PECSRL 2014 26th session of the Permanent European Conference for the Study of the Rural Landscape UNRAVELING THE LOGICS OF LANDSCAPE

8-12 September 2014 in Gothenburg and Mariestad, Sweden





UNIVERSITY OF GOTHENBURG

PECSRL 2014 Organizing Committee (eds.): Unraveling the Logics of Landscape

Published on the occasion of the 26th session of the Permanent European Conference for the Study of the Rural Landscape, 8-12 September 2014

Print: Ale Tryckteam, Bohus 2014 Layout and cover photo: Minireklam/Erik Stenseke, minireklam.se



UNRAVELING THE LOGICS OF LANDSCAPE

8-12 September 2014 in Gothenburg and Mariestad, Sweden



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Welcome!

Welcome to the 26th session of the Permanent European Conference for the Study of the Rural Landscape (PECSRL) in Gothenburg and Mariestad, Sweden 8–12 September 2014. This publication includes the program, a collection of abstracts from five keynotes, 198 oral and 13 poster presentations, and a list of the 250 delegates participating in the conference.

The 2014 PECSRL program covers a broad range of topics, with contributions from scholars from more than 30 countries. The main theme of the conference is *Unraveling the Logics of Landscape*. Despite conceptual oscillations through times, the concept of landscape remains highly subjective, whereupon unraveling its 'logics' opens up to a plurality of interpretations. Accordingly, the conference will elaborate on how the rural landscape is valued, monitored, changed, harbored, used and misused, be it through actions, representations or metaphors. Besides oral and poster presentations, the conference also includes a full day of field excursions, in which the participants will be guided in the multi-faceted rural landscape of Västra Götaland.

PECSRL is hosted by the University of Gothenburg and arranged by the profile area Critical Heritage Studies within its cluster Globalizing Heritage, and linked to the sub-cluster Landscape, Place, Destination. Within this frame, four departments are co-operating in organizing the conference: Dept of Economy and Society, Dept of Conservation, Dept of Global Studies and Dept of Historical Studies. Region Västra Götaland and The Biosphere reserve Lake Vänern Archipelago and Mount Kinnekulle serve as local partners.

In the preparations for PECSRL 2014, we called for organized sessions and received a great response. We find this very positive, as it contributes to the vitality of the conference through the engagement of a large number of scholars. Last but not least, many thanks to the session organizers for taking great responsibility in reviewing the abstracts, communicating and planning the program!

On behalf of the Organizing Committee,

Marie Stenseke

Organizing committee

Marie Stenseke (Chair) Mirek Dymitrow (Conference secretary) Katarina Saltzman (Co-chair) Gunilla A. Olsson (Co-chair) Bo Magnusson (Co-ordinator for Mariestad issues) Eva Gustavsson Bo Lagerqvist Lars Nyström Annelie Sjölander Lindqvist Jonathan Westin

Scientific committee

Gabriel Bladh Karl Martin Born Sebastian Eiter Michael Jones Kristian Kristiansen Bosse Lagerqvist Bo Magnusson Lars Nyström Gunilla A. Olsson Hannes Palang Ulrika Palme Kerstin Potthoff Katarina Saltzman Annelie Sjölander Lindqvist Marie Stenseke Mimi Urbanc Jacob van der Vaart





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Göteborgs Stad Swedish Research Council Formas



City of Gothenburg

The Bank of Sweden Tercentenary Foundation



Västra Götaland Regional Council

G Swedish National Heritage Board

Swedish National Heritage Board

Conference Program

Monday 8 September (Gothenburg)

08.30	Registration desk opens
10.00-10.20	Grand opening
10.20-11.00	Keynote 1: Kristian Kristiansen – Critical heritage studies and the rural landscape
11.00-12.00	Keynote 2: Rudy Rabbinge – Unravelling the logics of landscape.
	Utopia and dystopia, the future of European landscapes
12.00-13.00	Lunch
13.00-15.00	Parallel Sessions A
15.00-15.30	Coffee break
15.30-17.30	Parallel Sessions B
17.30-19.00	Spare time
19.00-20.30	Reception at Estrad Banquet Hall, Gothia Towers,
	hosted by the City of Gothenburg

Tuesday 9 September (Gothenburg)

- 08.30-09.30 Keynote 3: Tom Mels Draining landscapes: logics of nature, science and modernity
- **09.30-10.00** Coffee break
- 10.00-12.00 Parallel Sessions C
- 12.00-13.00 Lunch
- **13.00–15.00** Parallel Sessions D
- 15.00-15.45 Coffee break + Poster session
- 15.45-17.45 Parallel Sessions E

Wednesday 10 September

08.00-18.00 Field trips (4) ending in Mariestad. Meeting point in Gothenburg: Götaplatsen

Thursday 11 September (Mariestad)

08.30-09.30	Keynote 4: Johanna MacTaggart – UNESCO Biosphere Reserves involve
	communities in sustainable development and land use management - an
	international network supports local initiatives in a global context
09.30-10.00	Coffee break
10.00-12.00	Parallel Sessions F
12.00-14.00	Lunch + Garden exhibition
14.00-16.00	Parallel Sessions G
16.00-16.30	Coffee break / Inauguration of a new journal for landscape research:
	"Rural Landscapes, Society - Environment - History" (in the aula)
16.30-18.00	Parallel Sessions H
18.00-19.30	Spare time
19.30	Conference dinner hosted by the Mariestad Municipality, at the Rotunda,
	Karlsholme Folkpark

Friday 12 September (Mariestad)

08.30-10.30	Parallel Sessions I
10.30-11.00	Coffee break
11.00-12.00	Keynote 5: Theano S. Terkenli – A blessing in disguise: tourism and the
	landscape in times of crisis. The case of Greece
12.00-12.45	Closing session
12.45	Lunch
13.45	Coaches leave for Gothenburg and Gothenburg Landvetter Airport
14.00	Post conference excursion to the Finn settlements

Saturday 13 September

Post conference excursion to the Finn settlements

Sunday 14 September

Post conference excursion to the Finn settlements - ending in the afternoon at the Karlstad train station (times will be adjusted to trains departing for Stockholm, Oslo and Gothenburg)

Parallel Sessions Program

A sessions – Monday 8 September 13.00 – 15.00

A1 Landscape accessibility – How to enter a world of mystery (1/2)

Chairs: Peter Bezák, Hannes Palang and Bas Pedroli Location: Wallenbergsalen

Sebastian Eiter: Accessing landscapes: demystifying (and re-mystifying) land and people Jesper Brandt, Andreas Aagaard Christensen & Stig Roar Svenningsen: Multifunctional landscape practice and accessibility in manorial landscapes

Juraj Lieskovský, Tibor Lieskovský & Veronika Piscová: Physical accessibility to landscape in relation to changes in land cover and landscape identity

Ole Hjort Caspersen: The rise or fall of multifunctional landscapes – the conflict between increased public interest and reduced accessibility

Peter Bezák, Zita Izakovičová, Milena Moyzeová, Peter Mederly & Magdaléna Bezáková: Accessibility to natural capital and landscape services (local case studies) Kati Soonvald: Winter landscape accessibility and visually impaired people

A2 Bridging people and place through landscape identity (1/3)

Chairs: Isabel Loupa Ramos, Veerle Van Eetvelde, Graham Fairclough and Bas Pedroli Location: Lyktan

Veerle Van Eetvelde, Isabel Loupa Ramos & Graham Fairclough: Landscape identity to explore the interaction between landscape and people

Andrew Butler: Landscape identity complex

Anita Zariņa & Kristīne Krumberga: Artifacts of Amberland: production of meanings of national landscape in Latvia

Michael Jones: A landscape symphony - reflections on landscape, music and cyclical time

A3 Landscape management (1/2)

Chair: Bo Magnusson Location: Ljusvågen

Pau Torrents Daganzo, Lisen Schultz, Andreas Duit, Örjan Bodin, Cecilia Lundholm, Simon West & Alba Mohedano: Farmers' participation in conservation of rural landscapes. A case study of the Menorca Biosphere Reserve (Spain)

Bo Magnusson & Eva Gustavsson: Using historical and biological records in restoring and managing semi-natural habitats – Hindens spit as a case study

Kaisa Raatikainen: Enhancing management of traditional rural biotopes by grazing - experiences from an EU-project

Morten Clemetsen & Bengt Schibbye: Landscape Character Assessment methods in the Nordic countries – supporting regional dynamic management and innovation or holding on to the past?
 Sophie Visser: The right information? Cultural landscape information and what it may afford in actions, contexts and concepts

A4 The forces behind landscape change (1/4)

Chairs: Henrik Svensson and Magnus Bohman Location: Radiovågen

Theo van der Sluis & Marion Bogers: Drivers of landscape change: a comparison of processes in different European landscapes

- **Ulf Jansson & Anders Wästfelt:** From the Crimean war to the Rio-conference: The relational geography of agriculture in Western Sweden, 1811-2011
- Magnus Bohman: Conditional crisis? Why some succeed and others do not. Agricultural growth and landscape change, the case of southern Sweden (Scania) circa 1700-1870.
- Hele Kiimann: Population and land-use change on Noarootsi Parish (Nuckö) in North-West Estonia during the transition from feudal society to capitalism (1590-1940).

A5 Peri-urban landscapes – sustainability potential for the future (1/2)

Chairs: Gunilla Almered Olsson, Karl Martin Born and Katarina Saltzman Location: Mikrovågen

Eva Kerselaers, Elke Rogge, Marlinde Koopmans & Michiel De Krom: Governance of planning processes in peri-urban landscapes. A comparison of three "good examples"

Karl Martin Born: "Mundraub, MeineErnte, Ackerhelden" – sustainability-driven small-scale agriculture in Germany. An attempt of a typology

Jeroen De Waegemaeker, Maarten Van Acker, Eva Kerselaers & Elke Rogge: A new perspective on peri-urban areas, planning for climate adaptation and food production

Vita Zlender: The use of and, accessibility to, peri-urban green open spaces: A comparison of green wedges vs. green heart spatial strategy

B sessions – Monday 8 September 15.30 – 17.30

B1 Landscape accessibility – how to enter a world of mystery (2/2)

Chairs: Peter Bezák, Hannes Palang and Bas Pedroli Location: Wallenbergsalen

Shelley Egoz & Tim Williams: Abstract and concrete: Landscape as a human right and the Hortus Conclusus

Hannes Palang, Kadri Semm & Piret Pungas: Who owns neighbourhood milieu? Gerald D. Sack: The mansion and garden of Muhammad Afifi in the Western Galilee Tim Waterman: Democracy and trespass: Political dimensions of landscape access

B2 Bridging people and place through landscape identity (2/3)

Chairs: Isabel Loupa Ramos, Veerle Van Eetvelde, Graham Fairclough and Bas Pedroli Location: Lyktan

Thomas Beery: Outdoor recreation and place attachment in the Kristianstad Vattenrike Gabriel Bladh & Kristian Björnstad: Place, process and park. Mobilization through landscape analysis in Finnskogen Nature & Culture park

Christine Rottenbacher: Assessment to make sense of place

Alessia De Nardi & Benedetta Castiglioni: Exploring multi-faced identities: reading urban and rural landscapes through native and immigrant children's landscape perceptions

Nora Fagerholm, Niina Käyhkö & Henrik Jansson: Spatial presentations of landscape identity through participatory mapping – case Archipelago Sea, Finland

B3 Landscape management (2/2)

Chair: Bo Magnusson Location: Ljusvågen

Peter Kumer & Nika Razpotnik Visković: Management objectives and motivations of smallscale forest owners in Slovenia

Xavier Badan, Yves Michelin & Laurent Rieutort: How better integrate global landscape protections stakes in livestock farmer practices? Comparative analysis of tow French pastoral sites in Massif Central

Anna Bohlin, Annelie Sjölander Lindqvist & Serena Cinque: Restoration or conservation? Heritage values in Swedish river restoration

Theo Spek & Martijn Horst: The cultural biography of nature: historical-ecological research, communicative planning and integrated management of Natura 2000 areas in The Netherlands

B4 The forces behind landscape change (2/4)

Chairs: Henrik Svensson and Magnus Bohman Location: Radiovågen

Magnus Thelaus & Joachim Regnell: Land degradation and dune formation during modern time at the Kristianstad plain, southern Sweden

Ewa Axelsson: Forest industry in northern Sweden - a landscape changing force in the beginning of the 20th century?

Patrik Olsson: Landscape change and landscape crisis

B5 Peri-urban landscapes – sustainability potential for the future (2/2)

Chairs: Gunilla Almered Olsson, Karl Martin Born and Katarina Saltzman Location: Mikrovågen

Gunilla Almered Olsson: Peri-urban futures – optimizing ecosystem services by multifunctional land use as a way towards sustainability

Elke Rogge, Eva Kerselaers, Fanny Van Den Haute & Anna Verhoeve: The role and position of agriculture in a strongly urbanised peri-urban area

Alessandra Lai: The peri-urban landscape as battlefield between private and public perspectives Joakim Seiler & Gunnar Almevik: Dreaming of the historically correct lawn. Exploring the possibilities of integrating living heritage and real estate management in the gardens of Gunnebo

C sessions – Tuesday 9 September 10.00 – 12.00

C1 Landscape and culture – how can society value its cultural landscapes?

Chair: Paul Tabbush Location: Wallenbergsalen

Gunhild Setten: Ecosystem services (ECS) and the case of sheep-grazing in Norway
Robert Fish & Andrew Church: Experience from the UK NEA: Environmental settings as an ECS
Kenneth Olwig: Power structures, categorisation and decision-making: an example from the English Lake District
Jake Morris: Stakeholder research in the UK on landscape values in context
Sabine O'Hara: An ecological economics perspective
Timothy Collins & Reiko Goto: Shared values for a Caledonian pinewood
Peter Herring: An holistic and flexible approach to cultural landscape and the services it provides society

C2 Bridging people and place through landscape identity (3/3)

Chairs: Isabel Loupa Ramos, Veerle Van Eetvelde, Graham Fairclough and Bas Pedroli Location: Lyktan

Vittorio Tigrino, Anna Maria Stagno & Giulia Beltrametti: Landscape identity and common resources: history, practices and narrative of contested rights (Ligurian Appennine XVI-XXI c.)
 Rebekka Dossche, Elke Rogge & Veerle Van Eetvelde: Detecting peoples' and landscape identify in a changing mountain landscape. An example from the Northern Italian Appennines.

Yves Michelin, Cecile Olive & Christine Montoloy: The "living archives project": building a local identity by sharing personal archives in order to help local people designing a management plan for a UNESCO WH application

C3 Tourism and recreation drives rural economies whilst also driving rural conservation

Chairs: Richard Stones and Andreas Skriver Hansen Location: Ljusvågen

- **Orly Rechtman:** The Negev desert farms in transition to become new sites on the tourist map of Israel: An analysis based on tourist perceptions
- Andy Lyon: Discourses of sustainable tourism development in the Waterberg Biosphere Reserve, South Africa
- Richard Stones: Walking the walk of sustainable tourism, rather than talking the talk; discourses of sustainable tourism in Iceland
- Andreas Skriver Hansen: Managing recreational opportunities and environmental quality

C4 The forces behind landscape change (3/4)

Chairs: Henrik Svensson and Magnus Bohman Location: Radiovågen

Henrik Svensson: Privatization as a force of landscape change

- Nika Razpotnik Visković & Peter Kumer: Social respectability of the farming profession and part-time farming: factor of rural landscape change? Case of Slovenia
- Zdeněk Kučera: Persistence, destruction and creation in cultural landscape transformations: the case of settlement desertion in the resettled borderland of Czechia
- Kerstin Potthoff & Sebastian Eiter: Changes in accessibility and in building conditions in a mountain area: What are the driving forces?
- **Pille Tomson & Kalev Sepp:** Ash and shit. The forces behind disappearance of the landscapes formed by fire cultivation in Southern Estonia

C5 That is why we eat sheep: Combining nature management and extensive meat production

Chair: Martin Woestenburg Location: Mikrovågen

Martin Woestenburg: That is why we eat sheep

Frederik Lerouge, Kurt Sannen, Hubert Gulinck & Liesbet Vranken: Revisiting agricultural production and ecosystem services for evaluating local land use alternatives

Jean-Baptiste Grison, Lydie Ménadier, Laurent Rieutort & Daniel Ricard: «Shaping» the future pastoral landscape: Products, farming practices, and landscape representations as keys to establish scenarios of evolution of a French pastoral valley

Rainer Luick: Extensive grazings in Europe within the context of the CAP 2013 reform

D sessions – Tuesday 9 September 13.00 – 15.00

D1 Linking society and ecosystems in rural landscapes

Chairs: Anna Dahlström, Tommy Lennartsson, Iréne A. Flygare, Maths Isacson, Marja Erikson and Mats Morell Location: Wallenbergsalen

Lovisa Solbär: Interweaving choreographies next to each other after each other – was Torsten Hägerstrand envisioning an ecology of practices?

Jan Kolen: Humanizing biotopes: historical case studies from the Netherlands

Marion Amalric and Claudia Cirelli: Artificial landscape: social representation and integration of sewage plants in periurban landscapes

Tommy Lennartsson, Marja Erikson, Anna Westin, Iréne A. Flygare, Mats Morell & Maths Isacson: The pre-industrial agriculture as a social-ecological system

D2 Visioning for re-coupling social and ecological landscape components (1/2)

Chairs: Claudia Bieling, Tobias Plieninger and Thanasis Kizos Location: Lyktan

Bas Pedroli: Coping with external influences on landscape – a fundamental need for visioning **Marie Stenseke:** Integrated landscape management – visions and practice

Tibor Hartel: "Re-coupling" or "coupling" social-ecological systems? Reflections from Transylvania, Romania

Lone Søderkvist Kristensen & Jørgen Primdahl: Landscape strategy making as a means to reconnect landscape, agriculture and rural development – experiences from Denmark

Thanasis Kizos, Claire Kelly, Vasilis Detsis & Minas Metaxakis: Competing landscape visions: Stakeholders' perceptions and the future of landscape of Messara and Asterousia, Greece

Isabel Loupa-Ramos & Ricardo Silva: Integrating alternative landscape visualization techniques in future studies: exploratory approach in peri-urban areas of Lisbon Metropolitan Area

D3 Under urban mask: On rural landscapes with different logics (1/2)

Chairs: Jadwiga Biegańska, Mirek Dymitrow and Elżbieta Grzelak-Kostulska Location: Ljusvågen

Jaap Evert Abrahamse: On the nature of planning and the planning of nature: Construction and decay of post-war rural areas in Amsterdam

Aleksandar Toskić, Dražen Njegač & Danijel Orešić: Zumberak: A marginal region in Zagreb's peri-urban fringe

Monika Wasilewicz-Pszczółkowska, Agnieszka Szczepańska & Adam Senetra: Rural transformations resulting from urban influences: The example of the capital city of the region of Warmia and Mazury Robert Krzysztofik, Iwona Kantor-Pietraga & Tomasz Spórna: Degraded urban agglomerations

and twin towns in Poland

Mirek Dymitrow, René Brauer, Gun Holmertz, Biljana Apostolovska-Toševska, Fredrik Holmberg & Lars Johansson: Transcending the rural-urban meme: Hammarkullen – a landscape caught in-between

D4 The forces behind landscape change (4/4)

Chairs: Henrik Svensson and Magnus Bohman Location: Radiovågen

Iwona Kantor-Pietraga, Mirek Dymitrow, Robert Szmytkie, René Brauer, Jolanta Pełka-Gościniak, Tomasz Spórna & Robert Krzysztofik: Environmental hazards as a driver of urban abandonment in Poland

Christer Ahlberger: The heathland and technology diffusion in 18th century Western Sweden Lars Nyström: Landscape, land prices and enclosures

Erik Hallberg: The struggle over the outfields in 18th century Sweden?

D5 Unraveling the logics of renewable energy landscapes (1/2)

Chairs: Kira Gee, Marina Frolova, Karin Hammarlund and Viviana Ferrario Location: Mikrovågen

Jose Muñoz-Rojas Morenes, Marc Gonzalez-Puente, Felipe Cortines-Garcia & Ester Lopez-Castillo: Unraveling the spatial logics of wind-farm planning in Scotland from a landscape-services perspective.

Serge Briffaud, Rémi Bercovitz & Marina Frolova: Landscape scenarios for approaching energy: The cases of four European mountain regions

Benedetta Castiglioni & Viviana Ferrario: Hydropower exploitation in the Piave river basin (Italian Eastern Alps). A critical reading through landscape

Viviana Ferrario: Contested agroenergy landscapes and the reasons behind: the case of biogas Kira Gee, Marina Frolova, Andreas Kannen & Christian Fischer: Offshore wind farming and the logics of the seascape: A comparison of Germany and Spain

Poster session – Tuesday 9 September 15.00 – 15.45

Location: Grand Hall of the Conference Centre Wallenberg

Hilde Rigmor Amundsen & Kristin Os: Reindeer hunting systems in southern Norway -Sámi or Norse?

Teresa Batista, Eva Flores, Cristina Carriço, David Lagar, Jose Cabezas, Luis Fernandez, Paula Mendes & Carlos Pinto Gomes: Rurality index: New methodological approach to

regional development in OTALEX C

- **René Brauer & Gunilla Almered Olsson:** Conflicting future in Torslanda a case study on different future scenarios for a peri-urban landscape
- Ignacio Cañas Guerrero, Ana Álvarez Pérez & Salvador Villacreces Arnedo: Application of graphic thinking to teaching landscape. Case of the visual impact of wind farms
- Mirek Dymitrow & René Brauer: Monitoring... when monitoring fails: The case of quality of life within the rural development policy
- Ineta Grīne, Elīna Apsīte-Beriņa, Zaiga Krišjāne & Oļģerts Nikodemus: Reflections of settlement changes in Vidzeme Uplands (Latvia) landscape after year 2000
- Antonia Paniza Cabrera: The "Dehesa" of "Sierra Morena Jiennense" between the traditional and the new land use.
- Kaisa Raatikainen, Panu Halme, Mikko Mönkkönen & Elizabeth S. Barron: The management and significance of traditional rural biotopes from the perspective of sustainable development
- Maraja Riechers, Teja Tscharntke & Jan Barkmann: Cultural ecosystem services in the urban setting of Berlin: Results from a quantitative valuation

Merit Snoeijer: Post-socialist landscape changes related to decollectivisation in Eastern-Europe: A Romanian case study

Laimdota Truus, Liis Multer, Urve Ratas, Reimo Rivis & Are Kont: Crowberry heaths on the southern coast of the Gulf of Finland

Salvador Villacreces Arnedo, Ignacio Cañas Guerrero & Ana Álvarez Pérez: Visual impact and improvement proposals for wind farms: A case study of the "La Plata" wind farm

Malin Weijmer: Landscape as fora of negotiation – approaches to a participatory process

E sessions – Tuesday 9 September 15.45 – 17.45

E1 Political landscapes: Materiality, power, and critique

Chairs: Ludger Gailing and Markus Leibenath Location: Wallenbergsalen

Markus Leibenath: Governmentality, 'energy-conscious subjects' and landscape perception
 Rob van der Laarse & Jan Kolen: Terrorscapes as heterotopias
 Ludger Gailing, Sören Becker & Timothy Moss: Landscape, materiality and power: Assemblage thinking, political ecologies and Foucauldian dispositifs
 Zeevik Greenberg: The village landscape function in process of building a society: Memories of

three generation of Birem's displacement Marte Lange Vik: "Dugnad" as a democratic landscape practice

E2 Visioning for re-coupling social and ecological landscape components (2/2)

Chairs: Claudia Bieling, Tobias Plieninger and Thanasis Kizos Location: Lyktan

Armelle Caron, Claire Planchat, Arnaud Larade & Valerie Angeon: Participatory landscape visualisation for shared knowledge and implementation of the green and blue networks

Discussion and preparation of concrete and joint output (synthesis paper etc.) with presenters and audience.

E3 Under urban mask: On rural landscapes with different logics (1/2)

Chairs: Jadwiga Biegańska, Mirek Dymitrow and Elżbieta Grzelak-Kostulska Location: Ljusvågen

Anna Bocheńska-Skałecka, Zbigniew Kuriata, Irena Niedźwiecka-Filipiak, Anna Podolska & Liliana Serafin: The application of rural landscape discriminants in valorization and revitalization: Creating the new image of rural areas

Robert Szmytkie: Changing landscapes of degraded towns in Silesia (SW Poland)

Jadwiga Biegańska, Elżbieta Grzelak-Kostulska & Mirek Dymitrow: The "agri-ghetto": On dysfunctional landscapes and the rural-urban paradox

Dominic Teodorescu: Ferentari: Bucharest's Romani ghetto

Eleftheria Gavriilidou, Dionysia Dedousi, Eleni Oureilidou & Maria Ritou: The city as a resource: Urban agriculture in the "Lachanokipoi" district of Thessaloniki

E4 Energy production systems and rural landscape qualities

Chairs: Alexandra Kruse, Michael Roth and Csaba Centeri Location: Radiovågen

Anna M. Hersperger, Rico Hergert & Felix Kienast: Conflicts between renewable energy systems and landscape quality: how appropriate are national assessments for a regional context?

Michael Roth: Energy production systems and rural landscape qualities

Michel Deshaies: Wind turbines and landscapes in german "Naturparks": a new challenge?

- **Pia Nilsson & Karoline Daugstad:** The assessment of cultural heritage in relation to wind parks examples from Sweden and Norway
- Matthias Buchecker, Annina Michel & Norman Backhaus: The acceptance of solar panel sites in a tourism region
- Salvador Villacreces Arnedo, Ignacio Cañas Guerrero & Ana Álvarez Pérez: Visual impact and improvement proposals for wind farms: A case study of the "La Plata" wind farm

E5 Unraveling the logics of renewable energy landscapes (2/2)

Chairs: Kira Gee, Marina Frolova, Karin Hammarlund and Viviana Ferrario Location: Radiovågen

- Daniel Herrero Luque & Eugenio Baraja: Emergence of wind power landscape in Spain: good practices of local management in rural areas of Castilla y León (Northern Spain).
- Mark Bailoni & Michel Deshaies: Energy transition and landscape issues in Portugal
- **Dirk Oudes & Sven Stremke:** Research techniques to inform local stakeholders in the transition towards renewable energy landscapes
- Søren Præstholm, Vibeke Nellemann & Lone Søderkvist Kristensen: Bridging energy production, cultural heritage and public acceptance – planning for wind turbines in the fields of old manor houses in Guldborgsund Municipality in Denmark

Field trips – Wednesday 10 September 08.00 – 18.00

1. Urban proximate landscapes, recreation and nature conservation (Kärna and Söne)

Arranged by: Gunilla A Olsson (University of Gothenburg, Department of Global Studies) and Anders Wästfelt (Swedish University of Agricultural Sciences/Stockholm University)

2. Stripping the fields – unravelling the historical layers of agrarian landscape

Arranged by: Lars Nyström, Pär Connelid, Erik Hallberg and Christer Ahlberger (University of Gothenburg, Department of Historical Studies)

3. Garden landscapes

Arranged by: Katarina Saltzman (University of Gothenburg, Department of Conservation) and Annelie Sjölander-Lindqvist (University of Gothenburg, Department of Global Studies)

4. The biosphere reserve Lake Vänern Archipelago and Mount Kinnekulle

Arranged by: Bo Magnusson and Eva Gustavsson (University of Gothenburg, Department of Conservation)

F sessions - Thursday 11 September 10.00 - 12.00

F1 Future farming: What role will and should European farming play in the future, and which consequences will it have for landscapes?

Chairs: Anders Wästfelt, Camilla Eriksson and Erik Westholm Location: The Aula

- **Elin Slätmo:** The situation for extensive agriculture in Sweden today the importance of a landscape perspective
- **Ernst-August Nuppenau & Bernd Müller:** Governing the commons: Trusteeships and rule of reeves in landscape management for nature provision
- Mattias Sandberg: Can you see the pasture for all trees? Farmers' local management of seminatural pastures in light of general EU regulations
- **Camilla Eriksson:** The future of family farming: Current changes in family farming as ideology and practice
- Anders Wästfelt: Future Swedish farming: Consequences for society and landscape

F2 Spatial analysis based on categorial map data: How to address fluctuating landscape processes through the analysis of historical cartographic sources, landscape representations and spatial data (1/3)

Chairs: Stig Roar Svenningsen, Andreas Aagaard Christensen, Gregor Levin, Paolo Picchi and Jesper Brandt Location: Room A

- **Stig Roar Svenningsen:** Unraveling the categorial bias in historical cartographic material as data for landscape research
- Martin Rudbeck Jepsen, Stig Roar Svenningsen & Gregor Levin: Reverse causality: What we think is what we get
- **Otto Brinkkemper, Menne Kosian & Bert Maes:** Ancient woodlands: seeing the wood from the trees by means of ancient maps, floristic data and field inventories

Daniela Ribeiro, Matija Zorn & Andraž Čarni: The importance of historical datasets to the comprehension of current rural landscapes – on the example of Slovenia

Jana Krčmářová: Forgetting and remembering of agroforestry in Czech Republic

F3 Landscape monitoring – understanding and communicating landscape change

Chair: Grete Stokstad Location: Room B

Anna-Lena Axelsson & Neil Cory: Visualizing historical and future change in Swedish forest landscapes using official forest statistics and scenario analysis.

Wendy Fjellstad & Grete Stokstad: Understanding and communicating landscapes changes from monitoring of the agricultural landscape in Norway

Michel Lascaris: Monitoring the cultural heritage of the Dutch landscape

Aukje de Haan & Inge Verdurmen: Landscape inventory Flanders and the integration of cultural landscapes within spatial planning. Karin Göbel: Modular system for big GIS-projects

F4 Unravelling the concepts of sustainability as logics of mountain landscapes conservation

Chairs: Rolf Peter Tanner and Oliver Bender Location: Room C

Oliver Bender, Sigrun Kanitscheider & Christian Drackert: Migration and the sustainability of mountain landscapes in the European Alps

Rolf Peter Tanner: Unravelling sustainability concepts in the Alps

José Valentín Guzmán Fernández: Sustainable architecture in the mountains: a case study of the cultural landscape of the Sierra Nevada mountain range (Spain)

Hilde Rigmor Amundsen & Kristin Os: Reindeer hunting systems in Southern Norway - Sámi or Norse?

F5 The logic of landscapes and antiquarian practice (1/2)

Chairs: Ådel Vestbö-Franzén, Carl-Johan Sanglert and Moa Lorentzon Location: Room D

Mark Bowden: Experiencing landscape: a perspective from Britain

Mauro Varotto, Viviana Ferrario & Angelica Dal Pozzo: Historical rural landscapes: a critical overview on the Italian case

Moa Lorentzon: Lost in time and space – between the prehistory of archaeology and the history of written sources

Carl Johan Sanglert: Moving forward or just business as usual? – The political logics of landscape perspectives in antiquarian practice.

G sessions – Thursday 11 September 14.00 – 16.00

G1 Landscape challenges in EU's new agricultural policy: How did and how will the Common Agricultural Policy change the rural landscapes in Europe? (1/2)

Chairs: Hans Renes, Edwin Raap, Gerrit-Jan van Herwaarden and Henk Baas Location: The Aula

Hans Renes: European landscapes under the influence of the Common Agricultural Policy Jens Peter Vesterager, Martin Rudbeck Jepsen, Anne Gravsholt Busck & Søren Bech Pilgaard Kristensen: Past experience with the EU Common Agricultural Policy and future challenges for landscape development - institutional obstacles, with focus on Denmark in

European perspective

Mauro Agnoletti & Antonio Santoro: Landscape and CAP in Italy: The establishment of the national observatory of rural landscape at the ministry of agriculture food and forestry Alexandra Kruse & Johannes Dreer: Landscape – economic activities in the countryside and its importance to regional and local Identification for people

G2 Spatial analysis based on categorial map data: How to address fluctuating landscape processes through the analysis of historical cartographic sources, landscape representations and spatial data (2/3)

Chairs: Stig Roar Svenningsen, Andreas Aagaard Christensen, Gregor Levin, Paolo Picchi and Jesper Brandt Location: Room A

Gregor Levin: Application of categorial spatial data for estimation of carbon fluxes from land use/land cover changes

Paolo Picchi, Chiara Rizzi & Stefania Staniscia: Cadastral maps and historical ortophoto images as data source for the analysis of landscape dynamics and related phenomena: three case studies in Trentino region, Italy

Stephanie Verplaetse, Wouter Gheyle, Birger Stichelbaut, Timothy Saey, Jean Bourgeois, Marc Van Meirvenne & Veerle Van Eetvelde: Using military cartographic sources to reconstruct the Belgian World War One front zone

Kristofer Jupiter: Methods for analysing spatial organization and land use in 17th century Sweden using large scale maps

Niina Käyhkö, Helle Skånes & Nora Fagerholm: Challenges and possibilities in depicting landscape dynamics with integrated analyses of spatio-temporal data

G3 Travelling landscapes (1/2)

Chairs: Mattias Qviström and Katrín Anna Lund Location: Room B

Avril Maddrell: To be a pilgrim: the travelling relational landscape of spiritual engagementMattias Qviström: On fitness running and the heterogeneity of portable landscapesGabriele Mulè: Garden on the move. Sicilian rural landscape in the experience of foreign travelers in eighteenth century

Katrín Anna Lund: Narrating marginal landscapes

G4 Landscape and heritage

Chair: Annelie Sjölander Lindqvist Location: Room C

Michiel Purmer: Concrete in the dunes: the Atlantikwall in coastal nature-reserves in the Netherlands; past, present and future

Niels Dabaut, Sam Turner & Veerle Van Eetvelde: Heritage value of the landscapes in an urban context as base for integrated heritage management in Flanders (Belgium)

Christine Alloush-Hadid & Feras Hammami: Understanding the cultural heritage landscapes in rural Palestine: exploring local conceptions in the village of Dair Ghassaneh

Anu Printsmann & Hannes Palang: Sustainability of places of heritage: Baltic German manors in Estonia
 Graham Fairclough: A powerful union – 'Landscape as Heritage'

G5 The logic of landscapes and antiquarian practice (2/2)

Chairs: Ådel Vestbö-Franzén, Carl-Johan Sanglert and Moa Lorentzon Location: Room D

- **Ådel Vestbö Franzén:** The rise and fall of areas of national interest. Perspectives on historical landscapes in the planning process
- **Jette Baagøe:** Nomination of a Danish par force hunting landscape for the World Heritage List, and its implications
- **Tina Westerlund, Gunnar Almevik & Peter Sjömar:** Gardening crafts and the ephemeral biological heritage. Exploring the possibilities to develop small nurseries for local plant propagation in the gardens of Gunnebo and Mårbacka
- Hans Antonson, Mattias Hjerpe, Sofie Storbjörk, Robert Hrelja & Karolina Isaksson: Handling of climate change in the coastal zone. Planning practice in the interface between municipal and regional landscape planning

H sessions – Thursday 11 September 16.30 – 18.00

H1 Landscape challenges in EU's new agricultural policy: How did and how will the Common Agricultural Policy change the rural landscapes in Europe? (2/2)

Chairs: Hans Renes, Edwin Raap, Gerrit-Jan van Herwaarden and Henk Baas Location: The Aula

Peter Kurz: From smallholder traditions to ecological modernisation: Austria's rural landscapes after joining the CAP

Henk Baas: CAP, cultural landscape and heritage in the Netherlands Fanny Van den Haute, Elke Rogge, Eva Kerselaers & Veerle Van Eetvelde: Analyzing spatio-temporal patterns of agricultural land fragmentation in an urbanized region

H2 Spatial analysis based on categorial map data: How to address fluctuating landscape processes through the analysis of historical cartographic sources, landscape representations and spatial data (3/3)

Chairs: Stig Roar Svenningsen, Andreas Aagaard Christensen, Gregor Levin, Paolo Picchi and Jesper Brandt Location: Room A

Zbyněk Janoušek & Ivan Bičík: Hot spots of agricultural land losses in Czechia (1845–2010) Timo Pitkänen, Niina Käyhkö & Jyrki Lehtinen: Semi-natural grasslands: history matters, but to what extent? Zigmārs Rendenieks & Oļģerts Nikodemus: Management history and landscape structure in the North Vidzeme Biosphere Reserve, Latvia – combining historical maps, forest inventory and remote sensing data

H3 Travelling landscapes (2/2)

Chairs: Mattias Qviström and Katrín Anna Lund Location: Room B

Vera Vicenzotti and Mattias Qviström: The Scanian Zwischenstadt? Some methodological reflections on portable landscapes and travelling concepts in planning
 Staffan Appelgren: Heritagizing the nomad
 Ingrid Martins Holmberg: Travelling into history: The case of Swedish Roma

H4 Geographical indications, place based branding, landscapes and rural development

Chairs: Paulina Rytkönen and Madeleine Bonow Location: Room C

- Magdalena Kašková: The role of regional product labelling schemes in shaping images of the region and its landscapes: the case of the Association of Regional Brands, Czechia
- Alejandro Rescia-Perazzo, Miriam Torres-Miralles & Javier Sanz-Cañada: Economic value and multifunctional management of an olive grove landscape in Andalusia (southern Spain)
- **Paulina Rytkönen:** Culinary regions and GIs benefits, threats and general impact on rural landscapes and communities in Sweden
- Madeleine Bonow: Protecting local and traditional products and landscapes through the GI system: terroir products in a Swedish context

H5 Visual methods (1/2)

Chair: Jonathan Westin Location: Room D

Teresa Batista, José Manuel de Mascarenhas & Paula Mendes: The heritage landscape development of Évora peri-urban area

Keld Buciek: Landscape photography – interpretation of nature or reflexion of culture? Willem Vletter: Travelling through time and space

I sessions – Friday 12 September 08.30 – 10.30

I1 Unraveling the logics of food landscapes

Chairs: Ingrid Sarlöv Herlin, Kenneth R. Olwig and Richard Tellström Location: The Aula

Ingrid Sarlöv Herlin: Good food for 'good landscapes'. How can the consumer know? Richard Tellström: Food culture as a super-user of landscapes

Lydie Ménadier, Gérald Domon & Julie Ruiz: Landscape practices and farmer's sensitivity to landscape to understand the relationships between food production and landscapes: perspectives from France and Québec

Kenneth R. Olwig: Taste the niche landscape: Landscape, food and bio-/cultural diversity Erik Jönsson: Representing in vitro meat: Technology, high hopes, and spectacle in the politics of presenting future food landscapes

I2 Garden landscapes

Chair: Katarina Saltzman Location: Room A

Allan Gunnarsson & Pierre Nestlog: The orchard meadow landscape – a vulnerable landscape heritage Marina Pintar, Matjaž Glavan, Majda Černič-Istenič & Andrej Udovč: Sustainable potential of urban gardening for short food supply chain

Valerie Dewaelheyns & Elke Rogge: Bringing private actors into action. The garden complex in Flanders.

Anna Jakobsson: The role of the garden in the own-your-own-home movement in Swedish cities 1905-1936, the example of Rostorp in Malmö

Katarina Saltzman, Carina Sjöholm & Allan Gunnarsson: Relics and intruders. Managing plants in motion in the private garden

I3 Rethinking ecosystem services – special focus on cultural services (Panel/Workshop)

Chairs: Gunilla Almered Olsson, Petra Andersson and Ulrika Palme Location: Room B

Claudia Bieling: Methods for eliciting cultural ecosystem services

Ulrika Palme: Methods for assessing cultural ecosystem services

Maraja Riechers, Teja Tscharntke & Jan Barkmann: Valuing cultural ecosystem services:

Qualitative, quantitative and monetary valuation combined

Melanie Steinbacher: The limits of valuation of cultural ecosystem services through a positivist approach: Understanding rural landscapes – concepts and actions

Mateja Śmid Hribar & Mimi Urbanc: The values of cultural services in a landscape

Paolo Picchi: Cultural ecosystem services provision in landscape assessment and planning: a case study in Trentino region, Italy

Marion Amalric: CES in a urban context: methodologies, indicators and social founding

I4 Identity, gender and history

Chair: Mattias Sandberg Location: Room C

Kim Philip Schumacher: Gender and european rural landscapes Carl Holmberg: Agrarian visions in Victoria Bendeditcsson's authorship Justin Carter: Re-framing art through landscape – practice, people and place Meryem Atik, Abdurrahman Kanabakan & Veli Ortaçeşme: Place names as unraveling characters of rural landscape: Serik case from Turkish Mediterranean Edmunds Valdemārs Bunkśe: Epiphanies: Re-enchanting landscapes

I5 Visual methods (2/2)

Chair: Jonathan Westin Location: Room D

- Lien Dupont & Veerle Van Eetvelde: Exploring the influence of landscape related expertise on the observation of landscape photographs using eye-tracking.
- Kati Häfner, Ingo Zasada, Boris T. van Zanten, Fabrizio Ungaro & Annette Piorr: Assessing the cultural ecosystem services: A visual choice experiment on agricultural landscapes preferences from a user perspective in the case study Märkische Schweiz, Germany
- Petra Thorpert: Perceived colour in relation to people and their landscape Claire Planchat & Kuang-Yu Wang: Unraveling the landscape logics: using land art as a
 - medium to reveal the links between farming practices, biodiversity and landscape

Conference locations

1. Gothenburg

Grand opening, sessions and keynotes

Conference Centre Wallenberg Address: Medicinaregatan 20 A

Reception

Estrad Banquet Hall at Gothia Towers Address: Mässans Gata 24

Field trip meeting point

Address: Götaplatsen (by the Poseidon statue)

2. Mariestad

Sessions

Department of Conservation at the University of Gothenburg ("Trädgårdens skola") Address: Magasinsgatan 4

Keynotes and closing session

Regionens Hus Address: Drottninggatan 1

Conference dinner

The Rotunda, Karlsholme Folkpark Address: Nygatan 32

Garden exhibition

Mariestad Gardens by the river Tidan Address: off Gärdesbron (a bridge), opposite of the Department of Conservation at the University of Gothenburg

Keynote lectures

Keynote lecture 1 Monday 8 September, 10.20 – 11.00

Location: Wallenbergssalen, Conference Center Wallenberg, Gothenburg

Critical heritage studies and the rural landscape

Kristian Kristiansen, University of Gothenburg, Sweden

Keynote lecture 2

Monday 8 September, 11.00 – 12.00

Location: Wallenbergssalen, Conference Center Wallenberg, Gothenburg

Unravelling the logics of landscape. Utopia and dystopia, the future of European landscapes

Rudy Rabbinge, Wageningen University, The Netherlands

European landscapes have developed over the last few decades in a direction that was strongly affected by land use for agriculture. Land use for agriculture is heavily dominated by the way agriculture could or should function. Agricultural policies were very often dominated by vested interests and political choices connected to interest groups. However there is much more possible and the change in the European common agricultural policy offers a chance to use dynamics and renewal in such a way that various objectives from different fields may be optimized. That may lead to dystopia or utopia. The latter may be seen as the outcome of scenario's developed already in 1992 by the Scientific Council for Government Policy.

The outcomes of four scenarios (scenario A: free market and free trade; scenario B: regional development; scenario C: nature and landscape; scenario D: environmental protection), differ by a factor of 2 to 7 in terms of the amount of land required, costs, employment, and use of fertilisers and pesticides. They also differ greatly from the current situation.

The four scenarios unmistakably point to a number of structural developments in landbased agriculture and forestry, which will have to be catered for in future policy. According to the Council, these developments are:

- a continuing rise in productivity in the agricultural sector which will eventually reach objectively defined ceilings;
- increasing land surpluses, irrespective of policy;

- a further loss of jobs in agriculture;
- good possibilities for more environmentally friendly agricultural production;
- sufficient land is available to achieve a tentative ecological main structure at the level of EC-12 as the 'backbone' of nature.

These scenarios were developed in 1992 and now more than 20 years later some of the developments have occurred. European agriculture in general became much more productive and cleaner. There are places where substantial increases in yields and considerable reduction in pollution and pesticide use have been achieved.

Agriculture at agriculturally well endowed soils has much to offer for yield, environment and safe guarding ha's for nature and biodiversity. That increase in productivity per ha has also enabled the extensions of the ecological main structure, large areas of forest and nature and combination of low productive agriculture with biodiversity aims at specific places. The role of the landscape architect has been too modest in all these developments. The changes take place in a non structured way and not based on landscape architectural insights. Things could even result in dystopia when the increasing surplus of agriculturally marginal land is used for biomass for biofuel. That requires enormous areas of land with very low productivity and tremendous negative environmental and nature side effects.

The role of the landscape architect should be more prominent to promote utopia and to prevent dystopia, that role requires a much more anticipatory role. The present conference may contribute to that mission.

Keynote lecture 3

Tuesday 9 September, 08.30 – 09.30

Location: Wallenbergssalen, Conference Center Wallenberg, Gothenburg

Draining landscapes: logics of nature, science and modernity

Tom Mels, Uppsala University, Sweden

In the nineteenth century, the mire landscape of Gotland, Sweden, was subjected to a first round of reclamation, remarkable in both geographical scale and discursive scope. Capitalist modernity remodelled the landscape with the help of a wide-ranging series of hydrologic, agricultural, cartographic, political, scientific, and legal interventions. As this paper explores, the laborious transformation of biophysical wetlands into a hydro-technological landscape fit for modern agriculture involved a number of highly specific conceptual and discursive shifts. Through these, landscape and nature were made visible, known and accessible in particular ways that organized capitalist modernity as a seemingly intelligible, even rational affair. Yet this was simultaneously a deeply contested rendering, resisted by customary practice and the 20th century conservation movement. In an attempt to go beyond the limitations of this particular case, the paper also seeks to comprehend how representational practices, including first and foremost claims to knowledge and ideological struggles over capitalist modernization, work as an active cultural force, immanent in and formative of changes in the landscape.

Keynote lecture 4

Thursday 11 September, 08.30 – 09.30

Location: Regionsalen, Regionens Hus, Mariestad

UNESCO Biosphere Reserves involve communities in sustainable development and land use management – An international network supports local initiatives in a global context

Johanna MacTaggart, Biosphere Reserve Lake Vänern Archipelago and Mount Kinnekulle, Sweden

UNESCO'S Man and the Biosphere Programme (MAB) was launched in the early 1970's as an attempt to address the global issue of rapid biodiversity decline. In the early days of the MAB programme, special geographical areas were chosen as model regions, where knowledge about the cause of the increasing loss of biodiversity was derived by applying a scientific approach. These areas, called Biosphere Reserves, were selected parts of the world that represent a wide variety of ecosystems and land use schemes. Today, there are more than 600 biosphere reserves in well over 100 countries. These model regions for sustainable development are established by using a bottom-up approach, engaging local communities in their local contribution to global sustainability.

Biosphere Reserve Lake Vänern Archipelago and Mount Kinnekulle received its recognition by UNESCO in 2010. It was not only a formal recognition of the high quality of natural and cultural landscapes, it was also an approval and further strong support for local communities to continue develop their dialogue, their commitments and their actions for creating better conditions for future generations. Today, there is a non-governmental organization leading the activities within the biosphere reserve, serving as a neutral platform for dialogue and awareness rising. The people and communities gradually increase their understanding and knowledge of how to manage the landscape, the effects of aiming for a more sustainable energy usage, how to better harvest and use local resources, and much more. Being part of the World Network of Biosphere Reserves gives an added value to the local region, since sharing of knowledge and good practice within the network is one of its main contributions.

Keynote lecture 5 Friday 12 September, 11.00 – 12.00 *Location: Regionsalen, Regionens Hus, Mariestad*

A blessing in disguise: tourism and the landscape in times of crisis, the case of Greece

Theano S. Terkenli, University of the Aegean, Greece

Out of all European landscapes, the current credit/economic crisis seems to be posing the greatest risk to Mediterranean ones, since Mediterranean countries are - so far - most affected, due to economic re-prioritizing, exerting increasing pressures on their resources. As this presentation purports to highlight, using the example of Greece, the resolution of many of the problems that contemporary societies face largely rests on their landscape. Landscape constitutes a most significant geographical medium for the development and analysis of the interrelationships between tourists and visited locations; it becomes a veritable stage for play and recreation. This presentation argues that the relationship between tourism and landscape is irrevocable, uncontested—even essential to tourism. With the aid of SWOT analysis, the study proceeds to assess this relationship in the case of the Greek landscape under the current conditions of 'crisis'. It concludes with a discussion of such challenges to the landscape and to tourism, while proposing opportunities, arising from 'the crisis', for both the future of the landscape and for tourism development. In such times of crisis, the Greek landscape is going through a shift of sorts: from a context of quality of life to a medium of coping with crises. A valuable resource, widely accessible and available, the landscape (both tangible and intangible) becomes a solution to shortage and a medium/ means of sustainable development, especially on the basis of tourism and recreation development. The great potential for place/ destination promotion through the tourism industry offers a sustainable and profitable economic outlet for local development, on a landscape basis. All, but especially alternative and special-interest, forms of tourism rely on the consumption of landscape services, images, experiences, pleasures, products, etc. The inextricable link between tourism and the landscape offers brilliant prospects for the development of various forms of tourism, based on the principles of locality and sustainability—highly compatible with Greek and other European landscapes of societies currently under grave conditions of crisis.

Parallel Sessions A Monday 8 September 13.00 – 15.00

Conference Centre Wallenberg, Gothenburg

A1

Landscape accessibility – How to enter a world of mystery (1/2)

Chairs: Peter Bezák, Hannes Palang and Bas Pedroli Location: Wallenbergsalen

Accessing landscapes: demystifying (and re-mystifying) land and people

Sebastian Eiter, Norwegian Forest and Landscape Institute, Norway

In accordance with widely different understandings and definitions of landscape, accessibility can cover a broad variety of meanings: for example, 1) physical accessibility of land which may be restricted by people's capability of overcoming physical obstacles, 2) legal accessibility to land as regulated by law through permissions and prohibitions, 3) intellectual or cognitive accessibility in the sense of gaining knowledge on natural or cultural landscape features, elements, or characteristics, and 4) socio-cultural accessibility in terms of the willingness of people or groups ('insiders') to share their landscapes with newcomers ('outsiders'). Numerous approaches to 'measure' accessibility exist; however, accessing a landscape depends not only on 'measurable' accessibility, but also on the degree of accessibility perceived: what am I physically capable of, what am I legally allowed to, what will I be able to learn, and what may others be willing to let me explore, or share with me? This paper aims at giving a broad overview of different landscape accessibilities, illustrated with examples from literature and from research in Norway. Although accessibility is seen as desirable in many respects, 'total' accessibility might be neither possible nor desirable. To access means to explore, and to explore means - in the first instance - to reduce mystery. Limited or reduced accessibility thus preserves or increases mystery, which can be seen as a quality likewise.

Multifunctional landscape practice and accessibility in manorial landscapes

Jesper Brandt, ENSPAC, University of Roskilde, Denmark Andreas Aagaard Christensen, University of Copenhagen, Denmark Stig Roar Svenningsen, The Royal Library of Denmark and University of Roskilde, Denmark

Structural development of modern productivistic agriculture characterized by marked specialization and increasing size of holdings are in general considered one of the main reasons behind a declining accessibility of landscape values within agricultural landscapes in most developed countries. However classical manorial estates seems to represent an opposite trend. Allthough working at the same market conditions as other large specialized holdings developed through the process of structural rationalization, they have often maintained and elaborated a land use strategy based on a multifunctional use of the potential ecosystem services present within their domain. The targeted combination of agriculture, forestry, hunting rents, rental housing, and a variety of recreational activities influences makes a certain public accessibility to an integrated part of this strategy, diverging from the trends at the other big modern specialized holdings. A historical tradition for access to the manorial landscape as an integrated part of the pre-capitalist way of landscape management at the manorial estates might play a certain role, but it is anticipated that this is being of less importance than the multifunctional landscape strategy supporting a certain public access. A study of this thesis will be presented based on an analysis of multifunctionality, landscape development and accessibility in Danish Manorial landscapes and eventual linkages between their multifunctional landscape strategy, their history and their potential for landscape sustainability strategies will be discussed.

Physical accessibility to landscape in relation to changes in land cover and landscape identity

Juraj Lieskovský, Slovak Academy of Sciences, Slovakia Tibor Lieskovský, Slovak University of Technology, Slovakia Veronika Piscová, Slovak Academy of Sciences, Slovakia

Physical accessibility is recognized as an important driver of the land cover development in increasing number of studies. However, in most of the studies is the accessibility analyzed in a simplified form as a direct Euclidean distance, with no regard to existing road network, land cover or terrain, that fundamentally affect the results. This contribution describes advanced methods, input data sets and the friction coefficients needed for analyze of the landscape accessibility as a time distance for accessing the landscape.

The use of the analyzes is presented in three case studies, that are focused on the effect of the accessibility to changes in land cover and landscape identity. First, from historical ages when the cultural landscape was forming, present the effect of landscape accessibility to location of the settlements. Second example is from the second half of 20th century, when the small-scale cultural landscape was transformed into large-scale fields suitable for industrial agriculture. Accessibility was recognized as an important factor in transformation or preservation of traditional agricultural landscapes and consequently, in changes in landscape character and identity. Third example showing the accessibility as a factor affecting the abandonment of remained traditional agricultural landscapes as a consequence of the economic and cultural changes triggered by the transition to open-market economy.

The rise or fall of multifunctional landscapes – the conflict between increased public interest and reduced accessibility

Ole Hjort Caspersen, University of Copenhagen, Denmark

During a Landscape character mapping procedure (LCA) that involved local citizens in an area north of Copenhagen the topic of this Pecsrl session showed its relevance when a participant stated "that although I live in the landscape I have nearly no access to it". The participant lived in a smaller village but felt that access to the landscape was difficult due to private restrictions related to ownership and missing infrastructure. The priority of access to the landscape was articulated during the LCA that included local hearings. In Denmark access to the rural landscape has decreased significantly; a survey conducted in four areas showed a reduction of dirt roads of up to 54 % in the period 1954 to 2010. This decrease is related to ongoing structural changes that results in fewer and larger farms. In Denmark there is no right to roam but it is allowed to use the dirt roads for hiking and recreation purposes, hence this reduction conflicts with the growing interest for accessibility to the landscape and it has influence on the associated opportunities of creating social identity. In the vicinity of the larger urban areas many of the abandoned farms are transformed to a peri-urban settlement for hobby farms and horsiculture however this development towards a more multifunctional use of the landscape does not create better accessibility on the contrary access is becoming increasingly difficult. By departing in an example of a landscape that transforms towards a more multifunctional use this presentation raises the question of how we can increase local accessibility in relation to rural changes. Is a specific concept for planning needed? Should there be recreational demands connected to changes in farm size? And can public involvement in the LCA mapping process efficiently secure the identification of local narratives and strengthen identity and social design of the future landscapes?

Accessibility to natural capital and landscape services (local case studies)

Peter Bezák, Zita Izakovičová and Milena Moyzeová, Slovak Academy of Sciences, Slovakia Peter Mederly, Regioplán Nitra, Slovakia Magdaléna Bezáková, Constantine the Philosopher University, Nitra, Slovakia

A mixture of individual ecosystems, like forest, agricultural land, wetlands, human settlements and their spatial interactions determines the character of landscape to a considerable extent. Landscape represents the integrated concept and the appropriate spatial dimension for a study of ecosystems with the specific objective to translate scientific knowledge into proper guidance for land use practice, enhancing the inclusion of local stakeholders in decision-making procedures. Landscapes that represent a significant degree of natural capital resources tend to provide a better balanced provision of ecosystem services. Vice versa, many urban landscapes are losing capacity for the provision of many ecological processes. Access to the ecosystem services provided by the landscape depends on the characteristics of the landscape. How do people that are engaged in their local landscape perceive the importance of and accessibility to the services generated in it? Which aspects of landscapes can enhance or affect satisfaction of the local community with the provision of these services? On the basis of landscape services mapping, expert judgment and feedback from local stakeholders, we present an evaluation of current land use structure and the associated natural capital in different landscapes, their potential to provide ecosystem services, and recent social preferences for ecosystem services benefiting quality of life. Such analysis serves to communicate the insights gained to planners and decision-makers in order to strengthen sustainable management of the natural resources and enhance accessibility to landscape services.

Winter landscape accessibility and visually impaired people

Kati Soonvald, Tallinn University, Estonia

The seasons and weather are definitely among the many factors that affect physical accessibility. In the Nordic conditions, winter is definitely the most dominant season, with snow and low temperatures creating physical as well as mental barriers. For visually impaired people, winter can severely distort and transform the appearance of the surrounding environment. Still, through this changed landscape visually impaired people and blind people have to get from one place to another. For them it is quite a challenge because mostly there are no big contrasts between different edges of elements (which usually help them to orientate themselves) - they all are usually covered with white snow. Also snow crunches and makes the detection of different ground materials harder. How visually impaired and/or blind people perceive and cope with winter landscapes is a topic which has not been studies too much? In my presentation I will discuss how people with visual impairment or blindness describe winter landscape accessibility. It is based on qualitative research data gathered from interviews conducted with voluntarily involved respondents.

A2

Bridging people and place through landscape identity (1/3)

Chairs: Isabel Loupa Ramos, Veerle Van Eetvelde, Graham Fairclough and Bas Pedroli Location: Lyktan

Landscape identity to explore the interaction between landscape and people

Veerle Van Eetvelde, Ghent University, Belgium Isabel Loupa Ramos, University of Lisbon, Portugal Graham Fairclough, Newcastle University, United Kingdom

The concept of 'landscape identity' is mentioned throughout literature and policy documents as an important asset. Both the UNESCO World Heritage Convention and the European Landscape Convention refers to landscapes as part or as the foundation of peoples' (collective) identity. Landscape identity can be understood as the mutual relation between landscape and people. On the one hand, this refers to the landscape itself and the features that render its differences, like used in landscape character assessments. On the other hand, the concept can explain how people construct their individual or collective identity through the landscape, which is more used in concepts of social representation and place identity as a means to explore place attachment and sense of belonging. This duality in the concept of landscape identity may not be random; there is interdependency between the two perspectives that need further exploration and conceptualisation.

Landscape identity can also be a useful concept to assess the impacts of changes in both the physical dimension of landscape and the social systems; but also changes in norms and values may influence the perception of people of landscape and their changes. Is there a correspondence between the measured physical landscape changes and perceived changes; how much change is acceptable and where is the "tipping point" where landscape changes as considered detrimental to the bonds between people and place and action should be taken to halt those changes?

This paper will introduce the general theme of the session, by first giving an overview of the meaning of landscape identity, referring to both perspectives and the multidimensionality of landscape and identify and the interaction between people and landscape. Second, based on examples from different areas and scale levels, a theoretical framework will be proposed as a transactional approach towards landscape identity.

Landscape identity complex

Andrew Butler, Swedish University of Agricultural Sciences, Sweden

The aim of this paper is to contribute to the conceptualisation of landscape identity. This is undertaken through examining the perceived duality which exists between the landscapes physical identification and its role as a medium through which individual and social identity is formed. The relevance of landscape identity as expressed through the call for this session is increasingly made relevant through the ELC and work to implement it. However what landscape identity meaning in practice is rarely explored or else is often used to represent the physical character of landscape. While most academic studies focusing on the topic either address the physical aspect or else work relating to place identity and the role of landscape as the basis for societal and individual identity. A significant step in the conceptualisation of the topic is Stobbelaar and Pedroli definition: "...the unique psycho-sociological perception of a place defined in a spatial-cultural space" recognising the relevance of both aspects. Their definition works as the point of departure for this paper. The paper will explore how individuals identify themselves in relation to the landscape; what categories or groups they identify themselves with and the significance of the physicality of landscape for this social and individual identity. The study on which the paper builds comprised of semistructured interviews with individuals from a sub-urban-fringe areas in eastern Sweden.

Artifacts of Amberland: production of meanings of national landscape in Latvia

Anita Zariņa and Kristīne Krumberga, University of Latvia, Latvia

Amber in Latvia according to the common knowledge is one of the strongest symbols of Latvian culture and ancient Latvian craftsmanship. During the last two centuries amber was forbidden, neglected, industrialized, beautified, used as a symbol and eventually nationalized. Despite the fact that amber deposits were found only in few spots along the Baltic Sea and in insignificant amount in sediments of the Litorina Sea, it has become a collectively accepted symbol for the entire territory of Latvia, named the Amberland. Although amber bits are still collected at the beach after storms during everyday walks along the seashore, there is no archetypical Latvian amber landscape as in Palanga (Lithuania), which is the historical centre of amber trade and manufactures, or Kaliningrad (Russia) that has the largest amber extraction sites in the region. Nevertheless, we will find many linguistic amber representations), for example, in place names all over the territory of Latvia, in titles of various activities or in branding of resorts and enterprises. From today's state of affairs Amberland is everything and everywhere, it is the landscape of Latvia with eventually vague reference to the particular places or landscape features. Thus the quest for the amber landscape rooted in sites of historical and contemporary amber practices unfolds, as up until now do unexposed ideological windings in the narratives about the construction of Amberland for national or collective identity purposes. Our research reveals less considered aspects of amber history in Latvia focusing on issues of territoriality, as well as emergences and ruptures of amber practices. Linguistic and visual representations in the context of Häkli's "discoursive landscape" (1999) were analyzed to link the amber discourses of different political eras in a common narrative about construction of national landscape of Amberland.

A landscape symphony – reflections on landscape, music and cyclical time

Michael Jones, Norwegian University of Science and Technology, Norway

The paper explores metaphorical interconnections between landscape, music and philosophy. Associations between landscape and music are based on personal experience, memory and feelings of identity, awakening responses and recognition by others. An Alpine Symphony (1915) by Richard Strauss is a tone poem describing a hike in the Alps involving a climb to a mountain summit. Strauss's musical 'painting' employs various instruments and musical effects to evoke the different mountain landscapes encountered during the day in changeable weather. The tone poem is cyclical, going from one night to the next. It conveys elation as the summit is reached, and anxiety as the hiker meets dangers and a storm on the descent. Strauss's tone poems were inspired by his engagement with the works of Friedrich Nietzsche. According to music historian Charles Youmans, Strauss studied Nietzsche's philosophy to address specific concerns, including an affirmative conception of the physicality of art, and a new aesthetic direction for German music opposed to the metaphysical. However, both Nietzsche and Strauss suffered cycles of optimism and doubt concerning the ability of humans to free themselves from the metaphysical. Both expressed ideas of recurring cycles: the cyclical pattern of experience and a circular conception of history. Perceptions of cyclical time can be applied to understanding the rhythms of physical landscapes associated with, for example, the cycle of daily life, the annual cycle of seasons, and the human life cycle. Further, a cyclical conception of history leads to reflection on the blossoming and decline of cultures, with optimism giving way to the destruction of war and sites of remembrance - and then landscapes of reconstruction and renewal. The contrasts of blossoming, decay and renewal manifested in physical landscapes are mirrored in the tensions between creativity, nostalgia and revitalization in people's attachments to landscape, expressing different forms of landscape identity.

A3 Landscape management (1/2)

Chair: Bo Magnusson Location: Ljusvågen

Farmers' participation in conservation of rural landscapes. A case study of the Menorca Biosphere Reserve (Spain)

Pau Torrents Daganzo, Lisen Schultz, Andreas Duit, Örjan Bodin, Cecilia Lundholm, Simon West and Alba Mohedano, Stockholm University, Sweden

In an European context of agricultural land abandonment, the role of the farming community as landscape stewards is crucial for maintaining the rural landscape as well as the ecosystem services provided by this landscape. Such stewardship is studied here by assessing the participation of the farming community in the management of Menorca Biosphere Reserve, a small Mediterranean island with very well conserved and rich rural landscape which is not escaping this tendency of land abandonment. A survey of 41 farms and interviews with 15 stakeholders were performed in order to assess the role of the farming community in participatory management processes and the effectiveness of the Menorca Biosphere Reserve Agency (MBRA) in facilitating their participation.

The results show that the participatory activities of the MBRA are effective and highly valued by participating stakeholders but could be improved by: 1) engaging non-associated farmers and traditional farmers in the MBRA activities 2) finding a consensual and long-term solution on issues related to the access to private rural land 3) providing rapid feed-back to participants after meetings and 4) transforming the MBRA structure in order to deal with changes and an uncertain future. Failing to do this could illegitimate further participatory activities, erode trust among stakeholders and alienate the farming community and the society, thereby affecting the maintenance of the rural landscape.

This case study highlights the importance of appropriate management structure for adaptive co-management to benefit from the participation of stakeholders in general and farmers in particular. The findings should be of interest to managers, scholars and practitioners using adaptive co-management approaches to manage complex social-ecological systems such as rural, cultural landscapes.

Using historical and biological records in restoring and managing semi-natural habitats – Hindens spit as a case study

Bo Magnusson and Eva Gustavsson, University of Gothenburg, Sweden

Landscape management with specialization in Natural and Cultural Landscape together with techniques and practical knowledge for maintenance and restoration of valuable landscape has become increasingly in demand. Hindens spit is a terminal moraine formed by the end of the last glaciation is a three kilometre long spit pointing into Lake Vänern. It was first protected in 1970, primarily as a unique geological formation, but also to protect its "untouched character". "Free development" was prescribed, resulting in complete forest overgrowth. The untouched character is contradicted by the signs of grazing still present in e.g. the shape of some of the trees. This is a biocultural heritage from when Hinden was part of the Söne parish pasturelands, Främjan. A geometrical map from 1768 describes Hinden as being a completely treeless Calluna heath. Grazing on Hinden continued well into the 1900's. In the 1950's the biologist Bengt MP Larsson undertook detailed surveys of the Hinden shoreline, a material which he never entirely published. Photos show, and Larsson describes, a young forest, but open shores. Using historical, biological and biocultural records we propose to design a mode of restoring a pastureland and a management regime based on historical records. The aim is to show a landscape that better displays the geological formation and that enhances the biocultural heritage and preserves the management-dependent flora and fauna still present at Hindens spit. Particular attention will be paid to the shoreline. Apart from grazing, it has also lost the disturbance regime from the temporal flooding provided by Lake Vänern before it was regulated for hydropower. Which were the critical components of this combined disturbance regime, which was common around Lake Vänern a century ago? Can the botanical changes, as provided by the Larsson material, give any insight in to the process of disturbance change? Which tools in landscape management would be useful for the restoration of this landscape?

Enhancing management of traditional rural biotopes by grazing – experiences from an EU-project

Kaisa Raatikainen, University of Jyväskylä, Finland

Partly EU-funded project Härkää sarvista was conducted in Finland during 1.6.2009– 30.9.2012. The aim of the project was to improve management of cultural landscapes and to preserve the biodiversity associated with diminishing traditional rural biotopes such as wood pastures and meadows. According to this, practices of utilising cattle grazing in nature management were introduced to voluntary farms, and the farmers were advised to apply EU-based subsidies for financing management actions of traditional rural biotope sites. By this, new production activities to individual farms were pursued. Detailed management plans were written to each site in collaboration with regional authorities, landscape planners and local landowners. Also collaboration between non-farming landowners and cattle owners was encouraged in order to restore abandoned pastures. During the project a total of 137 site-specific management plans were done, and in addition 9 large-scale landscape management plans were prepared. Ca. 400 hectares of conservation areas and Natura 2000 sites were included in site planning. The large-scaled plans were mainly allocated to cultural landscapes threatened by abandonment of farming and overgrowing due to silviculture. The project proved to be efficient in directing management actions to biologically important sites and it increased the usage of subsidies. The traditional ecological knowledge of the older landowners was recorded and incorporated into the site-specific management plans. Contemporary knowledge, such as pasture rotation practices of modern farms, was also included in planning. Possible restrictions for management actions caused by conservation status of sites were deciphered and the relevant permissions were applied if needed. The farmers participating in the project appreciated especially the guidance offered in applying subsidies. However, the implementation of large-scaled plans failed since responsible quarters were difficult to find and there was no straightforward monetary funding available. Another shortcoming was the inability to arrange a long-term monitoring of the sites.

Landscape Character Assessment methods in the Nordic countries – supporting regional dynamic management and innovation or holding on to the past?

Morten Clemetsen, University of Life Sciences, Norway Bengt Schibbye, Schibbye Landskap AB, Sweden

The concept of Landscape, according to the European Landscape Convention, is recognized as holistic, encompassing several dimensions; spatial, temporal and memory. In the Nordic countries, we have seen several interesting endeavors over the past years, trying to capture the multidimensional aspects of landscape – both tangible and intangible ones in methodological tools for planning, management and change. Still, we see that "Landscape methods" not necessarily can serve as holistic and dynamic planning and management tools on landscape level, which may include aspects like ecosystem management, regional innovation, sense of place and place based value creation.

Both in Norway and Denmark Landscape Character Assessment methods has been published as national guides for use on regional and municipal scale. In Sweden has Trafikverket – the national directorate for road and rail infrastructure, developed a method for LCA on regional scale, drawing partly on experiences from both Norway and Denmark (http://www.trafikverket.se/landskap/). The ambition is not only to assess landscape for infrastructure planning, but also to merge with strategic resource innovation, environmental management and regional development. The methodology has been developed by a multidisciplinary team of landscape ecologists, historians, landscape architects and planners, working in close contact with regional and local administrations and stakeholders. It has been and tested in two regions: Västra Götaland and Västmanland.

The focus on Landscape Character has been criticized for being too static and focusing more on the visual and cultural-historical aspects of landscape and downplaying the functional/ dynamic properties, which makes landscapes as social-ecological system working. Experiences from the testing indicates that this can be overcome by focusing on developing a common/transdisciplinary language which can serve as a shared space of learning, bridging different professional fields of knowledge as well as local players and stakeholder groups. In this paper we will elaborate more on the following questions;

- What are the main constraints to a holistic /multidimensional understanding of land-scape in a regional context?

- How can the "Trafikverket" method provide a communicative platform for integrating sector planning (infrastructure) in regional development strategies?

- What methodological aspects must be considered in developing a shared language among landscape professionals?

The right information? Cultural landscape information and what it may afford in actions, contexts and concepts

Sophie Visser, Utrecht University, The Netherlands

Cultural landscape information and information products consist of three intertwined aspects related to respectively 'cultural landscape', 'information' and 'information products'. All three involve many activities and choices so as to make the final product (e.g. an information system). Certain approaches, viewpoints, starting points and opinions on all three aspects implicitly or explicitly get represented in the information. For landscapes these aspects concern amongst others landscape and heritage features, valuations, objects and types, for information products the choice of information technologies and media, and for information the forms, representations (maps and other visualizations, texts, pictures, etc.), processes and concepts. As a result, information is not necessarily neutral or factual and may foremost be tailored to the needs of the directly involved stakeholders ('the makers') and their purposes, actions, contexts and knowledge needs. If the makers are the only users, the information supposedly is on target.

In many cases, though, other users are disregarded in this process, whether or not seen as potential users from the start. Hence, their purposes, actions should be or become an issue as well, as should their perceptions, approaches, valuations, selections as well as their information and knowledge needs. Information is generally meant to be used as knowledge in some action by somebody, which always happens in some context. The information needed for that action therefore typically is contextual. Existing information should offer ('afford for') the required information, but in many cases this aim is not or only partial reached. Usability is the key to insight in these 'affordance(s)' and constraints of offered information. Although affordances basically vary from case to case and from person to person, the concept also allows for more general insights.

This contribution discusses affordances (or constraints) and their causes and consequences, based on some typical information systems on cultural landscapes.

A4 The forces behind landscape change (1/4)

Chairs: Henrik Svensson and Magnus Bohman Location: Radiovågen

Drivers of landscape change: a comparison of processes in different European landscapes

Theo van der Sluis and Marion Bogers, Wageningen University, The Netherlands

Drivers of landscape change are crucial to understand processes of landscape and land use transition. Landscape change is scale dependent; drivers causing changes at international level are different than those causing changes at the local/farm or regional level. This paper focuses on drivers at an international scale, differentiated by the Environmental zones of Europe. Based on the participatory Fuzzy Cognitive Mapping methodology the cause-effect relationships between drivers and landscape transformation are identified and assessed. The results show that in southern Europe (Mediterranean) the dominant drivers of change are related to environmental factors like climate (change) and topography. In particular the economic and societal boundary conditions for specific land use types related to topography and required investments for irrigation are decisive in the pathways towards intensification or land abandonment. With these pathways conversions from traditional agricultural landscapes to (semi-) natural or semi-industrial landscapes are associated. In Western Europe (Atlantic region) we observe a small scale, diverse landscape serving food production, leisure, and living conditions. Urban areas become more interwoven with the rural areas, which can be linked with an increase in living standard in the rural areas. Northern Europe and the Alps (Boreal and Alpine Regions) experience in some areas a decline in population and thus decreasing economic activity, resulting in larger natural areas and increase in forests, but in other areas an increase in economic activities as a result of mass tourism results in negative consequences for the landscape. Central and Eastern Europe (Continental regions) show large economic transformations. Increased demand for food combined with low production costs is leading here to an intensification of agriculture. It is concluded that European policies – for instance CAP – could gain in effectiveness when focusing on the identified drivers of change. Landscape structure, biodiversity and other ecosystem services could certainly benefit from this approach.

From the Crimean war to the Rio-conference: The relational geography of agriculture in Western Sweden, 1811-2011

Ulf Jansson and Anders Wästfelt, Stockholm University, Sweden

Agricultural landscapes are locally produced but have always been influenced by events, actors and conditions elsewhere. A way of understanding this is to study the relational geography of agricultural landscapes over a long period of time. There has been a shift towards relational studies in rural geography (Heley & Jones 2013). In an empirical study on land-use, ownership and rural production in a region in Central Western Sweden in Northern Europe during 200 years we apply a relational perspective. The transformation during the 19th century included the conversion of heathlands and meadows into arable fields. The configuration of arable fields was since the late 19th century relatively stable, but ownership, land-use and production structure saw dramatic changes. We see a major shift in production from live-stock to cash crops, oats for export to Great Britain, in the 19th century followed by a state regulated market during the better part of the 20th century and since World War II an intense structural change and mechanization of agriculture, small family run farms of 2-20 ha dominated during the first half of the 20th century and there was a focus of dairy production and over time grain production became more important in this highly productive landscape since the turn of the century. With a relational approach and a focus on the famers' decisions as actors we interpret that these transformations in Western Sweden are caused by situated changes in infrastructure, technology, international trade, national policies and consumer demands.

Conditional crisis? Why some succeed and others do not. Agricultural growth and landscape change, the case of southern Sweden (Scania) circa 1700-1870.

Magnus Bohman, Umeå University, Sweden

The agricultural revolution of the 19th and 20th centuries meant rapid agricultural expansion and growth but also increased pressure on the natural resources and the landscape. Some argue that the early modern European society had been on continuous downward ecological slope for centuries, which manifested itself for instance through deforestation, soil exhaustion and sand drift; creating powerful incentives for change when the process culminated in a crisis. Others however do not agree on this view and argue instead that most areas managed to raise production in the primary sector of agriculture without pushing the ecological limits too far. But why is it then that some regions do show severe signs of ecological stress, or even crisis, as a result of the agricultural expansion while others do not; processes that fundamentally transformed the landscape? The aim of this proposed paper is to investigate both the process and underlying causes in the interplay between agricultural expansion, agro-ecological crises and landscape change. An important hypothesis is that the crisis was conditional, i.e. that certain factors (determining e.g. the ecological resilience) determined why some areas managed to increase production while similar strategies in other areas lead to devastating results.

The empirical foundation of the investigation comprises both qualitative and quantitative data, primarily on production and land use. A comparative study is conducted where the long term development of three villages with different geographic conditions are investigated; in relation to one another as well as in relation to the overall trend of the region as a whole.

Population and land-use change on Noarootsi Parish (Nuckö) in North-West Estonia during the transition from feudal society to capitalism (1590-1940).

Hele Kiimann, University of Uppsala, Sweden

The coastal landscapes of north-west Estonia have undergone dramatic changes over the centuries. Changes were related to ecological transformations as well as political and demographic developments. The current paper analyses the settlement and land use changes in the Noarootsi (Nuckö) peninsula in north-west Estonia from 1590 to 1940. A place settled primarily by Swedes who utilized a specific niche comprised of seal-hunting, fishing and a strong base in pastoral agriculture. The case study will scrutinise several Scandinavian, or Swedish villages, along the western coast in Noarootsi parish in order to illuminate the changes up to the modern times that had occurred from the prehistoric ecological niche, in order to answer questions about how local livelihood and farming systems of the coastal peasants changed as a result of changes in physical environmental and social structure in reflection of various local or regional political decisions by the local lords of the manor, provincial governments in Reval (Tallinn) or imperial structures in Stockholm and St. Petersburg. **A5**

Peri-urban landscapes – sustainability potential for the future (1/2)

Chairs: Gunilla Almered Olsson, Karl Martin Born and Katarina Saltzman Location: Mikrovågen

A new perspective on peri-urban areas, planning for climate adaptation and food production

Jeroen De Waegemaeker and Maarten Van Acker, University of Antwerp, Belgium Eva Kerselaers and Elke Rogge, Institute for Agricultural and Fisheries Research (ILVO), Belgium

Spatial and landscape planning for climate adaptation is a novelty and raises several challenges. A mayor challenge is the so-called adaptation gap; How can we integrate long term trends, resulting from climate change research, into everyday planning practices? This question is all the more pressing in peri-urban areas where current land use changes (e.g. urbanization, horsification, recreational developments) rapidly alter local vulnerability. The local vulnerability to climate change of a metropolitan area results from exposure, potential losses and adaptive capacity, which are all affected by land use changes. Moreover, although local agricultural values are usually high, farmland in western peri-urban areas is currently lost at high rate. However, climate change research projects that these areas will be increasingly significant to the world food production on the long term.

This study aims to unravel the complexity of spatial and landscape planning for climate adaptation by exploring a case study: peri-urban Flanders. We define two major research objectives: (1) Which climate adaptive layouts are promising for peri-urban areas and where might they be applied in Flanders? (2) How do these layouts secure the future food production without ignoring current societal expectations for rural areas?

Through research by design, the significance of the Flemish peri-urban territories for food production and their vulnerability to climate change will be examined. Regional climate change models and historical data are used to assess the local exposure to climate change. Furthermore, the potential losses and the adaptive capacity of the peri-urban developments are estimated. Therefore, insights from agricultural climate adaptation studies is matched with spatial data. Finally, the strategic value of Flemish peri-urban areas and the opportunities for climate change adaptation by spatial and landscape planning will be discussed.

"Mundraub, MeineErnte, Ackerhelden" – sustainability-driven small-scale agriculture in Germany. An attempt of a typology

Karl Martin Born, University of Vechta, Germany

Mundraub [theft of food], MeineErnte [myHarvest] and Ackerhelden [field heroes] are the latest outcomes of a movement which aims to attract urban people to small-scale agricultural production. Organised as virtual communities or as commercial franchisebased enterprises they offer opportunities to grow and harvest food. Obviously this movement is connected to concerns about the origin of food, its quality, the conditions under which it was produced and the carbon-footprint of its transport. The main target group seems to be the LOHAS in urban centres.

The paper will present a compilation of the basic ideas, conceptualisations and businessplans of these organisations linking them to basic concepts such as resilience, autonomy and regionalization of food production. Drawing on available information and interviews with the organisations a typology shall be developed.

Governance of planning processes in peri-urban landscapes. A comparison of three "good examples"

Eva Kerselaers and Elke Rogge, Institute for Agricultural and Fisheries Research (ILVO), Belgium Marlinde Koopmans and Michiel De Krom, Institute for Agricultural and Fisheries Research (ILVO); Ghent University, Belgium

In metropolitan areas are experiencing an increasing competition for land. Besides urbanisation, this competition is due to new societal expectations of the countryside such as space for housing, commercial activities, nature and recreational areas. As a consequence, rural spatial planning processes must attempt to balance the expectations and goals of a variety of stakeholders. Developing a well-balanced, fair and participatory rural planning processes appears to be difficult. Previous research has shown that spatial planning processes often lead to resentment among the involved actors and the implementation of the planning goals often lags behind.

The objective of our research is to get a better grasp of these decentralised, participatory planning processes. By getting insight into the success and failure-factors of past planning processes we hope to formulate policy guidelines for the governance of rural planning processes. Within this research, we focus on cases in which the stakeholders were satisfied with the course of the planning process. Furthermore we focus on cases in which agricultural land is lost at the expense of other functions. In the highly urbanized region of Flanders, agricultural land is vulnerable and under a continuous pressure. Within our cases we therefore focus on planning processes in which agricultural land is taken over by other functions (e.g. nature or industrial developments). Insight in the governance of such planning processes should provide guidance to policymakers and practitioners in Flanders and other countries with similar planning challenges.

With this contribution we want to present the results of a first case in which agricultural land is lost in order to build a new motor-way. The majority of the involved actors indicated that they had a positive perception on the process and its outcomes. By making a qualitative analysis of a series of in-depth interviews we were able to define success factors for rural planning that exceed the particularities of the case-study.

The use of and, accessibility to, peri-urban green open spaces: A comparison of green wedges vs. green heart spatial strategy

Vita Zlender, University of Edinburgh, United Kingdom

In past decades, European cities, once considered as compact, have become affected by urban sprawl (EEA, 2006)1 and the socio-spatial contrast between cities and surrounding rural areas has become blurred. To preserve their compact layout, cities across Europe have attempted to control their development through various spatial strategies, such as green belt, green fingers and green heart. The success of these strategies has been different in different cities, however, today, the existence of a new type of space between rural and urban, i.e. peri-urban space, is generally recognised and accepted. Despite its recognition, this space has, until now, received very little attention from planners and authorities and it was often neglected and perceived as transient landscapes that will be developed in the future. Nevertheless, to-date research has showed that peri-urban green spaces have been increasingly used for recreational and leisure purposes of urban and rural dwellers.

This study focused on the exploration of how two different spatial strategies, green wedges and green belt, enable or create barriers to the use of and, accessibility to, periurban green spaces. It was carried out empirically: two cities of similar size, Ljubljana and Edinburgh, have been used as case studies to compare the two contrasting spatial strategies: green wedges and green belt. By using mixed method approach which involved interviews with authorities and planners, focus groups, a survey with inner-city dwellers, and spatial pattern analyses, the study assessed advantages and disadvantages of both strategies. Whilst green wedges' areas were used frequently but for shorter period of time, the green belt offered people a space extensive enough for activities that require more space and time. The study concluded with a proposal of combining both strategies and thus ensuring green corridors connecting city centre with its outskirts where extensive but managed open areas are preserved.

Parallel Sessions B Monday 8 September 15.30 – 17.30

Conference Centre Wallenberg, Gothenburg

B1

Landscape accessibility – how to enter a world of mystery (2/2)

Chairs: Peter Bezák, Hannes Palang and Bas Pedroli Location: Wallenbergsalen

Abstract and concrete: Landscape as a human right and the Hortus Conclusus

Shelley Egoz, Norwegian University of Life Sciences, Norway Tim Williams, International consultant on development in fragile settings

The term landscape epitomises a whole world in only one word. The conceptual underpinnings of landscape are nonetheless complex and employ multiple definitions. While the elasticity of the concept may seem confusing at times, this flexibility can also become the direct and simple access path to address universal ideas of the pursuit of wellbeing implemented through spatial practices. An example of such a theoretical tool is exemplified through the Right to Landscape initiative. The understanding that landscape is compounded from the material and the intangible world activates the association between the spatial and the ethic. Landscape, as an overarching concept of an integrated entity of physical environments that is imbued with meaning and comprises an underpinning component for ensuring wellbeing and dignity of human beings is, as put by geographer Yi-Fu Tuan, a: "concept indispensable to the probing of human nature and human wellbeing ".

Much has been said and written of and about landscape. The European landscape convention's flow is constantly extending professional and public discourse regarding an ethical commitment to improving all landscapes for everyone. The right to landscape discussion on human rights, nonetheless, has stretched the interpretation of the term landscape within the humanities into a new political arena. By using the paradox embedded in a word that describes an entity that is specific and universal at the same time, it makes the argument for making this association simple and accessible: landscape is place and culture specific but at the same time is our fundamental infrastructure for ensuring survival and wellbeing. In that respect it is a universal concept similar to human rights as established in the Universal Declaration of Human Rights in 1948. Human rights address both concrete survival needs such as shelter, food and health care and also the more abstract intangible needs quintessential to being human define as 'dignity'.

This presentation will explore these ideas through the use of the metaphor of Hortus Conclusus (The Enclosed Garden), in the example of Artas, a Palestinian village landscape near Bethlehem where an ensemble of physical and political drivers challenge the access rights of the community.

Who owns neighbourhood milieu?

Hannes Palang, Kadri Semm and Piret Pungas, Tallinn University, Estonia

Accessibility is one of the main drivers of landscape change. In this paper we go beyond the ordinary understanding of accessibility as a physical obstacle and focus rather on socio-political approaches, by asking questions who defines landscape accessibility or how accessibility is made useful in the landscape. This way, the term 'accessibility' is not confined with any strict territorial or material borders like fences or signs – 'private area' or 'keep out', but rather with the purpose to understand the general socio-political context behind these signs.

We will study these questions based on two rather controversial cases. First, we exemplify how specific planning discourse influences accessibility in neighbourhood's landscape in Tallinn, Estonia. The milieu discourse in Tallinn has a strategic aim in terms of preserving neighbourhood's architectural housing heritage and acknowledging the traditional understanding of the heritage value. In the collective knowledge the expert-based milieu discourse influences the specific perception of the term 'milieu' that will in turn influence the change of a neighbourhood's social structure and its landscape. This discourse does not consider the socio-spatial everyday life, which is significant in terms of viable neighbourhood regeneration. It has an effect on accessibility in the neighbourhood. Second, we go to the countryside where, mostly due to the need for visitor management, authorities try to increase and at the same time limit physical access to some nature areas by means of boardwalks etc. These facilities however turn out to be able to control the social and also the political aspects of accessibility.

The mansion and garden of Muhammad Afifi in the Western Galilee

Gerald D. Sack, Hebrew University of Jerusalem and Zefat Academic College, Israel

This paper discusses how war altered a rural landscape and Arab agricultural communities in the Western Galilee in 1948. The 1858 Ottoman Land Code enabled the registration of landownership for the first time in a Moslem state. In Ottoman Palestine this led to the consolidation of blocs of land in the hands of rural and urban elites ["effendis"], many of them absentee landlords. In the Western Galilee some effendis built rural mansions but few lived in them, and most lived in Acre. We discuss one rural mansion in a small village of tenant-farmers, and what happened to it and the village in 1948. As a result of the Arab-Israeli War of 1948-1949 the villagers were expelled, mostly to Lebanon, and the effendi's mansion and the villages obliterated from the landscape. Recently a new "Palestinian-Israeli" identity has led to attempts to reinstate the memories of such destroyed villages in the Israeli landscape.

Democracy and trespass: Political dimensions of landscape access

Tim Waterman, Writtle College, United Kingdom

There is a wide variety of types of access to the landscape, from traditional transhumance to the 'right to the city', from public and egalitarian rights of way to the private rites of privileged access associated with such pastimes as fox hunting and golf. Knowledge of the availability of access also plays a role in our landscape imaginaries, in which we may dream of attaining privileged access or of creating public access where it is denied.

The European Landscape Convention demarcates a very low threshold for the definition of 'landscape'. An environment needs merely to be perceived by humans to qualify as a landscape. Where landscape becomes political, however, and where it gains symbolism beyond that of grand abstractions such as 'escape' or 'wildness' is when landscape may be accessed. A political landscape imaginary must include the possibility of passage, occupation, and/or inhabitation in order to have maximum power. The elements of the possibilities of landscape imaginaries benefit from being tested in physical space and place by human bodies and their constructions. This testing often takes place in acts of transgression such as the mass trespass of Kinder Scout in England's Peak District in 1932 or of the contemporary actions of the Occupy movement such as the action at Istanbul's Gezi Park in 2013. Passage and occupation are both situated qualities of human bodies in landscapes. This paper will argue that a situated understanding is foundational to any meaningful conception of democratic society; a fact which could have a profound impact on governments that seek increasingly to rule through numbers and data and an abstract 'evidence base'. Trespass forces access and forces politics back into real landscape space, thus this paper will also argue for the necessity of trespass for democracy.

B2

Bridging people and place through landscape identity (2/3)

Chairs: Isabel Loupa Ramos, Veerle Van Eetvelde, Graham Fairclough and Bas Pedroli Location: Lyktan

Outdoor recreation and place attachment in the Kristianstad Vattenrike

Thomas Beery, Kristianstad University, Sweden

The protected landscape of the The Kristianstad Vattenrike is a unique landscape construction. Building upon themes in the region's history (an integrated natural and cultural history), including an ecologically significant biodiversity, the biosphere area was established in 2005. UNESCO (2013) describes biosphere reserves as partnerships between people and nature, and this has been highlighted in the Vattenrike since the designation of the area. The Vattenrike biosphere program deliberately set the boundaries for the biosphere core area not only inclusive of the ecologically significant wetlands of the region, but also to include the small city of Kristianstad in an effort to emphasize people as a part of the natural system. This integrated systems approach underscores the importance of public engagement in the ongoing efforts of the biosphere area. Outdoor recreation will be used as one aspect of the dynamic relationship between people and place to consider landscape identity.

Twenty-one visitor sites serve as key locations for public engagement in Kristianstad Vattenrike natural/cultural history topics and outdoor recreation. This study investigates the role of outdoor recreation at these visitor sites and explores whether these experiences are contributing toward the broad sustainability goals of the biosphere reserve program. Specifically, this study examines whether outdoor recreation shows a relationship with Vattenrike place attachment (measured via place identity and place dependence scales), and ultimately with environmentally responsible behavior using a model from Vaske and Kobrin (2001). Environmentally responsible behavior is explored given the desire to measure one aspect of public engagement with sustainability on a personal and/or household level. Data collection and analysis will include both quantitative survey and qualitative interview methodologies. Results may be able to illuminate landscape identity and broaden perspective of outdoor recreation's role as a method of public engagement in protected landscape management.

Place, process and park. Mobilization through landscape analysis in Finnskogen Nature & Culture park

Gabriel Bladh, Karlstad University, Sweden Kristian Björnstad, Norwegian University of Life Sciences (NMBU), Norway

In the Norwegian-Swedish border areas in Värmland-Solör, a continuous settlement area, known as Finnskogen (The Finn Forest) became established in the seventeenth century by Forest Finns migrating from eastern Finland. The Finns brought their customs and way of life, including slash-and-burn cultivation, smoke sauna and epic poetry. In places, the population in Finnskogen made up a distinct ethnic group up until the 20th century, but the Forest Finns were increasingly assimilated into the Swedish and Norwegian society. Changes in the livelihood, especially development of modern forestry, and disappearance of small farms involved a rapid depopulation of Finnskogen. Today, the Finnish culture remains in building styles, cultural landscape, place names and story-tellings, forming a specific landscape identity for the area.

The last thirty years have seen an increasing interest in preserving, managing and developing the values in Finnskogen. Several attempts at regional cooperation have been made in recent years with varying success, for example a process to establish a UNESCO biosphere reserve did not take off. A more positive result is that the local associations have joined together in cooperation and two museums have been established. This have improved local participation and protection of cultural heritage, however, this has not linked to broader processes of local and regional development. Since two years ago, there is a move to establish a regional park in Finnskogen, Finnskogen Nature & Culture park. The concept of regional parks has evolved in Norway, with inspiration from Switzerland and France, and in accordance with the European landscape convention. A landscape resource analysis and resource-based development methods were used in the process to establish the park. In our paper we will further explore how those processes can create mobilization and more consciousness regarding the values and identities found in the landscape.

Assessment to make sense of place

Christine Rottenbacher, Ingenieurbüro für Landschaftsarchitektur Rottenbacher, Austria

As a landscape architect I developed an assessment method (Moved Planning Process MPP) to negotiate the use and maintenance of places that build our cultural landscapes. Within a public participation process we identify qualities of places to start an exchange about cultural landscape values and the ongoing use and maintenance. This process is embedded in a shared reflected landscape identity, how meaning of places are constructed and changed

to enhance landscape and place relationships for an ongoing stewardship and well-being.

Sensing place thereby is used as a central aspect of human orientation in the several natural and social environments. This aspect includes the construction of meanings of place, of history of place, and of the effect that humans agree to a shared identity of place. Concepts like territory concepts (Janz), perception and action concepts (Maturana, Varela, Kepner, Goldstein, Damasio) as well as phenomenological insights (Merleau-Ponty, Casey) need to be integrated into the assessment method. Places get meanings, which are defined by relationships. These relationships are expressed within the special social context, and influenced by personal and shared experiences and knowledge ("here and now" within the assessment).

This approach is based on the assumption, that humans need to express their knowledge and experiences about place to create reliable relationships to places and landscape. The expression of knowledge about place, the naming of the qualities takes a big part of this participation method; related to the visible particulars of local topographies, the biographical associations, and the socially given systems. In repeated contacts with places during the participation process the relationships of the humans with the socio-natural context are strengthened, corrected and extended. I would like to show how these relationships can grow to a shared reality, a construction of the past as "what happened here?", and lead to a reflection of socio-natural habits. As personal and social identities are situated in place and landscape, this can contribute to negotiating the use and maintenance for the future.

Exploring multi-faced identities: reading urban and rural landscapes through native and immigrant children's landscape perceptions

Alessia De Nardi and Benedetta Castiglioni, University of Padua, Italy

The relationship between landscape and identity assumes particular relevance in the context of everyday-life ordinary landscapes and when considering areas strongly interested by recent immigration processes, where multicultural communities live.

This paper investigates this issue, referring to a research that analyses and compares landscape perceptions of immigrant and native teenagers, living in two localities of the Veneto Region (Northeast Italy): Arcella, a neighbourhood in the city of Padua, and Borgoricco, a village located 14 km North of the town. Following mainly a qualitative and multi-method approach (autophotography, interview, focus group), the study deals with the different dimensions of landscape identity investigating children's experiences and points of view concerning their everyday-life places, and analysing the links between the physical characteristics of such places and the meanings attributed to them.

The choice of diverse settings and the involvement of foreigners and Italians allow us to investigate the "bridge" between landscape and identity from a 3-fold perspective: first, focusing on how children develop a sense of belonging to everyday-life places, according to their ethnic origin; second, focusing on how diverse landscape characteristics (urban vs rural) influence the relationship that the children of both groups build with such places; third, focusing on how landscapes assume different meanings when seen through the various gazes of their young inhabitants. According to our results - that identify different categories of landscape meanings (aesthetic value, collective sense of place, ecological value, functional value, personal place attachment and social relationships) - differences in landscape perception between teenagers living in the two localities are as important as differences in landscape perception between Italians and foreigners. At the same time considering the various points of view of the multicultural community living there represents a fundamental step in order to better understand the identity of each of the two landscapes.

Spatial presentations of landscape identity through participatory mapping – case Archipelago Sea, Finland

Nora Fagerholm, Niina Käyhkö, University of Turku, Finland Henrik Jansson, Metsähallitus, Natural Heritage Services, Finland

This paper highlights the importance of subjective place meanings for landscape identity. Under the notion of landscape as depicting the interdependent nature of people and landscape, the subjective place meanings have started to gain interest. This has been the case especially within the practical landscape management. Hence, the relevance of mapping the experiential landscape through stakeholder participation has been increasingly addressed. We consider participatory mapping as a useful strategy for bringing the subjective human practice in and experience of the landscape to spatial context, while acknowledging the underlying phenomenologi¬cal concern for the experiencing subject. Participatory mapping allows creating place-based knowledge, for example, on those cultural values that cannot be captured through expert-based data sources.

With examples from an empirical case in the Archipelago Sea area in SW Finland, we will discuss the unraveling of landscape identity through participatory mapping of subjective place-based landscape practices and experiences. With an internet survey applying participatory GIS (PGIS) methods and, tourists, inhabitants and other stakeholders operating in the Archipelago Sea shared their knowledge on landscape practices, perceptions, values and meanings. Hence, we can understand the landscape identity rising from the individual subjective experience as collective presentations. This may be useful when aiming to search an answer to questions such as: What kind of values people attach to their Archipelago Sea landscape and how are these distributed spatially? What kind of contribution to landscape identity this knowledge from survey participants puts forward? Are the results correlating with how the Archipelago Sea is presented and managed or is there something else intricate to the landscape guiding the experience? What kind of contribution this information could have when integrated into a landscape characterization process?

B3 Landscape management (2/2)

Chair: Bo Magnusson Location: Ljusvågen

Management objectives and motivations of small-scale forest owners in Slovenia

Peter Kumer and Nika Razpotnik Visković, Scientific Research Centre of the Slovenian Academy of Sciences and Arts, Anton Melik Geographical Institute, Slovenia

Forest covers around 60 % of the territory of Slovenia. By having wood as one of the most important renewable natural resources, forest management in Slovenia is receiving an increased attention. More than half of the forest estates in Slovenia are privately owned and most of these are smaller than 1 hectare. Traditionally, many small scale owners were farmers and economically dependent on their forests. Today the socio-economic structure of owners has changed - only minority of them are still full-time farmers. Due to increased engagement in urban lifestyles they now appear to focus on amenity (rather than on production) functions which reflects also in their management orientation.

This paper seeks to describe how small-scale forest owners in Slovenia themselves perceive their forests and how their objectives and motives for forest management differ with regard to their social-economic status, size of income, education, workplace position and also the cost of management and the accessibility of the forest properties. Different attitudes to forest show the need for typology of forest owners and the need for diversified policy measures that would stimulate forestry and wood-production chain in Slovenia in respect to these different types of small-scale forest owners.

How better integrate global landscape protections stakes in livestock farmer practices? Comparative analysis of tow French pastoral sites in Massif Central

Xavier Badan, Yves Michelin and Laurent Rieutort, Clermont University, France

The inscription process on the Natural World Heritage Site (WHS) list concerning pastoral landscapes brings local and national institutions to assign new functions to this landscape. They're asking breeders to adapt their activity by promoting "good" farm practices which are considered favorable to the project, and prohibiting others considered harmful. Fail to win unanimous support, those propositions are rarely accepted by farmers who consider differently their agricultural practices and production way. Those conditions run the risk to induce conflicts before and after the WHS inscription.

However, a complex collective exchange and communication network exists at breeders scale. This system influences essential factors in landscape transformation like farmer's representations, negotiations and practices evolutions. Mobilization of the collective network associated to the system of communications could facilitate the exchanges between local managers and farmers.

This communication compares the collective networks analyze of two WH sites in the French Massif central, which landscapes are strongly shaped by sheep pastoral activity. We intend to show the existence of a three dimensions collective actors' network. The institution's dimension which enacts norms, the farmer's dimension which is little inclined to change their practices under institution's injunctions and the dimension of technical mediators (agricultural advisor, protected area's rangers...). This last group has the ability to transcribe the institutional injunctions in operational terms and to bring back technical proposals developed by innovative farmers toward institutional groups. We will discuss on the necessary conditions that permit this mediator group to facilitate the adoption of new practices which reconcile farmers' local interests with global issues of heritage preservation promoted by UNESCO.

Restoration or conservation? Heritage values in Swedish river restoration

Anna Bohlin, Annelie Sjölander Lindqvist and Serena Cinque, University of Gothenburg, Sweden

Swedish rural landscapes are traversed by rivers and watercourses of different sizes, ranging from roaring rivers in the north to streams and brooks in the south. Connecting many different kinds of landscapes, rural, urban and peri-urban, they constitute cultural dense environments while providing habitats for a great number of species. As a result of a parliamentary decision, a large number these rivers are currently restored in order to protect and enhance a range of different of landscape values: environmental, biological, hydrologic, geomorphic and cultural. However, river restoration presents a number of specific challenges. While on the national level, different government agencies express a consensus regarding the need to collaborate around the restoration of watercourses in order to protect biodiversity, preserve cultural heritage, maintain long-term ecosystem productivity and ensure wise management of natural resources, further down the organizational hierarchy collaborative efforts become increasingly complicated. One dilemma concerns the contradictory sets of interests related to nature conservation, on the one hand, and cultural heritage, on the other. While conservationists wish to remove or modify traces of human activity from the watercourses in order to protect species and biotopes, such traces (for example artefacts, landscape modification, or built structures) are precisely what cultural heritage professionals wish to preserve. In addition, river restoration brings to the fore dynamics relating to local stakeholders and their interests, since such projects contribute to the remaking of local environments. This may result in strong reactions from concerned local communities and interest groups. Drawing on interviews conducted with officials involved in the planning of river restoration, as well as on ethnographic fieldwork conducted in connection with the actual implementation of such initiatives, this paper investigates how different professional groups try to reconcile these interests and achieve sustainable solutions that are 'owned' by local stakeholders.

The cultural biography of nature: historical-ecological research, communicative planning and integrated management of Natura 2000 areas in The Netherlands

Theo Spek, University of Groningen, The Netherlands Martijn Horst, Cultuurland Advies, Heerde, The Netherlands

How could nature management and cultural heritage management succesfully be combined? What interdisciplinary research strategies are available for this? And how can we fine-tune research, planning and management in areas that contain high nature values as well as high cultural values? In our paper we will discuss a new integrative approach that has been developed for nature reserves and national parks in The Netherlands during the last five years, consisting of three main steps: (1) The elaboration of a historical-ecological approach in the inventory of nature reserves or national parks, using the concept of the cultural biography of nature; (2) The development of new communicative planning methods in which local communities and stakeholders play an important role in the decisionmaking about the future of their enviroment; (3) The realization of new integrative management plans that more closely link the protection and development of natural as well as cultural values. In our paper we will show and evaluate several Dutch case studies, on a local as well as on a regional scale.

B4 The forces behind landscape change (2/4)

Chairs: Henrik Svensson and Magnus Bohman Location: Radiovågen

Land degradation and dune formation during modern time at the Kristianstad plain, southern Sweden

Magnus Thelaus and Joachim Regnell, Kristianstad University, Sweden

The aim of this pilot study is to use dune stratigraphy, optically stimulated luminescence (OSL) analysis and radiocarbon analysis to determine the age of the aeolian deposits in an inland dune at Gringelstad on the Kristianstad plane and to relate aeolian events to regional climate and local environmental history. By excavator one transversal section through the dune was cleared and the stratigraphy was studied in detail. Five samples for OSL measurement and one sample for 14C analysis were collected. Most OSLages date between 1775 and 1700 AD. One date in the lower part of the dune give the age 1085-1115 AD, which possibly indicates an aeolian event during early Medieval Time. Dune activity appears be associated with the last part of the "Little Ice Age". Local controlling factors are probably human-induced.

Forest industry in northern Sweden – a landscape changing force in the beginning of the 20th century?

Ewa Axelsson, Umeå University, Sweden

The landscape in northern Sweden has undergone great changes during the industrialization period. The forest is an open system, restricted and created by institutions and actors. Therefore the forest has been an arena of conflicts, discussions and opinions. Clashing opinions about how the resources of northern Sweden should be used have led to discussion and conflicts.

In the overall economic and social debate at the beginning of the 20th century includes what should be the main industry in northern Sweden, ownership and land use. Surrounding forest companies' further development early 1900s was complicated.

1901 was the end of the ongoing development. Forest companies were stopped from

buying up forest land from farmers. Norrlandskommittéen was appointed to propose a future development of northern Sweden. One of the committee's proposals was a ban on further land takeovers from famers to forest corporations. In 1900, forest corporations owned 34.3 percent of the general land. 1/3 of that had been acquired between 1885 - 1900. With landed property came also local influence in local government. The companies owned large acreage which gave them access to great influence over the development. In what way was the forest industry in northern Sweden act as a landscape changing force? How did the entry of forest companies' affect the local economic- and social development?

The PhD project will examine existing conditions and tension between institutions, corporations and farmers. The interaction between them has been a force causing changes in the landscape as well in the economic and social structure.

Landscape change and landscape crisis

Patrik Olsson, The Regional Museum in Kristianstad, Sweden

Landscape change and landscape crisis – "the two main driving forces of avenues (treelined roads) [...] forced by distress, tempted by the use and captivated by the magnificient appearance".

Scienceman Clas Blechert Trozelius thoughts on avenues (tree-lined roads) says it all! Avenues are in many rural landscapes a characteristic landscape-element. Avenues are seen as a nice aesthetic element beautifying the landscape. Indeed, this is in most eyes true. However, there lies much more information behind the avenue. I will argue that the avenue itself is a story and, if correctly interpreted and understood, can unravel the logics of landscape change.

One dramatic change in the landscape was the gradual cutting of wood. At the end, this became a crisis and a national ordinance was proclaimed in 1734 with the purpose to decrease the cutting of wood for e.g. fences. In the decree, there were also information on planting-duties. In the county of Scania, the county governor gave out regional announcements on how this should be done. I will discuss how two county-governors addressed the problem by sending instructions that trees should be planted as avenues by the farmer along the roads at the farmers road-lots. These regional announcements are most likely the driving force behind most avenues along the road-network that used to belong to the farmers – today predominantly owned and managed by the state. The announcements also indicates that it was not only practical reasons but that aesthetical purposes also played an important role. By understanding and doing research on the county-governors announcements, and the results of them, important and often forgotten driving forces of landscape change will be unraveled.

This paper is a presentation of one of the main results in my thesis "Both sides of the road: Avenues and the landscape in Scania 1700-1900", 2012.

B5

Peri-urban landscapes – sustainability potential for the future (2/2)

Chairs: Gunilla Almered Olsson, Karl Martin Born and Katarina Saltzman Location: Mikrovågen

Peri-urban futures – optimizing ecosystem services by multifunctional land use as a way towards sustainability

Gunilla Almered Olsson, University of Gothenburg, Sweden

Main challenges for land use in peri-urban regions in western Europe are the conflicting interests from urban expansion, urban food security, human health and recreation, and conservation. Maintaining food security is a critical issue also for wealthy countries. The peri-urban regions have a key role to be re-gained: food production for the urban population with a potential link to the current strong interests in urban agriculture.

Health & Recreation: A European trend is using the peri-urban former agricultural land for recreation by urban populations e.g. golf courses, horse grazing and equestrian sports.

Conservation in peri-urban landscapes: Protected areas (PA) for the conservation of biodiversity and the cultural heritage components are of outmost importance for delivering a number of ecosystem services. Insufficient financial resources for management of PAs urges for finding innovative solutions to integrate the management of the protected sites to current societal needs.

Conflicts of interests and potential for synergies: Peri-urban regions have potentials for production of essential ecosystem services – and they are also conflict areas for different social goals. There are a number of converting trends for multifunctional peri-urban landscapes with production of multiple ecosystem services.

This talk presents cases from from peri-urban Gothenburg. A Natura 2000 site in a coastal agricultural landscape with high ecological and cultural heritage values is managed for conservation and yields food products and a number of cultural and recreation services. Scenario development for another area in the same region builds on current development trends and policies. The production of ecosystem services from the different scenarios and their sustainability potentials will be elaborated and discussed. Data is based on empirical field studies, stakeholder interviews and maps on land cover and land use that are generated from GIS-simulations.

The role and position of agriculture in a strongly urbanised peri-urban area

Elke Rogge, Eva Kerselaers, Fanny Van Den Haute and Anna Verhoeve, Institute for Agricultural and Fisheries Research (ILVO), Belgium

Europe is a highly urbanized continent and more than 75% of the population lives in urban areas today. Urban development however is hard to predict or even to describe. It does not happen in neatly defined concentric rings around one urban core but rather in complex and diffuse patterns. Accompanying this urban growth we also notice an increase in the surface of the so-called urban fringe. Scott and Collier refer to the rural-urban fringe (RUF) as 'that messy space where town meets countryside'; 'the jigsaw of land-use, development, environment and community'.

Traditionally the RUF has been viewed as a space to meet the needs of an urbanized society rather than a place for innovative forms of rural activities. As such policy in the RUF is often conceptualized from a very urban-centric perspective. In a first approach the RUF is viewed as a repository for an increasing set of urban infrastructure demands for housing, retail, tourism, recreation and transport. In a second approach all developments within the RUF are essentially a reaction to the large development pressure of neighboring cities. By approaching the RUF from this urban-centric perspective it is difficult to let these regions grow to their full potential. The peri-urban should therefore not be seen just as a fringe, rather it should be conceived as a new kind of multifunctional territory. We need to develop strategies, visions and plans that approach areas in the RUF as distinct entities with their own unique characteristics, assets and challenges. The dynamics of the urban-rural fringe may also provide opportunities for establishing new, mutually beneficial relationships between neighboring land uses e.g. by providing new sources of income from farmers through the production of food, water, energy and recreational spaces.

Within this paper explore the opportunities for agriculture in the rural-urban fringe. Can agriculture play a role in defining strategies and plans for the future development of RUF areas? We studied the position of agriculture in the rural-urban fringe of two Flemish cities (Kortrijk and Antwerp). First of all, an inventory was made of all activities that take place on farms and that take advantage of the unique location and characteristics of their location. In a second step in-depth interviews and a focus group discussion resulted in some first steps towards the development of a vision for agriculture in the RUF.

The peri-urban landscape as battlefield between private and public perspectives

Alessandra Lai, University of Sassari, Italy

For centuries, development in the Mediterranean region has typically occurred in a compact form, inside and around centres of varying sizes, establishing a clear distinction between the urban and the rural. However, this dichotomy between city and countryside has been recently challenged by different forms of residential development emerging in peri-urban areas. The island-region of Sardinia, in Italy, contains two characteristic, yet distinctive, examples of such processes around its two major urban centres: Cagliari and Sassari. This presentation will analyse the landscape transformations triggered by peri-urban growth in these two cities, from a physical and social point of view by contrasting the perspectives of the public and private sectors, and will discuss policy responses that have been put in place.

Part 1 of the presentation provides a brief overview of growth processes in the metropolitan region of Cagliari and the progressive abandonment of agricultural activities in Sassari's olive tree belt. In part 2, the major stakeholders involved in the residential development process are identified, focusing on their different features and strategies. Part 3 addresses the measures implemented to reverse the negative trends observed in peri-urban regions, including a brief assessment of the effects of these policies. Finally, some conclusions will be presented connecting with the topics of fairness and sustainability in regards to land use change and the on-going conflict between two different perspectives or conceptualizations on the future of the environment in the fringes of the two main Sardinian cities. This will prove that the case is not confined to the traditional opposition between private profit and public interest, but it rather involves public profits as well.

The findings of the research can contribute to reassess public policies related to landscape stewardship, by shifting the priority from curbing the actual negative trends towards the achievement of shared quality objectives.

Dreaming of the historically correct lawn. Exploring the possibilities of integrating living heritage and real estate management in the gardens of Gunnebo

Joakim Seiler, Gunnebo House and Gardens, Sweden, Gunnar Almevik and Peter Sjömar, University of Gothenburg, Sweden

Gunnebo estate was built in late 18th century as a summer residence in the peri-urban landscape of Gothenburg for a merchant family. The site was a sleeping beauty in the early 1990th, with about 2.000 visitors each year. 1995 restoration- and reconstruction work started at the manor house, formal gardens, kitchen gardens and surrounding landscapes. As a result the public interest has increased, counting today 400 000 visitors. A recent survey shows that the most valued content in a vast range of activities is the garden and the gardeners work. What strategies does this imply for the management of the real estate?

In this paper we will argue for the sustainability future potential to integrate the practice and communication of traditional craftsmanship with real estate management. The case concerns the maintenance of lawns and meadows, which occupy a large part of every gardeners work. Considering the fact that the lawn mower was invented about 1830, the original maintenance consisted of other tools and methods than the present noisy gasoline driven riding mowers and trimmers. The survey deals with the knowledge, skills and consequences of the historical gardening work linked to lawns and meadows.

The results indicate that our knowledge of the historical methods is limited and that the rigorously historical way of working is hard to justify in large scale. However, the efficiency is deeply depending on the gardeners master advanced skills. We call for enhancement of traditional craftsmanship in real estate management, as these skills ads experience and public values to the estate. Gardening crafts are demanded in the experience economy and furthermore a vital ingredient in the curation of heritage places and creation of cultural spaces.

Parallel Sessions C Tuesday 9 September 10.00 – 12.00

Conference Centre Wallenberg, Gothenburg

C1 Landscape and culture – how can society value its cultural landscapes?

Chair: Paul Tabbush Location: Wallenbergsalen

Ecosystem services (ECS) and the case of sheep-grazing in Norway

Gunhild Setten, University of Trondheim, Norway

Gunhild Setten et al. (2012:306) recognise the conservationist motivation behind the development of ES but criticise the approach for falling short of understanding the relational nature of 'services'. ES is too often seen as a property of the ecosystem itself, as if ES are produced independent of the stakeholder. Setten will draw on findings from an ongoing research project on ES and sheep grazing in mountains in Norway to argue that the language of ES serves to reproduce this alienating, decontextualised and ultimately naive approach to human-nature relations. Stakeholders interviewed in the project demonstrate a much more messy and non-linear reality than the ES framework currently allows for. This 'messiness' needs to be taken more seriously if the ES framework is to provide a sound tool for sustainable resource use and policies.

Experience from the UK NEA: Environmental settings as an ECS

Robert Fish, University of Exeter, United Kingdom Andrew Church, University of Brighton, United Kingdom

Andrew Church and Robert Fish, in their "cultural services" chapter of the UK National Ecosystem Assessment (Church et al., 2011), posit a final cultural ecosystem service, defined as 'environmental settings which provide the sites for human interactions with nature and others'. Environmental settings range in geographical scale from domestic gardens to regional landscapes, but are distinct from habitats or ecosystems as they are, culturally, the locations within which people interact with one another and with nature. Economic analysis (Bateman et al. 2011) in chapter 22 of the assessment attempts to relate the provision of new settings to real ('created') increases in health benefits, but recognises the difficulty in identifying such increases. This is just the type of situation described by Funto-

wicz and Ravetz (1994) as 'post-normal', i.e. the uncertainty is very great and the stakes are very high. These authors foresaw a policy- and decision-making orientation that takes account of uncertainty, and the use of "A new enriched common language, which is not dominated by the worldview of one particular sort of stakeholder (expressed in the monetary standard), would come about when negotiators recognize the irreducible complexity of the issues at stake" (page 198). Shared values, rather than individual preferences, are held by communities and may be revealed through deliberative methodologies. Consequently in the Uk National Ecosystem Assessment Follow On Research completed in 2104 Andrew Church and Robert Fish refined and elaborated their placed based approach to cultural ES so that they are understood as the environmental spaces (e.g. parks and beaches) within which people interact with the natural environment and the cultural practices (e.g. exercising and playing) that define these interactions and spaces. The refined approach also recognises that environmental spaces and cultural practices are understood to shape and reflect a wider set of cultural (collective or shared) values about ecosystems. Values, spaces and practices interact in complex and non-linear ways to give rise to a range of cultural benefits to human well-being; for instance, in terms of the identities they help frame (such as peoples' senses of place), the experiences they help enable (such as peace and tranquillity) and the capabilities they help equip (such as learning a new skill).

Power structures, categorisation and decision-making: an example from the English Lake District

Kenneth Olwig, Swedish University of Agricultural Sciences, Sweden

Kenneth Olwig has provided a philosophical perspective on the landscape construct, and the power structures which underlie its categorisation and influence decision making. At stake here are the things in landscapes that are recognised by decision-makers as being real. Olwig provides a stark example, from the English Lake District, where: "what occurred in the Lake District in the context of a (Landscape Character Assessment) LCA and the eco-economics of Ecosystem Services.... with the result that these spatial and ecological abstractions came to define, and overlook, the reality of a much more socially and environmentally complex landscape." (Olwig, 2013).

Stakeholder research in the UK on landscape values in context

Jake Morris, Forest Research, United Kingdom

Jake Morris will present a paper drawing from interviews with stakeholders in three case studies (the Lake District, South-west England, and the Cairngorms) which sought to implement this formal stepwise approach in landscape planning and delivery. In each case, consensus was seen to emerge through a less structured, iterative, deliberative process that recognised scientific and stakeholder knowledge and values in ways that were more nuanced, inclusive and holistic than were possible through the formal approach. The challenge is to find ways to strengthen existing decision-making processes through selective demonstration and capturing of values, rather than trying to impose a new logic that seeks to quantify and monetize the totality of goods and services.

An ecological economics perspective

Sabine O'Hara, University of the District of Columbia, Washington, D.C., United States

[Guest contribution via video link]

Shared values for a Caledonian pinewood

Timothy Collins and Reiko Goto, Collins & Goto Studio, United Kingdom

Tim Collins (together with Reiko Goto) began a community dialogue culminating in a Future Forest workshop that helped 'imagine' the social and cultural relationships constrained by four decades of conservation based statutory oversight of a Caledonian pine wood. The process revealed ideas about shared values that are now dormant; rendered invisible through positivist scientific analysis. The Future Forest effort will be included as a case study in the National Ecosystem Assessment Guide for Decision Makers.

An holistic and flexible approach to cultural landscape and the services it provides society

Peter Herring, English Heritage, United Kingdom

Peter Herring, who has worked for English Heritage on Landscape Character assessment, will give a short paper that considers how an holistic approach to cultural landscape (and the services it provides society) could introduce flexibility to the ecosystem services approach. The ecosystem services model tends to present fairly static, fixed and certain views of what ecosystems contain and what they deliver. I think most people working with ecosystems, as well as with landscape, understand that they are in reality fluid, everchanging and uncertain, and so the services they provide, even before those are filtered through the perceptions of consumers, are also ever-changing. He will identify four of the several ways it could do this.

1. emphasising how universal the cultural landscape is - how it may be seen to encompass biodiversity and ecosystems, physically, perceptually and in working landscape also operationally, rather than being an adjunct to them.

2. showing how plural are the ways that society, as individuals and as communities of place and interest, value cultural landscape, and thus also the biodiversity and ecosystem services it contains. Could note the four ways of valuing places (evidential, historical, aesthetic and communal) set out in English Heritage's Conservation Principles, building upon those developed for the Burra Charter.

3. demonstrating how the qualities of landscape (and thus also biodiversity and ecosystems) that contribute to those plural values may be differently affected by different change scenarios. In other words, that values vary with context. **C2**

Bridging people and place through landscape identity (3/3)

Chairs: Isabel Loupa Ramos, Veerle Van Eetvelde, Graham Fairclough and Bas Pedroli Location: Lyktan

Landscape identity and common resources: history, practices and narrative of contested rights (Ligurian Appennine XVI-XXI c.)

Vittorio Tigrino, University of Eastern Piedmont, Italy Anna Maria Stagno, University of the Basque Country, Spain, Giulia Beltrametti, University of Italian Switzerland, Switzerland

The paper aims to investigates the concept of landscape identity linking it with another theme widely discussed in the social and environmental sciences debate: the issue of commons, that has itself strong relations with the concept of landscape. The analysis is fed by a series of interdisciplinary researches that have reconstructed, since the seventieth century, which strategies some communities and local groups in the genoese Appennine have joined to claim collective rights on agro-forestry-pastoral resources.

The investigation of these processes allowed to reconstruct how particular geographical spaces (landscapes) have been produced by local actors. The historical analysis of shared exploitation of common resources, carried out at local scale, allows to test the ideas of collectivity and of identity: collective rights were in fact uninterruptedly reformulated and connected to particular modalities of appropriation and of use of resources carried out by local social groups. The reconstruction of these dynamics highlights a processual and not neutral (nor natural) relationship between a social group and its landscape.

A Landscape it is precisely identified by historical actors as a result of a series of actions, that are historical. This perspective shows that the concept of landscape identity is not only a cultural concept, but also a social and political one, strategic and at the same time fragile, and thus constantly negotiated and confirmed by local groups (communities, parishes,...). The case of the commons shows that the connection between a place and a social group is linked to the historical attestation of use and of ownership rights. The way in which historical "proofs" are used by social actors to claim possession, and the manner in which the legislative and political circumstances compel those groups to "tell" their identification with those shared places, shows the processual aspects of the landscape identity.

The project is based on the analysis of documentary sources (including iconographic and cartographic ones), - centrally and locally produced (parishes, municipalities, families and local committees) - , and of a series of interviews. The comparison with fieldworks sources of historical ecology and rural archeology allowed to reconstruct the historical dynamics and the material evidences of the practices on contested collective resources.

Detecting peoples' and landscape identify in a changing mountain landscape. An example from the Northern Italian Apennines.

Rebekka Dossche, University of Genoa, Italy; Ghent University and Institute for Agricultural and Fisheries Research (ILVO), Belgium Elke Rogge, Institute for Agricultural and Fisheries Research (ILVO), Belgium Veerle Van Eetvelde, Ghent University, Belgium

Remote mountain areas in the Northern Italian Apennines were historically characterized by rural landscapes, covered by grasslands with herds of sheep and cows, chestnuts, small vineyards, mountain villages and criss-crossed with mercantile trails connecting the Ligurian Sea with the Po plain. Since 1950s, inhabitants of these mountain villages, mainly farmers and shepherds but also merchandisers or travelers, emigrated and abandoned the agricultural land which caused a spontaneous growth of secondary vegetation and transformed the valleys in marginal areas with shrub, woodland and desolated villages. More recently, young 'newcomers' arrive in those villages, consisting of a community of a few elderly people, and set up 'new' rural activities like environmental education, agricultural tourism, cheese production, etc. The current diversity of today's users of the landscape creates an interesting identity 'clash'. Original inhabitants identify themselves with the historical agricultural landscape of before the large abandonment; newcomers with the current landscape and even dear to look towards the future.

This paper aims to construct a theoretical framework on both the individual and collective landscape identity in a landscape that changed drastically trough time. Therefore, we first want to detect how people identify themselves within a changing mountain landscape and discover to which landscape, the historical or the recent one, the main community refers to when it comes to identification. We want to understand why people still identify themselves with a historical and disappeared landscape.

Second, we want to describe when and how both the newer and historical landscape identity does evolve into a collective landscape identity, in analogy with the landscape changes. Furthermore, we want to detect smaller collective identities, referring to the current or even future landscape, formed by parallel communities.

To found this framework, a large series of in-depth interviews are performed with different types of stakeholders. This information is combined with the analysis of landscape change patterns and processes (economic, political, social ...) causing a switch in the dominant identity from the historical to the actual landscape.

The "living archives project": building a local identity by sharing personal archives in order to help local people designing a management plan for a UNESCO WH application

Yves Michelin, Clermont University, France Cecile Olive and Danielle Fournioux, Conseil Général63, France Christine Montoloy, PNR Volcans d'Auvergne, France

By identifying certain sites as showing "outstanding universal value", inscription on to the World Heritage List using biophysical or geological criteria, might not be in agreement with those corresponding to the usages and values conferred on the place by the local population, based on historical, social, economic, cultural or religious criteria. As a consequence, there are often conflicts between national and international organizations and local stakeholders and inhabitants during the pallication process and after the inscription. The aim of this communication is to present the method and to discuss the first results of the "Living archives project" driven on the site "Chaine des puys -Limagne fault" (France) in order to facilitate the design and the implementation of the management plan associated to the UNESCO World Heritage application.

This project aims to favour the relation between landscape and people through identity by collecting personal iconographic archives of the sites and combining these artifacts with public archives that are very rich in this area (old maps and cadastres from the Middle Age to the 19th century, ancient photographs and movies, drawing and sketches, Albert Kahn "autochromes" collection...). With the support of the local media, we have involved the data collection process for a year and organized several meetings with local inhabitants.

Actually, it is not only the pictures in their self but the discussion about what the pictures show and hide of the local history that brings various public to question what makes heritage in the landscape. This accumulated and shared knowledge of the site and its outstanding value, and the feeling of pride in a site which makes up part of a universal heritage can lead local players and inhabitants to handle the site development better and to rethink their management strategies to make them more sustainable. **C3**

Tourism and recreation drives rural economies whilst also driving rural conservation

Chairs: Richard Stones and Andreas Skriver Hansen Location: Ljusvågen

The Negev desert farms in transition to become new sites on the tourist map of Israel: An analysis based on tourist perceptions

Orly Rechtman, Technion - Israel Institute of Technology, Israel

Over the last three decades, 60 farms were established in the Negev desert of Israel. While most of the farms were intended for crop cultivation and livestock keeping, some of them have, over the last ten years, gradually diversified into rural tourism sites. Some of the farms are located on ancient Nabataean agricultural sites (the Nabataeas were nomadic pastoralists who settled the Negev and the Sinai Peninsula around the 4th- 1st century BCE). These farms are presently attempting to follow the mechanism of the ancient agricultural systems focusing on runoff rainwater management. This research focuses on the tourist aspect of these farms as a recent developing rural tourism niche on the region's tourist map of Israel. The purpose of the research was to define a profile of those tourists visiting these farms, identify the rural identity of the sites, the visitor feelings and degree of satisfaction, and to assess the effect of these factors on the visitor's future decisions. This research was based on the presumption that the image-shaping process of tourist sites depends on a complex set of subjective elements related to the visitor as well on objective factors generated by the site itself. Based on this approach, an analysis model was proposed that combines six factors, showing the relation between these factors, as well as the potential of a farm to function as a rural tourist site. In order to address the research questions, a visitor's survey was conducted among a representative sample of farms. The findings produced appropriate data for defining the tourist profile, for conceptualizing the perceived image of the farms, and for identifying the potential for positioning these farms as unique rural tourism sites on the tourist map in Israel.

Discourses of sustainable tourism development in the Waterberg Biosphere Reserve, South Africa

Andy Lyon, University of Chester, United Kingdom

The aim of this session is to examine the extent to which tourism is a sustainable development (SD) option in the Waterberg Biosphere Reserve (WBR), South Africa. It examines the discourses of those stakeholders who can actively affect decisions or actions regarding sustainable tourism development (STD). The literature on tourism points to it being a contested development option, with a number of positive aspects which are mainly economic fitting with the neoliberal development paradigm. There are however critical concerns over the ability of tourism to contribute to the wider issues surrounding SD. The case-study examines tourism development in the predominantly rural WBR which has seen tourism become the major economic and land-use sector in the area. The discourses of the active stakeholders are analysed using critical discourse analysis to reveal that tourism is seen mainly as an economic driver and SD discourses do emerge regarding the environment and futurity or concern for future generations. The discourses also uncover a strong 'sense of place' attachment to the region and a desire to conserve the environment. However they show that tourism does not contribute to wider SD objectives of basic needs, poverty reduction, quality of life improvement and population levels. This presentation reveals how levels of knowledge from active stakeholders, influenced by ideology, affect power in the region. The session also shows that active stakeholder discourses need to be understood in the contexts of development and that the link between discourse, knowledge, ideology and power needs to recognised when examining tourism as a sustainable development option.

Walking the walk of sustainable tourism, rather than talking the talk; discourses of sustainable tourism in Iceland

Richard Stones, University of Exeter, United Kingdom

The aim of this session is to evaluate just how sustainable tourism practices are in Iceland and whether tourism is solely an economic driver for their rural and capital economy. Tourism has and still is driven by entrepreneurs, capitalising on the natural wildness of the geothermal, volcanic, and glacial landscapes and areas of land without human habitation; and after the economic collapse of 2008, tourism is now recognised by government as a pillar of growth and economy that could enhance Iceland's recovery and aid long term prosperity. The land is 'pegged' for capital growth and this could mean that sustainable practices aren't adhered to, and it could be argued that in some cases discursive practices by those involved with developing tourism are constructing 'false' perceptions of what is really wild or what are really considerate actions for 'balanced' sustainable practices. Many now question if there is a balance between what can remain wilderness alongside tourism development, especially with so much control being influenced by entrepreneurs and government 'protection' of these 'tourism elites'; arguably an effect of neoliberalism. There are those within the political establishment and the corporate sector who would state that tourism and corporate actions are acting as a lead element in conservation; but they are on a journey to what I term Corporate Conservation where there are several hurdles to overcome and so now is the time for actions not words. In this session I will show that tourism is driving rural economies but at the same time corporate and government actions need to evolve to enhance conservation not be the antithesis to it, and the death of neoliberal and discursive practices will go some way to progressing sustainable development, which will be driven by the realisation that this socio-cultural dependence on nature must be conserved for the longer-term.

Managing recreational opportunities and environmental quality

Andreas Skriver Hansen, University of Gothenburg, Sweden

Coastal and marine areas are often thought of as classic rural landscapes in Sweden, and have - for a long time now - been targets for both nature protection and tourism/recreational development. However, to ensure that these two particular kinds of land use interests do not interfere, managers of coastal and marine areas need to provide opportunities for tourism and recreation without jeopardizing goals for conservation. This is not an easy task to solve, and the two goals often conflict. From a sustainable management perspective, knowing more about the relationship between conservation efforts and touristic/recreational activities in coastal and marine areas could provide a basis to improve management efforts by focusing action on key areas, where overlaps between social-ecological interests and conflicts occur. However, while approaches to gain integrated knowledge on nature conservation and visitor management are plentiful and often seen in studies from terrestrial areas, such as mountain or forest areas, studies from coastal and marine areas are few and not well developed. The primary and overall aim of this presentation is therefore to introduce and discuss new and better ways of gaining integrated knowledge on recreational and environmental management in coastal and marine areas. I will do this by first introducing the concepts of recreational and environmental monitoring as two central ways of gaining integrated knowledge on nature conservation and visitor management. I will then present a few examples of my research from Kosterhavet National Park, Sweden, where a colleague in marine ecology and I have been working with an integrative monitoring method aimed at locating social-ecological interests and conflicts. Finally, I will emphasis the conclusion that more research on studies of human-nature interactions in coastal/marine landscapes is needed if the link between recreational use and protection of the marine landscapes is to be understood more thoroughly.

C4 The forces behind landscape change (3/4)

Chairs: Henrik Svensson and Magnus Bohman Location: Radiovågen

Privatization as a force of landscape change

Henrik Svensson, Kristianstad University, Sweden

Land consolidation reforms and the changing meaning of land ownership do in several countries count as perhaps the most important factor behind the early modern agrarian revolution. We have good evidence from different countries that production increased almost momentarily in connection with the rationalization of the agricultural landscape, through the far-reaching land reforms. This paper focus on the individuals and the landscape at a micro level in this process. Who benefited initially from the privatization process and where in the landscape can we expect to find the most prominent changes? By combining production series and historical maps it is possible to discuss investment in landesque capital at a farm level. Can we discern the characteristics of who invested and profited and who did not? The investigation in this research project concerns villages in the province of Skåne (Scania) in southern Sweden during the early and middle nineteenth century.

Social respectability of the farming profession and part-time farming: factor of rural landscape change? Case of Slovenia

Nika Razpotnik Visković and Peter Kumer, Scientific Research Centre of the Slovenian Academy of Sciences and Arts, Anton Melik Geographical Institute, Slovenia

This paper presents the issue of social respectability of farming profession and part-time farming after WWII as an important factor of the socio-economic transformation of farms and consequently of the rural landscape transformation in Slovenia.

Paper begins with putting the process of deagrarianization and the formation of parttime farms into historic perspective. By limiting the maximum land size per owner the government radically and permanently changed the structure of agricultural properties after 1945. On the other hand, the employment opportunities for the non-qualified, including the agricultural workforce increased considerably, thus leading more children of farmers to opt for vocational or university study programmes. Industry-oriented politics hampered, if not disabled, the development of private agriculture. Thus the respectability of farmers decreased, which negatively affected the possibility of making a living only by farming.

The analysis of the social respectability of farming profession and part-time farming was based on the public opinion surveys in the period 1968–2003. It has shown how society dealt with post-war political and economic development. The reasons for lack of respect for the farming profession have not been entirely determined, but the political disregard for farming, the rise of the working class and growing importance of education for one's socio-economic situation certainly contributed to it. The low respectability of the farming profession considerably influenced the decisions of young people (potential future farm owners) to seek employment outside the agriculture.

In conclusion, the paper gives a broader geographical and sociological perspective concerning interconnection between the increase of part-time farms and transformation of Slovenian agrarian landscape. Part-time farms have been recognized as an important indicator of the intensity of traditional agrarian landscape deterioration. Knowing their attitude towards agricultural land, agricultural practices and production orientation is of key importance to understanding the rural landscape identity change.

Persistence, destruction and creation in cultural landscape transformations: the case of settlement desertion in the resettled borderland of Czechia

Zdeněk Kučera, Charles University in Prague, Czech Republic

Settlement desertion or abandonment is an inevitable part of landscape development. The paper discusses the role of settlement desertion in cultural landscape transformations that took place in the resettled borderland of Czechia in the second half of the 20th century. Settlement desertion is not discussed as an outcome, rather it is introduced as a complex process that has undergone its own development. Although the results (i.e. deserted/abandoned settlements) were similar, the reasons for and meanings of settlement desertion and its contribution to landscape transformations have changed during the observed period. Thus the historical geography of settlement desertion needs to be explored. Attention is given to related transformations of landscape forms, functions, meanings and values as well as to driving forces behind these changes and to the context in which these changes took place. Like every landscape, landscape of the Czech borderland also refers to past events and times. In this sense it is a palimpsest and a multihistoric heritage, which is constantly undergoing development and (re)interpretation. During the period following the end of World War II, Czech borderland witnessed almost total population exchange. With the transfer of the Czech Germans the continuity in landscape cultivation and interpretation was broken. As a result of post-war events and subsequent changes during the Communist period, thousands of settlements in the borderland disappeared. However, the story of settlement desertion is not only the story of loss, destruction and oblivion. Through their material inertia, deserted settlements may also become a part of local and regional heritage and be integrated in the activities of those people that strive for the creation of a relationship with certain historical and intergenerational continuity to the lived-in landscape.

Changes in accessibility and in building conditions in a mountain area: What are the driving forces?

Kerstin Potthoff, University of Bergen, Norway Sebastian Eiter, Norwegian Forest and Landscape Institute, Norway

Accessibility is a central issue for human activity in mountain areas, especially where climate does not allow permanent settlement. In this paper we identify changes in accessibility and in condition of buildings (as maintenance of the latter is strongly dependent on access) in a mountain area in Western Norway. In a second step we focus on the driving forces of change. Accessibility has changed in different ways. In some cases, it has become easier during the past 40-60 years due to road construction, partly in connection with hydropower development. In other cases, re-growth of paths has reduced accessibility due to abandonment of seasonal farming and of the use of paths. Changes in building conditions show distinct patterns: numbers of buildings in good repair and in very poor condition increased while those in initial and intermediate stages of decay decreased. Financial support from city council and government were of crucial importance for road construction across the mountains. However, construction would not have been possible without the commitment of the local people. They supported it strongly by donating money, by their willingness to provide property for free where the road should be constructed, and not at least by volunteering to work under the construction process. Hydropower development and subsequent road construction within the mountains was allowed through decisions of the national government as well as of the local municipality. The local decision was based on the expectation of socio-economic development within the community. The abandonment of seasonal farming can be related to a number of driving forces, as the improvement of grazing possibilities closer to the permanent farm through the availability of fertilizers, but also state support, higher prices for milk than for butter and lack of dairymaid workforce. Overall, important drivers can be considered to be economic, political and technological.

Ash and shit. The forces behind disappearance of the landscapes formed by fire cultivation in Southern Estonia

Pille Tomson and Kalev Sepp, Estonian University of Life Sciences, Estonia

The slash and burn cultivation has been a traditional form of cultivation in the Northern Europe. In the Western and Northern Estonia the importance of fire cultivation declined already in the Middle Ages and later the land use based mostly on arable fields fertilized with dung. In the Southern Estonia the slash and burn cultivation (in which case the burnt wood ash served as the fertilizer) kept its position throughout the 19th century. According to the general agreement, intensification of the agriculture due to the growth of population and shortage of land was the main reason for the decline of slash and burn cultivation. Maps dating from the second half of the 19th century consist a valuable source for reconstructing the historical situation of land use. There special areas for slash and burn cultivation – buschland – were designated on these maps among the other land categories.

The present study is based on analysis of cadastral maps of 51 farms dating from the 1860-70s, located in Karula Parish in South-East Estonia. Comparison of these maps with the contemporary soil database shows that the hay meadows have mostly been located in the unproductive wetlands. Such a choice of location indicates that the shortage of agricultural land was supposed to be an actual problem at that time, already. At the same time 34% of the farmland was labelled as buschland on the maps. Apparently, the slash and burn cultivation might have been more effective than the regular three field cultivation in some cases. The most common type of soil in the former buschlands is very suitable for flax cultivation.

The Estonian peasants were admitted a right to purchase farmlands as real property at the second half of the 19th century. At the same time there occurred a rapid increase of prices on European textile market due to the American Civil War (1861—1865). The large areas of buschland available allowed the peasants to extend flax cultivation and to subside their purchases of land. The shrubby landscapes typical to the fire cultivation started to disappear and the shit finally took over the ash's position. **C5**

That is why we eat sheep: Combining nature management and extensive meat production

Chair: Martin Woestenburg Location: Mikrovågen

That is why we eat sheep

Martin Woestenburg, Wageningen University, The Netherlands

Grazing can be the management solution for various types of open land: heath fields and grasslands in the protected Natura 2000 areas, territories of water boards, recreational grounds and (former) agricultural land in the Natura 2000 areas. In The Netherlands alone researchers estimate a total surface of 200.000 hectares of these types of open land. For Europe the estimate is in the tens of millions of hectares.

The shepherd combines nature management with extensive agricultural production. This is often forgotten when shepherds are used for nature management. We state that the extensive production of mutton, lamb and other agricultural products by grazing companies working in nature areas provide a good opportunity for the promotion and marketing of these nature areas. That is why nature managers must not seek extra money from selling meat and other products, but see these products themselves as tools to market nature management.

Within the practitioner's network That is why we eat sheep we have been researching this hypothesis. In the presentation we want to clarify the reasoning above, and enlighten this with examples from the Netherlands and other European countries.

Revisiting agricultural production and ecosystem services for evaluating local land use alternatives

Frederik Lerouge, University of Leuven, Belgium Kurt Sannen, Natuurboerderij 'het Bolhuis', Belgium Hubert Gulinck and Liesbet Vranken, University of Leuven, Belgium

Against a background of climate change and volatile energy markets, land is becoming a scarcer resource. This might increase insecurity in supply and prices of agri-food products. Outputs need to increase without further compromising environmental quality and other

system services, which inevitably implies trade-offs. From this perspective, maintaining certain levels of agricultural production or safeguarding the potential to domestically produce helps to buffer against shocks. As such, the need for improving the capacity of agricultural systems to ensure ecosystem services has been thoroughly recognized. We evaluate aggregated ecosystem services provided by bioproductive space in an integrative manner. We focus on a case of extensive meat production in Flanders. Here, provisional services are combined with nature management and agro-tourism in a semi-natural landscape. We determine the aggregated output of a selection of agro- and ecosystem services. This allows us to compare how extensive livestock farming compares to a hypothesized conventional livestock farming in the same area. This case study demonstrates that extensive land use strategies may provide higher societal benefits (i.e. output of agro- ecosystem services) than intensive land use strategies in regions with both 'inferior' and high quality land and under high urbanization pressure. However, without biophysical constraints the intensive land use strategies might outperform extensive land use strategies.

Such aggregation of agro- and ecosystem services can be included in an analytical framework for maximizing the provision of services in a landscape. With this in mind, we discuss the potential of the framework to incorporate resilience thinking in spatial planning.

«Shaping» the future pastoral landscape: Products, farming practices, and landscape representations as keys to establish scenarios of evolution of a French pastoral valley

Jean-Baptiste Grison, University Blaise Pascal, France Lydie Ménadier, University of Montréal; University of Québec in Trois-Rivières, Canada Laurent Rieutort and Daniel Ricard, University Blaise Pascal, France

Understanding relationships between agriculture, farmers and landscapes is important to respond to the social demand of landscapes and products of quality. This is especially important for pastoral territories, where the farming systems are based on grassland, and where the stakeholders are engaged, in a high number of them, in projects aiming at valorising local productions. In this context, we studied the valley of Mars (massif Central, France), caracterised by a long history of pastoral activities. This valley is today dedicated to the production of meat, after beeing a « fief » for the cheese production. Landscape dynamics are defined by the decrease of pasture areas related to the presence of a plurality of stakeholders acting at several levels, and to the influence of external farmers practicing a «mining agriculture».

Our research consisted in a prospective study of the valley, to give stakeholders leads to valorise the farming production while engaging a positive landscape management.

In this presentation, we'll first present our theoretical framework based on the concept of « farming system territories », and the importance to study farmers' perceptions on land-

scapes. Then, we'll present our methodology, based on the agregation of four types of material: a bibliographic analysis of the evolution of agriculture and landscapes in the valley; a comparison of aerial photographies over the last 50 years; semi-structured interviews of local stakeholders and farmers to understand their point of view on the economic and social situation of the valley, the farming practices related to the landscape management, and their representation of landscape.

Finally, we'll develop the five prospective scenarios of this territory (continuity, revival of the cheese production, farm diversification, development of local productions, and domination of the territory by external farmers), considerating the consequences on the landscapes, the rural life, and the valorisation of the local products.

Extensive grazings in Europe within the context of the CAP 2013 reform

Rainer Luick, University of Rottenburg, Germany

The prevalent topic of all recent discussions on agricultural policy has been design and impact of the new EU common agricultural policy (CAP) framework from 2014 onwards. Focal issues of debate has been the so-called greening components of the first pillar, to what extent the second pillar will be modified (weakened or enforced), the realignment of the less-favoured areas boundaries, revision and adjustment of cross-compliance obligations, and the financial ceiling of CAP expenditures in the next programming period. Whereas the proposals of the Commission originally encompassed considerations for slightly improved instruments to address ecological objectives, many stakeholders as well as a significant number of EU member states expressed heavy opposition to such approaches of greening the CAP, beyond existing benchmarks.

It is widely acknowledged that agricultural species-rich grassland systems contribute a major share of desired ecosystem services. Benefits of such grassland ecosystems to biodiversity, water, climate, and soils are much more important than indicated by their proportion of the total surface of grassland. Of central importance are large-scale and low intensity grazing systems as they still exist in a wide variety in various parts of Europe. Low-intensity grazing-oriented livestock farming represents modern, multifunctional and sustainable agriculture and provides as well numerous public goods (ecosystem services) at low or no cost. But it is also reality that such extensive agricultural grassland ecosystems also suffer (in quantity and ecological quality) from numerous negative impacts which most refer to European and national agricultural and rural policies. The paper gives an overview of how the political changes within the new CAP from 2014 to 2020 will or will not provide the needed framework as to (a) make a future for farming communities who are still willing to continue with grazing oriented extensive grassland management practises and (b) can ensure that major legal targets to preserve European biodiversity in cultural landscapes can be achieved.

Parallel Sessions D Tuesday 9 September 13.00 – 15.00

Conference Centre Wallenberg, Gothenburg

D1

Linking society and ecosystems in rural landscapes

Chairs: Anna Dahlström, Tommy Lennartsson, Iréne A. Flygare, Maths Isacson, Marja Erikson and Mats Morell Location: Wallenbergsalen

Interweaving choreographies next to each other after each other - was Torsten Hägerstrand envisioning an ecology of practices?

Lovisa Solbär, Lund University, Sweden

Torsten Hägerstrand is associated with time-geography, the analytical study of entities' mobilities in space; he developed the conceptualisation of landscape towards incorporating the dynamic (Hägerstrand 1993) and perceived of the mobilities of humans and animals as consisting of intelligible activities in sequences (Hägerstrand 1985, 2009). The paper advances along this line of reasoning theoretically, I also draw on my thesis study of rural land use activities. Hägerstrand varyingly attempted to link the trajectory described by an entity to its surroundings, importantly also ahead in front; and to link the sequential logic pertaining to mobilities with their carrying-out being dependent on specific environments. Hägerstrand proceeded from notational analysis of trajectories to assessing the interplay of choreographies, one may however argue that all-ecology was what he had in mind already in the 1970's (Hägerstrand 1972) with the overall ambition to break the epistemological isolation from each other of natural processes and human projects in a unified timespace. Examples of this are the thing structure of reality, the complementary space with its openings, the metaphors inspired by weaving textiles, and the stress given to the entities' advancing always being carried out in relation to each other. The vision of continuously shifting touchings and partings that transform the world inhabited by living and non-living beings into a web of 'before-and-afterness' and 'side-by-sideness' is ecological by its ambition. This vision opens for the possibility to think of human practices in an ecological mode, as depending on access to enough time for the performance of a goaloriented sequence of actions and enough suitable space in which to relate to other entities in an appropriate way. The paper suggests that sustainable human interaction in/with rural landscapes depends on seeing human activities as situated and learning to re-connect them to their surroundings.

Humanizing biotopes: historical case studies from the Netherlands

Jan Kolen, Leiden University; Delft Technical University; Erasmus University Rotterdam, The Netherlands

This paper explores the issue of human-nature relationships from two different perspectives. The first is inspired by Philippe Descola's (1996) approach of 'symbolic ecology'. Descola states that all societies develop specific ways of distinguishing between humans and non-humans, between the 'self' and the 'other'. Each society thereby also creates its own social topography, of which the Western way, which is based on a distinction between natural species with exclusive (intrinsic) qualities, between living beings and inanimate things, and between beings with self-awareness (humans) and beings without (animals and plants), is just one specific example. Alternatively, he describes a number of systems which vary significantly according to their modes of identification and modes of categorization. The second perspective is inspired by Tim Ingold's (1993) ideas on people's perception of the environment, indicating that human-nature relationships are constantly being (re)constituted in the concrete actions of daily life and the individual's interaction with the environment. Two historical cases are used to elaborate on these perspectives. The first is the southeastern part of the Netherlands, where historical communities 'categorized' the natural world of the area's wetlands in a unique way, for instance by relating fens to specific bird species. The second example is taken from the Dutch central river landscape in the 19th century, where individuals with diverging ideas about their relationship to the land created biotopes that differed significantly, not only in environmental dynamics and economic aspects, but also in terms of human-animal and social relationships.

Artificial landscape: social representation and integration of sewage plants in periurban landscapes

Marion Amalric and Claudia Cirelli, University of Tours, France

The paper deals with new kind of artificial wetlands conceived to add a treatment to sewage and to create zones where ecological diversity could be enhanced. Such artificial wetlands have a more or less valuable impact on the landscape depending on their situation, their size, their access paths, the ecosystem they are part of and their ecological and social interests. the future of peri-urban landscapes considering such What is wetlands created, managed and used, according to different perceptions? could be First, we wonder if these "industrial" projects (as they are planned by political stakeholders but also by the sewage plants managers) could encourage a standardization of landscapes. How are they designed? What are their aims? Where are they situated, what do they "stand for"? In a context of urban sprawling and development of housing estate, artificial wetlands could answer the needs for leisure places, but offering what amenities? The creation of artificial wetlands can also give values to abandoned spaces. Second, what principles should run the management of these ecosystems and of the landscapes associated? Should it be ruled as a natural ecosystem, a hotspot of biodiversity? As a place for leisure? Whether one or the other, what is the role of the planners, should they approve and favor these projects in their towns so that it could make their planning projects greener or more ecologically friendly? What degree of nature conservation should be implemented in such places? Can these projects also be conceived as a way for making the presence of treatment plants more acceptable in the urban landscape? More generally speaking, this paper also asks a wider question on the perception of health risk that could be generated by a treatment zone conceived as a place for biodiversity and recreation. The construction of an artificial wetland could be considered as an opportunity for greener places in urban neighborhood and an enhancement of biodiversity in town, but it could also be seen as introducing hazard in regularly attended places.

The pre-industrial agriculture as a social-ecological system

Tommy Lennartsson, Swedish University of Agricultural Sciences, Sweden Marja Erikson, Uppsala University, Sweden Anna Westin, Swedish University of Agricultural Sciences, Sweden Iréne A. Flygare, The Uppland Museum, Sweden Mats Morell, The Uppland Museum; Stockholm University, Sweden Maths Isacson, Uppsala University, Sweden

Before the introduction of fossil fuels and fertilisers, agriculture was largely based on the local landscapes' ecosystem resources. The subsistence of an agrarian household also depended on socio-economic variables, such as the microeconomic and macroeconomic conditions, societal structure, and local social relations, including the household's internal gender structure. Each of these ecological and socio-economic variables has been in focus for studies of pre-industrial agriculture, but few studies have addressed the question of how multiple variables simultaneously provided the arena, or landscape, for farmers.

In this study we apply a social-ecological framework on an early 19th century Swedish agrarian household, described by the detailed diary by the farmer and Dean J. F. Muncktell (1764-1848). Using this approach, we consider the household to be manoeuvring in a social-ecological landscape composed of ecological, economic, and social-cultural domains, in dynamic interaction with each other. When reading the diary we focus on variables and activities being important for the resilience of the subsistence system during some years of harsh weather conditions and crop failure in the 1810's.

D2

Visioning for re-coupling social and ecological landscape components (1/2)

Chairs: Claudia Bieling, Tobias Plieninger and Thanasis Kizos Location: Lyktan

Coping with external influences on landscape – a fundamental need for visioning

Bas Pedroli, Wageningen University, The Netherlands

Landscape is not an EU competence. Still, many EU policies unintendedly but directly influence landscape. Since the policy relevance of landscape is generally low, both at EU level and at the level of national governments, landscapes are just subject of unpredictable external influences. This also applies in those countries that have ratified the European Landscape Convention. Local social and ecological developments in landscape are even less predictable, because of local interests, land ownership and societal conditions. In short, all decisions and actions initiated at regional and global scale have local consequences, they all affect (and are affected by) decisions and actions taken in the local landscape.

Conventional coping strategies for external influences are to reduce the negative effects, or to influence the external system developments themselves. These strategies focus at a symptoms level for individual sectors. Instead of predicting the external developments and designing mitigation and adaptation strategies for separate policy domains, visioning aims at forward looking strategy development. Examples will be given of such process at European level, using an intensive stakeholder based process, providing synergy between the various sectors. Evidence-based knowledge of land use transition processes in the past can thus be translated into preferable pathways towards envisaged landscape futures. In this sense, the landscape is no longer considered a victim of our globalising and individualising society. The landscape concept embodies the community based platform for finding integrated solutions for future development.

Integrated landscape management - visions and practice

Marie Stenseke, University of Gothenburg, Sweden

The overall aim of this paper is to contribute to the scientific guidance for integrated landscape planning and management. I seek to disseminate what is integration by discussing how the issue of integration is framed and how it is carried out in practice. The paper is based on a study of selected areas where planning instruments with integrative approaches; landscape character assessments, biosphere reserves and national parks, have been applied in differing European nations. Case studies have been carried out in Peak District and Lake District, England, the Cevennes, France and mount Kinnekulle, Sweden.

The cases reveal that in practice there are negotiations between various conservation objectives as well between conservation objectives and other societal objectives, in the process of planning for sustainable landscape management. The cases illustrate the need to reflect on how to handle the changes over time in how humans relate to nature. Most often the features that is to be maintained by landscape management are results of past land use and that complicates the issue of integration: What is to be integrated, the old culture" or the present one? One conclusion is that the conservative bias in "landscape" has to be challenged together with the nature-culture dichotomy. In striving for integrated landscape management, concepts such as cultural landscape, locals and local society, has to be scrutinized. Moreover, a dynamic and updated perspective on the rural landscape and drivers of land use change is vital and will open up for new solutions.

"Re-coupling" or "coupling" social-ecological systems? Reflections from Transylvania, Romania

Tibor Hartel, Sapientia University, Romania

A critical condition for sustainable development is the harmonization of the social-economic development with the capacity of the environment to sustain it. Harmonizing social-ecological components requires understanding of a wide range of issues related to the social and ecological systems and the ways they interact, including governance structures, knowledge types, resilience and transformability, potential traps, or the way how the global change affects these systems. In this presentation I will give a personal Eastern European perspective on the sustainable re-coupling social and ecological systems. First, I will show that in their fundaments, social-ecological systems at least in the Eastern European context, were never sustainably coupled. This statement holds, even if we consider the rich traditional ecological knowledge and ecological embeddedness of the traditional communities, the apparent sustainable management of the traditional rural landscapes, their demographic conditions and the exceptional richness of the traditional cultural landscapes. In these conditions, the sustainable "coupling" social-ecological systems is a novel, unpreceeded

and indeed challenging societal trial with many practical limitations. Second, I will highlight the difficulties around establishing a "reference regime" on the base of which we can consider socialecological systems "sustainably coupled". The many on-going drastic and increasingly chaotic changes makes the establishment of such a baseline domain very difficult. Third, I will highlight the problem of spatial scale and the importance of the resource rich traditional rural landscapes in the maintenance of wealth in the western developed countries. Fourth, I will highlight that there may be many seductive elements in our academic understanding which in one hand can generate hope and provide ground for academic thinking, but in the other hand, they may not help us in advancing with practical solutions toward achieving sustainability in our planet.

Landscape strategy making as a means to reconnect landscape, agriculture and rural development – experiences from Denmark

Lone Søderkvist Kristensen and Jørgen Primdahl, University of Copenhagen, Denmark

Decoupling of social, economic and ecological sub-systems of cultural landscapes has been a reality in most cultural landscapes and has resulted in loss of landscape values. However decoupling processes have also implication for wider rural community and the rural development in general. In this paper we present experience from two Danish projects where we have experimented with landscape strategy making as a means to reconnect, landscape, agriculture and rural development. In our work we have been inspired by collaborative planning and concepts of spatial strategy making conceptualized by Patsy Healey (2010). According to Healey strategy making is a complex process including four interacting dimensions: Mobilizing attention, Scoping the situation, Enlarging intelligence, and Creating frames and selecting actions. The end product of a landscape strategy the making process is the collectively formulated visions for the future of the landscape in question as well as a selection of concrete projects and actions to be implemented. However the process in it-self may also contribute to the institutional capacity building among the participants as well as to community building in general. The strategy is 'voluntary document' for the guiding of future actions and decisions of both public and private actors including public policy formulations, fundraising and initiations of new activities. We argue that strategy making in a rural context can be seen as a 'policy instrument' working in the field between the single land use owner, the local community and the local authorities, bridging different policy fields, as well as working as a platform for the formulation of new visions and projects for the future of the landscape in question. Based on our experiences we summarize main inputs and outcomes of the processes including examples of methods used in the different steps of the process and how visions has been translated into actions.

Competing landscape visions: Stakeholders' perceptions and the future of landscape of Messara and Asterousia, Greece

Thanasis Kizos, University of the Aegean, Greece Claire Kelly, University of Plymouth, United Kingdom Vasilis Detsis, Harokopio University, Greece Minas Metaxakis, University of the Aegean, Greece

Landscape studies are an area of research that has emerged through diverse multi-sectoral and trans-disciplinary approaches. Different actors and stakeholders may have divergent and even competing needs, uses and aspirations from a landscape, views that are in many cases related with ecological processes and social or economic interests nested within these processes. In this paper, we explore the perceptions and views of different stakeholders on the future of "their" landscape for two rural areas in Crete: Messara and Asterousia. The areas, were linked in the past by transhumance practices with Asteroussia flocks overwintering in fallows in Messara. They have been separated by the intensification of sheep husbandry in Asterousia and the shift towards olive cultivation in Messara. Both areas face environmental issues, water pollution and soil degradation in Messara and soil erosion in Asterousia. Selected stakeholders were interviewed and asked to comment on possible future trajectories of their areas under different scenarios. The findings reveal diverging if not directly competing visions for reasons that seem to be related with the fact that social, economic and ecological processes act on different temporal and spatial scales. At the same ders failed to see interactions of social, economic and ecological time, some stakehol processes and their landscape level outcomes. These findings are important in understanding how views about the landscape are formed and especially on how ecological concerns and components of a landscape can be integrated into an approach that seeks to conserve material and immaterial components of a landscape.

The primary data for the paper come from the EU-funded project LEDDRA (FP7-ENV-2009-1, No. 243857) that were collected to assess the socio-ecological resilience of these areas. The interpretations of the interviews are of the authors and do not necessarily reflect the views of the project consortium.

Integrating alternative landscape visualization techniques in future studies: exploratory approach in peri-urban areas of Lisbon Metropolitan Area

Isabel Loupa-Ramos and Ricardo Silva, University of Lisbon, Portugal

The European Landscape Convention (ELC) (COE, 2000) recognizes the importance to promote the public participation in the development of sustainable landscapes. Peri-urban areas encompass characteristics of both the urban and rural world and they are located somewhere in-between the urban core and the rural space, resulting in extremely dynamic cultural landscapes. Hence, this work contributes for a better comprehension of the landscape visioning as a tool of discussion of the landscape futures (what techniques should be used and how they should be displayed and employed) in complex cultural landscapes, learning from the experience of a project of development of future landscape scenarios. This abstract focuses on the assessment of the relation between stakeholders' vision of landscape and different techniques of landscape communication of future scenarios, as an early contribution for projects with public participation. In the last years, there has been a proliferation of landscape visualization techniques, regarding different typologies and improved software has communication tools for public participation exercises. Landscape visualizations can, therefore, be understood as a mechanism of communication and engagement of communities. However, only few studies have been conducted to provide a better understanding of the strengths and weaknesses of each technique and of the relation

that each establish with multiple audiences. So, a methodology has been applied to the Lisbon Metropolitan Area, using the visual simulation of four landscape scenarios. For the landscape visualization methodology different techniques were used and the results were presented to a panel of experts and stakeholders to collect their feedback on how they related to each image and which factors contributed for that relation. Thus, it seems worthwhile to discuss the contribution of different techniques of landscape visualization and how each one of them related to the different audience.

D3

Under urban mask: On rural landscapes with different logics (1/2)

Chairs: Jadwiga Biegańska, Mirek Dymitrow and Elżbieta Grzelak-Kostulska Location: Ljusvågen

On the nature of planning and the planning of nature: Construction and decay of post-war rural areas in Amsterdam

Jaap Evert Abrahamse, Cultural Heritage Agency of the Netherlands, The Netherlands

In the 1930s, the General Extension Plan for Amsterdam was adopted. This revolutionary, CIAM-influenced plan regulated the layout of the entire municipality, including its rural areas, for many years. Up to the present day, it has had a decisive influence on the city and its surroundings. Its realization was taken in hand from the early 1950s onwards, the heyday of government involvement in planning and building. Garden cities, industrial and harbour areas, business parks and green areas were laid out subsequently.

Several decades later, the areas that were the result of post-war, large-scale government planning are the least in demand, and sometimes desolate parts of the city. In this paper I want to compare two areas, which both fell into decay soon after their realization.

The Bijlmermeer estate, created in the 1970s, was to be the 'city of the future': an urban megastructure, far from the city, in which high-rise residential slabs were integrated with public space, parks, parking garages, via a three-level infrastructure in which pedestrian, local and interlocal traffic was strictly separated. Upon completion, it fell into decay.

The western harbour area of Amsterdam was planned meticulously in the 1930s, but its realisation was delayed. Parts of the area can be characterized as an open-air museum of spatial intentions; some areas turned into dumping grounds for toxic waste. But these wastelands were prepared for building with sand from the North Sea coast, with which the seeds for an unusual development of nature were brought in – nature took over, and later the area was reclaimed by inhabitants. In the Bijlmermeer, we also see a comparable movement, as high-rises are sold off to individuals. As government retreats and top-down planning gives way to bottom-up initiative, the nature of these areas – and the meaning of dysfunction – seems to have changed rapidly.

Zumberak: A marginal region in Zagreb's peri-urban fringe

Aleksandar Toskić, Dražen Njegač and Danijel Orešić, University of Zagreb, Croatia

Previous research of the Zagreb rural-urban fringe has demonstrated very different transformation of its particular parts. Various landscape types were identified - from neglected (deteriorating) rural landscapes and still noticeable traditional agricultural landscapes to urbanising landscapes. The major land use changes in particular parts of the Zagreb surroundings are the consequence of urban sprawl and other urban activities (business and industrial zones, recreational zones). However, some parts of the surroundings, although within the 30 km isodistante, are extremely marginal and characterized by a neglected rural landscape. The conducted research shows that the mountainous region of Zumberak south-west of Zagreb, by the Croatian-Slovenian frontier, represents the most typical such area. Marginality is defined by demographic features, population structure, transport connections and urbanization stage. Zumberak is characterized by very old-aged population, extreme depopulation, fragmented and dispersed settlement pattern, and, in spite of its proximity to Zagreb, transport isolation. In addition, the region's mountainous character has limited potential locations of urban activities, consequently, for the most part, Zumberak is not an attractive region exposed to the pressures of urbanization. The landscape has not been significantly transformed; moreover, it has characteristics of an extremely neglected landscape. The only positive change noticed in the landscape transformation relates to a sporadic location of planned sport-recreation and tourist places (ethno village, golf terrains) in the most accessible parts.

Rural transformations resulting from urban influences: The example of the capital city of the region of Warmia and Mazury

Monika Wasilewicz-Pszczółkowska, Agnieszka Szczepańska and Adam Senetra, University of Warmia and Mazury in Olsztyn, Poland

Nowadays we have to deal with the degradation of rural areas located around cities. Negative changes in the suburban landscape are result from urban sprawl and the migration of urban inhabitants to suburban areas. The inflow of urban population cause significant changes in the rural space. The above process leads to intensified land management practices, changes in land use structure, changes in the rural landscape, introduction of new architectural features and population growth. Urban sprawl transforms the spatial and social fabric of suburban areas. These phenomena contribute to the development of new landscape features, new land use patterns and the establishment of social relations between local communities and incoming residents. The problem is that the changes are often chaotic and distort rural areas.

The region of Warmia and Mazury in north-eastern Poland is undergoing rapid urbanization, and the above is particularly true of suburban areas surrounding the region's capital city. The analyzed area consists of rural municipalities (the smallest administrative unit in Poland) in the immediate vicinity of Olsztyn - it is a popular destination for urban migrants owing to convenient transport links with the city. The above indicates that the analyzed area is a highly attractive site for development a different functions (for example for residential development). The transfer of new functions is a natural consequence of progressing urbanization but the analyzed area covers the valuable ecosystems (on a European scale) and the changes are very important for the environment.

The objective of this study was to describe spatial changes in Olsztyn's suburban areas. This study analyzes demographic changes, changes in land-use structure and changes in cultural landscape observed in the analyzed area. The analysis covered the period of 2007-2013.

Degraded urban agglomerations and twin towns in Poland

Robert Krzysztofik, Iwona Kantor-Pietraga and Tomasz Spórna, University of Silesia, Poland

A characteristic of the rural landscape of Poland is a network of settlements of feudal origin, which, although endowed with urban spatial features, are not considered urban in a formal sense. Having lost their urban status in the past, settlements of this type are defined as 'degraded towns'. These settlements are of different sizes (no more than 10.000 inhabitants), various morphological layouts and subject to varying economic bases. Their common denominator, however, is lack of urban status in contemporary times.

An interesting sub-group of 'degraded towns' are settlements that have coexisted in the past within the spatial structures of urban conglomerations, such as agglomerations, conurbations as well as twin cities. This subgroup is at the fore of this presentation. Degraded towns as an extant part of the contemporary rural landscape are typically characterized by two specific features. Firstly, they are an indicator of disturbance within the equilibrium of geographical space when considered from the point of view of developmental dynamics. Secondly, a characteristic of degraded towns is also the instability of the genetic factors that contributed to their very emergence. In the case of the here presented degraded urban agglomerations, the impact of both forces drivers is markedly enhanced, resulting in complete dissipation of the previously agglomerated forms of settlement. This particular phenomenon culminates in perceivable ruralization, visible, for instance, in the disappearance of the typical urban fabric.

In that light, the first objective of this presentation is to indicate the role of this type of settlements within the network of other degraded towns in Poland; an approach, that could be regarded as primarily quantitative. In order to also bring forth qualitative depth, the second objective is to present some selected cases of urban complexes from around Poland that represent different types of agglomerated forms of settlements (monocentric agglomerations, conurbations, twin cities).

Transcending the rural-urban meme: Hammarkullen – a landscape caught in-between

Mirek Dymitrow, University of Gothenburg, Sweden René Brauer, Aalto University, Finland Gun Holmertz, Caritas Sweden – Branch Gothenburg, Sweden Biljana Apostolovska-Toševska, Ss. Cyril and Methodius University, Republic of Macedonia Fredrik Holmberg, City of Gothenburg, Sweden Lars Johansson, Fortum Distribution AB – Branch Karlstad, Sweden

People's different relations towards their environment are always the result of how they perceive it and how different spatialities are ascribed symbolic meaning. Taking into account these relations when formulating policies aimed at solving various problems could offer valuable knowledge for more sustainable planning and management. In certain areas, however, achieving this goal might prove extra problematic due to the preconceived vision of how problems associated with certain spatialities ought to be handled.

Hammarkullen, a suburb of Gothenburg, is an extreme example of this. For decades facing socio-economic and structural problems, the struggles of Hammarkullen could be described as a "wicked problem". Many programs have been undertaken to address it, the latest of which is one of Sweden's largest EU-projects within urban development. In light of the considerable criticism it has received, we evaluated its inadequacy to solve the identified problems through three case studies.

We conclude that a major contributing factor is the urban bias impregnating the design of urban development projects. It happens because the concept of "urbanity" is not onedimensional (there are at least 40 attributes defining it); moreover it is juxtaposed "rurality" as its conceptual counterpart. Since any of the constitutive attributes is neither fully "rural" nor "urban", different spatialities assume manifold overlapping combinations. Although Hammarkullen has an urban morphology, many of its attributes fall within the conceptual range of "rurality", and should be addressed accordingly. However, since urbanity is most often viewed as morphology, the "urban shell" of Hammarkullen inadvertently prompts "urban" development projects. In that light, we resort to a landscape approach as an alternative conceptual tool to circumvent the rural-urban impasse in problem-solving. As a relational, non-essentialist technique, a landscape approach has the potential to capture the individual needs of each spatiality, including those that are not necessarily aligned with a conceptual rural-urban axis.

D4 The forces behind landscape change (4/4)

Chairs: Henrik Svensson and Magnus Bohman Location: Radiovågen

Environmental hazards as a driver of urban abandonment in Poland

Iwona Kantor-Pietraga, University of Silesia, Poland Mirek Dymitrow, University of Gothenburg, Sweden Robert Szmytkie, University of Wrocław, Poland René Brauer, Aalto University, Finland Jolanta Pełka-Gościniak, Tomasz Spórna and Robert Krzysztofik, University of Silesia, Poland

The modern society is often perceived robust enough to withhold the calamities of adverse natural forces, while the phenomenon of complete settlement abandonment might seem as a thing of the past. However, due to an increased rate of environmental change, the issue of human vulnerability becomes all the more pertinent. In this presentation, we focus on the emergence of rural landscapes as a result of urban abandonment due to environmental hazards, here seen as an element in the functioning of the concept of environmental drivers. The underlying assumption is that a characteristic of environmental hazards is their spatial and temporal constancy of impact, whereby processes and phenomena having taken place in the past have their analogies in the present. In order to generate considerations for future research and policy development, there is a need to pay greater attention to the dangerous relationship between humans and the natural environment, not least by drawing lessons from the past. The presentation clarifies the dynamic interactions of drivers and their progression through various stages of urban abandonment with both an analysis of some general trends and an in-depth examination of three selected case studies from Poland. It has two objectives. The first one is to identify the historical role of environmental drivers in the process of urban abandonment, while the second one is to contribute to the typology of environmentally related processes of urban abandonment in order to better identify future calamities. In the first respect, the findings reveal that the relation between environmental hazards and urban abandonment is pertinent in regions with specific geographic conditions and pertains only to certain categories of urban settlements. In the second respect, by drawing on these findings, we propose some alterations and amendments to McLeman's comprehensive model of settlement abandonment in the context of global environmental change.

The heathland and technology diffusion in 18th century Western Sweden

Christer Ahlberger, University of Gothenburg, Sweden

Although the heath was subjected to massive criticism, led by Linnaeus during the 18th century, the growth of this ecotype was huge. What were the reasons for that? How should we explain the inconsistency of the moor, with its low yield, being expanded during the era of rationalism? Why did the peasants not pay attention to the ceaseless proclamations about the heath's substandard properties?

The researchers mainly follow the line of argument that the peasants traditionalism and ignorance meant that they continued to expand the moor instead of converting the land to productive agriculture or forestry. The expansion of the heath is seen as a consequence of population growth and depletion of the soil. In the beginning of the 19th century this led to an overexploitation of the earth meaning it was longer able to feed the population; the result being mass poverty. This presentation is driven by the notion that the peasant's expansion of the heath was not only rational but also forward-looking. Rational due to the yield of mainly wool, and due to the high monetary value of heath; proactive because the wool formed the basis for both a major capitalist textile production as well as an intensive technology diffusion.

Although research on early textile technology is minimal, there are results that clearly show that major inventions such as the lying loom and the spinning wheel essentially did not exist in the households of ordinary peasants before the beginning of the 18th century. There is also clear evidence that the cottage industry flourished in the early years of the century, and that most families in Western Sweden invested in a loom and spinning wheel. This expansion was a due to an increase in demand for and production of homespun material. The prerequisites for this were access to cheap wool. As the price of wool became high, there was a strong domestic market for wool which rationalised the expansion of the heathland. In turn this created a growing proto- industrialisation and created the conditions for "industrialisation proper" which we find later in the 19th century.

Landscape, land prices and enclosures

Lars Nyström, University of Gothenburg, Sweden

Enclosures are generally seen a central driving force of the agrarian revolution. In Sweden the Enskifte (1804-1827) and Laga skifte (1827–) reforms signalled the end of open fields and the privatisation of land. Even though the consequences are considered to have been extensive, few empirical attempts have been made to establish the relationship between these reforms and other aspects of agrarian change. This presentation focuses on the plains of Skånings County in the Skaraborg province in western Sweden. The process of creating enclosures in this region stretched over almost 50 years from 1808 until the 1850s. As a result of this it has been possible to examine and compare technology, production and social developments on enclosed and unenclosed land separately.

Following this methodological approach, special attention has been paid to land prices as an analytical tool. An act of enclosure meant the destruction of old agrarian capital as much as it presented an opportunity to accumulate new resources. If enclosures were seen as an inevitable or superior option, then the old capital must quickly have been regarded as worthless. Combined with data on production and technology, the prices paid for enclosed and unenclosed land can therefore be used to both study productivity within the two regimes and as an indicator of the farmers' interpretation of the process.

From a landscape perspective, the effects of reform were far-reaching in the area. Large hamlets (up to 100 farms) with enormous open fields gave way to single farmsteads dispersed over the plain. Production was multiplied during the period. Nevertheless, up until the 1840s resistance towards enclosures amongst farmers was fierce – sometimes even violent. As its effects could easily have been studied in neighbouring hamlets, it might not just have been ignorance behind this opposition. From this perspective one of the objectives of the study is to reconstruct the contemporary understanding of the process and the different possible outcomes of the creation of enclosures.

The struggle over the outfields in 18th century Sweden?

Erik Hallberg, University of Gothenburg, Sweden

More than two and a half centuries have passed since the first enclosure reform in Sweden, however, we still know relatively little about its momentum and impact on local communities. This is mainly for two reasons:

Firstly, the outfield commons – its management and usefulness – is rather neglected in Swedish historical research. Focus has traditionally been on fields. According to this view, the meadow and outfields derive their significance primarily by virtue of their contribution to fields. Thus, outfields are considered a periphery in support of the central focus (the fields).

Secondly, research on enclosures has focused almost entirely on field enclosures and not of outfields. Enclosures are thought to have merely evolved after a supposed increasing pressure on the outfield commons made itself felt along with the growing need for more clearly defined property rights which emerged among the peasantry. Nevertheless, this process has not been substantially studied.

Evidence presented in this paper, however, challenges the established views. Com-

mons were managed by villages to prevent individual overuse and preserve a diversity of resources, all of which were of central importance. The state, on the other hand, was mainly interested in one resource; timber. In fact, the protection of timber was the stated motive behind the reform of enclosures in the 1750s. Furthermore, since wool of fine quality was requested in the emerging textile industry, the state encouraged the breeding of fine woolly sheep through grants and other measures beginning in the late 1730s. Such sheep farming mainly spread among larger landowners; in order to separate fine woolly sheep from the traditional rough woolly breed, fenced grazing areas were necessary.

In this perspective, there might very well have been a growing pressure on the outfields in the 18th century. However, it seems to have been driven by politics, and not by the peasantry. **D5**

Unraveling the logics of renewable energy landscapes (1/2)

Chairs: Kira Gee, Marina Frolova, Karin Hammarlund and Viviana Ferrario Location: Mikrovågen

Unraveling the spatial logics of wind-farm planning in Scotland from a landscape-services perspective.

Jose Muñoz-Rojas Morenes, James Hutton Institute, United Kingdom Marc Gonzalez-Puente, Universitat Autonoma de Barcelona, Spain Felipe Cortines-Garcia, Institute for Alpine Environment, EURAC Research, Bolzano, Italy Ester Lopez-Castillo, Universitat Autonoma de Barcelona, Spain

Scotland is undergoing a rapid transition towards a low-carbon economy. Such transition is sustained by an ambitious political agenda that aims to significantly expand renewable energies, with actions proposed over the production and consumption components of the renewable energy system. A significant part of these efforts are directed towards the expansion of wind-farms. Underpinning these efforts a sophisticated planning framework is being constructed, with many public and private actors, networks and institutions involved at a wide range of institutional levels. Accordingly, a number of equally ambitious targets are being formulated for the diverse components of Scotland's landscapes (e.g. forestry, infrastructures, biodiversity, crop production). To reach these targets innovative strategic planning instruments have been approved. These strategic instruments intend to act as the glue that will bind together the mosaic of actors and institutions whose mutual interactions at the local and regional scales ultimately drive landscape change. It is through this planning mosaic that conflicts between targets for wind-farm expansion and for landscape sustainability need to be resolved. In our view two main barriers may impede the current planning system from resolving these conflicts; the lack of spatial explicitness that characterizes the planning instruments above the local level, and the absence of a theoretical model that jointly addresses the production and consumption components of renewable energy landscapes. To help tackle these barriers we applied a Landscape Services analytical framework that is spatially expressed through the mapping of potential conflicts and synergies within the existing planning regime. We will present the results obtained in the application of such analytical framework over NE Scotland and the Central Scotland Green Network. We will then discuss the potentialities and limitations of such analytical framework to help unravel the complex landscapes of wind-farm expansion in the Scottish and wider European contexts.

Landscape scenarios for approaching energy: The cases of four European mountain regions

Serge Briffaud and Rémi Bercovitz, Ecole nationale supérieure d'architecture et de paysage de Bordeaux, France Marina Frolova, University of Granada, Spain

The paper presents some of the results of research conducted in four European mountain regions (Sierra Nevada, the Central Pyrenees and the Alps - the upper valley of the River Piave and Valais -) on energy/landscape relations, addressed both from a historical and a prospective point of view. Energy is considered here as the "resource of the resource", exploitation of which allows us to activate other resources, or brings about changes in the forms of its own exploitation. The exploitation of renewable energy resources, in their various datable forms also appears as one of the greatest driving forces behind the transformation and dynamics of landscapes. This paper will also show how energy readings of landscape based on the reconstitution of landscape scenarios of energy can be built upon this base. We focus on interactions that emerged between different forms of energy exploitation and other forms of exploiting the resources of mountain areas throughout the last century (in particular agriculture, forestry and tourism). We also consider the direct and indirect effects of the "houille blanche" (literally white coal - water as an energy resource) energy revolution on mountain landscapes in the first half of the 20th century. This allows us to put into perspective current trends towards harnessing new, diverse renewable energy resources, which are today causing effects that cannot yet be properly measured. These landscape scenarios provide local stakeholders and residents with a very concrete image of the territorial implications of decisions taken in renewable energy development and become the principal basis for dialogue with them (« landscape mediation »). By integrating the territorial and social effects of energy development, this historical analysis of landscape and energy representations becomes an instrument that enables us to articulate energy projects with local territory projects.

Hydropower exploitation in the Piave river basin (Italian Eastern Alps): A critical reading through landscape

Benedetta Castiglioni, University of Padua, Italy Viviana Ferrario, University IUAV, Venice, Italy

Renewable energies have been one of the main driving forces of European landscape change in the last ten years. Despite its acknowledged contribution to sustainable development, "renewable" is not ipso facto "sustainable": on the contrary renewable energies can

have negative impacts and create both environmental and social conflicts. Landscape is often at the heart of these conflicts, both as an asset to protect and as a tool for use in debate. This paper investigates the relationships between energy production and the territory, using landscape as a tool for a critical review of past and current hydropower exploitation in the Piave river basin (Italian Eastern Alps). Here hydropower potential was widely exploited during the 20th century with the construction of one of the largest hydropower systems in Italy. Nowadays a new wave of small-scale hydropower development is taking place, with a locally high degree of conflicts, that call into question its social, cultural, ecological and even economical sustainability. As in many other parts of the Alps, in the Piave river basin renewable energy seems not to be capable to build new sustainable landscapes yet.

In our work we approach landscape as a "prism that reflects the complexity of the concept of sustainability" and acts as an "interface between sustainability principles and wishes of local development" (Guisepelli et al., 2013). A critical reading of hydropower development through landscape requires on one side to go further the visible aspects of landscape and to integrate the different issues involved in energy development; on the other side it allows to recognize the different values and meanings expressed by the different stakeholders and to make implicit territorial projects emerge. Our conclusion is that an interpretation of energy "through landscape" is not only possible, but it also enables us to unravel the logics of renewable energy landscapes and provides useful insights for a more aware, broader based, landscape-sensitive development of sustainable renewable energies.

Contested agroenergy landscapes and the reasons behind: the case of biogas

Viviana Ferrario, University IUAV, Venice, Italy

In recent years European and national policies have given strong support to renewable energies. The Common Agricultural Policy in particular, has been pushing farmers to produce renewable energy, both as a contribution to sustainable development and as a way to achieve better economic results. Energy production from biomass, biogas and biofuel cultivated by farmers – agroenergy – is beginning to produce large scale landscape changes. Despite their apparent contribution to sustainability, these new landscapes can be – and often are – contested.

Biogas in particular is one the most contested agroenergy, that arose several strong protest in the very last years, both globally and locally. Far from being considered simply as an expression of a selfish Nimby attitude, local conflicts question both local transformation decisions and the very principle of producing energy by biogas.

As we will see, the unacceptability of biogas seems to be influenced not so much by its visual impact, but – according to Selman 2010 – by the "narrative" behind it. Nevertheless this narrative is more than just rhetoric. On the contrary it identifies a real problem: the

evident difficulties with policy coordination shown by the public administration, together with the indifference towards territorialisation and landscape transformation, which generate critical territorial effects, perceived as unfair.

These arguments must be taken into account if we intend to design a fairer, more democratic renewable energy landscape.

Offshore wind farming and the logics of the seascape: A comparison of Germany and Spain

Kira Gee, University of Liverpool, United Kingdom Marina Frolova, University of Granada, Spain Andreas Kannen and Christian Fischer, HZG, Germany

The advent of offshore wind farming (OWF) and the associated need for sea space has triggered a comprehensive debate on how to plan for the sustainable development of the sea. Territorial waters and the exclusive economic zone are subject to multiple uses already, and international and national sectoral policy targets and economic development objectives are likely to increase competition between key uses such as energy, transport, fishing and nature conservation. Different views of how the sea should be used and what should be given priority to have led to different approaches for resolving conflicts. In this context the practices and values associated with seascape play a role that has yet to be thoroughly analyzed.

Using the two local case studies from Germany and Spain we explore place-based perspectives of the sea and their links to local identity and seascape values. In each case, we show the specific links between land and sea and the constituents of the specific "marine identity" that exists in both case study areas. We then describe how offshore wind farming may change this relationship, exploring this in relation to:

- Changing functions of sea space
- Shift in social and cultural values and benefits/purposes ascribed to the sea

We close with recommendations for "positive planning".

Poster session Tuesday 9 September 15.00 – 15.45

Grand Hall of the Conference Centre Wallenberg, Gothenburg

Reindeer hunting systems in Southern Norway - Sámi or Norse?

Hilde Rigmor Amundsen and Kristin Os, The Norwegian Institute for Cultural Heritage Research (NIKU), Norway

This study investigates the three known funnel shaped reindeer trapping systems in Hedmark County, south eastern Norway. The systems are situated between 1000 - 1500 meters above sea level, all above the tree limit. The landscape is characterized by mountain plateaus and high peaks. Thus, geographically, the region includes the southern part of the historic Sámi settlement areas. The use of these systems is usually dated within the Iron Age and the 19th Century. Reindeer hunting served as economic base, as is apparent from the use of the time and effort to build and maintain the trapping system, the hunt itself, the processing and finally the distribution. The funnel shaped trapping systems are converging guiding fences, which end in a closed area where it is difficult for the reindeers to escape. These enclosures are either natural, for example a cliff, or a closed fenced area or a combination. The extent of the guiding fences varies depending on the surroundings. These trapping systems are made for mass hunting, and it is possible to catch big herds of wild reindeers in a limited time span. While those constructions are considered to be of Sámi origin in the northern part of Norway, this is more debatable in the southern part. The reason for diversity in opinion with regard to the origin of these traps could be the complex cultural history of the mountain areas in southern Norway, and lack of recognition of the Sámi presence in prehistory. Cultural differences between the Sámi and Norse are more apparent in the northern Norway. However, the similarities in these specific trapping systems, and landscape in the different regions make it pertinent to investigate the origin of these traps in southern Norway.

Rurality index: New methodological approach to regional development in OTALEX C

Teresa Batista, CIMAC; University of Évora, Portugal Eva Flores, Junta da Extremadura, Spain Cristina Carriço, CIMAC, Portugal David Lagar, Diputación de Cáceres, Spain Jose Cabezas and Luis Fernandez, Universty of Badajoz, Spain Paula Mendes and Carlos Pinto Gomes, University of Évora, Portugal

Rurality index is one of the most used indicators to territorial characterization in the world. The most common formulation of this index is based in the total population of a region (EUROSTAT). However the application to local and regional development doesn't fits the needs of detail information. So as result of an extensive work held by a group of experts of the crossborder regions of Alentejo and Centro (Portugal) and Extremadura (Spain), that have been for more than 16 years of cooperation in Territory and GIS applications. From this cooperation it was built the first crossborder Spatial Data Infrastructure (SDI) (www.ideotalex.eu), and the SIO (Indicator system of OTALEX C). One of the indicators developed to fits the needs of the regions was the rurality index. This index is formulated including not only the total population, but also, population density, level of education, population by activity sectors, level of health, and services. As results it's presented the comparative analysis of the rurality index maps derived from the different methodologies.

Conflicting future in Torslanda – A case study on different future scenarios for a peri-urban landscape

René Brauer, Aalto University, Finland Gunilla Almered Olsson, University of Gothenburg, Sweden

In modern societies, the aim of policy is to guide development into a benevolent direction for the members of that society. As such, policy aims are often expressed in general policy goals that draw upon research, political conventions, public opinion, etc. outlining the desired direction. These can involve issues of sustainable development, increased quality of life, protection of natural areas or minimizing climate change, too only mention a few. However, as these draw on a wide range of different sources, these aims of are of very general nature. This generality opens up for multiple interpretations when implementing them into a specific local context.

Torslanda, a peri-urban region on the outskirts of Gothenburg, is no exception to this. The effects of urban sprawl, globalization and increased emphasis on recreation create conflicts of land use in the area. These changes transform the character of the traditional Swedish west coast landscape, among others, by turning agriculture land into residential, recreation or industrial areas.

Previous research within the area via the EU funded projects SECOA and RETHINK has shown different interests expressed at different legislative levels for the future development of the area. The present project aims to investigate these differences systematically by analyzing the policy guiding documents at different legislative levels (EU, national, regional and local level). The identification of these scenarios is based upon combination of recent development trends in the area, recent socio-economic statistic and aerial photography of the last 20 years. The combination of these different information sources, regarding the local context, is then used as a starting point for a qualitative description of the impacts of these identified scenarios. These examples are intended to provide policy makers relatable cases to aid their decisions when implementing general policy aims for a future sustainable society.

Application of graphic thinking to teaching landscape. Case of the visual impact of wind farms

Ignacio Cañas Guerrero, Ana Álvarez Pérez and Salvador Villacreces Arnedo, Technical University of Madrid, Spain

This communication aims to facilitate the learning and use of the Cañas quantitative method for landscape assessment.

The Cañas method is performed in the field by manually filling out forms in which the various attributes and variables appear. Thus, it is possible to classify items involved in landscape assessment in an exclusive, exhaustive and complete manner. The score of a given landscape results from adding the value given to each of its variables, and it can be classified into: degraded, poor, average, good, remarkable, very good or excellent.

Through this communication, the application of this method is proposed for the evaluation of wind farm visual impact on the landscape. For this, graphic thinking is used, through vignettes representing different types of attributes described in the method, such as physical, aesthetic and psychological. Through images and textual descriptions of the different attribute variables, a quick guide to images giving an overview of all the variables that influence the landscape is obtained.

Monitoring... when monitoring fails: The case of quality of life within the rural development policy

Mirek Dymitrow, University of Gothenburg, Sweden René Brauer, Aalto University, Finland

Monitoring plays a vital role within democratic societies. Monitoring of policies, in particular, is a continuous process spanning over three phases – pre-inception, in-conduct and post-completion – with the overall aim to improve performance, evaluate efficacy and inform upcoming policies. This progression forms a monitoring cycle that underlies the entire political process, purportedly designed to communicate how landscapes are understood and changed accordingly.

EU's Rural Development policy (RDP), for instance, has been subject to several inquiries, controls and audits. The 2007–2013 rendition is particularly interesting due its use of the concept of quality of life (QOL), introduced in an attempt to broaden the previously agriculture-dominated view of the rural. However, traditional audits of RDP unanimously concur that the implementation of QOL was impossible to monitor due to the concept's vagueness, insufficient data and lack of specified evaluation criteria.

In light of these unsatisfying non-results, we resorted to a different approach of moni-

toring policy – a quantitative text analysis method called topic modeling. By focusing on the pre-inception phase of the political process underlying RDP, it became apparent why its post-completion monitoring had failed. Although some attempts to address the conceptual rural reshuffle have been made, the major focus is still on agriculture, largely to the detriment of QOL. In order to approach this thematic imbalance, we present three different drivers that could serve as possible models of explanation. The first one builds on an outdated conceptual understanding of 'the rural'. The second questions the prevailing capitalist prerogative that underpins contemporary politics. The third eschews social constructionist explanations in favor of a material-based perspective from actor-network theory.

Although only QOL was investigated, we argue that these scenarios also largely apply to problems of implementation and subsequent monitoring of thematically related goals, such as promoting sustainable development, protection of biodiversity or climate change prevention.

Reflections of settlement changes in Vidzeme Uplands (Latvia) landscape after year 2000

Ineta Grīne, Elīna Apsīte-Beriņa, Zaiga Krišjāne and Oļģerts Nikodemus, University of Latvia, Latvia

The aim of the research is to characterize the reflections of population changes since year 2000 in the Taurene parish observed in the landscape. The study is based on the secondary statistical and cartographical material analysis as well as field research materials like population survey held in summer of year 2013. Data are further are compared to the data from previous studies in the same areas in period from 1998 to 2005 (Nikodemus O., Bell S., Grine I., Liepinš I., 2005; Grine I., 2009; etc.).

After the year 2000 rural and urban population in Latvia continues to show trends of decrease with the only exception of suburban areas around the capital Riga. Population change can also be observed in the settlement. These rural areas have experienced inflow of new population segment, which use the farmsteads as second homes – during summers, holidays and/or weekends.

A major role in the choice of settlements is played not only by the location (proximity to the city), accessibility to the public transport and road networks, services, but also family ties, employment and estate. No less important is the quality of the environment and landscape attractiveness

The study area is Taurene parish (in Vecpiebalga county) located in Vidzeme Uplands. According to the available statistical data, population in Taurene parish in the last 14 years has decreased by more than 20%. Significant changes in several population groups – decrease of youngsters in rural areas and increase of persons at retirement age. There are several settlements, which are inhabited only by couple of persons at retirement age. Taurene parish has relatively high number of seasonally used farmsteads. There are also a number of empty, uninhabited farmsteads. Decrease of population does not have a direct impact on the rural landscape. This can be explained by development of larger-scale farms.

The "Dehesa" of "Sierra Morena Jiennense" between the traditional and the new land use.

Antonia Paniza Cabrera, University of Jaén, Spain

This paper tries to differentiate the evolution of the surface dedicated to the dehesa in Sierra Morena from middle of 20th century up to our modern day, in order to be able to identify the spaces that support the traditional land use and the new use related with the new activities that are developing in this area. These new uses suppose an important transformation in the landscape of the dehesa. In some spaces the substitution of the dehesa is carrying out for other more profitable agrarian uses, specially, the olive grove. In the areas where remain the structure of dehesa, the change of the livestock for the hunting activity supposes an internal modification in the particular configuration of the dehesa with an increase of the scrublands. Another use that is developing of important form in these landscapes is related to the tourist activity as complement to the cattle use and that supposes the preservation of the traditional landscape of the dehesa.

The management and significance of traditional rural biotopes from the perspective of sustainable development

Kaisa Raatikainen, Panu Halme and Mikko Mönkkönen, University of Jyväskylä, Finland Elizabeth S. Barron, University of Wisconsin, United States

Traditional rural biotopes are diverse, species-rich habitats created by practices typical of old-fashioned agriculture, e.g. mowing, extensive grazing, and pollarding. These habitats, such as meadows and wood pastures, usually need constant management to persist. In addition to their biological importance, they are supported by cultural and historical values, and the traditional ecological knowledge of the ageing landowners is important to include in planning the management of the sites. Compared to 100 years ago, less than one percent of the cover of traditional rural biotopes remains in Finland. This, and poorly conducted management of the sites, have induced endangerment of hundreds of species and decline of many previously abundant species. The national assessments of Finnish red-listed species and threatened habitats show that besides holding the greatest proportion of endangered habitat types, traditional rural biotopes also provide the primary habitat for 24 % of threatened species. The Finnish government has been funding the management of traditional rural biotopes since Finland joined the European Union in 1995. EU-based subsidies for environmental protection in agriculture have guaranteed the subsistence of many traditional rural biotope sites, but the top-down controlled system has not improved the quality of management. The subsidies have also been criticized for being very bureau-cratic and insufficient to cover the costs of management. The aim of this research project is to find out which are the most critical factors affecting the quality of management of traditional rural biotopes in Finland, and in what ways the management effort could be optimized in relation to the sustainable conservation status of the site network. The research consists of ecological, social, and economic studies, and an integrative synthesis. In this poster a general outline of the project is presented together with short descriptions of the individual subprojects.

Cultural Ecosystem Services in the urban setting of Berlin: Results from a quantitative valuation

Maraja Riechers, Teja Tscharntke and Jan Barkmann, Georg-August-University Göttingen, Germany

Cultural ecosystem services (CES) are a highly important constituent of the Ecosystem Service framework. The precise definition of CES as well as appropriate ways to describe and - quantitatively - valuate them, are under debate, however. Furthermore, urban settings have been rather neglected in CES research so far.

To tackle this, we valuate cultural ecosystem services quantitatively on an urban- rural gradient in Berlin. For this, face-to-face interviews were carried out in autumn 2013 (n= 249). A second wave of the quantitative survey is planned for spring 2014 (planned n= 250).

Results from the qualitative interviews show that the 10 CES categories used, e.g., in the Millennium Ecosystem Assessment, are a useful guide to structure CES analyses. The preliminary results for the autumn round, quantitative date analysis show that aesthetical values, values of knowledge systems and recreation turn out as particularly important categories. Overall preferences for cultural ecosystem services are significantly correlated with the rural- urban gradient. For example are aesthetical, educational and inspirational value positively correlated with the gradient, whereas social relation, sense of place and recreation are negatively correlated and their value seem to decrease the more rural it gets. Also the attitude towards nature protection is significantly correlated with the urban- rural gradient. Yet, final results will be shown in September.

The quantification of cultural ecosystem services is part of a study which addresses several conceptual issues and approaches the valuation of cultural ecosystem services from a "methodical pluralist" perspective (qualitative interviews [n=43], quantitative survey on attitudes and stated preferences).

Results are highly informative for landscape and city planners as well as for political decision makers. It gives inside into the various perceptions related to urban, peri-urban and rural landscapes in the specific regional context of Berlin (as city and state).

Post-socialist landscape changes related to decollectivisation in Eastern-Europe: A Romanian case study

Merit Snoeijer, University of Groningen; Wageningen University, The Netherlands

Landscape changes are particularly interesting in areas where society's influence has caused rapid changes, for example in fast developing areas such as Eastern Europe. Concern about rapid landscape changes, and the fear that landscape values might get lost, is becoming a popular theme in international scientific publications and conferences. The changes all have a growing impact on the landscape, such as adding new layers to the existing landscapes, and new landscapes replacing the traditional ones. This causes a risk of loosing cultural heritage.

One of the more vulnerable regions to landscape change is Eastern Europe, where rapid changes are currently influencing the landscape. After the fall of communism, the transition from a communist economy to a free market-oriented economy during the early 1990s led to the drastic changes. Both land use and landscape were highly affected by transformations such as decollectivisation. This is a process where all land and agricultural production is transferred from state-owned large-scale collective- and state-farms, to privately owned farms. This process causes changes such as land fragmentation and land degradation.

Romania is particularly interesting for study because of its large agricultural sector and its richness in traditional cultural rural landscapes. This study focuses on the effect of decollectivisation on landscape change by identifying, characterizing and analyzing landscape change in Romania through time. As today's landscapes are the result of many layers of past natural processes and human interventions, this temporal perspective is needed. Such a landscape-change history provides valuable information for managing cultural landscapes. Because these processes of landscape change are hard to trace, this study relies on a combination of different sources and research methods. Maps, land use data, aerial photographs, fieldwork data, statistic data and data from interviews supplement the already existing literature in order to present a comprehensive analysis.

Crowberry heaths on the southern coast of the Gulf of Finland

Laimdota Truus, Liis Multer, Urve Ratas, Reimo Rivis and Are Kont, Tallinn University, Estonia

Decalcified fixed dunes with Empetrum nigrum (2140) are an important habitat type of Natura 2000 and are registered in coastal areas of many European countries from Scotland to Sweden and Finland. This habitat is also found on small islands of N Estonia in the Gulf of Finland. Empetrum nigrum L. is the dominant species accompanied with an arctic species Empetrum hermaphroditum L.

The formation of the heaths on the islands of N Estonia has been favoured by harsher climatic conditions (lower temperature, stronger winds, longer duration of ice cover in the sea) compared to the continent. Low beach ridges made up of calcium-poor sand occur on the islands. Primitive Arenosols and Haplic Podzols poor in nitrogen, potassium and phosphorus predominate in the soil cover. Crowberries grow in patches alternately with lichens. Their existence in different stages of development is closely related to human activity. Sheep grazing is a critical activity favouring the distribution and conservation of the habitats. Cessation of grazing leads to overgrowth.

At the beginning of the 20th century, the islands were populated. For instance, nearly 20 households were on Rammu Island (102.6 ha) with pastures in higher and dryer sites. Continuous plant cover was missing and moving sand fields were typical due to intensive grazing. Land use stopped in the 1950s and heath vegetation started to develop. Drastic changes started in the 1980s due to plantation of pine stands. Accumulation of litter under the trees in changed light and moisture conditions led to rapid reduction in the growth area of crowberries and the heaths turned to forests. The share of crowberry heaths decreased by 12% in ten years.

Rare and valuable habitats of crowberry heaths in Estonia can survive if their successional development is monitored and plantation of pines is restricted.

Visual impact and improvement proposals for wind farms: A case study of the "La Plata" wind farm

Salvador Villacreces Arnedo, Ignacio Cañas Guerrero and Ana Álvarez Pérez, Technical University of Madrid, Spain

In the last few decades, renewable energy has come to play an essential role in the global energy supply due to increased energy demand and increasing environmental problems. However, renewable energy sources are not without environmental problems, and factors such as land use and visual impact make them less socially acceptable. In the case of wind power turbines layout is determined by the intermittency in wind direction and intensity, complicating visual impact reduction of wind farms and therefore their social acceptance. Due to the complexity of the scenarios in which these facilities are located there is a great diversity of methodologies for integration into the landscape, but there is no general methodology to take into account that people should play an important role in its development. The purpose of this study was to determine and evaluate the visual impact that the "La Plata" wind farm, located in the town of Villarrubia de Santiago (Toledo). For this we have carried out the implementation of three methods to check the visual impact of the wind farm, based on the qualitative assessment of population scenarios, one on the use of Geographic Information Systems (GIS) and the latter through questionnaires and checking equality in the results of the three test methods. Finally a number of measures are proposed to reduce the visual impact of the wind farm.

Landscape as fora of negotiation - approaches to a participatory process

Malin Weijmer, University of Gothenburg, Sweden

Landscape has become an articulated concept in the forefront of the European Landscape Convention (ELC). As a term it reaches on to different interpretations and uses. In the ELC spirit landscape is explicit "as perceived by people". But what landscape is it that people perceive? My aim for this presentation is to discuss what different kinds of interpretations of landscape that becomes articulated in a participatory process, using as an example the pilot project of integrating a participatory process in the landscape character assessment connected to the rail road of mount Kinnekulle in Sweden. This is an ongoing case study in my PhD-project with the overall aim to study how a participatory approach can be understood and developed in heritage management and planning. The case centers round an understanding of the rail road as a living heritage as well as an important daily infrastructure.

Attention is on the process of participation extended into the overall planning process, raising questions of distribution of agency and power. Anthony Giddens discussions on the duality of structure can be used to discuss how social agency is shaped but also shapes social actions and "structures" in the sense of patterns that becomes reproduced. Agency gives the ability to act but also set out the conditions from where one can act and with which authority. In the presentation focus will be on ideas of heritage and landscape that comes into practice when different stakeholders and actors meet and negotiate. What are the fora for negotiation and what happens to participatory process and landscape character assessment when it becomes translated into the regular infrastructure planning process? And what will be the dominating version on landscape?

Parallel Sessions E Tuesday 9 September 15.45 – 17.45

Conference Centre Wallenberg, Gothenburg

E1 Political landscapes: Materiality, power, and critique

Chairs: Ludger Gailing and Markus Leibenath Location: Wallenbergsalen

Governmentality, 'energy-conscious subjects' and landscape perception

Markus Leibenath, Leibniz Institute of Ecological Urban and Regional Development, Germany

There exist many approaches to the study of power. One of these is Foucault's analytics of power, which is closely linked to his notion of governmentality or governing at a distance. This contribution seeks to apply these concepts to an investigation of power structures in energy landscapes.

The paper begins with a brief and necessarily incomplete review of how power has previously been handled in landscape research. The governmentality perspective is introduced in greater detail as well as the related poststructuralist conceptualization of power. One essential aspect of governmentality is the discursive construction of subjectivities through the interplay of technologies of government and technologies of the self.

The German government has implemented a fundamental shift in energy policy away from nuclear power and fossil fuels towards renewable sources of energy. This entails discursive strategies to construct a class of subjectivities which can be labelled 'energy conscious subjects'. By that I mean individuals who use energy wisely and who welcome smart new technologies into their daily lives and/or participate in civic initiatives for the establishment of renewable energy schemes such as civic wind farms.

Against this background, the paper attempts to answer two research questions: First, which discursive strategies or 'technologies of government' are employed to construct these subjectivities? Second, how do individuals who have adopted such subjectivities by means of 'technologies of the self' perceive and assess energy landscapes, i.e. areas in which especially renewable energy technologies are visible? Findings are based on document analyses and selected interviews with persons who display traits of 'energy conscious subjects'.

Terrorscapes as heterotopias

Rob van der Laarse, University of Amsterdam; VU University Amsterdam, The Netherlands Jan Kolen, Leiden University; Delft University of Technology; Erasmus University Rotterdam, The Netherlands

This paper explores the concentration camps from the Second World War as terrorscapes and heterotopias. Some concentration camps originated as "logical" elements of the rural landscape, such as at Westerbork (the Netherlands), where Jewish refugees were enabled to build a temporary existence as rural community within the framework of the ongoing heathland and polder reclamation after the closure of the Dutch farmer colonies for refugee Palestine pioneers (1918-1940). Others were established as integral components of urban or industrial landscapes, such as Auschwitz, were the camps functioned as crucial chains in the rapidly growing industry of war. Yet, as explicit examples of terrorscapes, the concentration camps exhibited all political, moral and organized aspects of terror, being the systemized use of violence by organized groups against civilian targets to effect a change of political power by spatial and ethnic cleansing in occupied territories. Moreover, they were increasingly designed and used as spatial technologies for exercising terrorism in an active way, not only practically but also symbolically. Although firmly embedded in the safely ordered and dissected cultural landscape, the camps soon became to disturb the everyday order of normalized living space. As such they might be understood as "heterotopias", the geographical concept elaborated by Foucault for non-hegemonic spaces that cannot be classified easily in terms of here and there, public and private, self and other. From this perspective, the paper explores WWII concentration camps not so much as limited and clearly delineated sites of terror, but as extensive and diffuse spaces -as landscapes- that were characterized by liminality, ambiguity, transition and inversion, and by specific arrangements of material culture. The authors will suggest that this concept might also be related to the recent transformation of long 'forgotten' former 'foreign' camps into (trans)national memorial spaces and heritage sites. Examples are taken from Westerbork, Dachau, Auschwitz, Natzweiler and several other SS concentration camps.

Landscape, materiality and power: Assemblage thinking, political ecologies and Foucauldian dispositifs

Ludger Gailing, Sören Becker and Timothy Moss, Leibniz Institute for Regional Development and Structural Planning, Germany

The material turn in geography and social sciences has generated a growing corpus of literature entailing various theoretical understandings and empirical foci of how materiality is relevant and under scrutiny. There is a growing attention towards material issues and the co-production of material and social phenomena. Yet most often, different approaches towards the socio-material exist in parallel theoretical communities. Thus, the contribution seeks to relate three debates on socio-materiality and non-human agency from different academic disciplines and to spell out their contribution to an operationalization of socio-material contention and changes in landscape research. It links ANT inspired works of assemblage thinking (McFarlane 2011, Farías & Bender 2010), the neo-Marxist bodies of political ecology research (Heynen et al. 2006, Swyngedouw & Heynen 2003), and Foucauld-ian thoughts on discourses and dispositifs (Foucault 2000, Füller & Michel 2012). The paper will compare their understanding of socio-material ontologies as well as their conceptualization of power and will relate them to selected aspects of landscape research. The theoretical findings will be illustrated on the regional scale with the empirical example of the East German Prignitz landscape which is a major site of corporate on-shore wind power generation.

The village landscape function in process of building a society: Memories of three generation of Birem's displacement

Zeevik Greenberg, Tel-Hai College, Israel

This lecture presents the process of building meaning and memorial stories in three generation of displacement from Bire'm, a Christian, Maroon village in the north of Israel. The natives of Bire'm lived in their village for hundreds of years and had to leave it after the 1948 war. They were evacuated from their lands and houses.

The displacement was originally defined for a short time, the army and the government promised them they could come back after a few months. The governments still haven't fulfilled their promise until today. Some of the villagers left the country; some of them live in other places in Israel and part of them live in villages in the north.

The cultural geography discussion is between 'place' and 'space'. Place has borders, signals, significance and stories which give it meaning for their people. Space is the contrast to place. It doesn't have borders, signals and people can't see the significance, and can't find objects or symbols for their stories.

In all these years the Israel government has done a lot to change the area from a place to a space: the buildings were destroyed, the roads were dismantled, new paths were built and the area was pronounced a national park with an old synagogue in the center.

This lecture will present the narrative of memory of three generations of the Bire'm displacement. The findings show how the village landscape functions in the collective memory and stories of the three displaced generations. These stories show us the experience of building the place and the function of landscape in their memory which is expressed in their practice of rebuilding the place against the government process of changing it to a space.

"Dugnad" as a democratic landscape practice

Marte Lange Vik, Norwegian University of Science and Technology, Norway

The European Landscape Convention (ELC) calls for broad participation in management of all kinds of landscapes, and obliges signatory parties to establish procedures for the public participation. Altogether, the ambition is to create a "true 'landscape democracy" by bringing all kinds of professional actors as well as local actors throughout Europe on to the same stage. Nevertheless, the ELC has also been the target of some criticisms. Most elaborated, and important for this study, is the critique towards the democratic aspects in the Convention. Studies on public participation and landscape democracy have focused on challenges in implementing the convention, and on lack of coherence between the convention text and its explanatory report. More specifically, a number of studies have been made on challenges to and prerequisites for public participation. A recent adaption of Arnstein's "ladder of participation" has renamed the top level to self-mobilisation. Dugnad is wellestablished as a way of public mobilisation in Norway, and it is often related to democratic promises. This paper is based on field work done in two small communities in Norway and Denmark. Both communities are small, with relatively few permanent inhabitants, and they are geographically isolated or separated from other communities. Furthermore, they are both characterised by broad civil engagement through local organisations and associations. There are recent initiatives in both communities implying efforts and engagement in processes in order to regain or retain the power of their areas. In this work, I study varying forms of dugnad, aiming to explore how such local initiatives and voluntary efforts may be understood as landscape practices, and I ask what happens to landscape democracy in communities where the people have mobilised in matters related to use and change of landscape.

E2

Visioning for re-coupling social and ecological landscape components (2/2)

Chairs: Claudia Bieling, Tobias Plieninger and Thanasis Kizos Location: Lyktan

Participatory landscape visualisation for shared knowledge and implementation of the green and blue networks

Armelle Caron, AgroParisTech, UMR Metafort, France Claire Planchat, Vous Etes D'ici Agency; AgroParisTech, UMR Métafort, France Arnaud Larade, AgroParisTech, UMR Métafort, France Valerie Angeon, University of The Antilles and The Guiana; AgroParisTech, France

The aim of this communication is to present a participative method developed using five case studies in France and Guadeloupe. The national research project is dedicated to the analysis of the conditions and means of an effective implementation of the "Green and Blue Networks" (GBN) - the future French ecological network, recently introduced in the French Law within the framework of the "Grenelle de l'Environnement". It refers to ecological key concepts, such as biodiversity tanks and ecological corridors, in landscape ecology. Many research projects identified the links between cultural and ecological landscapes; and through the participation, the recognition of the dynamic interactions between social and ecological systems. However, the participative design of ecological networks and corridors, concepts that reflect a renewal of the biodiversity conservation policy, appear as a new challenge. Our method promotes stakeholders and inhabitants' involvement into the design and the management of the GBN for its local and efficient implementation into landscape and urban planning. We combine two landscape visualisation tools (block diagram, and photolanguage). The objective is to use the landscape as a medium to reveal socio-ecological systems, but also cultural and local values and meaning of GBN concepts. The comparison of the five case studies (two in the Natural Regional Park of Auvergne Volcanoes GBN projects, one community in Guadeloupe (Morne à l'Eau) and one county landscape and urban plan, one project of protected area) highlighted three main results. Landscape patterns and scenarios of values produced by the participants help to apprehend the changes and to explain socio-ecosystemic dynamics but also political and institutional processes of implementation of the GBN. To articulate different visualisation tools facilitates ecological networks identification at different spatial and institutional scales. This method facilitates crossover between scientific and lay knowledge, enhancing both ecological coherence and social acceptance of the GBN.

Discussion and preparation of concrete and joint output (synthesis paper etc.) with presenters and audience.

E3

Under urban mask: On rural landscapes with different logics (1/2)

Chairs: Jadwiga Biegańska, Mirek Dymitrow and Elżbieta Grzelak-Kostulska Location: Ljusvågen

The application of rural landscape discriminants in valorization and revitalization: Creating the new image of rural areas

Anna Bocheńska-Skałecka, Zbigniew Kuriata, Irena Niedźwiecka-Filipiak, Anna Podolska and Liliana Serafin, Wrocław University of Environmental and Life Sciences, Poland

Today we are witnessing uncontrolled degradation of rural landscape. The lack of any actions, being aimed at defining clear rules of conduct in order to preserve regional diversity and different from urban character of these areas, constitutes danger of further increase of spatial chaos. In order to find a proper way of shaping the rural landscape, its valorization should be done. Different areas and rural units should be designated and divided into those which are the most valuable and the ones with the potential of becoming valuable. The combination of valorization and natural considerations is significant to determine the scope of investment activities in these areas, which is associated with the proper development of rural areas and shaping their landscape.

Our area of research, significant for the implementation of project's main goals, is to formulate a concept of landscape perception, theories used for landscape research (particularly its changes). Landscape visual attractiveness, which is commonly used for utilitarian purposes, seems to be especially interesting for research. The development of techniques of applying the data about landscape and the preparation of models enabling the assessment of different projects connected with the natural environment contributed to forming landscape standards. However it seems that there is still no research that could use the existing methods and tools in specific environmental situations. It is necessary to verify them in reality.

The main objective of the project is valorization of cultural rural landscape in the chosen region, in terms of appropriate and harmonious rural areas development.

Changing landscapes of degraded towns in Silesia (SW Poland)

Robert Szmytkie, University of Wrocław, Poland

The main objective of the presentation is to determine the changes within the landscape of degraded towns in Silesia (SW Poland), which took place after their deprivation of urban status. It is assumed that formal-administrative degradation did not significantly affect the degree of the preserved urban landscape. The degraded towns included in this study are situated within the historical borders of Silesia, and differ regarding their genesis, former and current functions, as well as the time of their origin and of formal degradation. To determine the degree of urban landscape preservation in the sense of the settlements' morphology and physiognomy, this study uses graph methods as well as findings obtained through field research.

The "agri-ghetto": On dysfunctional landscapes and the rural-urban paradox

Jadwiga Biegańska and Elżbieta Grzelak-Kostulska, Nicolaus Copernicus University, Poland Mirek Dymitrow, University of Gothenburg, Sweden

1989 was a turning point within the socio-economic development in the former Eastern bloc, initiating a system transformation that affected both rural and urban areas. It also contributed to the crystallization of certain cultural landscapes, hitherto largely illegible due to the inhibition of spatial processes encountered during Communism. After a quartercentury of free market economy, the focus on social problems began to expand to the spatial realm as well. It became apparent that the progressive social polarization that followed was most prominent in environments striated by a special landscape type – "socjałki".

In Poland, the dysfunctional character of socjałki is noticeable in a wide array of dimensions: unemployment, poverty, social anomies and pathologies, claiming attitudes, substandard housing, and ghettoization. The main characteristic of socjałki, however, is their equal prevalence in both urban environments (dormitory suburbs) and in rural areas (state agricultural farms). Particularly in the context of the latter – of which socjałki are an integral part – they differ significantly from traditional rural landscapes of Poland. Nevertheless, being formally rural, they are subject to development programs labeled as "rural", despite the striking similarity to their urban counterparts, which, in turn, prompt "urban" developmental endeavors.

To illustrate this discrepancy, two similar Polish socjałki were investigated – one formally urban and one formally rural. By taking account of the residents' perceptions of their everyday lives, we allowed them to define their own problems in view of the rural-urban bias that frames and impregnates them. The main research problem revolves around the assumption that socjałki are distinct landscapes that are poorly explicated using the pervasive rural-urban axis as an analytical tool. In this respect, we highlight the consolidation of a new type of landscape that transcends formal dichotomies. We argue it could benefit from being studied and evaluated on the basis of commonalities other than the rural-urban stereotype.

Ferentari: Bucharest's Romani ghetto

Dominic Teodorescu, Uppsala University, Sweden

Romania is a country with a long socialist planning tradition that evoked in mass urbanisation, leaving a tremendous footprint on the current urban structure of virtually every Romanian city. The first years after the 1989 revolution caused, however, a clear break with this blueprint planning and state controlled housing system, and ushered in an era of, among other, predominant building freeze and decreasing maintenance funds. This new era had a disproportional impact on those who were dependent on government aid, among them many Roma. My research discusses the case of Ferentari, Bucharest's most feared neighbourhood and one of Romania's notorious Romani ghettos. The article I intend to write on this subject will be based on an ethnography from 2012 and a fieldwork that will take place in March this year. It endeavours to demonstrate the discrepancy between the aims of planning instruments and the actual state of Ferentari. The post 1989 cutbacks on planning and housing affected Ferentari disproportionally and as a consequence mainly the predominant Roma inhabited areas of South Ferentari have been terrorised by vandalism and crime. According to the residents, this is the reason why Sector 5 does not persevere in the much-needed urban renewal. The result is a stigmatised neighbourhood with a shutin community and an unpopular housing market. The ongoing ghettoisation can also be regarded as a clear break with Bucharest's urban fabric as many slums appear and most apartments are squatted and severely damaged. Within these poignant circumstances one can also find enclaves of detached houses with opaque fences. The aim of the conference presentation will be to demonstrate the officials' and residents' discourses on the planning and housing issues. Through this I will also reflect how main issues are rationalised and subsequently institutionalised in proposed planning schemes or make-shift adjustments from the residents.

The city as a resource: Urban agriculture in the "Lachanokipoi" district of Thessaloniki

Eleftheria Gavriilidou, Dionysia Dedousi, Eleni Oureilidou and Maria Ritou, Aristotle University of Thessaloniki, Greece

The case study concerns how Urban Agriculture can contribute to an urban development, opening a social, economic and ecological renewal of the city with innovative perspectives. The area of concern is "Lachanokipoi" district, located in the western part of Thessaloniki, a city in the northern Greece. The name derives from the 18th century, when the site was a cultivated land as part of the rural landscape close to the city (lachano=vegetables, kipos=garden). The industrialization transformed the area into the city's core of secondary sector of production, being in parallel node of transport network (railway, highway). Today, because of the economic recession, the productive activities have stopped, mutating this part into a brownfield, without identity, left to decay, in need of regeneration. The spreading tendencies of the city due to the immigration outline also the new framework.

The profile of the area is called back through the introduction of urban agriculture in the design process, establishing two perspectives: one bottom-up, another bottom-down. One part focuses on research and educational uses in the field of alternative agriculture and the practice of perma-culture and the other is given to autonomous cultivations oriented for three population groups: new permanent residents, temporal residents, residents/users in need of social rehabilitation. While the first part is organized as a public thematic part, the second part aims to restore the sense of community and products' exchange.

Finally, the study proposes new life – styles and social environments, envisioning a new way of living the urban life ("red" and "green" as "community" and "infrastructure") in a non-centralized economy. This hypothesis as a beginning provokes a new way of thinking and opens relevant dimensions for an urban post-growth-era in general, introducing the primary sector in order to satisfy the need of existence for the increasing population of the cities today.

E4

Energy production systems and rural landscape qualities

Chairs: Alexandra Kruse, Michael Roth and Csaba Centeri Location: Radiovågen

Conflicts between renewable energy systems and landscape quality: how appropriate are national assessments for a regional context?

Anna M. Hersperger, Rico Hergert and Felix Kienast, Swiss Federal Research Institute WSL, Switzerland

Implementation of renewable energy production systems often collides with current landscape services, resulting in conflicts. The landscape services approach, in which energy production services are considered a landscape service among others, is well suited to frame and model conflicts. Thanks to a wealth of spatial data many nationwide landscape service assessments are spatially explicit. For Switzerland, the potentials of renewable energy production systems (wind, solar, energy wood and small hydro power facilities) and other landscape services (aesthetics, recreation and tourism, cultural heritage, water cycle, and biodiversity) have been modeled, based on physical data and expert knowledge. An overlay of these maps led to 16 nationwide conflict maps. The purpose of the present contribution is to understand to what degree expert-driven national conflict assessments match with the regional perception of these conflicts. Methods of media content analysis are used to analyze articles on conflicts published in regional newspapers. Expert interviews are conducted to gain a thorough understanding of these conflicts. The degree of agreement between expert-based national and actor-based regional assessment is evaluated based on the following questions: can the documented conflict be explained with the results of the national conflict analysis? Does the severity of the conflict correspond with the degree of the modelled conflict potential? Are the affected services adequately represented in the conflict maps? Since expert based national assessments of potentials and conflicts are prevalent, it is important to understand their limitations, and to pinpoint improvements to modelling landscape quality in the context of landscape services.

Energy production systems and rural landscape qualities

Michael Roth, Nuertingen-Geislingen University, Germany

Germany has ambitious goals regarding the production of electricity from renewable energies (50 % in 2030) with wind power contributing the largest share. At the same time, the protection of landscape diversity, characteristics and beauty is enshrined e.g. in the Federal Nature Conservation Act. The localization of onshore wind farms in Germany is regulated by the designation of concentration zones in formal land use planning, which lead to an exclusion of wind turbines in the remaining planning area. Thus, realizing a sufficient potential of onshore wind power strongly depends on planning. The comprehensive land use planning process contains chances but also responsibilities to avoid and mitigate conflicts with competing land uses and landscape functions (such as the provision of scenic landscape qualities).

The presentation will show results of a research project on renewable energy production and visual landscape quality, using the case of a current formal land-use planning process in the Saarland, Germany. Innovative methods of visual impact analysis using GIS tools and methods, as well as state-of-the-art digital landscape data and web-based participatory approaches were used to determine and assess potential locations for wind turbines. Using digital participatory approaches, experts and lay people provided the empirical basis and validation for our landscape assessment method in order to ensure compatibility of renewable energy production and the maintenance of high visual quality of rural landscapes.

By complementing theory- and data-driven GIS methods with digital participatory planning approaches, we contributed towards ensuring a better acceptance of wind energy production by avoiding and mitigating conflicts early in the planning process. The use of validated digital methods with a solid empirical/participatory basis helped to de-emotionalize the planning discussion about wind turbine localization and also to maintain high visual quality rural landscapes by giving this factor appropriate weight in planning and decision making.

Wind turbines and landscapes in German "Naturparks": a new challenge?

Michel Deshaies, University of Lorraine, France

"Naturpark" in Germany is a legal category of protected areas according to the Federal Nature Conservation Act. Given that these were set up amongst other reasons in order to help preserve high quality landscapes, it may seem strange that the installation of wind turbines in Naturparks could even be contemplated. The distribution of wind turbines varies a great deal across the country. Only a dozen Naturparks have a large number of wind turbines, while 37 parks have none at all. The other 55 Naturparks have a relatively small number of wind turbines. The density of the deployment of wind farms in Naturparks is very uneven

due to several factors. It is partly the result of regulations and partly due to varying perceptions as to whether or not turbines are compatible with the landscape and the environment. In the context of repowering projects booming in Germany, the increase in the size of wind turbines brings a new challenge for their deployment in Naturparks. These giant wind turbines have an unprecedented impact on the landscape, especially considering they can now be installed in formerly excluded areas such as forests. Large wind turbines are much more likely to arouse public opposition as can be seen in several conflicts that have arisen recently in different parks. Opposition movements to the installation of these new wind turbines have emerged both in parks without wind turbines and in others that already have large numbers. In the first case, for example in the Soonwald-Nahe Naturpark, the planned deployment of eight wind turbines in an iconic forest in the park was strongly opposed by many local environmental protection groups. Other opposition movements to wind turbines have appeared in Naturparks where they are already present in large numbers (Naturpark Vogelsberg). With the development of repowering, Naturparks therefore act as something of a barrier to wind power development, particularly because of the value attributed to the landscapes that people wish to preserve.

The assessment of cultural heritage in relation to wind parks – examples from Sweden and Norway

Pia Nilsson, Swedish National Heritage Board, Sweden Karoline Daugstad, Norwegian University of Science and Technology, Norway

Both Sweden and Norway have defined political goals of increasing the share of renewable energy and reducing energy based on fossil fuels. By and large this is to be realized by establishing wind parks. The increase of wind energy by constructing on- and offshore wind parks, takes place in different landscapes: from open coastal areas, lowland plains, forested areas, to moors and mountain plateaus. These landscapes represent various landscape values - obviously an economic potential in 'harvesting' wind, other forms of economic activity (farming, forestry), recreational aspects, biodiversity, cultural heritage, cultural historic values and identity values. For each planned wind park, small or large, the assessments of the consequences are compulsory. One of the topics covered in the assessment process is to look at the consequences for cultural heritage and the cultural history embedded in the landscape. In both countries, Sweden and Norway, public bodies are responsible for such assessments and different agencies and consultancies are often involved. The assessments shall identify and describe the cultural heritage qualities in the actual areas, and suggest how the planned wind power project can be adjusted to minimize negative effects on cultural heritage. In this presentation we will investigate two recent wind parks: Egby on Öland (Sweden) and Høg-Jæren in Rogaland (Norway). In both areas there were strong arguments against the construction. We will identify how the cultural heritage qualities were presented in the assessment reports, how the effect of the wind parks on cultural heritage was outlined, to what extent cultural heritage was part of the protests against the establishment and what type of arguments were presented. The empirical basis for this presentation is an analysis of the assessment reports and of articles from regional newspapers.

The acceptance of solar panel sites in a tourism region

Matthias Buchecker, Swiss Federal Research Institute WSL, Switzerland Annina Michel and Norman Backhaus, Geographical Institute of the University of Zurich, Switzerland

Extending the production of solar energy is considered a key strategy to achieve the energy turnaround in Europe. Depending on the selected sites, this technology can have considerable impact on the landscape quality. In a pilot project in a Swiss Alpine valley (Goms), the application of avalanche protection constructions as carriers of photovoltaic panels was tested. To evaluate the social effects of this project, we conducted a qualitative pre-study and a standardised survey of the directly affected population. With the survey study, we wanted to find out which factors influence people's acceptance of the photovoltaic panels on avalanche protection constructions located on a slope in close neighbourhood to the ski arena of Bellwald. Furthermore, we extended the research question to alternative hypothetical sites for solar panels in the (regional) landscape. We measured the acceptance of the sites for solar panels directly (rated approval) and indirectly using semantic differentials of authenticity in terms of the landscape elements. The questionnaire was sent to all households of three municipalities that differ in the visibility of the pilot project: Bellwald (N=438), Ernen (N=541) and Münster (N=507). Furthermore, the questionnaire was distributed to local tourists of Bellwald (N=500). The return rate of the household achieved 35 %, the one of the tourists' survey about 14%. The statistical analysis showed that 85 % of the respondents supported the pilot project. A regression analysis revealed that the perceived benefit for the place image and the degree of involvement in the pilot project are the main predictors for local residents' acceptance of the project. In contrast to solar panels on functional constructions (74-98%), sites in the core village (33%), in open fields (16%) or protected areas (9%) were considered as suiting only by a minority of the respondents. The implications for a sustainable landscape development will be discussed.

Visual impact and improvement proposals for wind farms: A case study of the "La Plata" wind farm

Salvador Villacreces Arnedo, Ignacio Cañas Guerrero and Ana Álvarez Pérez, Technical University of Madrid, Spain

In the last few decades, renewable energy has come to play an essential role in the global energy supply due to increased energy demand and increasing environmental problems. However, renewable energy sources are not without environmental problems, and factors such as land use and visual impact make them less socially acceptable. In the case of wind power turbines layout is determined by the intermittency in wind direction and intensity, complicating visual impact reduction of wind farms and therefore their social acceptance. Due to the complexity of the scenarios in which these facilities are located there is a great diversity of methodologies for integration into the landscape, but there is no general methodology to take into account that people should play an important role in its development. The purpose of this study was to determine and evaluate the visual impact that the "La Plata" wind farm, located in the town of Villarrubia de Santiago (Toledo). For this we have carried out the implementation of three methods to check the visual impact of the wind farm, based on the qualitative assessment of population scenarios, one on the use of Geographic Information Systems (GIS) and the latter through questionnaires and checking equality in the results of the three test methods. Finally a number of measures are proposed to reduce the visual impact of the wind farm.

Unraveling the logics of renewable energy landscapes (2/2)

Chairs: Kira Gee, Marina Frolova, Karin Hammarlund and Viviana Ferrario Location: Radiovågen

Emergence of wind power landscape in Spain: good practices of local management in rural areas of Castilla y León (Northern Spain).

Daniel Herrero Luque and Eugenio Baraja Rodríguez, University of Valladolid, Spain

The aim of this communication is to present cases of good practice during wind farm development in rural areas of Castilla y León and to highlight the impacts of this good practice on the emergence of new energy landscapes in this region. These practices involve the local population and help to improve wind power acceptance. Certain stakeholders have promoted changes in the management of wind resources and its economic benefits at local level. Thanks to this successful management new landscape forms and functions related to wind power have begun to be integrated in local landscapes. These good practices have also promoted the emergence of new landscape meanings and values linked to wind power. The driving force of these practices is wind power revenue management, which relies on land ownership and the role that the local population and their local representatives acquire in the decision-making process. The contribution will analyse how good practices serve to create synergies through promotion of rural tourism, sustainable community development, and economic diversification, etc. thereby promoting the acceptance of new landscape forms and values.

Energy transition and landscape issues in Portugal

Mark Bailoni and Michel Deshaies, Université de Lorraine, France

The visual impact of renewable energies on the landscapes may provoke protests in the European countries. In this context, new renewable energies such as wind power seem to focus the opposition, while the infrastructures established for many decades, such as hydroelectric dams, generate no longer many reactions. However the situation in Portugal is quite different. The country aims to significantly increase its electricity production from renewable energies by 2020, in the context of his energy transition strategy. To reach this goal, it committed to triple its production capacities of renewable in comparison with the situation in 2005. Incentive policies helped to strongly increase the capacities of wind

power and this development of wind farms, mainly located in the northern mountains of the country, has generally provoked little protest.

Nevertheless this considerable development of wind energy is limited by the unpredictable intermittency of production which requires a large increase in hydropower potential including the implementation of several reservoirs and pumped-storage plants. Portugal has launched since 2007 what is described as "the most important hydroelectricity project in Europe over the last 25 years". The construction of eight new dams provokes protests in the name of environment, heritage and landscapes protection. Indeed a new dam is built in the Upper Douro valley, a UNESCO World Heritage site, which has been listed for the value of its iconic vineyards landscapes. The various local conflicts in the Portuguese valleys and the protection of the traditional landscapes show the complexity of implementation of renewables, even when the aims of the planners seem to be compatible with concerns of environmentalist protesters, such as an ambitious policy of energy transition. Indeed these aims are confronted with local interests and different perceptions of landscapes.

Research techniques to inform local stakeholders in the transition towards renewable energy landscapes

Dirk Oudes and Sven Stremke, Wageningen University, The Netherlands

Since the revival of renewable energy technologies, implementation often faces fierce opposition. To address this issue an alternative approach has been pursued, where options and consequences of multiple renewable energy technologies are revealed at the very beginning of the transition process. This research has been performed within the methodological framework of the so-called five-step approach for strategic spatial planning and landscape design (Stremke et al 2012). This contribution focuses on the research techniques employed during the first step of the five-step approach in the city region of Parkstad Limburg (NL). Within the first phase, energy potential mapping (EPM) was conducted to identify both potentials and constraints of five renewable energy sources (Van den Dobbelsteen et al. 2011). Next, a questionnaire was employed to gather and prioritize key consideration of local stakeholders with regard to the future energy landscape. A multi-criteria decision analysis (MCDA) was used to create scenarios (see also Grêt-Regamey and Wissen-Hayek, 2013). The first, reference scenario shows the maximum capacity for renewable energy generation. The second, integrated scenario is based on the conceptual framework for the planning and design of sustainable energy landscapes (Stremke, in press) while many criteria were specified on the basis of the questionnaire and interviews. Four different types of conditions were identified, each relating to a different level of decision-making. This provided stakeholders with insight in which conditions they control and how decisions would affect the emerging energy landscape. The MCDA, in combination with EPM and stakeholder interaction, provides a solid basis for decision-making. While our study informed the political debate about realistic energy targets for the region, the results are not static. Instead, a set of interrelated tools has been developed that can be used to test and verify alternative proposals for a sustainable energy landscape in future phases of the transition process.

Bridging energy production, cultural heritage and public acceptance – planning for wind turbines in the fields of old manor houses in Guldborgsund Municipality in Denmark

Søren Præstholm, Vibeke Nellemann and Lone Søderkvist Kristensen, University of Copenhagen, Denmark

Policy and economic measures has encouraged extensive use of wind power for electricity production in Denmark. Today, 30 % of the domestic capacity for producing electricity origins from wind turbines (2012), compared to only few percent in 1990. This has created many jobs within production, research and development of wind turbines. But the many and successively larger wind turbines have also had negative consequences. Neighbors are unsatisfied by noises, shadows, reflections and landscape impacts while NGO's claim that the turbines erode natural values and cultural heritage. Therefore, planning authorities in most municipalities have faced public resistance against new wind turbines in the landscape.

These challenges have indeed been present in Guldborgsund Municipality. The local politicians have consequently declined all new wind turbine projects in the landscape during the last ten years. However, a new planning process has been initiated to perform a comprehensive plan for location of future wind turbines. Public participation is emphasized along with new planning approaches. Furthermore recent legislation provides accompanying measures to compensate the local community and these will be introduced in the dialogue.

"Future Landscapes" is a national research program following this planning process. Action research will focus on collaborative landscape analysis and strategies by including neighbours, local community, NGO's, extern experts, planners and the landowners of two large manor houses. These estates offer potentials in terms of long distance to nearest neighbors and owners with capability to invest in the turbines. On the other hand, the manor houses are characterized by landscape structures with a long continuity, and many cultural values attached to the landscape. The collaborative process will seek to create common understandings and solutions, combining the location of the turbines with other initiatives such as improved public access. The results from the process will be presented on the conference.

Field Trips Wednesday 10 September 08.00 – 18.00

Meeting place in Gothenburg: Götaplatsen

1. Urban proximate landscapes, recreation and nature conservation (Kärna and Söne)

Arranged by: Gunilla A Olsson and Anders Wästfelt

The excursion will run through the peri-urban landscape northwest of Gothenburg to the central agricultural district of Västergötland (West Gothland). It will demonstrate the current peri-urban land use with dispersed settlements, recreation facilities on former arable land, conservation sites and some food cultivation in allotment gardens. A walking tour in the Natura 2000 site överön peninsula with coastal organic agriculture, ecotourism and biodiversity management will demonstrate the production of multiple ecosystem services. The impressions from the Herring Periods are significant along the southern coast of Bohuslän. At the Tofta Manor those links become evident, with roots in the fish-biofuel of the 17th century, today a modern conference facility. Here, the characteristic change in agrarian policies is apparent, stemming from the desire to increase the arable land by wetland drainage in the 19th century to the shaping of a recreation landscape for urban citizens with horse riding, golf courses and coastal nature trails. In the afternoon we reach the Söne parish and the Degeberg farm, where we will look into conflicts and paradoxes within the current landscape preservation program, EU subsidy schemes and the UN Biodiversity convention, and its effects on farmland regulation in Sweden. We will inspect a newly constructed common grazing area and the effects of measures for habitat protection. These cases will be put into an historical regional agrarian context, along with the current conditions for farming through dialogue with the present farmer. After this stop, we will finally reach Mariestad in the evening.

2. Stripping the fields – unravelling the historical layers of agrarian landscape

Arranged by: Lars Nyström, Pär Connelid, Erik Hallberg and Christer Ahlberger

There is an extraordinarily rich heritage of visible remains from agricultural activity in south-western Sweden which stretches from the early Neolithic through to the present day. These include prehistoric cairn fields, strip field systems and abandoned medieval farmsteads as well as the remnants of a later agrarian expansion and withdrawal such as19th century cottage ruins. They are often preserved in wide-stretched and highly visible contexts where different historical layers of human activity can easily be discerned. There is also a comprehensive collection of historical maps (from ca. 1630 onwards) - a product of the process of assessing and dividing the land - which portray the historical landscape in great detail. Using this living heritage as an enormous outdoor archive, this excursion follows the relationship between man and his land throughout the agrarian history of the region. Special attention will also be paid to the continuous communication between the different historical layers in the landscape by the means of, for example, landesque capital or present day heritage management and conservation.

3. Garden landscapes

Arranged by: Katarina Saltzman and Annelie Sjölander-Lindqvist

Garden landscapes come in many forms and shapes, and there is no clear-cut distinction between gardens and other types of landscapes. This excursion will take us through various examples of contemporary land use of semi-urban and rural landscapes where cultivation, display and enjoyment are important features. Heading in a northeasterly direction from Gothenburg, we will be travelling through the shifting landscapes of the Västergötland (West Gothland) region on our way to the small town of Mariestad. This full-day excursion will include different types of gardens and landscapes, as well as glimpses of present-day small-scale farming and food production.

4. The biosphere reserve Lake Vänern Archipelago and Mount Kinnekulle

Arranged by: Bo Magnusson Eva Gustavsson

The excursion will take us through different types of natural and cultural landscapes to the Biosphere Reserve Lake Vänern Archipelago and Mount Kinnekulle, about 1,5 hours in the northeast direction from Gothenburg. During the autumn of 2004, a preliminary study was launched on the feasibility of forming a biosphere reserve in the region, along the southeastern shoreline of Lake Vänern. The area's significant natural and cultural values and local commitment was the basis for this work. On 2nd of June 2010, the area became accepted as an official Biosphere Reserve. The association has a board of nine members and the Biosphere's office is situated in Mariestad. The Biosphere Reserve is involved in a variety of projects focusing on sustainable development and has contributed to new partnerships between different actors. These new partnerships offer opportunities for new creative ideas to emerge. This full-day excursion will include a number of stops where we some examples of different projects carried out in the Biosphere Reserve area will be shown.

Parallel Sessions F Thursday 11 September 10.00 – 12.00

Department of Conservation, Mariestad

F1

Future farming: What role will and should European farming play in the future, and which consequences will it have for landscapes?

Chairs: Anders Wästfelt, Camilla Eriksson and Erik Westholm Location: The Aula

The situation for extensive agriculture in Sweden today – the importance of a landscape perspective

Elin Slätmo, University of Gothenburg, Sweden

Major changes have taken place in agricultural sector in Europe and internationally since the 1950s, both in terms of intensification and abandonment of agricultural land use. Intensification of agricultural production due to investment in machinery, drainage, fertilizer and pesticides are taken place in highly productive areas. Where the socio-economic and biophysical conditions do not allow this intensification, in more unproductive and inaccessible areas, agriculture has become more extensive or given up and abandoned.

Using empirical data from the case area Hållnäs in South-central Sweden this paper investigate the current situation for extensive agricultural activities. The results confirm that today's agricultural activities contribute to several values, other than food production, viewed as important for the whole society. This means that the physical form of agricultural land can be linked to social functions of food production but also to other functions with respect to heritage, recreation, consumption and conservation. These synergy effects however depend on which type of agricultural activities that are taken place. Further, the forces influencing the agricultural activities in Hållnäs have been categorized into limiting and enabling drivers. This analysis shows for example that agricultural land can be sustained by motives beyond economically productive and that official funding for land management are significant for the continuation of the extensive land use. The study also emphasise that agricultural land is not only connected to the agricultural sector, instead the proximity to several activities and operations beyond the traditional rural sectors are crucial for today's agriculture. With a relational perspective on landscapes this paper contributes to further knowledge around agricultural land use management.

Governing the commons: Trusteeships and rule of reeves in landscape management for nature provision

Ernst-August Nuppenau and Bernd Müller, Justus Liebig University Giessen, Germany

In many European countries agriculture and natural resource management as well as its governance are confronted with two very distinct directions of thoughts on institutions which are to be implemented in cultural landscapes for nature provision. On the one side proponents of private property rights and minimal state intervention enthusiastically analyse modern western institutions. They shall provide a maximum of incentives for resource conservation using payments and other incentive schemes. On the other side common pool resource management and traditional concepts have regained interest in the debate being concepts of authority and governance by rule setting and authority.

Recently, some alternatives (hybrids) for the design of public institutions in farm and landscape management being more conducive for sustainability have been suggested, which shall combine advantages of public management regimes with competitive neoclassical frameworks of institutions, hopefully creating more rural livelihoods and nature with less conflict. It is the objective to delineate such alternatives. The paper investigates a model of community management based on ES quality, i.e. common pool resource as BD, in a cultural landscape where farmers have to concede land for habitats and ecological main structures EMS. Rights to farm land are individual, but a trusteeship and management by reeves request land for EMS. The EMS offers ES services. By design of statutory regulations land is assigned for environment purpose. Food production is with farms, differently benefiting from ES. We investigate the role of common property management in detail. Two institutions are compared: First, labour used for farming or environmental improvement is either controlled by the manager or, second, labour can freely migrate seeking higher rents in neighbouring communities. The question for future farming, which we address, is whether the role of landscape as ES providing unit requires a system of authority and regulations beyond private property.

Can you see the pasture for all trees? Farmers' local management of semi-natural pastures in light of general EU regulations

Mattias Sandberg, University of Gothenburg, Sweden

This study concerns farmers' management of trees on semi-natural pastures and how it is influenced by EU's subsidies. The presentation will provide preliminary results from an ongoing interview study with farmers in a Biosphere reserve in Jönköping municipality, Sweden. 'Knowledge-cultures' is proposed as a potentially useful term for exploring how actors in the area, at least seemingly, have gone from conflict to mutual understanding when it comes to balance production and conservation efforts.

Semi-natural pastures – in the interface between forest and grasslands – are some of the most species-rich environments in Sweden. The species depend on continuous grazing by husbandry animals, a fact which makes semi-natural pastures an interesting case for the study of human-environment interaction. In that light, farmers could be seen as primary actors with far-reaching power to manage their pastures and change land-use, while EU could be seen as the leading conductor with financial means ('symbolic transactions' via national authorities) to indirect orchestrate things on the ground.

With guidance from a new 'multifunctional' agriculture regime, policy instruments within CAP have had some success in halting the perceived threats to the cultural landscape. Still, the effectiveness and legitimacy of EU's agricultural policy is continuously debated. In 2007, the Swedish definition of grazed semi-natural pastures was disapproved by the EU because agriculture support had been given to pastures that were considered forest. To be granted money for proper management, a maximum of 60 trees per ha are allowed. This regulation is questioned, among others from the point of view of biodiversity management. What considerations do farmers base there management decisions on? In the light of the new CAP it is important to map and understand how farmers perceive the incentives provided by policy measures, and how the economic conditions and other land-use interest interplay with farmers' aims and abilities.

The future of family farming: Current changes in family farming as ideology and practice

Camilla Eriksson, Swedish University of Agricultural Sciences, Sweden

Family farming is a global phenomenon that has attracted a lot of attention both within research and among policymakers. The family farm is a dominant form of organising farming in the Western world and agricultural policies often strives to maintain family farms for various reasons even as large-scale "super-farms" have emerged as a competing way of effectively using land. During the last couple of decades, small-scale family farming has also been re-established in many post-Soviet countries through land reforms, often by recommendation from the IMF and World Bank. In this paper I discuss why family farms have such a strong foothold in contemporary farming. What do family farms represent to-day? I also look into the practice of family farming. What does it take to run a family farm today? To what degree are family farms a mark of historical continuity and to what degree are they subject to change? What skills do family farmers need today? The paper draws on interviews with farmers carried out in an ongoing research project on the restructuring of farming in Sweden, showing that current family farms are heteregenerous and multifaceted.

Future Swedish farming: Consequences for society and landscape

Anders Wästfelt, Swedish University of Agriculture Science, Sweden

When Sweden liberalized agriculture in 1991 and opened up for global competition, it was a radical decision. The only country subjected to this situation in the modern era was New Zeeland. The decision was entirely in the spirit of free market as a tool for creating efficiency solving problems of overproduction. Sweden became a member of the EU in 1995 and the CAP was implemented in Sweden. The EU has since signed a WTO-agreement and the pursuit of increased global trade continues. Today, the impact of EU policies is visible in the Swedish countryside where major restructuring and closure of agriculture has taken place, especially in the forested areas. These processes are part of the global specialization and geographic concentration made possible by increased mobility. Continued industrialization of farming demands the availability of cheap oil, and extensive global relocation of production to places where labour is the cheapest and where the free-flowing global capital can operate most effectively. This relocation and specialization leads to both local and global environmental problems. For example relatively rich countries, such as Sweden have a hard time keeping their competitiveness on the global agricultural market. This has also lead to a decrease in production and in self-sufficiency.

The restructuring of Swedish farms since 1990 raises a number of questions: To what extent has landscape characteristics impacted transformations? To what extent is there a correspondence between new farms and changes in direction of production? What ethical and philosophical issues are actualized? Has there been a major change in the production of agricultural goods? These questions will be answered by the detailed analysis of farm level data provided by the National Board of Agriculture.

F2

Spatial analysis based on categorial map data: How to address fluctuating landscape processes through the analysis of historical cartographic sources, landscape representations and spatial data (1/3)

Chairs: Stig Roar Svenningsen, Andreas Aagaard Christensen, Gregor Levin, Paolo Picchi and Jesper Brandt Location: Room A

Unraveling the categorial bias in historical cartographic material – as data for landscape research

Stig Roar Svenningsen, The Royal Library of Denmark; Roskilde University, Denmark

Data specifically produced for use in landscape research and for environmental monitoring purposes is a new phenomenon and consequently historical cartographic material are often utilized in the analysis of landscape change, land use and land cover dynamics as well as assessments of environmental and cultural aspects of the landscape. However, the extensive reliance on historical cartographic data is not reflected in research on the reliability and precision of the data.

Maps are generally produced in order to provide a spatial model related to a particular social need or utility, identified by the individual or organization ordering the map. The cadastral maps produced by nation states to collect revenue and the topographic maps made for military purposes in most western countries, are good examples of the result of such socially and historically situated map making practices. Thus maps have a constructivist character and should not be viewed as objective representations of the world, but rather as categorizations of the landscape, derived to produce data related to specific societal processes.

This paper investigates the nature of different forms of cartographic categorizations of the landscape in Denmark during the last 200 years. Three different cartographic representations of the landscape are included; (1) Cadastral maps, (2) Topographic maps and (3) Environmental maps. These map types are evaluated in a comparative analysis of the way they represent the landscape, in order to analyze their different categorical bias. The consequences of the differences between the three forms of cartography will be discussed, suggesting a need for the development of methods and procedures for using historical cartographic data, especially to create links between former economic and military categories of the landscape to categories which comply with data used today. It is discussed how an improved understanding of biases inherent to historical cartographic sources may advance the study of processes of landscape persistence and change.

Reverse causality: What we think is what we get

Martin Rudbeck Jepsen, University of Copenhagen, Denmark Stig Roar Svenningsen, The Royal Library of Denmark; Roskilde University, Denmark Gregor Levin, Aarhus University, Denmark

Dynamics in the coupled human-environmental system are often analysed through studies of land use change trajectories and identification of drivers of change. This study presents one such approach. However, when change detection studies are based on various versions of thematic maps one should be aware that observed changes in land use could be due to changes in the mindsets of cartographers. In this study, we present a land use change detection based on cartographic maps, and validate the findings on historic orthophotography. Our results indicate that the link between Real World biophysical land cover and the corresponding map categories should be treated with caution and the changes detected by comparing thematic maps may be dubious.

Ancient woodlands: seeing the wood from the trees by means of ancient maps, floristic data and field inventories

Otto Brinkkemper and Menne Kosian, Cultural Heritage Agency, The Netherlands Bert Maes, Ecological Consultancy Maes, Belgium

The Dutch Cultural Heritage Agency has adopted the historical geographical GIS dataset of HISTLAND. In this dataset, "ancient woodlands" is one of the 54 categories used to build a map covering the Netherlands. This category only occurs in three provinces out of twelve, with 88 polygons. Inventories made by Bert Maes show that ancient woodlands occur in almost all provinces (with the exception of the recently created province of Flevoland).

This discrepancy is now investigated by means of the combination of vectorized historical maps of different time slices and the occurrence of floristic "ancient woodland indicators" in the Dutch floristic database FLORON. The results produced by the combination of these two datasets are tested with the independent dataset of the ancient woodlands inventory by Bert Maes and his colleagues.

The importance of historical datasets to the comprehension of current rural landscapes – on the example of Slovenia

Daniela Ribeiro, Matija Zorn and Andraž Čarni, Slovenian Academy of Sciences and Arts, Anton Melik Geographical Institute, Slovenia

The creation of cultural landscapes is dependent on the activities that people had and continue to have in them. To be able to follow these changes through time, different sources are used. Currently the use of historical maps is the most popular. Usually landscape studies aim to reconstruct historical landscapes through the assessment of land use changes. As mentioned historical maps are a very important data source in this regard. However, there are also other historical data that can be used, e.g. land registers (cadastres) and archival data.

On the example of two case studies from southeastern Slovenia the ability to use different sources will be presented. Used sources were:

- Three types of cadastres elaborated between mid-18th century and 19th century covering the current territory of Slovenia: the Theresian, the Josephian and the Franziscean land cadastres. As well as an additional cadastre, the so-called Revised Franziscean Land cadastre, which resulted from a more precise mapping between 1869 and 1887 as in 1848 the feudal system in the Habsburg Empire was abolished and the relationship between ownership and taxation changed.

The maps of the First (1763–1787), Second (1836–1852) and Third (1876–1880)
 Military surveys of the Habsburg Empire, as they also offer some information on the land use changes but unfortunately not accurately enough for systematical use.

 Archival data on Agrarian reform carried out in 1946, when by Yugoslav law, land was confiscated. At this time the land ownership by farmers decreased heavily.

 The Agriculture map from 1986 – a map of agrarian land use made for qualitative evaluation of the productive capacity of the agricultural land.

Contemporary land use was mapped in the field, in both areas in 2012.

Forgetting and remembering of agroforestry in Czech Republic

Jana Krčmářová, Charles University in Prague, Czech Republic

Trees are thought to have been a part of agriculture from its very beginning and in Europe the complex of agroforestry management techniques was once widely distributed and diversified. Nowadays however land use combining agriculture and forestry – while gaining momentum in tropics, is declining in temperate zone. While the agroforestry systems here are becoming scarce or extinct, their ecological, cultural, socio-economic and historical value is starting to be recognized both on the theoretical and political level and incentives for their preservation, restoration or at least documentation are made.

In Czech Republic both agroforestry research and practices are virtually non-existent phenomena. However with the use of Austrian-Hungarian stabile cadaster records from the years 1824–1845 it was discovered that in the near history- in the middle of nineteenth century, there were distinguished more than five different agroforestry categories. Quantitative analysis of the tax records has further shown that some form of agroforestry could be found in all regions irrespective of the landscape type, land fertility, altitude and population density and nationality.

Meanwhile the discursive research of the contemporary 19th century Czech expert agricultural literature indicates otherwise- agroforestry is rarely mentioned here and if than in context of eradication of "obscurantist" traditional uses of landscape, while the narrative of change, rationalization, modernization and specialization prevails.

On the specific example of agroforestry we can demonstrate the process of active policy of agricultural traditions forgetting during the industrialization but also that of their resurrection with help of contemporary multidimensional and multifunctional agricultural policy incentives. **F3**

Landscape monitoring – understanding and communicating landscape change

Chair: Grete Stokstad Location: Room B

Visualizing historical and future change in Swedish forest landscapes using official forest statistics and scenario analysis.

Anna-Lena Axelsson and Neil Cory, Swedish University of Agricultural Sciences, Sweden

Information regarding forest resources has been collected on a regular basis in Sweden since the Swedish National Forest Inventory (Swedish NFI) started in 1923. Today, Sweden together with Norway and Finland, have the longest time series of high quality forest statistics in the world. The combination of a long time series of forest data with a powerful forecasting tool creates a unique possibility to explore both the past and the future.

Data from the Swedish NFI and forest scenario analysis are traditionally presented mainly as data tables or trend lines. There is however, currently a strong focus on alternative and innovative ways of presenting data in order to make it easier for both experts and laymen to interpret and use the results.

We will demonstrate how forest statistics and data from scenario analysis presented at county level can be visualized. We use a tool called Sweden eXplorer that is currently used by Statistics Sweden (SCB). Examples of major landscape transformations related to changes in forest use and agriculture from the 1920s through to today will be presented, for example heathland transformation and the expansion of spruce plantations in the south of Sweden. We will also visualize data from the last national forest consequence analysis that will show how the Swedish forest landscape is likely to develop during the 21st century based upon four different scenarios.

Different types of maps can be used to illustrate changes in forest structure and forest cover over longer time periods. Interpolated maps are useful in communicating changes in forest gradients over time while estimated datasets are dynamic, useful for modelling and open for the possibility of combining with other datasets. Examples will include changes in old forest and dead standing trees, which are important resources for forest biodiversity conservation.

Understanding and communicating landscapes changes from monitoring of the agricultural landscape in Norway

Wendy Fjellstad and Grete Stokstad, Norwegian Forest and Landscape Institute, Norway

The Norwegian Monitoring Programme for Agricultural Landscapes (3Q) has been running for 15 years. An important part of this monitoring programme is data extracted from maps produced by interpreting aerial photographs. Our job is to monitor and report status and changes in agricultural landscapes, both nationally and regionally. However the usefulness of the programme is to a large extent determined by whether or not we are able to interpret the data and communicate our results.

In this presentation we will discuss communication attempts based on our monitoring programme, and give our view on their success with regard to different users. In general, successful communication requires that we are able to explain our findings in a way that is easily understood by those receiving the message. The timing must be right and we may also need to communicate why the message is important, and even suggest appropriate responses.

Monitoring the cultural heritage of the Dutch landscape

Michel Lascaris, Cultural Heritage Agency, The Netherlands

In this paper we will focus on monitoring historical landscape structures like characteristic field forms, ditches and dikes. These structures form the backbone of the Dutch landscape and are therefore useful indicators for monitoring landscape changes. Since the nineties several systems for monitoring historical landscape structures have been developed in the Netherlands. Despite the investments in these systems, almost none functioned for longer periods. Apparently it is difficult to establish a long term dataset. The reason for discontinuing a monitoring project is usually a short term change of policy resulting in budget cuts which conflict with the wish to establish long term datasets.

In order to establish a long term dataset the baseline measurement and follow-up measurements have to be very cost effective. In this respect, GIS-based computerized comparison of detailed topographic maps is promising. In the Netherlands the land registry service is revising its digital 1:10.000 map every two years. This map has enough detail to monitor the geometry of objects like buildings, hedges and ditches and it is freely available. Due to computerized comparison, large areas can be quickly monitored, giving a first impression of the changes in the landscape without large investments.

At PECSRL we will give a short overview on landscape monitoring in the Netherlands. Further we will apply the GIS-based computerized comparison of topographic maps on the historical defense line of Amsterdam. This defense line covers an area of 14953 ha and is a UNESCO World Heritage Site. We will evaluate the GIS-based computerized comparison and compare it with other methods of landscape monitoring.

Landscape inventory Flanders and the integration of cultural landscapes within spatial planning.

Aukje de Haan and Inge Verdurmen, Flanders Heritage Agency, Belgium

Since 2001 Flanders has a landscape inventory: the landscape atlas. This inventory consists of landscape elements and areas that are relics of traditional landscapes. Significant items in this inventory are the "anchor places". Anchor places have a unique character and are landscapes/places of the highest historical interest in Flanders. They present high landscape value and consist of intact or representative nature. Furthermore they play an important role in the process of spatial planning and in the conservation or repair of the landscape environment.

These anchor places are the foundation (since ca. 2006) for a policy, not only aimed at the protection of these areas, but also at giving input in spatial planning. To achieve this goal, first of all, the anchor places had to be inventoried in greater detail, but more importantly, a sectorial vision of the future development of these areas had to be drawn up. While researching an anchor place we try to unravel the way the present landscape is shaped throughout time and which elements/relics remain as memories of different periods. Interdisciplinary research leads to an overall picture of the landscape evolution that comprises information about all elements that are part of or have an impact on the landscape e.g. buildings/monuments, archeology etc.

At this moment, the development of the anchor places is focused on the areas where spatial planning is redrawing the present land use. The input from the anchor places is used to ensure heritage has a place in the future landscape development.

The aim of our presentation is to give an overview of the method of identifying and analysing these anchor places and the way they are addressed in spatial planning. Is this a good way to transfer relevant information about heritage to policy makers?

Modular system for big GIS-projects

Karin Göbel, Centre for Baltic and Scandinavian Archaeology, Germany

For the last 8 years, the GIS department of the Centre for Baltic and Scandinavian Archaeology has integrated archived excavation records from various archaeological sites, predominantly from the Neolithic and the Iron Age, into a Geographic Information System. Every single project contains a lot of useful information about the people and their environment in former times. Over the years thousands of plans have been edited and combined with further information which was inserted in a database. For example the excavation documentation of the terp "Elisenhof" near the river Eider, excavated in 1957 to 1964 contains records of 1.26km profiles drawn at a scale of 1:20. Now they are accessible in three-dimensional -view together with the features of the recorded horizontal ground plan drawings. GIS is a powerful tool to combine all these data and make it available not only for archaeologists but also for scientists interested in landscape development. Nevertheless the way that data is integrated into these different Geographic Information Systems has to be optimized for comprehensive analysis. In our GIS department we have developed a standardised modular system. Every project has the same file system with an identification code to facilitate the combination of different data units. During the years we have improved our system through the experience we gained by handling the needs and problems of the different projects. This modular system also allows bigger projects to be split into smaller packets, which can be edited by different persons and afterwards recombined into the main project. This is a big advantage when compared to the handling of big one-piece-databases. Our next task is to make these data accessible and to test whether this workflow is feasible for projects with external collaborators.

F4

Unravelling the concepts of sustainability as logics of mountain landscapes conservation

Chairs: Rolf Peter Tanner and Oliver Bender Location: Room C

Migration and the sustainability of mountain landscapes in the European Alps

Oliver Bender and Sigrun Kanitscheider, Institute of Interdisciplinary Mountain Research, Austria Christian Drackert, University of Innsbruck, Austria

For a long time, peripheral rural regions in the European Alps were marked by emigration, particularly that of the young and well qualified. Now we can observe a trend reversal with 'new immigration' which started in some regions of the French Alps decades ago. However, this demographic process affects the Alpine regions unevenly in terms of both timing and intensity. Not only did the new demographic development start at different times in the individual Alpine countries, it also seems to have been carried by different sections of the population and reached varying proportions. Movements of specific age groups (immigration and emigration of people of generative or older age) have a particularly strong influence on the sustainability of the demographic structure and especially on the ageing of a population. Furthermore, growing spatial mobility and the resulting transformation of settlements cover several population segments with diverse motives for their movements.

This paper will sketch the development and the extent of the diverse emigration and immigration patterns for the individual countries of the Alps and will discuss how these population movement processes affect the sustainability of the settlement landscape. Several case studies for different mountain regions show a great variety, both of the persons migrating and the impacts on origin and target landscapes. Based on quantitative and qualitative methods, the paper examines representative case study areas in different regions of the European Alps and compares the onset and the intensity of the 'new immigration' process, the motivation and the characteristics of the migrants and the significance of this phenomenon for a sustainable regional development.

Unravelling sustainability concepts in the Alps

Rolf Peter Tanner, PHBern - School of Teacher Education, University of Applied Sciences, Switzerland

In accordance with the theme of the current special session this lecture aims at offering several case studies on the varying cultural landscapes in the Alps giving an overview of the different socio-economic systems and seeks to unravel the underlying concepts of sustainability. As a continuation of the discourse of the last conference in Leeuwarden, the concepts offered at that time of the two main patterns of alpine land use will be integrated in the perspectives of the European Landscape Convention (ELC) or the concepts deriving from Huxley's theories respectively as explicated in the outline of this special session:

- What were the sustainability concepts of the different alpine societies or its actors throughout time and space (mindscape, landscape as mentifact)?
- In what ways are those concepts implemented in the respective landscapes (matterscape, landscape as artefact)?
- Who were and are the main actors empowered with what degree of power and agency (powerscape, landscape as sociofact)?

Furthermore the paper wants to emphasise the effects of these factors on the current situation which can be seen throughout the entire alpine chain.

Sustainable architecture in the mountains: a case study of the cultural landscape of the Sierra Nevada mountain range (Spain)

José Valentín Guzmán Fernández, University of Málaga, Spain

Architecture is an essential part that makes up the landscape. All across Europe, constructions built in the mountains have been the result of the cultural dwelling tradition and the need for shelter and protection against harsh climatic conditions. A good example of this is found in the mountain range of the Sierra Nevada, in the south of Spain, where the architecture of the mountain villages of the southern slopes and the agricultural use of these lands have distinguished the area throughout history. That is how the cultural landscape of the Alpujarra became part of the rich and protected ecosystem of the Sierra Nevada.

The aim of this study is to examine the environmental and sustainable aspects of the cultural landscape of the Sierra Nevada mountain range. In addition, this study analyzes the characteristics that configure the traditional architecture of this mountain range, comparing it to the traditional architecture of other European mountains. This analysis and comparison will be used to identify options for possible development strategies in the region.

The research design for this study is a descriptive and interpretative case study that is analysed and also compared with other international examples, especially central European and Scandinavian ones; for example the Swedish and Norwegian traditional architecture of the mountains.

The growing demands for rural and mountain tourism may have a positive effect on the regional development and the local economy of the Sierra Nevada. However, it may also damage the environment, negatively affect the conservation of the landscape and lead to the loss of the architectural and sustainable aspects of the region. The key is how to promote tourism, in way that encourages future developments, that protect the environment at the same time.

Reindeer hunting systems in Southern Norway - Sámi or Norse?

Hilde Rigmor Amundsen and Kristin Os, Norwegian Institute of Cultural Heritage Research (NIKU), Norway

Visible traces from hunting reindeer are numerous in the mountains of Norway. This study focuses on trapping systems made for mass hunting located in the mountains of Hedmark County, south eastern Norway, called funnel shaped reindeer trapping systems. These specific systems are situated between 1000 - 1500 meters above sea level, all above the tree limit. The landscape is characterized by mountain plateaus and high peaks. The cultural origin of the reindeer trapping systems located in southern Norway has rarely been discussed. This region also includes the southern part of the historic Sámi settlement areas. The systems were used between the Iron Age and 19th Century. Reindeer hunting served as an economic base, as is apparent from the use of time and the effort to build and maintain the trapping system, the hunt itself, and the processing and finally the distribution of the catch. These trapping systems are made for mass hunting, and it is possible to catch big herds of wild reindeers in a limited time span. While those constructions are considered to be of Sámi origin in the northern part of Norway, this is more debatable in the southern part. The reason for the diversity in opinion could be the complex cultural history of the mountain areas in southern Norway, and lack of recognition of the Sámi presence in prehistoric times. Cultural differences between the Sámi and Norse are more apparent in northern Norway. However, the similarities in these specific trapping systems in the different regions make it pertinent to investigate the origin of these traps in southern Norway. Moreover, changes of use of the landscape are a threat to the visible remains of the hunting systems. Due to a growing tourism in the mountain areas, the systems are affected by recent impact, directly and indirectly.

F5 The logic of landscapes and antiquarian practice (1/2) *Chairs: Ådel Vestbö-Franzén, Carl-Johan Sanglert and Moa Lorentzon Location: Room D*

Experiencing landscape: a perspective from Britain

Mark Bowden, English Heritage, United Kingdom

Historic landscapes have been studied in Britain in a way that is analogous to approaches in Scandinavia and Germany but that has some significant differences from approaches adopted elsewhere. This paper will examine the development of historic landscape studies in Britain from the 17th century to the present day, looking particularly at methodological approaches in historical landscape analysis and investigation. It will be argued that the methodology made significant advances in the latter part of the 20th century and first years of the 21st but is now in crisis and that the way forward is difficult to plot. The reasons for that crisis and some possible responses to it will be explored.

Historical rural landscapes: a critical overview on the Italian case

Mauro Varotto, University of Padua, Italy Viviana Ferrario, University IUAV, Venice, Italy Angelica Dal Pozzo, University of Padua, Italy

In the frame of the "National Observatory of the Rural Landscape, Agricultural Practices and Traditional Knowledge", the Italian Ministry of Agricultural, Food and Forestry Policies instituted in 2012 a "National Register of Historical Rural Landscapes, Agricultural Practices and Traditional Knowledge" (art. 4, D.M. 17070/12), with the purpose of their recognition and preservation, also in relation with the assignment of the Common Agricultural Policies subsidies.

This paper aims to discuss the adopted definition for "Historical Rural Landscape" and to investigate the methodological criteria suggested for their individuation and cataloguing. Based on "significativeness", "integrity" and "vulnerability", they seem to be excessively restrictive since they risk to forget the widespread historical framework of the rural landscapes on the one hand, and too vague on what should be considered "historical" or not, on the other. Considering the different ways of thinking the interaction among "heritage", "rural" and "landscape", we can distinguish, at least, two different possible approaches to the historical landscapes individuation: a "documentary" one (landscape as historical document) and a "functional" one (historical landscape as expression of multi-functionality, cultural identity, biodiversity). Taking into account some case studies in the Veneto region, and analyzing the different driving forces which can influence the preservation of the historical rural landscapes, the discussion should ultimately lead towards a proposal for a wider articulation of the criteria for their evaluation and identification.

Lost in time and space – between the prehistory of archaeology and the history of written sources

Moa Lorentzon, County Museum of Jönköping, Sweden

For rural sites to be archaeologically excavated in Sweden, they ought to be prehistoric. This is how the county administrative board, who grants the permission for archaeological investigations, views it. If any historical sources can be used to interpret a site, there will be no, or only a minor, archaeological excavation. As a consequence a large number of historical or at least post-reformation rural sites end up in between the two disciplines of archaeology and history, with misinterpretations of the sites or, at the best, poor documentations, as the result.

One example are cultivation remains, so called clearance cairns. These remains became objects for archaeological investigations some 25 years ago, when interpreted as prehistoric. However, already in an early stage 14C-datings showed that these remains also, and maybe primarily, dated back to medieval period or even later. Even so, the idea of them being prehistoric still prevails and it is still on the basis of this idea, they are excavated.

For these and other rural historic sites a new approach is required, with new questions and new methods, under the premise that these sites are archaeological remains but also historical. To underline this claim and to illustrate the issue, some examples from excavations in the southern part of Sweden will be presented.

Moving forward or just business as usual? – The political logics of landscape perspectives in antiquarian practice.

Carl Johan Sanglert, County Administrative Board Jönköping, Sweden

Following the general trends within the heritage sector, as well as in academia and society in general, landscapes and landscape values have been approached in a lot of different ways throughout the 20th century. Simplifying the development in legislation and governmental administration it is possible to identify three major phases. 1) The single objects of preservation in national romantic and early modernist discourse. 2) The conservation of historical environment and landscapes as physical context in the post war transition between high modernity and post-industrialism. 3) Heritage as a social practice evolving in a postmodern planning discourse. Taken together this could be interpreted as a gradual development towards more holistic perspectives on heritage and landscapes as physical and social totalities. However, the development are mostly notable on the strategic level of policies and programs. On a tactical level single objects and the spatial boundaries has maintained a strong position in the planning process. From a realist point of view modernist as well as post-modern heritage discourses tend to commit a similar epistemological fallacy as various forms of representation are being confused with the actual landscape. In both cases the landscape, or maybe rather the landscape perspective, becomes a rhetorical position in the planning process. This calls for a greater focus on methods and planing applications that are able to grasp the intrinsic complexity of landscapes.

Parallel Sessions G Thursday 11 September 14.00 – 16.00

Department of Conservation, Mariestad

G1

Landscape challenges in EU's new agricultural policy: How did and how will the Common Agricultural Policy change the rural landscapes in Europe? (1/2)

Chairs: Hans Renes, Edwin Raap, Gerrit-Jan van Herwaarden and Henk Baas Location: The Aula

European landscapes under the influence of the Common Agricultural Policy

Hans Renes, Utrecht University; VU University Amsterdam, The Netherlands

The history of the Common Agricultural Policy (CAP) can be divided into two main periods. In the first period, from the 1960s into the 1980s, the CAP aimed particularly on growth of the agricultural production. In this respect the CAP was too successful, leading to surpluses. Moreover, the costs were high, not only because of the direct costs of subsidies and price interventions, but also because it led to food prices within the European (Economic) Community (now the European Union) that where higher than on the world market. Moreover, large farmers profited more than small ones and the system caused environmental damage. Since the 1980s the history of the CAP is dominated by successive reforms, aiming at diminishing the problems rather than by a clear vision of the future.

An interesting question is, to what degree the development of the landscape is influenced by the CAP. This is not an easy question, firstly because many structural reforms in the landscape, such as land consolidation, were executed by national governments. Secondly, processes of scale enlargement were also visible in non-EU countries. Thirdly, especially during the second period, the CAP was not consistent, on the one hand aiming at improving conditions for large-scale agriculture and on the other hand subsidising agriculture in mountainous regions, maintenance of hedgerows and small-scale cultivation of local products.

In this introduction to the session, some case studies and possibilities for future research are presented. Especially periods of fast landscape change in individual countries around the period of entering the Union are interesting.

Past experience with the EU Common Agricultural Policy and future challenges for landscape development – institutional obstacles, with focus on Denmark in European perspective

Jens Peter Vesterager, Martin Rudbeck Jepsen, Anne Gravsholt Busck and Søren Bech Pilgaard Kristensen, University of Copenhagen, Denmark

Countries located in north western Europe, have all been influenced by many similar drivers over the past 50 years, and their landscape development trajectory has largely been coordinated with some differences depending on the history, and natural potentials. The EU has influenced land management and land use through the Common Agricultural Policies (CAP) and several other policies, however it is sometimes difficult to distinguish between effects of EU policies and the general trends on the European continent.

In a Danish perspective, the formal effects of EU membership have been effectuated since the accession to the EU by 1973, however the trend towards intensification and industrialisation have emerged since the 2nd world war. Since 1973, landscape challenge have changed from intensification to debates on marginalisation in the early 1980s, introduction of the environmental policies in the mid 1980s with focus on the aquatic environment and lately towards a focus on biodiversity in respect to implementation of the habitats directive. A conglomerate of policy causes and effects on landscape changes is described in details from Denmark in the period from 1973-2014, and with specific analysis of data in a case study area in the period from 2000-2010.

The politically fluenced development in landscapes has been driven by EU policies and institutionalized national traditions, agendas, and discourse. The choices have largely been based on the dichotomy between Agriculturalists and Environmentalists; It is examined if this dichotomy is still determining the choice of implementation of the agri-environmental policy measures in a Danish context. National motives and interest organisations are examined, through text analysis and interviews. Last a perspective on future development is provided. The results are discussed based on perspectives from case studies in other EU countries as part of the Volante project.

Landscape and CAP in Italy: The establishment of the national observatory of rural landscape at the ministry of agriculture food and forestry

Mauro Agnoletti and Antonio Santoro, University of Florence, Italy

In the last CAP, 2007-13, landscape was introduced for the first time as one of the objectives of the Italian rural policies. A commission was established at the Ministry of Agriculture developing strategies for landscape considered as an 'added value' that cannot be

reproduced by competitors for local foods and tourism, valorizing the conservation of biodiversity due to traditional practices, the role of landscape for the quality of life. We will discuss how the 20 regional rural development programs interpreted these strategies, failures and achievements, as well as landscape in cross-compliance. In view of the CAP 2014-20 new strategies have been developed. The Ministry of Agriculture has now the power to promote policies for rural landscape, previously in the hands of the Ministry of Culture. In view of 2014-20 a national observatory for rural landscape has been established with the aim to: 1) develop planning strategies; 2) monitor landscape changes; 3) define landscape quality; 4) promote knowledge; 5) develop relationships with regional observatories; 6) develop international relations; 7) establish the national register of historical rural landscapes and traditional practices. The observatory is now defining the criteria for the selection of the historical landscapes. In these areas subsidies to farmers should be located, reducing those to industrialized crops. The monitoring system has been established surveying 120 areas in the whole territory. According to research findings abandonment and reforestation advances at a rate of 70.000 ha /year since 1920, forests have doubled their extension, while farmed land reduced by the half, a process also promoted by CAP. Thus, a law for the restoration of historical landscapes, allowing to remove forests, has been enhanced. International agreements with FAO (GIAHS), UNESCO WHC and UNESCO-CBD JP on biocultural diversity have been established. The new landscape approach promote a vision integrating economy, society and environment, for the development of the rural territory.

Landscape – economic activities in the countryside and its importance to regional and local Identification for people

Alexandra Kruse, EUCALAND – Institute for Research on European Agricultural Landscapes e.V., France Johannes Dreer, Hof und Leben GmbH, Germany

Since decades the structural change in agriculture leads to fundamental changes in rural areas. The farm's average size regarding farmed surface and live stock is constantly tending upwards. Simultaneously to the paradigm of economies of scales on the one hand there are very important arguments of nature and landscape protection (e.g. biodiversity etc. monument conservation) and herewith public interests on the other hand.

In order to maintain agricultural landscapes sustainable, new perspectives need to be created for young farmers in connection with the multiple interests and needs at and for cultural landscapes which can open not only new economic perspectives but also social and environmental benefits.

Agriculture is essential for emergence and maintenance of (most of) the cultural landscapes, including the preservation and the promotion of landscape elements and landforms. Farming activity is highly important, for the farmers themselves as well as for all other people living in the countryside. But not only arising awareness of the various aspects of the farmers activity is necessary, but also new perspectives for (young) farmers, so that they remain in the countryside, maintaining land, economy, heritage and (of course)identity: identity of farmers, of rural areas, of landscape.

The presentation will focus on three central elements of (a future project's) approach: case studies on successful sustainable maintenance of agricultural landscape, database on agricultural landscapes, educational material including e-learning for young farmers.

Objectives

- New entrepreneurial perspectives for agriculture
- Awareness raising locally/ regionally and on European level for the different European agricultural landscapes
- Re-valorisation of the cultural landscape; maintenance and enforcement of the multi functionality of cultural landscapes

Target groups

- young farmers
- young rural entrepreneurs
- education institutions for farmers
- people interested in rural areas.

The authors will present their approach and discuss with the audience.

G2

Spatial analysis based on categorial map data: How to address fluctuating landscape processes through the analysis of historical cartographic sources, landscape representations and spatial data (2/3)

Chairs: Stig Roar Svenningsen, Andreas Aagaard Christensen, Gregor Levin, Paolo Picchi and Jesper Brandt Location: Room A

Application of categorial spatial data for estimation of carbon fluxes from land use/land cover changes

Gregor Levin, Aarhus University, Denmark

Land use and land use changes can function as sources and sinks for greenhouse gasses and consequently affect atmospheric concentrations of greenhouse gasses. According to article 3(4) of the Kyoto protocol, it has been decided to include sources and sinks of greenhouse gasses originating from land use management and land use changes. According to the IPPC guidelines, states are obliged to annually document land use and land use changes from 1990 onwards. Land use and land use changes are to be documented for following land use types: Settlement and infrastructure; lakes; forest; cropland; grassland; wetland and other land. In Denmark this estimation of land use and land use changes is based on categorical spatial data, including topographical maps, data from habitat monitoring and agricultural registers.

This paper presents the methodology and results for the estimation of land use and annual changes in land use in Denmark for the period from 1990 to 2013. The application of categorical spatial data implies an accuracy in classification of land use types and a spatial resolution, which is very high compared to estimations based on remotely sensed data sources. However, applied categorical data have not been elaborated with the aim to assess land use and land use changes. Furthermore, applied categorical data are not spatially synchronized and consequently spatially overlap. Therefore, for the assessment of land use and land use changes, applied categorical data need to be interpreted according to their original purpose and thus the registration instructions, which these data are based on. Based on such interpretation, the different data need to be spatially prioritized over each other. Based on the presentation of the developed methodology for estimation of land use and land use changes in Denmark, advantages, disadvantages and solutions for the application of categorical data for estimations of land use and land use changes are discussed.

Cadastral maps and historical ortophoto images as data source for the analysis of landscape dynamics and related phenomena: three case studies in Trentino region, Italy

Paolo Picchi, Chiara Rizzi and Stefania Staniscia, University of Trento, Italy

This paper shows part of the research on the analysis of the transformation of the landscape in Trentino region, Italy, commissioned by the regional administration, Urban and Landscape Planning Department. The research showed the main transformations that characterized the landscape in the last 150 years considering three case studies supposed to be representative of particular landscape phenomena. The timeline considered was 1850-2008, this was due to the availability of data, starting with the first cadastral map. During the research we detected some limits in using data originally not produced for landscape research. At first this was due to a difficulty in interpreting the classification of cadastral maps to individuate a set of land cover classes valid for a dynamic analysis of the landscape through times. The information in cadastral maps was functional to the description of agricultural productions but not for natural land cover classes that nowadays cover wide areas at regional scale. A second problem was the identification of specific land cover classes in orto-photo images where the resolution of these was not optimal. In this case the observed trade-offs running between different classes along the considered time lass was supporting by logic sequence the identification phase in orto-photos. The land cover classes used were: woodlands, settlements, river scope and seven agricultural classes, grazing, meadows, arable land, wine-yards, poli-cultural mosaic and moorland. The phenomena were analyzed through specific landscape metrics describing the main dynamics occurred: a sprawl of settlement, an increase of woodland and moorland and a decrease of agriculture toward a general loose of diversity in the landscape. This research was useful to test the relation between the main landscape dynamics occurred and the social ones as reported in literature, and to build a data set of relevant cause-effects able to address the planning procedures.

Using military cartographic sources to reconstruct the Belgian World War One front zone

Stephanie Verplaetse, Wouter Gheyle, Birger Stichelbaut, Timothy Saey, Jean Bourgeois, Marc Van Meirvenne and Veerle Van Eetvelde, Ghent University, Belgium

During World War One, several military cartographic sources were produced, each with their own purpose in support of military practices. WWI aerial photographs, military topographical maps and trench maps of both the German and British army are known and include a lot of information about the militarised landscape. WWI played a key role in the development of aerial photography, since pilots making those pictures became the eyes of the army and replaced the traditional observers. Aerial photography was recognised as a new 'weapon' and especially used to observe the situation of the trenches in the non-dynamic battlefield in Flanders Fields. Also trench maps were produced as overlays on topographic maps. Last, the British army produced maps of the battlefields and hinterland, using their own symbols, categorization and place names. In this study, the different military cartographic sources are used to analyse how the landscape was influenced and changed by the military activities during WWI, but also how the landscape determined the military strategies. First, special attention will go to the information (content and quality) represented on the military cartographic sources and their potential for studying landscape dynamics during the war period. Second, the landscape changes in the war period will be assessed to understand the overall dynamics before, during, and after WWI for a study area around the city of Diksmuide. The different cartographic sources are integrated into a GIS-database. Based on the spatial and temporal changes in the study area, different landscape trajectories will be identified, referring to different military activities and their impacts on the landscape. These trajectories will be compared with the trenches and bunkers recognised on the aerial photographs. Finally, a 3D-visualation of the military landscape is constructed by draping the WWI-aerial photographs on a LiDAR elevation model, to provide a better understanding of the conflict landscape.

Methods for analysing spatial organization and land use in 17th century Sweden using large scale maps

Kristofer Jupiter, Swedish National Archives, Sweden

The Swedish geometrical maps are a unique source for analyzing pre modern agriculture. Starting in the 1630s until early 1700s over 15 000 large scale geometrical maps were produced. They are now registered in a GIS database and the large amount of data can be spatially analyzed. This paper shows how farms and villages in South-Western Sweden were organized spatially by an examination of two variables; distribution of parcels (tegskifte) and systems of fences (hägnadslag). About 2000 maps show the exact distribution of both these variables. The focus is on methods and how spatial patterns in a large number of maps can be analyzed using GIS.

From medieval times till the 18th century, farming in Sweden was organized in so called open fields; each individual farm owned numerous parcels scattered within the villages – both arable fields and meadows. The parcel patterns were either regular/planned (most common in eastern Sweden) or irregular (primarily western Sweden). There are also regional variations in settlement structure and in the number of fields (fallow systems). It's in the western parts where some of the largest villages in Sweden are to be found, characterized by irregular field systems and a mix of dispersed and nucleated settlement structures. Furthermore the system of fences in irregular systems were more complex than in the regular and included several hamlets/villages that were joint together to form large interconnected systems. Members of the hägnadslag were thereby forced to coordinate grazing and cultivation of the arable fields and meadows.

The Swedish geometrical maps are a unique and the primary source to describe and possibly unravel the complexity of 17th century agriculture and landscapes. The example from Western Sweden might also bring new insight on pre modern agriculture in a European context.

Challenges and possibilities in depicting landscape dynamics with integrated analyses of spatio-temporal data

Niina Käyhkö, University of Turku, Finland Helle Skånes, Stockholm University, Sweden Nora Fagerholm and Timo Pitkänen, University of Turku, Finland

Landscapes are intriguing mirrors of nature-human dynamics over space and time. Those who work with landscapes acknowledge that only through understanding past and present material and immaterial processes in landscapes can we start predicting their future trajectories and development. As landscapes materially portray to us through media such as contemporary and historical maps and imagery, we have an enormous challenge methodologically to identify those typical cyclical, linear, secular and reversible change processes, which characterise and depict landscapes we work in. Landscape change trajectory approaches emphasise understanding of transitions and driving forces in landscapes rather than measuring of optimal landscape patterning or distribution of land resources at a given moment in time. Still, most of these quantitative cartographic models of space and time are incomplete representations of human activities and systems. We would need to study these socio-ecological interactions so that our knowledge of landscape processes enlarges rather than becomes fragmented. In this presentation, we reflect our methodological and applied experiences working with integrated analysis of spatio-temporal data for landscape change research. We focus especially on forested landscapes, which manifest long-term human influences and face quantitative and qualitative losses of landscape related values. Our practical examples come from Finland, Sweden and Tanzania. Spatio-temporal data, available from all the sites, varies from contemporary spatial, interview and imagery data to historical maps and records. Data sets are heterogeneous in terms of their content and quality, which is typical to retrospective landscape change studies and prerequisite for methodological development of landscape change research.

G3 Travelling landscapes (1/2)

Chairs: Mattias Qviström and Katrín Anna Lund Location: Room B

To be a pilgrim: the travelling relational landscape of spiritual engagement

Avril Maddrell, University of the West of England, United Kingdom

This paper explores the ways in which pilgrims and landscape intersect, relate and impinge on one another. Pilgrims are travelers who undertake a journey, motivated by and committed to spiritual engagement and growth. As such, pilgrims have always undertaken simultaneous and imbricated inner and outer journeys. The significance of the outer journey varies with beliefs, denomination, location of pilgrimage and an individual's predisposition. However, recent work highlights the inter-relationship between the material and spiritual imaginary of landscape and pilgrims' more-than-representational embodied, spiritual and emotional experiences (Maddrell 2011, 2013, Maddrell and della Dora 2013). Pilgrims are marked and shaped physically, emotionally and spiritually by their journeys, but so too the landscape is marked and shaped, tattooed even, physically and metaphorically by pilgrims' spiritual journeys and practices.

Landscapes are dynamic place-temporalities shaped by the rhythmic mobilities that pass through them (Edensor 2010; Wunderlich 2010) and exploring pilgrim experiences offer greater understanding of the ways in which people and landscape are co-constituted through this dynamic relationality. The focus of this paper is on embodied, walking-centred forms of Christian pilgrimage, and experience of the landscape as spiritual hermeneutic, place of renewal and permeable threshold: the poetics of 'Thin Space' in Celtic traditions.

On fitness running and the heterogeneity of portable landscapes

Mattias Qviström, Swedish University of Agricultural Sciences, Sweden

Fitness running is an everyday practice which could be performed almost everywhere. Yet, in Sweden its historical development is clearly related to specific places and landscape ideals, and the marketing of fitness running was in turn also a marketing of a specific landscape: the urban forest. This paper presents the history of the portable landscapes for fitness running in Sweden from the late 1950s to the 1990s, and its importance for the current practice of running with the city of Malmö as a case. The first part of the paper introduces the history of fitness running, the actors involved in the marketing of the new "sport", and the embedded landscape ideal. Second, the concept portable landscape is being discussed: the paper argues that the travel cannot be understood by merely studying the national standards for fitness trails or the representations which circulated at the time; rather, a heterogeneous assemblage of personal bodily experiences, moral statements, rhythms, workout equipment, books, movies, and blue prints needs to be taken into consideration. It could be argued that such a complexity is likely to be found for other portable landscapes as well. Third, the paper discusses the importance of this portable landscape for the current practice of running, with a particular focus on tensions between the embedded heritage from the 1960s and 1970s and the current practice of fitness running in the city.

Garden on the move. Sicilian rural landscape in the experience of foreign travelers in eighteenth century

Gabriele Mulè, Independent scholar, Architect, Garden and landscape history scholar, Italy

In the eighteenth century, European noblemen, artists, scientists undertake the great travel in Italy, the Grand Tour. In Sicily, the southern most destination, they seek for suggestions of poetry and art, science and history, visiting ancient Greek colonies, places celebrated by Homer and Virgil, natural wonders and the Etna volcano. Between those stopovers of a classical and naturalistic tour of the island, between Palermo and Selinunte, Agrigento and Siracusa, travelers discover the unexpected and surprising rural landscape: enclosed in Arcadian valleys, extended on plains, opened on boundless views, the fertile countryside shows the scenery of ordered fields, extended cultivations, exotic plants among variegated crops. Human and natural, material and immaterial, historic and contemporary, all components of this many-sided scenery, examined and described by Grand Tour's protagonists, manifest dynamic features in relation to variable elements. For example, time of day, weather and season mark the cycle of life of plants, of agricultural works, of natural phenomena, observed along the way from a point of view fickle on the move, following different paths. This set of variables shapes the contents of the territory to the extent that modifies its appearance; it's with the changing effects of light and colors, sounds and smells, with the alternate succession of productive rhythms that Grand Tour's travelers unleash the passion for Sicilian countryside and reveal the perennial becoming of its expressive values. But this is not enough. Some foreign travelers experiment an original aesthetic feeling rising above the practical utility of agricultural production, advantage of settlements, scientific knowledge of natural phenomena; the Sicilian rural landscape recalls the idea of Garden, becomes object for aesthetic contemplation, and contributes, in European context, to reflect on the idea of landscape and on the relation between Man and Nature in eighteenth century.

Narrating marginal landscapes

Katrín Anna Lund, University of Iceland, Iceland

This paper follows different routes, roads and paths, to and from and in the region of Strandir in the north-west of Iceland in order to show how the region's landscapes are woven together through multiple narratives of past and present mobile practises. The region's mountainous but barren coastal landscape and geographical location by the north Atlantic ocean has always provided it the aura of isolation and marginality although to different degrees depending on changing ways in which people have travelled over time. Thus different forms of mobile practices have shaped and ordered the landscape's material and narrative qualities. In order to demonstrate how the region's landscape and sense of marginality has continuously been shaped and re-shaped I shall follow its main road to demonstrate how it weaves together and mobilises multiplicity of narrative routes, human and non-human, which create and shape the landscape as one travels through it. By doing that I shall provide an insight into how the region's marginal position has altered and changed, creating variety of landscapes, past and present, that emerge together through plethora of heterogeneous narratives. What appears is that whilst routes and roads may cut across landscapes, establishing borders that provide a sense of marginality, they also contain the narratives of mobile practices, human and non-human that order landscapes.

G4 Landscape and heritage

Chair: Annelie Sjölander Lindqvist Location: Room C

Concrete in the dunes: the Atlantikwall in coastal nature-reserves in the Netherlands; past, present and future

Michiel Purmer, Natural Monuments Society, The Netherlands

Immediately after the Second World War, the Dutch shoreline and coastal area were full of remains of the German coastal defense system, the Atlantikwall. The remains consisted of trenches, pill-boxes, anti-tankwalls, mines etc. This presentation focuses on the post-war development of this contested military landscape in nature conservation areas.

In nature-reserves in the coastal areas, impressive remains of the Atlantikwall have been preserved. However, it seems to be a typical example of preservation by neglect, as they seem to draw rather limited attention from the management of these conservation areas.

The first part of the presentation tries to explain this paradox by describing the postwar history of the Atlantikwall in Dutch coastal nature-reserves. What happened to these military structures? What decisions were made about the remnants of the Atlantikwall by the nature conservationists? And did the Atlantikwall obstruct the natural development of the dunes? What's the present state of conservation of this military landscape in the dunes?

The second part of the presentation will outline some possible scenarios for the future management of these military landscapes in the coastal nature reservations. The three presented scenarios range from musealisation and creative reuse to active demolition of the structures. As such it is an interesting example of a discussion on the nature-culture interface.

Heritage value of the landscapes in an urban context as base for integrated heritage management in Flanders (Belgium)

Niels Dabaut, Ghent University, Belgium Sam Turner, Newcastle University, United Kingdom Veerle Van Eetvelde, Ghent University, Belgium

The landscape scale connects and contextualises the cultural heritage objects in the urban context of settlements and towns and their surroundings. It is important to understand

the historic landscape of a settlement in order to make sustainable decisions in spatial planning. To provide this understanding to people who deal with conservation of monuments and landscapes, but also to architects and spatial planners, there is a need for an integrated and holistic approach. This paper outlines a method for characterising the historic, mainly urbanised, landscape of Flanders and how to integrate designated or selected monuments, within this characterisation. Besides individual monuments also of monuments, sites and their surroundings are taken into consideration. This approach can be part of a toolkit for treating more urbanised landscape as cultural heritage and for preserving, managing and changing this landscape in a comprehensive and sustainable way. The method includes GIS-based research executed using historic maps, aerial photography and satellite imagery, which is supported by field research. Fieldwork tries to combine the presence and the materiality of different features in the landscape (e.g. plot borders) with the visual envelopes that people have in the present day and may have had in the past. These visual envelopes are mapped in order to understand what perception people had of their monuments throughout history. How communities see and saw their monuments and their surrounding landscape is a key question in this paper. This is important to know in order to understand the evolution of a settlement, because change and development is often driven by a change in 'sense of place'. The paper will include a case study of this methodology on a parish with an urbanised core in Flanders (Belgium).

Understanding the cultural heritage landscapes in rural Palestine: Exploring local conceptions in the village of Dair Ghassaneh

Christine Alloush-Hadid, University of Birzeit, Palestine Feras Hammami, University of Gothenburg, Sweden

On a land that is still under occupation heritage is a critical issue that is highly related to the national identity. For heritage to continue to survive there is an urgent need for understanding the challenges of the current situation and planning for the future of the heritage laden landscapes in Palestine.

This research aims to explore the local conceptions of the cultural heritage landscape in rural Palestine; as these areas are characterized by their intact natural and cultural richness that are under threat due to the political constraints and occupation practices. taking the village of Dair Ghassaneh that is located to the north west of Ramallah city in the west bank as a case for the study. Dair Ghassaneh is a village that has special characteristics for being a throne village during the ottoman period in Palestine, a fact that was reflected in its built environment and social relations.

Using a bottom up approach the relationship between the locals' and their physical environment is studied in order to understand how the conceptions of heritage are constructed in relation to their values, needs, expectations and priorities. As an exploratory study, this research will depend on fieldwork, building focus groups, interviews and direct observations. The ambition is to explore possibilities for better integration of heritage aspects in rural planning in order to sustain healthy development and livelihood of heritage through the practices and interactions between humans and their physical environment.

The results are expected to reflect the influential factors in shaping the conceptions of the cultural landscapes in rural areas; political, social and economical as well the historical and environmental. And also how these conceptions shape the development in such areas, as they differ between the individuals within the community.

Sustainability of places of heritage: Baltic German manors in Estonia

Anu Printsmann and Hannes Palang, Tallinn University, Estonia

The sustainability of places of heritage is often thought to depend on maintaining and preserving the traditional value and significance that is attached to them. In this study, however, we demonstrate that radical alteration of the meaning of such places can contribute to their sustainability. Through a combined semiotic and phenomenological approach, and by distinguishing between constituted meanings and constitutive meaning-devices or secondary modelling systems and their development, we are able to explicate the nature of the meaning-formation processes that have been used to maintain the integrity of places by altering their meaning in collective memory. In the case of the manor houses of Baltic Germans in Estonia, changing functions during the long 20th century from noblemen's homes, through collective facilities for the less privileged to 'gourmet resorts' have led to their preservation and active engagement in the social and cultural life of society and in the construction of identity – a process of re-constituting, re-imagining and re-evaluating cultural meanings.

A powerful union – 'Landscape as Heritage'

Graham Fairclough, Newcastle University, United Kingdom Members of the CHeriScape network

As materialisations of where we have come from, where we live, and who we 'are', heritage and landscape (usually seen as separate) connect directly to current policy challenges such as human and social responses to climate change, social and demographic transformations, social (in)equity or the crisis of multiple identities. In combination - 'landscape as heritage' – they can be harnessed to pull these two 'ways of seeing' out of their preservationist, riskaverse stockades and into 'mainstream' policy and politics, from the suburbs of sectoral isolation to the inner city of global policy.

The Landscape as Heritage idea is encapsulated in a 3 year interdisciplinary network established in January 2013 to organise five international and interdisciplinary conferences on the relationship between heritage and landscape in the context of policy and research. This is called CHeriScape (Cultural Heritage in Landscape'; www.cheriscape.eu), and is a landscape-focussed project working in a heritage context, one of the first ten projects funded through the EC Joint Programming Initiative on Cultural Heritage (JPI-CH) (http://www.jpi-culturalheritage.eu/).

The JPI-CH promotes research on all three facets of heritage – tangible, intangible and digital/virtual – and one of CHeriScape's strengths is that landscape embraces all three. This is not about 'heritage landscapes' (heritage that covers large areas, or landscapes that are deemed old!) but about a more complex relationship by which both heritage and land-scape - always and everywhere - contains and contributes to the other. Starting points are the broad ELC definition of landscape but also an emergent 're-booting' of heritage as 'everything we have inherited' (not only the supposedly special bits that an unidentified 'we' wish to promote). This is a view that sees landscape+heritage as dynamic, useful and influential, central to expressions of democratic participation, and capable through policy and action of unravelling the logics of landscape.

G5

The logic of landscapes and antiquarian practice (2/2)

Chairs: Ådel Vestbö-Franzén, Carl-Johan Sanglert and Moa Lorentzon Location: Room D

The rise and fall of areas of national interest. Perspectives on historical landscapes in the planning process

Ådel Vestbö Franzén, Jönköping County Museum, Sweden

During the sixties and early seventies Sweden experienced a wave of areal exploitation. Malls and motorways, block of flats, parking spaces and industries took up former arable land or led to demolition of old town centers. Objects like ancient monuments and historical buildings were already protected through legislation and in order to limit the damage on landscape of high heritage values or with indispensable natural or biological values 'Areas of National Interest' (Riksintressen) was designed as a tool to help to preserve areas. From the beginning the National Heritage Board was in charge concerning the selection of the 'Areas of National Interest', but soon the responsibility was delegated to the county administrations. The selection of 'Areas of National Interest' concerning cultural heritage was carried out in a variety of ways depending on the education, knowledge and interest of the persons involved in the process. The methods and aims differed from county to county. From the starting point the aim was preservation, but new legislation altered the writings to stress the piety aspect. As the planning process in the late eighties was moved from the county administration to the local municipal level 'Areas of National Interest' has fallen between chairs and the question of how to deal with them in a planning process is delicate. The problems connected with the 'Areas of National Interest' concern partly the demarcation of the objects, partly the content or substance of the areas. In spite of the good intentions that the areas should reflect the distinctive character of a region, most of the selected areas reflect the spectacular and outstanding. Today the National Heritage Board has initiated a process to look over the 'Areas' and hopefully the renewed discussion will lead to new approaches.

Nomination of a Danish par force hunting landscape for the World Heritage List, and its implications

Jette Baagøe, Danish Museum of Hunting and Forestry, Denmark

In January 2014, Denmark presented a nomination of the par force hunting landscape in North Zealand for inclusion on UNESCO's World Heritage List. The landscape is nominated as an outstanding example of the interchange of Baroque values in Europe on developments in landscape design in the 17-18th centuries. The spatial organisation of buildings, forests, hunting roads, emblematic markers, stone posts and stone fences illustrates a development that peaks with the introduction of Cartesian geometry to optimise the function of the landscape and make it emblematic of an absolute monarch, his reason and power to control nature.

After the land reforms of the Enlightenment, the landscape's structure was preserved within the forests, whilst partly destroyed outside them. Therefore, the nominated property is a series of state owned forests, Gribskov, Store Dyrehave, and Jægersborg Dyrehave with Eremitageslottet. However, the nomination was prepared in cooperation between the owners, the municipalities surrounding the forests, the Danish Agency for Culture, and the Danish Museum of Hunting and Forestry, head of the steering committee, and future site manager.

The presentation describes the working process from the idea of proposing this forest landscape for nomination as a cultural landscape, through the difficult filtering process necessary to define the nominated series and its buffer zones to the problems of producing a comparative analysis.

Urban spread is a constant threat to all nature in Zealand north of Copenhagen, and the unique Danish Forest Preservation Act, which has protected the forests since 1805, is under pressure. Moreover, contemporary ideas of rewilding and close-to-nature principles in forestry threaten the cultural values in the forests. The presentation will discuss the future implications of the nomination in terms of protection of both cultural and natural values.

Gardening crafts and the ephemeral biological heritage. Exploring the possibilities to develop small nurseries for local plant propagation in the gardens of Gunnebo and Mårbacka

Tina Westerlund, Gunnar Almevik and Peter Sjömar, University of Gothenburg, Sweden

Gunnebo estate in the peri-urban landscape of Gothenburg and Selma Lagerlöfs Mårbacka in the heart of Värmland attracts together more than half a million visitors each year. The gardens and the performance of gardening are demanded in the experience economy, and furthermore a vital ingredient in the preservation and curation of these heritage places. What strategies does this imply for the management of the real estates?

In this paper we will argue for the possibility to expand the practice of traditional gardening craft skills in the management of real estate, to support restorative curation and development of gardens and landscapes. The case concerns the gardeners' skills in plant propagation and how this traditional craft practice could unravel the traditional antiquarian logic of heritage places.

In the last century the propagation of local horticultural plants has declined and almost ceased to exist as a gardening practice in standard maintenance and management of real estate. The common approach to renew a lost perennial plant, bush or tree is to buy a similar plant in a market-garden or a nursery. The variety of cultivars is sometimes limited and the historical relevance as well as the sustainability in the local habitus and ecological context may be questioned. The consequence has been drainage of gardening craft skills and loss of biological "green" heritage. This was the motive for the national project Programme for Diversity of Cultivared Plants (POM) to collect and safeguard the biological diversity of species and cultivars as a "green heritage". The future challenge is to involve horticultural practices to safeguard the biological diversity in a sustainable way.

The result from investigations and initial tests in Mårbacka and Gunnebo shows that protected historic parks and gardens could be developed to not only preserve existing structures and material, but also to renew, transmit and display the green heritage and the intangible heritage of traditional gardening crafts.

Handling of climate change in the coastal zone. Planning practice in the interface between municipal and regional landscape planning

Hans Antonson, VTI (Swedish National Road and Transport Research Institute), Sweden Mattias Hjerpe and Sofie Storbjörk, Linköping University, Sweden Robert Hrelja and Karolina Isaksson, VTI, Sweden

Putting climate change policy-integration into practice is challenged by problems of institutional misfit, due to, inter alia, deficient vertical administrative interplay (Urwin & Jordan, 2008; Moser & Ekstrom 2010). One neglected topic within the field of climate change research in Sweden lies within the interface of regional and local planning (Storbjörk & Hedrén 2011). In this context there is a dearth of knowledge concerning the government administrations landscape planning and management in coastal zones. Here, local authorities, so called municipalities, are commissioned to 'climate-proof' existing settlement and to develop new areas whereas regional authorities are set to preserve the natural and cultural landscape.

This paper analyses the views of local planners in a Swedish municipality and regional

planners in the County Administrative Board (CAB) concerning their strategies in coping with climate change in the coastal zone. Specifically, the paper addresses two landscape issues - namely cultural heritage and protected nature reserves in coastal zones - at risk due to estimated sea level rise and the suggested adaptation measures in the form of dikes/ embankments. The municipalities in Sweden are mandated to actively plan for mitigative and adaptive measures within their territory. The CAB supervises that the plans are in compliance with national legislation. The CAB is also designated a coordinating role for climate adaptation.

In-depth semi-structured interviews and official planning documents have been used, as oral stories are often considered to complement what is missing in the documents. The material reveals a tricky planning situation, filled with conflict. The local planners appear not to have fully assessed the situation concerning national interest, physical action on the ground and the citizen's views. In practice, various institutional frameworks, claims and ambitions collide. The paper also discusses Environmental Impact Statement in the light of climate change.

Parallel Sessions H Thursday 11 September 16.30 – 18.00

Department of Conservation, Mariestad

H1

Landscape challenges in EU's new agricultural policy: How did and how will the Common Agricultural Policy change the rural landscapes in Europe? (2/2)

Chairs: Hans Renes, Edwin Raap, Gerrit-Jan van Herwaarden and Henk Baas Location: The Aula

From smallholder traditions to ecological modernisation: Austria's rural landscapes after joining the CAP

Peter Kurz, Vienna University of Technology, Austria

When Austria joined the European Union in 1995, this meant a gash in agricultural politics, from broad support of sideline farming and smallholder households to a programme of straight modernisation and rationalisation. Austrian politicians defined this shift as a process of "ecological modernisation", incorporating agro-environmental schemes as instruments. Roughly 20 years after we find broadly re-organised structures in agricultural systems, while comparatively little documentation or evaluation of environmental changes on landscape level are available.

This paper traces the transformations in Austrian agricultural systems and in landscapes: Starting with a sketch of the changes in politics after joining the CAP, dynamics in agriculture are highlighted, focusing on the development of farm households (growth, concentration), agricultural production (specialisation, intensification) and land-use patterns (spatial segregation). This is followed by a regional case study, where effects on land-use and landscape patterns are figured out on example of a regional land-use system ("Egartenwirtschaft"). Based on that case, the concept of "ecological modernisation" as represented by the agro-environmental scheme ÖPUL, and its landscape impacts, are discussed. ÖPUL was introduced according to the standards of CAP, and has formed – in adapted versions – the central instrument of Austrian agricultural politics ever since.

Concluding evidence from the case study, it is stated that there are significant declines in landscape diversity to be observed. These can be seen as a consequence of the overall decline of smallholder and sideline farming, advanced by CAP. Smallholders are the main upholders of landscape diversity, regional agricultural heritage and knowledge- and placebased techniques of cultivation. Although promoted under the sign of "ecology", modernisation in CAP shall be seen critically from a landscape perspective. As Austrian agriculture still ranks among those with the smallest farm units within EU, effect of future politics on landscapes will strongly relate to their impact on farm size and processes of concentration.

CAP, cultural landscape and heritage in the Netherlands

Henk Baas, Cultural Heritage Agency of the Netherlands, The Netherlands

The Cultural Heritage Agency of the Netherlands has asked The Government Service for Land and Water Management (DLG) to explore in detail the possibilities, challenges etcetera which the new CAP will provide for heritage & cultural landscape. I will present the outcomes of the study. I will discuss the results achieved with the support of the CAP in the Netherlands and give a preview on how the new CAP support can be deployed for heritage/cultural landscape.

In the Netherlands the CAP funding which has been available for cultural landscape and/or archaeology over the past decade, has mainly been used to improve the visibility of monuments and structures. This helped to strengthen the interest in Landscapes and Sites, but use of the CAP for the management of sites, especially those in agricultural areas, was problematic.

The new CAP opens up possibilities for management of historical landscape in agricultural areas, but there are some major challenges. The first one is that Nature conservation is leading in where the money will be used. So only sites and landscape in agricultural areas and in the vicinity of nature conservation areas may qualify for support by the CAP. Luckily there is a good collaboration between the Cultural Heritage Agency (CHA) and nature conservation organizations.

I will focus also on farmers associations. By promoting cultural landscape and heritage as public goods, farmers can deliver and join forces. A farmer as guardian of natural and cultural heritage.

Analyzing spatio-temporal patterns of agricultural land fragmentation in an urbanized region

Fanny Van den Haute, Elke Rogge and Eva Kerselaers, Institute for Agricultural and Fisheries Research (ILVO), Belgium Veerle Van Eetvelde, Ghent University, Belgium

Fragmentation of agricultural land by urban sprawl affects both the agricultural production capacity and the environment. For decades, the problem of fragmentation is recognized in agriculture and the fragmentation of agricultural holdings has been a key argument for land consolidation projects in order to facilitate the shift from self-supporting mixed farming systems to a technology-oriented agriculture. However, fragmentation is not just a historical phenomenon but still on-going in many farm structures. Currently, urbanization puts pressure on farming systems due to (i) reduced expansion possibilities of farm units, (ii) influences on prices for land and (iii) more restrictive rules on farming when an increasing number of non-rural inhabitants has different expectations towards the countryside. Consequently, within strongly fragmented landscapes like the urban fringe, agriculture now competes with non-agricultural land uses for land.

Pressure on and hence, fragmentation of agricultural land, is also a problem in Belgium. Therefore, taking policy decisions requires a comprehensive study of the impacts of land fragmentation on farming systems and on their surrounding environment. This article is an introduction to the agricultural land fragmentation problem as well as an attempt to explore factors beyond urbanization pressure on farming systems. This research therefore aims to identify rural land fragmentation in three case studies using spatio-temporal data within the framework of GIS. The study period covers ca. 15 years and is based on the combined use of agricultural land use maps originating from administrative farmland databases. The data serve to formulate a renewed framework that can be used to describe land fragmentation in agricultural areas. These fragmentation processes that emerge from our analyses are compared to those defined and recognized in the current spatial planning policy and in existing monitoring data. This should allow us to identify bottlenecks and options for future spatial planning policy in highly urbanized areas.

H2

Spatial analysis based on categorial map data: How to address fluctuating landscape processes through the analysis of historical cartographic sources, landscape representations and spatial data (3/3)

Chairs: Stig Roar Svenningsen, Andreas Aagaard Christensen, Gregor Levin, Paolo Picchi and Jesper Brandt Location: Room A

Hot spots of agricultural land losses in Czechia (1845–2010)

Zbyněk Janoušek and Ivan Bičík, Charles University in Prague, Czech Republic

Agricultural land losses represent the main trend of landscape development in Czechia since the late 19th century. In this paper we will focus primarily on the methodical discussion of indicators and tools used to evaluate losses of agricultural land (especially arable land) and extensification processes in the Czech countryside: grassing and afforestation. The main objective is to evaluate the regional patterns of these processes. Cadastral data is used in the study and have been processed into a Database of long-term land use changes in Czechia (1845–2010), see Bicík et al. (2013).

Different methods lead to quite different resulting images (or spatial patterns) of the importance of land use changes in diverse regions of Czechia, therefore, the aim of this paper is to identify the most important areas of actual agricultural land losses in the Czech countryside in the long run from the mid 19th century to the present. Evaluation is carried out in a detailed regional perspective – at the level of cadastre units (basic territorial units, respectively, with an average area of 8.9 square kilometres). The major "hot spots" of land use changes are identified and a primary synthesis and explanation of the results is accomplished.

When interpreting the results it is necessary to take into account changes in land use classification throughout the period of observation. There were over 50 land use categories in 1845 and only 11 in 2010. Comparability of data was an essential requirement when creating the database. The important question, however, is also a change in the nature of registered categories (e.g. arable land) over such a long period. Discussion of these aspects of land use classification is thus a significant part of this paper.

Semi-natural grasslands: history matters, but to what extent?

Timo Pitkänen, Niina Käyhkö and Jyrki Lehtinen, University of Turku, Finland

Agricultural landscape in the hemiboreal zone has recently been facing significant changes, characterized by a shift from low-productive agriculture into modern land use regimes, favouring intensive cultivation. Due to this development, previously extensive semi-natural grasslands have largely disappeared from the contemporary landscape and been replaced either by hay or crop fields, or have been afforested.

The decrease and fragmentation of semi-natural grasslands have caused detrimental consequences to organisms depending on their resources – many of them have markedly declined, some almost disappeared. It is known that present habitats are markedly being influenced by the landscape trajectory and historical factors such as previous habitat extents or distance to villages, which have rather large explanatory power (Cousins and Eriksson 2002, Reitalu et al. 2012). However, there are no systematic quantifications of how important the added value of historical factors is, compared to presently observable environmental conditions.

This study is focused on the habitat modelling of fumewort (Corydalis solida) in the Rekijoki area, SW Finland, using field-collected presence/absence species data in combination with contemporary and historical information of land cover and land use changes in the area. The distribution modelling is performed using temporal sequences of topographic maps from the mid-1800s and 1960's and RapidEye satellite images from the present day. The paper aims to articulate added values of using historical data both for the modelling performance and for improved management and conservation of species and habitats.

Management history and landscape structure in the North Vidzeme Biosphere Reserve, Latvia – combining historical maps, forest inventory and remote sensing data

Zigmārs Rendenieks and Oļģerts Nikodemus, University of Latvia, Latvia

Agricultural landscape in the hemiboreal zone has recently been facing significant changes, characterized by a shift f Stand-level forest inventory data provides an opportunity to carry out a detailed investigation of internal structures and current disturbances in forest land-scapes with different ownerships. This database was supplemented with a series of historical maps and aerial photographs to further investigate the management history and its implications on today's landscapes. Since the private ownership rights to forest properties in Latvia were restored only after 1991, private forest holdings were small and fragmented compared to contiguous and continuously forested state forest tracts. The internal struc-

ture of these landscapes was formalized by fine-scale thematic maps, where forest stands were categorized by dominant species. Visual analysis of maps and stand structure was combined with the calculation of FRAGSTATS pattern metrics and quantitative analysis of landscape elements in an ArcGIS environment. Studied landscapes were in the size range of 1,700-2,100 ha each and were located in the North Vidzeme Biosphere Reserve, in Northern Latvia. Forest cover was stable for more than 80 years in state and municipal landscapes but approximately two thirds of private forests were formed by the afforestation of marginal agricultural lands in the second half of the 20th century. Evident differences in tree species composition and stand age distributions suggested that management history could explain the contrasts between state-owned and privately-owned forests. State and municipality forest landscapes were found to be more compact and having larger, more contiguous patches as the result of consistent long-term management in contrast to privately-owned forests where fragmented ownership and inconsistency of management have led to patterns unfavorable both for forestry and ecosystem vitality. This work has been supported by the European Social Fund within the project «Support for Doctoral Studies at University of Latvia».

H3 Travelling landscapes (2/2)

Chairs: Mattias Qviström and Katrín Anna Lund Location: Room B

The Scanian Zwischenstadt? Some methodological reflections on portable landscapes and travelling concepts in planning

Vera Vicenzotti and Mattias Qviström, Swedish University of Agricultural Sciences, Sweden

Landscape ideals have always travelled in planning. In the second half of the 20th century, the discourse on urban sprawl is an important example of this. In this paper we reflect upon challenges that planners encounter when they apply concepts developed elsewhere in a new context, i.e. when they make concepts travel and landscapes portable. Since the export and import of landscapes and concepts is one common way of advancing planning, we hope to contribute to reflecting on the knowledge production in planning.

In our study, we compare landscape discourses of urban sprawl in Germany and Sweden, i.e. planning discourses that have concentrated on landscape in order to offer new ways to understand and deal with urban sprawl. We will, by way of example, import the German concept 'Zwischenstadt' [intermediate city] (Sieverts), which has been informed by the situation in the Ruhr Area, into the planning discourse in Scania, a region in the South-West of Sweden. We explore to what extent the Zwischenstadt-concept facilitates an understanding of the Scanian landscape, and whether and to what degree it veils specific local conditions – it was, after all, conceived against the background of a different landscape.

This model import will be accompanied by a general methodological discussion concerning the potentials and pitfalls adopting concepts in planning. We start from the assumption that there is great potential for enriching the debate on urban sprawl by importing new concepts. However, if applied uncritically, the situated nature of knowledge tends to be ignored, i.e. the fact that every concepts derives from a specific situation, time, and place. If we do not consider the context dependency of concepts in planning, their adaption and adoption runs the risk of being ineffective; it can, however, also seriously hamper context sensitive and thus sustainable development of our built environment.

Heritagizing the nomad

Staffan Appelgren, University of Gothenburg, Sweden

Official recognition of territorialized heritage of certain mobile ethnic groups in Sweden has been limited. While the place-bound heritage of sedentary society – churches, castles and monuments – is intrinsic to the establishment of hegemonic landscape, nomadic groups are deterritorialized and predominantly associated with intangible cultural heritage and heritage artifacts.

This paper surveys and discusses the theoretical debates surrounding the intersection of territorialization and nomadism in order to answers questions such as: Is heritage inherently a sedentary phenomena? How does life in motion produce stable and fixed physical forms in the landscape? Do nomadism create remains, memorials and other presences of the past in the landscape that are not recognized by dominating sedentary ideologies? Departing from recent mobility theories, philosophical nomadism, deterritorialization debates in anthropology and the end-of-geography ideas of postmodernism, it is argued that sedentarism as a world-view associates mobility with a lack of and disinterest in stable physical forms and territorial moorings, whereas sedentary populations constitute their territoriality over time, through territorializing heritage practices, erecting grand buildings and spectacular monuments. Sedentary society develops conceptions, practices and institutions to celebrate and preserve their own territorial statements and achievements over time, which can be seen as a temporal strategy to link the past, the present and the future. Heritage becomes a territorializing – landscape claiming – practice.

Heritagizing the nomad thus is a continuation of sedentarism and the territorializing form of heritage. The paper explores the dynamic intersection of being on the move and creating lasting spatial anchorage and the politics of heritage as territorializing and deterritorializing claims, at a time when sedentarism is increasingly exposed to the destabilizing forces of global economy and politics.

Travelling into history: The case of Swedish Roma

Ingrid Martins Holmberg, University of Gothenburg, Sweden

Although celebrating their five hundred years in Sweden in 2012, there has been very little recognition of the Roma's corporeal long-term presence on Swedish grounds. There are severe difficulties in reconstructing the Roma's historical presence in Sweden, not at least because of their persistent travelling (mostly forced). Leaving aside here the issue of a parching and well documented anti-romanism that permeates most accounts of the Roma's history, this paper will present a study of some interesting contemporary efforts to gain

new knowledge about the Romas' historical places in Sweden: projects run by the official state heritage sector during the last years.

The paper will present what has become known of Roma historical places, itineraries, travelling and locations in Sweden trough these projects, and also which are the particular conditions, discourses and ambitions within the official heritage sector that have promoted and facilitated these projects. The paper puts the findings in relation to the spatial concepts territoriality, place-making and mobility, but goes on to discuss them from foucauldian notions of knowledge-power. According to the AHD theory (Smith), 'heritage' as an official practice is normally understood and performed within the discursive realms of a white-male-middle class history, and prioritizes material artefacts (such as buildings or cultural landscapes) over intangible and ephemeral forms of culture. In trying to gain knowledge about Romas' historical places, these heritage projects are forced to overcome the internal knowledge regimes, and in doing so, they can help to pinpoint the epistemological obstructions that appear when 'the travelling (subaltern) Roma' is to be situated within a particular 'heritage-biased historical landscape'.

H4

Geographical indications, place based branding, landscapes and rural development

Chairs: Paulina Rytkönen and Madeleine Bonow Location: Room C

The role of regional product labelling schemes in shaping images of the region and its landscapes: the case of the Association of Regional Brands, Czechia

Magdalena Kašková, Charles University in Prague, Czech Republic

First regional product labelling schemes emerged in Czechia about one decade ago. However "boom of labelling" started just recently, hand-in-hand with the rise of awareness focused on food (and other products') quality, origin and distribution/supply chains (i.e. alternative food networks – AFN). Despite sharing the key idea with AFN (revision and shortening of producer-consumer relations in a spatial and social sense), regional product labelling schemes offer a lot of other perspectives, beyond being "just" one of the alternatives.

The paper focuses on the relation between regional product labelling schemes and the region and landscape they are attached to, or more precisely the region's and landscape's image. Regional labelling schemes depend on an existing image. At the same time they are also inevitably shaping and producing images of the region and its landscapes by highlighting certain characteristics, qualities, symbols. Hence, the key question is how do various involved actors/subjects use labelling schemes to shape the image of the region and its landscapes.

The processes described and their impact on the local community and landscape is visible particularly at the microregional level. The study is thus further exploring the case of the Association of Regional Brands (ARB) covering two thirds of more than thirty microregional labelling schemes spread across Czechia. ARB sets basic common rules, however coordinating subjects of individual systems are autonomous in their decision-making. Thus they are key drivers considering the shaping of the region's and its landscape's image – being it deliberate or not. In-depth interviews with each of the 22 leading coordinators offer a look inside the labelling schemes and their operating. The combination of interviews with an analysis of the usage of local landscape representation and symbols enables the discussion of the role of labelling schemes in shaping images of the landscape – area – region they are attached to.

Economic value and multifunctional management of an olive grove landscape in Andalusia (southern Spain)

Alejandro Rescia-Perazzo and Miriam Torres-Miralles, Complutense University of Madrid, Spain Javier Sanz-Cañada, Spanish National Research Council, Spain

In the last few decades in Europe, accelerated land-use changes, resulting in turn from global socioeconomic ones, are causing a radical transformation of many agricultural landscapes. In Spain, olive grove landscapes are being simultaneously affected by land-use changes due to agricultural intensification and land abandonment. At the same time, these land-use changes are affecting their agricultural production and ecological functioning and, it is involving a sociological degradation at regional and local scales. As a consequence, the persistence of olive grove landscapes is being threatened. The management options heretofore applied in these landscapes (basically agri-environmental schemes) have failed, likely because of their biased objectives (farming production and environmental management) and their restrictive farming-system scale. In this work we will assess the economic value from a Contingent Valuation survey of an agricultural landscape corresponding to a Protected Designation of Origin district (comarca) of extra virgin olive oil and from that assessment we will propose a change of perspective in the management of olive grove landscape considering their multifunctionality (multiple ecosystem services). This implies applying management policies with wider-ranging objectives as well as payments for the non-provisioning component of ecosystem services. Additionally, we will suggest extending the scale of spatial planning, where appropriate, including the farming system and the neighboring and interspersed semi-natural and natural vegetation.

Culinary regions and GIs – benefits, threats and general impact on rural landscapes and communities in Sweden

Paulina Rytkönen, Södertörn University, Sweden

The French AOC system, PDOs, PGIs and other types of geographical indications (GIs), are re-known tools to boost the valorization of agro-food products by providing a place based collective branding umbrella, but they have also an enormous impact on the shaping and reshaping, and the perception and organisation of territories and landscapes. In Sweden the use of GIs is rather a new phenomenon. But during recent years, the New Culinary Country initiative (Sverige det Nya Matlandet) has pushed for the increased use of PDOs and PGIs and during the last year, also for the formal organization of culinary regions and perhaps also for the development of a national system for geographical indications. This article highlights this recent process with an analysis of the concerns about and

consequences of the articulation of culinary regions and of a national GI system for rural landscapes and communities departing from a planning, management, economic and institutional perspective. The article is based on focus groups and interviews conducted during 2013 in eight Swedish counties.

Protecting local and traditional products and landscapes through the GI system: terroir products in a Swedish context

Madeleine Bonow, Södertörn University, Sweden

Geographical indications (GI) are generally traditional products, produced by rural communities over generations that have gained a reputation on the markets for their specific qualities. These local agricultural products and foodstuffs are often called terroir products. These foodstuffs are often in the heart of the diversification of farming and sustainable development. Another major issue is the preservation of the natural resources on which the product is based and the biological and cultural diversity that is linked to these products. Protecting local and traditional products and landscapes through the GI system can contribute to conserving biodiversity at various levels: domestic animal breeds, plant varieties, microbial ecosystems, and landscapes. This is also a way of sustaining in a formal way communal knowledge and practices, since they reinforce the protected resource. Several examples taken in Sweden will help show how links can be established between the protection of GI, cultural biodiversity, and local knowledge.

H5 Visual methods (1/2)

Chair: Jonathan Westin Location: Room D

The heritage landscape development of Évora peri-urban area

Teresa Batista, José Manuel de Mascarenhas and Paula Mendes, University of Évora, Portugal

Évora (the Lusitanian Ebora), the most important town in Alentejo province (Southern Portugal) is involved by a cultural landscape where not only archaeological sites of several epochs are present, but also old fields networks and farms as well as specific agro forestry pastoral systems, the montados. In this study were analysed the relationship between the ancient cadastral networks (particularly, the Augustan Roman cadastral networks, the Late Empire Roman cadastral networks and the Medieval ground parcels network) and the actual properties in land network feature.

A detailed cartography of the old cadastral networks was done through the initial interpretation of 1958-67 vertical aerial photos, and validation with 2007 vertical aerial photos (approximate scale: 1:10 000) and land surveys, which allowed to delimitate the best preserved sectors and marks around Évora. As many of these marks remained integrated during long time in the landscape auto organization process, the morphology of the present parcel networks was conditioned by them. A GIS based approach was developed to test the role of these marks as actual boundaries of properties, ground parcels, roads and canals. Furthermore the best preserved areas and marks around Évora concerning the old cadastral systems, the ecological corridors networks and the montados were identified. These elements were central to for selecting the most interesting places to install interpretation centers and thematic paths. The main steps for developing such centers were also described. The results of this study are indubitably very useful to sustainable land planning programs, since Évora City presents actually an important urban expansion dynamics with impacts in peri-urban landscape.

This study is been held in the indicators working group of the project OTALEX C co-financed by the UE, POCTEP program and FEDER.

Landscape photography - interpretation of nature or reflexion of culture?

Keld Buciek, University of Roskilde, Denmark

"Land Matters" – this is the title of distinguished writer Liz Wells book on the relationship between landscape photography, culture and identity. And land do matter, especially when it comes to the idea of "the nordic landscapes". This paper deals with how nordic photographers engage with heritage, landscape and their representations. The paper follows Wells in arguing that landscape photography highlights political and social aspects of contemporary environmental issues. But where Wells focus on key examples of existing work by contemporary photographers, this paper takes it methodological point of departure in actual doing landscape photography, i.e. following artists/photographers in their quest for interpretation of landscape and heritage.

Travelling through time and space

Willem Vletter, University of Vienna, Austria

The application of LiDAR data for creating a 3D model of an area is already well known. It is also the only remote sensing technique that can visualize on a large scale the micro topography in (densely) forested areas. In forested areas historical road and paths are often better preserved than in agricultural land. Therefore the objective of my PhD thesis research is to develop a methodology based on LiDAR data to investigate road and path networks in forested areas.

In this presentation the focus lays on the use of gaming software (Unity) to visualize elaborated LiDAR data. On a 3D model (semi-) automatic extracted and (relatively) dated road and path networks are draped. Thanks to the dating, networks from different periods can be shown. This provides a temporal dimension to the model, making it 4D. Being a gaming software the model can be made more realistic by coloring and adding (different) vegetation to the scenes of the various periods. In addition agents can be introduced in the application, resulting in a historical landscape that can be 'experienced'. In this way one can not only 'travel in landscape' but also 'in time', expanding the analytical possibilities.

Parallel Sessions I Friday 12 September 08.30 – 10.30

Department of Conservation, Mariestad

I1

Unraveling the logics of food landscapes

Chairs: Ingrid Sarlöv Herlin, Kenneth R. Olwig and Richard Tellström Location: The Aula

Good food for 'good landscapes'. How can the consumer know?

Ingrid Sarlöv Herlin, Swedish University of Agricultural Sciences, Sweden

Landscape is a factory for food. Todays' intensive and industrial food production, due to increased consumption, has led to drastic landscape changes during the past decade, resulting in intensification and marginalization of land, fragmentation and decline of habitats for biodiversity, over-fertilization, loss of cultural elements and traditional land use types, and the disappearance of farm animals from the landscape to industrial stables. However, landscapes used in the marketing and labelling of food products, are often represented as Arcadian and pastoral, in harmony with nature, without connection to the real origin of the products. While the world market for industrially and intensively produced food is increasing, the (much smaller) market for organic and locally grown food is encouraged by informed consumers who are willing to pay the extra costs for a small scale production. However, while geographic origin is a well-established tool for differentiation of food products, and organic and locally grown food can be presented with environmental quality marking, it's very difficult for consumers to understand if their food choice can contribute to the stewardship of 'favourable' landscapes. Consumers find it difficult enough to understand if choices have positive environmental effects or if the labelling of a product is matching the content at all. This paper scrutinizes, through text analysis, initiatives for the promotion of food that put the actual landscape and landscape qualities in focus. Which rationales and language are used and in how is the message conveyed to the consumers? The study scrutinizes the language used in initiatives at different levels in England and Sweden; for example initiatives covering larger areas protected areas; such as Peak District Environmental Quality Mark and Cotswold Choice, the marketing of food from specific habitats as well as the texts on restaurant menus.

Food culture as a super-user of landscapes

Richard Tellström, Örebro University, Sweden

Food culture is the result of how people perceive themselves and their eating in relation to other people which they want to distinct themselves from or express a belonging. Both the production of food and the selection of available foods at markets are direct consequences of ideals, culture, political opinions, religion, social position and economy, but also the change that follows of the chosen direction of once own life. Our physic bodies' need of food every fourth or fifth hour in combination with cultural ambitions, creates a extensive food production effecting the land with fields, industrial areas and landscapes fragmented by infrastructures for transportation of the produced food to places where it will be further developed and consumed.

This presentation will put light on how human ideals on food and beverages effect the land and how historic food culture ideals have left tracks in the topography and in many cases totally reshaped it to new mostly large-scale structures. Different landscape types have become important marketing resources due to the contemporary interest in post-modern authenticity . Landscapes can be seen on food labels but also as way marketing tourist destinations were food and meals have become as important as nice beaches or interesting sights. The presentation will be based on observations from two fieldworks, one conducted in the Piemonte region, north in Italy (2012), and the other in England and Wales in Great Britain (2013) which have had focus on food and landscape in combination. Analysis will be made from the perspectives of the European Landscape Convention on human wellbeing, sustainable development and how the landscape is a constant resource for economic development.

Landscape practices and farmer's sensitivity to landscape to understand the relationships between food production and landscapes: perspectives from France and Québec

Lydie Ménadier, University of Montréal; University of Québec in Trois-Rivières, Canada Gérald Domon, University of Montréal, Canada Julie Ruiz, University of Québec in Trois-Rivières, Canada

Farmers have a rich perception of the landscape as they are both living and working in a specific place. This sensitivity to landscapes influences their farming practices and is a key to underline the multifunctionality of agriculture, in a context of demand of landscapes and products of quality and to respond to the goal of The European Landscape Convention. Thus, our research focused on a comparative analysis of farmer's relationships to landscapes in two PDO cheese areas in France and in one area of Québec where the number of marginalised products such as ice cider, cheese or exotic breeding is increasing.

We aimed at answering three questions : what are the landscape preferences and values of farmers who produce certified or marginal products in France and Québec ? Which links do they establish between their farming practices to produce a non conventional product and the landscape elements located on their farm ? Is it possible to define inside that group of farmers several "communities of relationships to the landscape" that contribute to understand the relationships between the food production and the landscapes ?

Our methodology was based on semi-structured interviews of 60 farmers leaded from 2008 to 2013. We distinguished 4 types of relationships to landscape: ordinary, utilitarian, hedonistic and symbolic relationships, and evaluated their respective weight for each farmer to finally identify communities of relationships to the landscape.

As a conclusion, this research points the sensitivity on landscapes of farmers based on interactions between technic, economic, social, cultural and aesthetic dimensions. The differences between the communities of relationships to landscapes suggest finally the significance to take into account the plurality of farmers point of view, in order to propose projects of rural development or projects of valorization of the products in adequacy with their aspirations and the diversity of their landscape values.

Taste the niche landscape: Landscape, food and bio-/cultural diversity

Kenneth R. Olwig, Swedish University of Agricultural Sciences, Sweden

The meaning of landscape is of relevance to the production, marketing and eating of agricultural food products, and to the resulting bio- and cultural diversity of the environment as protected, for example, by the European Landscape Convention (ELC). The original meaning of landscape in English was much like the present day meaning of the Swedish landskap, meaning a place or region like "Landskapet" Åland, or the present day composite area of Norrland. The "land" in landscape thus referred to the finite land, country, area or place of a people and it did not mean land in the sense of scenic topography. In the Renaissance, however, the techniques of mapping were applied to the representation of landscape as objectified pictorial scenery, and the land in landscape hereby came to be understood as land in the topographic sense, like the floor of a stage scene. This was not true, however, in the Romance languages where in the equivalent concept, such as the Italian paesaggio, the prefix paes (the equivalent to the land in landscape), still referred to the finite area of a place, or area, such as Trentino, which as a polity and place resembles a Nordic landskap, such as Åland. This paper will contrast the environmental and cultural implications, in relation to the ELC, of the application of the two differing senses of landscape to food production, marketing and eating, using the contrasting examples of Swedish "landskap" of Norrland's Polarbröd (Polar Bread) and the Trentino "Malghe" (mountain pasture) butter. The former is marketed with landscape scenes from Norrland and the claim that it has "Norrländska Egenskaper" (Norrlandic properties) even though water is about the only ingredient that comes from Norrland, while the latter is sold as a strictly controlled characteristic product of customary mountain common pastures and cooperative organization.

Representing in vitro meat: Technology, high hopes, and spectacle in the politics of presenting future food landscapes

Erik Jönsson, Lund University, Sweden

From livestock industries' marketing material depicting cows in sun-soaked green surroundings to activists' depictions of dark and overcrowded pigpens, representing the spaces of production have since long been central to the politics of food landscapes. Through such portrayals various actors struggle to steer consumers' behaviours and thereby influence the kind of landscapes (urban and rural, outdoors and indoors) consequentially materialising. This struggle over the kind of spaces put to the forefront or hidden from view is undoubtedly not only part of contemporary food-political landscapes, but can become even more accentuated as new food products and their accompanying production systems are initiated. Current representations of in vitro meat (i.e. meat grown outside of animal bodies) here offers a telling example.

Portrayed by researchers as safe, humane and resource-efficient (Datar & Betti, 2010) and by journalists as 'steak without wrecking the planet' (Bartholet, 2011), widely circulated representations of in vitro meat sees the product linked to war camps and government offices in the past, silicon valley start-ups and laboratories today, and to radically remade rural landscapes tomorrow. Proponents promise a technological solution to deal with the environmental impacts of meat production, but in this (often without acknowledging its full impact) also promise to radically transform an activity directly or indirectly occupying close to a third of the earth's ice-free landmass (Steinfeld et al, 2006).

In this paper, combining political ecology and historical-materialist landscape geography, I strive to unravel the spaces in vitro meat is connected to today, and the future landscapes it is presented alongside. Thereby I illuminate the roles perceived future landscapes play in the presentation of futuristic food production systems, and how hegemonic narratives risk over-emphasising spectacular spaces at the expense of a more holistic analysis of a food production system's entire hinterland.

I2 Garden landscapes

Chair: Katarina Saltzman Location: Room A

The orchard meadow landscape – a vulnerable landscape heritage

Allan Gunnarsson and Pierre Nestlog, Swedish University of Agricultural Sciences, Sweden

The aim of our presentation is to describe the main features of the orchard meadow system and landscape in southern Sweden and to explain the problems and challenges faced when trying to preserve some representative parts of it.

By the lake Åsnen in Småland, fruit-trees are still kept in semi natural, species rich meadows (orchard meadows/fruit tree meadows - in German `Streuobst Wiesen') and scattered on verges, by stone walls and in woodland edges. The meadows are traditionally used for haymaking, while the fruit varieties - mainly apples for sale - have been renewed by grafting on wild growing rootstocks like crabapple seedlings. Most often this landscape is today kept and managed due to its ecological- and cultural heritage values representing a gradual transition between horticulture and agriculture as well as between gardening and wooded meadow cultivation. The hard work to keep this landscape and its values as well as the special skill of craftsmanship that is needed, makes it very vulnerable. In a rather short period of time there might be nothing left but overgrown orchards with fast degenerating ruins of fruit trees and the skill connected to the cultivation and management will be lost, if the negative trend is not broken.

In this study we have documented and analyzed the dynamics and changes in the fruit tree meadow landscape focusing the last 20 years as well as the main management and cultivation procedures being essential in the cultivation and preservation of the meadows and fruit trees. Our hope is that the study will shed light on the problems of preserving and maintaining a living and cultivation dependent cultural heritage. The knowledge and the orchard meadow concept could also be used in development of urban horticulture projects directed towards woodland gardening and extensive fruit growing in urban green structures.

Sustainable potential of urban gardening for short food supply chain

Marina Pintar, Matjaž Glavan, Majda Černič-Istenič and Andrej Udovč, University of Ljubljana, Slovenia

The FP7 project 'Food Planning and Innovation for Sustainable Metropolitan Regions' (FOODMETRES) thrives to assess both the environmental and the socio-economic impacts of food chains with regard to spatial, logistical and resource dimension of growing food as well as food planning and governance.

The relationship between different food production/supply factors can be interpreted in form of the so called 'Food-Triangle' in which food chains take a key position between food safety, accessibility/availability as well as landscapes and ecosystem services on the one hand and food quality as a matter of ethical considerations on the other hand.

One of the main characteristics of the fenomenon of urban gardening is that the by far major share of food produced in these forms of subsistence gardening is consumed directly by the growers themselves, without any chain related charges and expenses, but also without having passed any health security assurance system (heavy metals, nitrate, hygienic aspects). In this short food chain type producer is simultaneously a consumer.

Regarding urban gardening, the aim of FOODMETRES project is to analyse the phenomenon of urban gardening depended on local natural resources and to examine the socioeconomic benefits of urban gardening beyond the provision of food and the specific positive and negative externalities that the urban gardening are bringing to their metropolitan areas. Six metropolitan regions, namely Rotterdam, London, Berlin, Milano, Ljubljana, and Nairobi are the subject of a more detailed study of the project FOODMETRES, and to some extent also gardening topics.

Bringing private actors into action. The garden complex in Flanders.

Valerie Dewaelheyns and Elke Rogge, Institute of Agricultural and Fisheries Research, Belgium

Domestic gardens remain one of the least studied and understood land uses. They are such a common and trivial part of people's everyday experience that they escape attention, from the academic world as well as from policy. Not only the smallness of many gardens, but also their modest and private character, large number of owners and managers and extreme diversity are obstacles for research and policy. Yet, a substantial fraction of the open space both in (peri-) urban as residential areas is covered by domestic gardens. Although individually they may look insignificant, the sum of domestic gardens for a certain area might be significant.

Given their spatial footprint, it is time to put the domestic garden in a different perspective. Despite their diversity and heterogeneity, domestic gardens have essential characteristics that invites to consider them as strategic land use units. Existing literature provides substantial information on ecological, social and economic characteristics, functions and services of domestic gardens. So, domestic gardens indeed seem to have strategic potential when thinking about future challenges and common goals like climate change and food security.

By means of a qualitative research design we were able to get a thorough insight into the barriers and levers for private garden owners to adjust their garden design and management for the common good. By combining expert interviews, a design workshop addressing garden and landscape architects as well as urbanist, and focus groups inquiring private garden owners, we were able to grasp the perceptions of all relevant actors with regards to the potential of mobilizing domestic gardens as a strategic land use. All three data sources were coded in Nvivo software. The insights were related to existing literature and captured in a theoretical scheme. The gained understandings are essential in unraveling the logics of domestic gardens.

The role of the garden in the own-your-own-home movement in Swedish cities 1905-1936, the example of Rostorp in Malmö

Anna Jakobsson, Swedish University of Agricultural Sciences, Sweden

In the early 1900s many stately loans were granted in order for working people to be able to build houses with gardens according to certain models, so called smallholdings or ownhomes, in the outskirts of Swedish cities. A home of one's own had a positive effect on health and social well-being according to the Swedish Own-Home Committee. Other arguments were to establish certain self-sufficiency and economic independence. The aim of this presentation is to discuss some of the roles of the garden in the own-your-own-home movement 1905-1936, using Rostorp in Malmö as an example. The discussion will be based on the early results of a post-doctoral study at both SLU Alnarp and Lund University, which has the overall aim to increase knowledge about the own-home garden, to contribute to the ongoing discussion about sustainable urban development and to discuss the application of knowledge on the history of urban agriculture and gardens in the context of urban planning today. The study as a whole conveys an understanding, and an awareness, of the role and heritage of the own-home garden and its values. The early results show that the own-home gardens played a role in the identification and place-making process as well as the social well-being of people in the housing area in question. This is indicated by f xshared usage of produced crops and joint efforts when building and cultivating the plots of land. The cultivation and the garden itself can be said to represent a common strive for selfsufficiency and independence. In the further context of urban and agricultural history, the established own-home associations provided and propagated knowledge on gardening and crop production, indicating a certain role of the own-home garden in society as a whole at that time, as far as building competence and reinforcing self-sufficiency in cities.

Relics and intruders. Managing plants in motion in the private garden

Katarina Saltzman, University of Gothenburg, Sweden Carina Sjöholm, Lund University, Sweden Allan Gunnarsson, Swedish University of Agricultural Sciences, Sweden

Gardens, as all landscapes, are constantly changing and involve many kinds of movement and motion. Changes connected to the cycles of the year, of day and night, and the life cycles of individuals are intermingled and combined with decisions and actions of human and non-human actors. This presentation will discuss people's relations to plants that are in motion, moving within and between gardens. It is based on an on-going trans-disciplinary research project, examining the complex interactions between people, plants and other actors in contemporary, private gardens in Sweden.

Despite their rootedness, plants do move and are moved between different places in the garden, and from one garden to another. In many private gardens there are plants with a history, where owners can tell stories about how it was brought in from a different location, for example from an old relative or from a journey. These plants are often regarded as relics or souvenirs, and receive special attention and care. Other plants move by themselves in and between gardens, through spreading seeds, winding roots or rhizomes. In some situations these can be regarded as welcome gifts and contributions, in other situations as fierce intruders that need to be controlled. A number of species are in some gardens regarded as useful and pretty, and in other gardens despised as weeds. Some gardeners describe their fight against specific weeds in terms of a continuous war.

The project includes a critical examination of dichotomies such as nature/culture, heritage/change, private/public and work/leisure, and research is carried out through qualitative methods, including semi-structured interviews and ethnographic observations.

I3 Rethinking ecosystem services – special focus on cultural services (Panel/Workshop)

Chairs: Gunilla Almered Olsson, Petra Andersson and Ulrika Palme Location: Room B

Methods for eliciting cultural ecosystem services

Claudia Bieling, University of Freiburg, Germany

One of the big open questions of ecosystem services research is how to identify and assess cultural ecosystem services. Up to now, cultural ecosystem services are underrepresented in ecosystem services assessments because they seem so difficult to capture. On the one hand, they may require resource-demanding approaches like in-depth interviews, on the other hand, results are typically highly context-specific qualitative insights that are hard to connect to data on other ecosystem services.

However, increasingly methods for eliciting cultural ecosystem services are carried out that aim for relatively quickly gathered, quantitative and spatially explicit data, for instance participatory mapping exercises. This panel contribution will provide a brief introduction into such approaches. The aim is to open up a discussion on current approaches in cultural ecosystem services research; aspects to be addressed encompass applicability as well as quality and usefulness of results (validity, possibilities of integrating the results into comprehensive ES assessments etc.).

Methods for assessing cultural ecosystem services

Ulrika Palme, Chalmers University of Technology, Sweden

Ecosystem services are manifold and there is hence no single metric to assess them. Cultural ecosystem services are furthermore intangible and hence more of a challenge to assess than ecosystem services manifested as physical flows. This abstract presents an ongoing literature study of methods for assessment of ecosystem services, deemed applicable in the assessment of cultural ecosystem services. That is, the review is broad, but only methods judged useful in the cultural ecosystem context have been selected. Furthermore, only methods with a multi stakeholder approach are included. The review looks at what methods that are recommended in what decision-making context, at what indicators and criteria that are

used, at how values are expressed, how trade-offs are handled and at how data is collected. A vast majority of the methods found are some kind of multi criteria assessment, either on its own or combined with e.g. trade-off analysis, vulnerability analysis, cost benefit analysis, geo-visualization, mapping exercises, scenario analysis and/or spatial analysis, but there are also methods based directly on qualitative interviews. A common trait is a link to landscape planning. Only a minority of the studies reviewed include cultural ecosystem services, possibly due to the challenge of assessing intangibles.

Valuing cultural ecosystem services: Qualitative, quantitative and monetary valuation combined

Maraja Riechers, Teja Tscharntke and Jan Barkmann, University of Göttingen, Germany

Cultural ecosystem services are seen as highly important for the comprehensiveness of the Ecosystem Service framework. They are, however, methodologically and conceptually still not well developed. Valuing cultural ecosystem services is seen as difficult, as direct use values and nonuse values are combined in the intangible character of the categories. Especially urban landscapes or urban green spaces have been neglected in the cultural ecosystem services research so far.

In the study: "Concepts of cultural ecosystem services and their valuation through methodical pluralism on an urban- rural gradient in Berlin" we innovatively focused on valuing cultural ecosystem services in qualitative, quantitative and monetary ways within a rural- urban gradient in Berlin. Qualitative methods, such as expert and problem-centered interviews were mixed with a broad quantitative study. Face-to-face interviews have been carried out in two seasons (autumn and spring) within a four- tiered gradient. Included in the quantitative assessment has been a Choice Experiment as monetary valuation. The methodological pluralism ought to tackle the problem of portraying different kinds of values of cultural ecosystem services, which is often named to be a problem in its valuation. Value statement in word, attitude measurements and monetary terms can be compared and give a broad spectrum of value for Valuing cultural ecosystem services .The results can hence be discussed according to the data collection method as well as a combination of values.

Results are highly informative for landscape and city planners as well as for political decision makers. It shows the differences and synergies between pluralistic valuations and gives inside into the various perception related to urban, peri-urban and rural landscapes in the specific regional context of Berlin (as city and state).

The limits of valuation of cultural ecosystem services through a positivist approach: Understanding rural landscapes – concepts and actions

Melanie Steinbacher, University of Innsbruck, Austria

Within the last decades a neoliberal approach towards public goods has taken place, driven and appropriated by different actors. While environmentalists initially saw in the valorization of ecosystem services a tool against the ongoing consumption of landscape, economists immediately developed on the basis of the Millennium Assessment a standardized evaluation and a generalized concept, the "Economics of Ecosystems and Biodiversity TEEB". Politicians and institutions initiated and funded the comprehensive conceptual work and took advantage on the results to legitimate subsidies and transfer payments.

Provisioning ecosystem services as individual goods are already largely covered by market processes. Regulating and supporting ecosystem services can rather easily be integrated via opportunity costs. The main problem arises with a valuation of cultural ecosystem service if a positivistic approach with quantitative measurements is applied. Social constructivism and moreover Kantian approaches argues strongly against this. Highly individual, atmospheric and situational evaluated landscapes show the limits of empirical survey methods which cannot be solved by quantitative ranking.

However some ecologists have taken up the challenge to valuate also cultural ecosystem services with quantitative and economic valuation approaches. It comes to a critical point if aesthetic and spiritual value of landscapes are in such a positivist epistemological way commodified.

The valuation of landscape aesthetics has on a regional level already started through transfers payments from tourism towards agriculture for "landscape designing". It is a question of time when scientific results of landscape valuation deliver a basis of argumentation for payments on a higher institutional level.

The values of cultural services in a landscape

Mateja Šmid Hribar and Mimi Urbanc, Scientific Research Centre of the Slovenian Academy of Sciences and Arts, Anton Melik Geographical Institute, Slovenia

A cultural landscape is a combination of human activities in the natural environment and is created across time and space. It is most profoundly influenced by its structures and their functions, and by changes. Changes in landscape structures or processes influence how the landscape works because these structures provide functions in space that produce various services. To obtain benefits from these services that may also have economic effects, it is often necessary to include other forms of capital. The Millennium Ecosystem Assessment distinguishes four types of ecosystem services: provisioning, regulating, supporting, and cultural services. Discussion has mainly focused on the first three, whereas cultural services are often reduced to recreational and tourism aspects. This article presents a case study of the Ljubljana Marshes that identifies the land-scape structures and evaluates their cultural services using a matrix for assessing ecosystem services (Burkhard et al. 2009). Because cultural services in the matrix comprise only "recreation and aesthetic values" and the "intrinsic value of biodiversity," we retained the first criterion and omitted the second one. Additionally we introduced and defined inspirational value, cultural/natural heritage and identity, spiritual/religious value, and educational/ research value. In the pilot area, landscape structures contribute most significantly to aesthetic value (beautiful views of meadows, spectacular colors), followed by inspirational value (encouraging individuals to engage in art). Certain buildings and landscape patterns help create cultural/natural heritage and local identity. Although there are several nature trails and information points in the area, the educational value is less notable, and even less so the spiritual/religious value and—surprisingly—the recreational value.

Like the cultural landscape, landscape structures change and ecosystem services change with them. In order to avoid conflicts of interest, future landscape management must equally take into account all ecosystem services, including cultural ones.

Cultural ecosystem services provision in landscape assessment and planning: a case study in Trentino region, Italy

Paolo Picchi, University of Trento, Italy

The evaluation of Cultural Ecosystem Services has been widely debated in the last decade. CES assessment seems to be very wick in relation to other Ecosystem Services evaluation. The paper shows that an important assumption in the evaluation of CES is that these can be better evaluated in relation to the landscape pattern where the service is provided. The provisioning of cultural services is strictly dependent on the landscape structure and in trade-off with other ES. The paper starts by the definition of CES as services that can be provided at landscape level whose definition corresponds to those of landscape services and land-scape functions. We propose a method based on the measure of landscape metrics corresponding to the most appreciate landscape pattern combination supporting CES. Landscape preferences are assessed through a picture-based questionnaire where stakeholders are asked to express social preferences for landscape scenarios, set where they would have some social activities as eco or agro-tourism, corresponding to specific cultural services derived from cultural classes, groups and types in CICES classification. The use of landscape metrics, as the proportion of different land cover classes, the intensity of human management or naturalness, the length of specific landscape features or the grade of cultural

heritage connectivity, can give a set of values expressing the preferred landscape scenarios supporting CES. The metric values can be aggregated into an index expressing the value of the provision of CES in a specific landscape pattern. This method is applied in a case study in Trentino region, Italy. The study area is the local Community of Piana Rotaliana. The assessment of CES can individuate landscape scopes characterized by an optimal value of CES useful to orient the planning procedures. The Community of Piana Rotaliana is actually producing a landscape plan and the aim is to test how CES framework can contribute to traditional landscape assessment and planning.

CES in a urban context: methodologies, indicators and social founding

Marion Amalric, University of Tours, France

Re-thinking cultural ecosystem services (CES) concept both necessitates handling with the question of how to assess people's wellbeing and the question of what indicators could be useful for managing landscapes and places.

Within a research program on ecosystem services associated with different types of parks and gardens in urban areas in France, we implement a methodology to assess if ecosystem services are known by users and integrated by stakeholders in their land planning practices. It leads us to a reflection on nature's and landscape's perceptions, and on the consciousness people do have of the impact of their living environment on their wellbeing.

Consequently, we debate on the criteria proposed by the Millenium Assessment (2005) for evaluating CES. When recreation or aesthetic values could be (quite) easily assessed, it appears that notions such as "sense of place", "inspiration" or "social relations" are much more complex to deal with. The individual and socio-cultural context makes these criteria "challengeable".

The discussion may propose an overview of one case study situated in the "Center" region of France, where urban gardens are daily used for "inspirational" practices by people working around, recreational uses, especially by families and whose heritage values are high (fieldworks are currently carried on). The presentation would firstly focus on the way the parks or gardens are perceived by people and the way their managers conceived the notion of CES. Afterwards, we could propose a critical point of view on the criteria and the indicators that were used or could have been used to characterize CES.

There are several issues from our point of view: first, the place of CES indicators among other criteria (such as economical costs of gardens management or the importance allowed to environment in urban planning). Secondly, there is a methodological challenge, mixed with a theoretical debate, on the way to assess representations of "nature" (speaking generally), their impact on cognitions within our Western societies.

I4 Identity, gender and history

Chair: Mattias Sandberg Location: Room C

Gender and European rural landscapes

Kim Philip Schumacher, University of Vechta, Germany

Spaces, places and landscapes are increasingly regarded as socio-cultural constructions rather than physical locations. Among the social categories of difference gender is of central importance. Therefore it seems logical that landscapes reflect distinct gender roles, gender relations and underlying inequalities of power. Additionally we might assume that gendered socialization would lead women and men to use and experience landscapes in different ways as well as to attach different meanings to landscapes. Because gender issues have so far only been a minor topic within the study of European rural landscapes this paper aims at unravelling material and symbolic representations of gender relations and gendered social and economic structures in European rural landscapes. After a structured review of existing literature on gender and rural landscapes with focus on Europe some future fields of research that appear to be fruitful for landscape research and advance gender studies will be discussed.

Agrarian visions in Victoria Bendeditcsson's authorship

Carl Holmberg, University of Gothenburg, Sweden

In 1887, a Swedish female author, Victoria Benedictsson, published a book called Fru Marianne (Mrs. Marianne). It is a story about a young upper middle class lady from the town of Lund in the province of Scania, Southern Sweden, and her marriage to a wealthy farmer in the Scanian countryside. This new life will be an adjustment for the young woman with many challenges and difficulties. After a series of initial conflicts, the couple finds a path to understanding and happiness.

Victoria Benedictsson was born in 1850. She belonged to the generation of writers who made their debut in the 1880s, an era that is usually regarded as the modern breakthrough in Swedish literature. The prime ideal for these writers, the most famous name amongst them being August Strindberg, was to create discussion about typical problems. Marriage, women's status or social misconditions were some of the issues which were heavily discussed.

Typical to 1880s writers, there was a lot of skepticism towards traditional authorities such as the church, the monarchy and established social conventions. Science and technology was praised, political and social reforms advocated. Meanwhile, Fru Marianne clearly implies a "Back to Earth"-message. It is not set in the city, with its degenerate and parasitic bourgeoisie, so the ideal marriage can be realised. Agriculture - carried out in modern, scientific operations – offer entirely different conditions. The common efforts to transform the agrarian landscape becomes a metaphor for their marital development and maturation.

Literary scholars analysis of the book tend to put emphasis purely on its gender-related problems. In my contribution, I instead intend to focus on an agrarian landscape interpretation. Fru Marianne can thus be seen as an expression of an agriculture-based social utopia.

Re-framing art through landscape – practice, people and place

Justin Carter, Glasgow School of Art, United Kingdom

This presentation will explore the role of contemporary art practice in opening up the dynamic relationship between people and place. The specific landscape in question is Leigh Woods, a National Trust nature reserve in Bristol registered with three different conservation designations (NNR, SAC and SSSI). The woods were once a place of pilgrimage for the Bristol School of landscape painters who sought inspiration from Nature. More recently it has become a venue for a series of contemporary art Commissions initiated by Trust New Art, aimed at developing new audiences for National Trust properties.

The presentation will focus on a specific art project developed by the author, commissioned for Leigh Woods in 2013. 'Autumn' existed as a series of walking performances - the artist wearing a tailored country-style suit printed with camouflage pattern based on James William Mullers painting 'Autumn' from 1833. The route for each walk went from Leigh woods where the original painting was made, to Bristol Museum where the painting now hangs. This action created a physical connection between two sites, (urban and rural) provoking new dialogues and stories. A short film of the same name captures this journey through Bristols rich historical landscape.

What role does art play in constructing landscape identities and values? How can contemporary art engage with people and place, particularly in complex and sensitive sites? Can artistic methods have measurable value, and if so, are they transferable to other places or disciplines? To address these questions the presentation will draw on work from a range of disciplines including art theory, anthropology, philosophy, geography and ecology.

Place names as unraveling characters of rural landscape: Serik case from Turkish Mediterranean

Meryem Atik, Abdurrahman Kanabakan and Veli Ortaçeşme, University of Akdeniz, Turkey

Landscape is defined as cultural and natural features of an area. Here rural landscapes often contain characteristics that unique to locality and region in which people work, live and typically produce. Traditional land use patterns and natural features of mountains, lowlands, valleys, rivers, vegetation, inaccessible rocky outcrops define the rural characters.

Landscape analysis involves a range of different dimensions and approaches to understand value of the landscape. Place names are a kind of linguistic form that people attach to the landscape and often explain the activities and processes in, experiences with and also characters of the landscape.

Landscape character is the distinct, recognizable and consistent pattern of elements in the landscape that makes one landscape different from another. They are the result of continuous interaction between human and nature. This interaction originates from human needs for basic commodities and relates closely with the cultivation of the land which is more evident in rural landscapes.

Place names that have been brought through the long history have become an integral part of the landscape. Resolving landscape into layers, place names constitutes one cultural layer intervened with natural and biophysical ones. Place names have not only have symbolic meaning but also knowledge explaining how landscape is valued, changed, used or interpreted by people over time.

The aim of this study is present a different approach in interpreting landscape characters in rural landscapes in case of Serik Region, Turkey. Found by the Pergamon King 2nd there are number of place names in Serik appealingly show rich natural material, fertility of the soil, animals, plants, mountains, rivers, forests, water resources as well as traditions, life styles, people and land use in rural landscapes in the region. Study result can add to the plurality of interpretation of rural landscapes and unravelling present and past rural characters.

Epiphanies: Re-enchanting landscapes

Edmunds Valdemārs Bunkśe, University of Latvia, Latvia

This paper continues work presented at the Lisbon meeting of PECSRL in 2010 on the ineffable, ethereal, and evanescent aspects of rural and "natural" landscapes. Such subtle perceptions enlarge and challenge orthodox expectations of rural landscapes by urban people who increasingly seek rural habitats. Introducing epiphanies into the discussion

adds a dimension of deeper, more active emotional involvement with rural landscapes beyond their values of entertainment or relaxation.

Originating with the Ancient Greeks, epiphaneia means a manifestation or a sudden appearance of a divine presence. For modern secular writers and certain travelers an epiphany is a sudden realization of the self in contexts, great or small. Today epiphanies are a relatively neglected form of creative literary expression. They are, however, of interest in the sciences, business, and education in understanding sudden creative breakthroughs to problems or questions being addressed and in attempting to create conditions that will lead to epiphanies.

I explore my unexpected insights of the self in relation to vastness that began in childhood and matured with the encounter of the prose poems of Charles Baudelaire, the first modern French poet. These insights came into sharp focus while on a research award term at Lund University in 1984, even though not central to my research there. In 1990 I first came across a major collection of epiphanies written by the Latvian poet Imants Ziedonis. We became friends because we shared similar perceptions of landscapes. Thus a major segment of the paper is focused on the epiphanies of Ziedonis as contributions to original and often eclectic and humorous noticing of everyday aspects of life and landscapes. Not merely seeing, to paraphrase the recently deceased poet, but noticing. The paper concludes with epiphanies in landscapes that led to a critical examination of the continuing pastoral ideology of Latvians about their national landscapes. I5 Visual methods (2/2)

Chair: Jonathan Westin Location: Room D

Exploring the influence of landscape related expertise on the observation of landscape photographs using eye-tracking.

Lien Dupont and Veerle Van Eetvelde, Ghent University, Belgium

Although landscape is often seen as a vast concept describing the environment, it remains subjective and is open to a multitude of interpretations. It comprises, for example, aspects such as culture, art, time, patterns, processes, history, identity, experiences etc. Besides, landscape is also subject to perception, which is clearly reflected by the ELC's definition of landscape: "... an area as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". Considering this point of view, it is worth analyzing how people visually perceive landscapes and investigating whether or not different groups of observers see the same landscape. Of particular interest is the dichotomy between landscape experts who guide decisions concerning landscape management, and lay people who live in that landscape and experience the consequences. The commonly diverging ideas with respect to landscape management could be explained by a different observation of the landscape by both groups. A method to objectively measure visual observation patterns is provided by eye-tracking, a system which allows recording the point-of-regard while observing images. In this study, landscape experts and lay people participated in an eye-tracking experiment in which 74 landscape photographs were observed. Their fixation patterns were visualised in focus maps, indicating which objects in the image drew the attention. Subsequently, these maps were compared to computationally generated saliency maps, predicting the features in the photograph which will theoretically attract the attention due to their colour, orientation, intensity etc. Furthermore, we analysed how the fixation positions from both groups are distributed over time. The preliminary results indicate that experts visually explore the landscape images more completely, extending their visual span. Laymen, however, focus more and longer on specific features in the photograph, restricting their field of view. This practical knowledge could be helpful in participatory landscape management.

Assessing the cultural ecosystem services: A visual choice experiment on agricultural landscapes preferences from a user perspective in the case study Märkische Schweiz, Germany

Kati Häfner, Leibniz Centre for Agricultural Landscape Research (ZALF); University of Potsdam, Germany Ingo Zasada, ZALF, Germany Boris T. van Zanten, VU University Amsterdam, The Netherlands Fabrizio Ungaro, ZALF, Germany; National Research Council, Italy Annette Piorr, ZALF, Germany

The provision of natural amenities and the aesthetic quality of agricultural landscapes represent an important territorial asset for rural tourism and quality of the living environment. As the visual value of a given landscape depends on individual preferences for its components and composition, targeted and cost-effective investments in their conservation and management is required. We conducted a stated preference survey in the case study region "Märkische Schweiz" (ca. 580 km2), 30 km east of the city of Berlin aiming at identifying variances in landscape preferences of local residents and visitors from Berlin (N=200).

Therefore photorealistic landscape visualisations of four different landscape attributes have been applied, including green point (e.g. trees) and linear elements (e.g. hedges), crop diversity as a function of field size and the presence of grazing livestock. Attributes are differentiated into three levels (low, medium, high) or two levels (present, not present), respectively. A multinomial-logit model (MNL) was chosen to estimate the preferences for landscape attributes and a random parameter (mixed)-logit model (RPL) to allow for individual specific values and the socio-economic influence.

Results of the analysis revealed significant differences in preferences for various landscape attributes, with a highest general preference for a high level of point elements. We also found preferences to be dependent on individual's socio-cultural background, e.g. level of education, gender or attitude and value setting. The spatial distributions of cumulative preference values were mapped on a regular 100 x 100 m grid, showing hot and cold spots of aesthetic quality. The results can help to improve the efficiency of the policy delivery and to identify priority areas for the local landscape management from an aesthetic value perspective.

Perceived colour in relation to people and their landscape

Petra Thorpert, Swedish University of Agricultural Sciences, Sweden

The perception of vegetation-borne colours is inherent to human landscape experience and thus central to landscape design and management practices. This study explores people's perception of, and emotional responses to, colours of vegetation and how that perception is influenced by distance, seasonal changes, and the complexity of the vegetation system.

The study was conducted as an outdoor case study in Alnarp Västerskog, a forest that was established on former arable land between 1994 and 1998 as part of the Landscape Laboratory at the Swedish University of Agricultural Sciences' campus in Alnarp. The Landscape Laboratory is a full-scale experimental site comprising forest stands, forest edge, watercourses, and meadows. The results show that even small changes in distance influence vegetation-borne colour to be perceived in two qualitatively different ways; as a 'colour mass' or as 'colour architecture'.

In addition to the seasons, distance was a decisive element when it came to perceiving a colours' hue, value, and chroma; the varying vegetation compositions, however, were less influential. A dynamic relationship was also illustrated with regard to emotional response—the distance at which the perceived colours generated the most positive associations changed with the seasons. Therefore, it is fair to say that vegetation-borne colours contribute to the dynamic relationship between people and their landscape.

Unraveling the landscape logics: using land art as a medium to reveal the links between farming practices, biodiversity and landscape

Claire Planchat, 'Vous Êtes D'Ici' Agency, AgroParisTech, UMR Metafort, France Kuang-Yu Wang, Chung Yuan Christian University, Taiwan

Numerous landscape projects in rural areas were conducted according to the urban, technical and visual dominated aestheticism. The objective of this project is to unravel other dimensions of landscape and to express processes of the construction of this landscape such as ecologic, agronomic and social dimensions. In this project we use Land art as a medium to initiate new ways of perception, interaction, observation and understanding of rural landscapes and to explore how land art could help to reveal the links between farming practices, biodiversity and landscape.

This project presents a specific learning experience developed in a participative workshop with a group of six Taiwanese landscape architecture students in 2013 in Sancy Moutains (France) where the students approached the landscape and its character through the art works of the festival Art and Nature Horizons. The two weeks workshop involves diverse partnerships including local, professional, artistic, educational and scientific stakes in the ways of territorial actions, field exercises, lectures, interviews. The results revealed the relationship of people and landscape through the triangular analysis between art, biodiversity and farming practice.

- Between art and biodiversity: the science aim at reconciling human activities and conservation of nature, however, the art is a synthesis of the representations of the social, biological dimensions into the physical appearances of an environment.
- Between art and farming practice: farmers lend their fields to the artists opens a new dialogue and landscape became the main tool.
- Between farming practice and biodiversity: landscape becomes a tool for the reading of the change of scale.

The process and results of this workshop were collected into a movie helping the translation and revelation of the environmental stakes and actors in landscape.

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