized under it and analysis of the documents produced by the campaign so far.

Keywords: Civil society, water management, water conservation, Jal Jan Jodo Abhiyan, water literacy.

Why urban poor in a coastal metropolis in Bangladesh care more about their exposure to urban ecosystem disservices than getting benefits from ecosystem services?

Nuzhat Fatema; Mustafa Saroar.

The role of urban ecosystem services for livelihood, security and comfort of urban poor are extensively discussed, yet little is known about the vulnerability of urban poor to ecosystem disservices particularly in the context of climate change. Therefore, this research is aimed: a) first, to identify urban ecosystem services and disservices which the urban poor take into account to ensure their well-being; b) second, to examine whether urban poor really care more about protecting them from ecosystem disservices than taking advantage of services; and c) finally, to identify the factors that determine urban poor's differential concern for ecosystem services/disservices. The study was conducted taking coastal Khulna- a metropolis exposed to climatic disasters, as a case. Family heads of a total 235 households from the low-income settlement- Rupsha slum were randomly interviewed through administering a semi structured questionnaire. Research instrument mainly explores their responses about both blue and green ecosystem services and disservices. The principal component analysis (PCA), and logistic regression techniques were employed to analyze data. The result shows that ecosystem disservices which the urban poor care most are waterlogging, storm water overflows, surface run off and smell from decomposed wastewater. Probit model shows that respondent's concern over ecosystem disservices are significantly determined by age, gender, occupa-

tion, the season of a year, the tenure of housing, length of stay, etc. The findings would help to design appropriate interventions to protect urban poor from the vulnerability of ecosystem disservices. Therefore, findings would give synergies to ongoing efforts of building resilient urban community in the context of the changing climate.

Keywords: Climate change, Coastal City, Ecosystem services, Urban poor, Bangladesh.

Poster

Planetary Boundaries and the Human Impacts of Economies. Plastic, fashion, and economies for sustainability

Jennifer Hinton, Celinda Palm, Patricia Villarrubia-Gómez, Sarah Cornell

This poster presents three current research projects at the Stockholm Resilience Centre. These projects explore the consumption-based drivers and impacts of human economies on the resilience of the Earth system, and seek to identify potential solutions that enable human flourishing within planetary boundaries. We do this by looking at the cases of marine plastic pollution, the fashion system, and sustainability-oriented economies. In one project, we investigate whether plastic meets three threat conditions to qualify as a planetary boundary issue, adapting a framework first proposed for chemical pollution. Is the problem irreversible? Is it detectable at planetary scale? Can it disrupt Earth system processes? We conclude that it would be useful to start considering marine plastic pollution as part of the chemical pollution planetary boundary. The second project looks at how fashion and the mass production and consumption of clothing also contribute to rising pressure on Earth's biosphere. For both plastic and fashion, it is easy to focus on the role of choices made by individuals. However, these systems are much more complex. The fashion system creates and regulates the discourse of fashion. As an institutional system, it fills clothes with abstract symbolism and transforms them into contemporary fashion; the material production of clothes does not automatically transform them into fashion. We are therefore interested in institutional diffusion and legitimization

processes, as they determine who the creator of fashion is, and spread the idea of what fashion is at any given time. We are also interested in individual's everyday perpetuated activity of getting dressed as it links to negative environmental impacts on a global biophysical scale. The case of fashion makes it clear that a systems approach to sustainability is necessary. The third project focuses on existing sustainability-oriented economies that might provide pathways for human flourishing within planetary boundaries. When discussing solutions for sustainability, there is a tendency in the literature to focus on top-down policies or bottom-up changes in individual lifestyles. This often neglects the diverse networks of social activity geared toward creating a more sustainable economy, which already exist somewhere between the 'top' and the 'bottom'. These diverse sustainability-oriented economies exist within or alongside the mainstream economy, which continues to promote unsustainable levels of consumption and production. In an era of ongoing social and ecological crises and economic uncertainty, sustainability researchers and practitioners must take a systems approach. This allows one to identify important leverage points for change.

Exhibition "Care of North"

Camilla Tungström, Daniel Edströms, Douglas Velasquez, Anton Åsberg, Alice Alm, Adam Bengtsson, Donjeta Luzhnica, Elaine Hägg, Fredrik Palmebäck, Helena Edqvist, Mårten Dahlöf, Madelene Pettersson, Sofie Thorsager, Tilda Kallberg, Theo Malmgård, Viktor Wigelius, Ida Seeger. Industrial design programme, second year. University of Gävle.

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