

Aalborg Universitet

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Copenhagen 9-11 April 2014

Brodersen, Søsser Grith Kragh; Dorland, Jens; Jørgensen, Michael Søgaard

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Abstract Book 6th Living Knowledge Conference April 9-11, 2014

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Editors Søsser Brodersen, Jens Dorland & Michael Søgaard Jørgensen

Center for Design, Innovation and Sustainable Transitions Aalborg University Copenhagen A C Meyers Vænge 15 2400 Copenhagen SV

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WELCOME FROM THE CONFERENCE ORGANIZERS

We are delighted to welcome you to the 6th Living Knowledge Conference in Copenhagen. We have been looking forward to seeing you all. Further we are very happy to announce that the conference seems to have attracted a lot of attention and interest, so much that we unfortunately have been forced to decline participation to rather many interested persons from both academia, the grassroot movement and from policy level. With more than 250 delegates we are proud to welcoming you all. We hope we will have three exciting days together.

Centre for Design, Innovation and Sustainable Transition - DIST

The conference is hosted by Aalborg University's Center for Design, Innovation and Sustainable Transitions (DIST) in Copenhagen and is organised by researchers who were among the founders of the international science shop network, Living Knowledge.

The Center for Design, Innovation and Sustainable Transition – DIST – brings together researchers from the human, technical and social sciences to address these issues. Grounded within the tradition of science and technology studies, the Center is dedicated to conducting research on the socio-technical and to developing modes of intervention that engage a broad array of actors.

The Center is an important part of Aalborg University's strategy for building a strong, research based campus in Copenhagen that is nationally and internationally recognized within the fields of design, innovation and sustainable transitions

DIST research focuses on four inter-related domains:

- The design of products, processes, organizations and markets with the aim of developing more sustainable solutions
- Innovation processes leading to changes in social, organizational, political, technical and institutional configurations

- The sustainability of these changes the controversies, journeys and power plays involved
- Transitions the displacement and reconfiguration of social values, institutions, relations, and material structures that the changes in design and innovation practices invoke

The associations and tensions between these four domains mediated through a profound engagement within the field of science and technology studies is the core strength of DIST.

The Center is involved in a number of different educational programs – at the undergraduate and graduate levels as well as within continued and executive education. They focus on sustainable design, sustainable cities, sustainable transitions and anthropology of technology. The programs are deliberately cross-disciplinary, combining competences from engineering, design, sociology and humanities. The center is also involved in PhD training at national and international level within its core research fields.

Thanks to......

We, Michael Søgaard Jørgensen, Søsser Brodersen and Jens Dorland, like to thank the Scientific Committee for putting a lot of time and effort in assessing abstracts and organizing the different sessions making up the conference. Big thanks to: Nicola Buckley, Catherine Bates, Hansje Epping, Meira Hanson, Siobhan Long, Daniel Ludwig, Emma McKenna, Eileen Martin, Glen Millot, Henk A. J. Mulder, Khan Rahi, Norbert Steinhaus, Gerard Straver and Padraig Murphy.

Finally we like to thank Frank Teller for taking care of all the conference registration and Michaela Shields for her valuable work with the conference webpage.

We hope you will all enjoy the conference.





Søsser Brodersen



Jens Dorland



WELCOME BY COORDINATOR OF PERARES AND THE COORDINATOR OF THE LIVING KNOWLEDGE NETWORK

Dear distinguished participants of the 6th Living Knowledge Conference!

On behalf of Living Knowledge, the International Science Shop Network, and on behalf of PERARES- our on-going project, funded by the European Commission in the 7th Framework Program – we would like to welcome you to Copenhagen, welcome to the 6th Living Knowledge Conference.

Since its establishment in 2000, Living Knowledge is the international network of Science Shops and comparable organizations that want to give citizens around Europe (and beyond) better access to scientific information and expertise! With now more than 60 active Science Shops worldwide, it advances citizens' ability to participate in the dialogue between science and society. Its offered services fulfil basic needs on contact, information and support.

Today, the Living Knowledge Network is proud and happy that for the 6th time so many researchers, students, civil society organizations, policy makers and funders from all over the world followed the invitation to attend its bi-annual Living Knowledge conference. This conference offers a fantastic opportunity to learn and to exchange experiences and to discuss questions of citizer' involvement in debates on emerging technologies and decision making processes or their participation in research processes. It will support us to move forward in establishing a deeper and more systematic engagement of civil society groups in setting research agendas.

For the second time the Living Knowledge conference is organized within the activities of the PERARES project, which was awarded financial support from the European Commission's Science in Society Program. We are very grateful for that support. Aside from the conference, the cooperation in PERARES enabled us over the past four years, to bring 'public engagement with research and research engagement with society' to the next level. With European support, we established Science Shop activities in ten countries, we piloted different forms of scenario workshops, and worked hard to set research agenda's on different topics. For this, we used on-line dialogues and direct co-operation among civil society organisations and universities in different

countries. Also, you can now benefit from studies on Higher Education Policies for Civic Engagement and on the role of research funders in this. Moreover, evaluation tools for Science Shop projects are now available to all of you.

We will showcase many of our findings during this conference. However, we hope to take away even more: we still have six months in our PERARES project and hope to share our collectively created knowledge with many more policy makers, researchers and civil society organisations. The new European research policies, which focus on Responsible Research and Innovation and solving the Grand Societal Challenges through co-operative, inclusive projects, give us a window of opportunity for this.

Let us create impact. An innovative civil society builds on participation, on community-university engagement and the co-creation of knowledge. There are exciting times ahead.

We wish you an inspiring and successful conference and a pleasant time in Copenhagen

Dr Henk Mulder, University of Groningen, Coordinator PERARES



Norbert Steinhaus, Living Knowledge, International Science Shop Contact Point



GENERAL INFORMATION

Conference Venue

Hotel Scandic Sydhavnen, Copenhagen Sydhavns Plads 15 2450 Copenhagen Denmark

Registration

The Registration desk is located at the Foyer in the conference section. Please direct any questions you might have regarding registration, session attendance or other elements of the conference to the staff at this desk.

Registration Desk Opening Hours

Tuesday 8, 2014: 10 pm – 5 pm

Wednesday 9, 2014: 8 am - 5 pm

Thursday 10, 2014: 8 am – 5 pm

Friday 11, 2014: 8.30 am - 4.30 pm

Name Badges

All delegates, including presenters will be provided with a name badges when making the registration at the conference. The name badges must be worn at all times within the conference venue.

Lunch

Lunch is served in the Hotel restaurant Wednesday to Friday.

Coffee and Tea

Coffee and Tea is provided during all day through the whole conference.

Smoking

Scandic Hotel is a non-smoking environment. All smoking must be outside.

Internet access

There is free access to WiFi within the hotel area. Access code is provided in the registration desk.

OPENING RECEPTION

CONFERENCE DINNER

We are delighted to inform you that Copenhagen Municipality has invited all delegate to an opening reception at the Municipality Hall of Copenhagen. Here you will be invited to taste the famous 'Rådhus Pandekager' (Muncipality Pancakes) with a glass of wine.

The opening reception takes place Wednesday 9 April at 6 pm-7 pm

Transportation to the Municipality Hall: Public transport – either you take bus number 10 or the Train E going to Hillerød. More information will be provided at the register desk at the conference.

Thursday evening we have arranged for the conference dinner. The dinner is held at Scandic Hotel and starts at 7 pm. For those of you who have signed up for the conference dinner, a ticket will be provided when doing the registration. After dinner there will be music and dance.

EXCURSIONS

Copenhagen Food Community

The organizers of the Living Knowledge 6 conference are delighted to invite some delegates to visit one of three innovative grassroot initiatives in Copenhagen.

The three initiatives that we are visiting are:

- Copenhagen Food Community (Wednesday at 4 pm to 5 pm). Departure from Scanic hotel (by public transport) is at 3 pm.
- Floating City Community (Thursday at 1.15 pm to 2.30 pm). Departure from Scanic Hotel (by walk) is at 12.00
- Bicycle Innovation Lab (Thursday at 1.30 pm to 2.30 pm). Departure from Scanic hotel (by bus) is 1 pm.

Each excursion can take up to 30 delegates. Registration can be done by the registration desk from Tuesday the 8th of April.

Please note that the excursions are held in parallel with different sessions. So make sure if you register that you are not expected in a session at the same time.

Copenhagen Food Community (in Danish: Københavns Fødevarefællesskab - KBHFF) is a member-based and member-driven food co-operative in Copenhagen. KBHFF is an alternative to the ordinary profit-driven supermarket chains. They focus on offering organic and biodynamic products in season with lots of taste and quality at affordable prices.

- To us "consumer influence" is not just the opportunity to choose between different brands and groceries. In KBHFF, the customers are members, owners and co-workers.
- As a member you can buy cheap, locally produced organic fruit and vegetables every week. All members are expected to put in three hours of work in the Co-Op each month. This could be packing vegetables in the shop, ordering vegetables, arranging debates, fixing the website, etc.

As co-owners of KBHFF, all members have a say in the operation and development of the Co-Op. All decisions regarding the products and economy are taken by the members of KBHFF, and every member has the opportunity to influence these decisions.

Floating City community

Bicycle Innovation Lab

The Floating City community (in Danish: Flydende Byer) aims to build up a sustainable society from below. They develop methods to create decentralized sustainable solutions out of reused and organic resources, and they experiment with new ways of organizing work, economy and decision processes in a fair and socially sustainable way.

The organization's strategy for the period of 2012-14 has been create a self-sufficient, travelling floating course centre, build according to own principles of sustainable and organic-complex architecture. The floating course centre should from 2015 be reaching harbors around the world, exchanging knowledge about decentralized sustainable solutions.

The Bicycle Innovation Lab association is to work for an innovative development of bicycle cultures both a national and an international level. The association's activities serve to highlight the potentials of cycling culture across disciplines. The association further works to promote interdisciplinary collaborations and interdisciplinary dialogue on important issues related to the economy, mobility, sustainability and urban development. This is done in a holistic process involving design, technology, mobility behavior, urban development and traffic planning.

Activities of the Bicycle Innovation Lab

The lab has different activities ranging from a bicycle library to courses and exhibitions. The basic idea behind the bike library is that everyone should have the opportunity to test drive a wide range of bicycle types, as more different bikes you've tried; the greater is the chance that you will find just the bike that suits your individual transportation needs.

- 'The City on a Bike' is a course that focuses on the intersection between
 design and the city. The lab has also developed a course for school children,
 aiming at increasing the percentage of kids cycling to school, through a
 method of teaching makes the bike relevant as an interdisciplinary teaching
 object in subjects such as mathematics, science & technology, art or history,
 while promoting the children's desire to cycle.
- 'The Good City' is Bicycle Innovation Lab's international travelling exhibition.
 It focuses on the challenges Copenhagen faces as a cycling city and explores
 the possibilities inherent in cycling as a platform for change towards better
 cities with less congestion and better living spaces. The travelling exhibition
 is aimed at an international audience and can be rented by anyone in any
 locality. Rent it to create an interactive space for debating the role of the
 bicycle in the good cities of the future.

THE CALL BEHIND THE CONFERENCE: AN INNOVATIVE CIVIL SOCIETY: IMPACT THROUGH CO-CREATION AND PARTICIPATION

The time has come to recognize civil society as producer of knowledge, and have civil society organisations accepted as partners in research and innovation directed towards public interest, but also have civil society's own activities recognised as research and innovation. There is today some interest in participation of citizens and civil society organisations in community-based research and in policy processes and decision-making. However, there is still a long way to go before citizens and civil society organisations are fully accepted as equal partners and providers of knowledge and expertise to solve societal challenges, despite the many innovative ideas and initiatives, which communities and civil society organisations develop and organise.

Researchers and students can be exposed to societal perspectives of research and innovation by integrating engagement with societal actors into university curricula and into research. There is also a need for structures for partnerships between researchers and societal actors as part of research activities, including as part of research planning. At the same time there is a need for mechanisms which enable civil society actors to develop their research capacities.

The 6th Living Knowledge Conference will seek to explore experiences with research and innovation for, with and by civil society, and develop policy recommendations and articulate research needs within community-based research and research focusing on societal challenges.

The conference will build on the experience of the previous Living Knowledge Conferences in Leuven, Seville, Paris, Belfast, and Bonn. The conference will be an opportunity to bring together some of the key thinkers and practitioners in the area of community-based research, university-community partnerships and science shops, provide opportunities for collaboration, and try to ensure that civil society's role in research and innovation is prioritised on policy agendas, both nationally and internationally.

The 6th Living Knowledge Conference will also be a platform for exchange and discussions of findings and results of the PERARES project among policy

makers, researchers and civil society organisations. An important objective of the PERARES consortium is to move dialogues between researchers and civil society "upstream", and develop proposals for which direction new research and innovation activities and programs should take.

The conference themes are:

Theme 1: Social innovation – empowering civil society?

Theme 2: How to involve multiple users in design of assistive technologies?

Theme 3: Co-operation in multicultural contexts- North-South cooperation

Theme 4: Sustainable development: from vision to transition

Theme 5: Developing competences through problem-based learning with civil society

Theme 6: Developing the university – civil society interaction

Theme 7: How to organize and manage science shops and community-based research units?

Theme 8: Governance of science and technology with civil society

Theme 1: Social innovation – empowering civil society?

Theme 2: How to involve multiple users in design of assistive technologies

Social innovation is one of the more recent innovation concepts. It is defined in many different ways ranging from civil society organizations' and grassroots organizations' development of solutions to societal problems to social entrepreneurs' and social enterprises' development and supply of products and services. Furthermore, the recent economic crisis and austerity has created civil society initiatives aiming at delivering social care, health care, environmental protection etc. when public institutions make cut down. At the same policy-makers seem to expect increasing civil society responsibility.

Key questions:

- What are the experiences from civil society organizations' and grassroots organizations' innovative activities: planning, implementation, impact, embedding, transfer and dissemination, etc.?
- What are the experiences from social entrepreneurship and social enterprises? How legitimate are the products and services provided? How are citizens and civil society organizations involved?
- How is the economic crisis and austerity changing the roles of civil society, governmental institutions and businesses in social care, health care, environmental protection etc.?
- What are the roles of science shops, university research and education in enabling, organizing, embedding, and disseminating social innovation?
- What methods are used in organising the temporary spaces (pop-ups) in social innovation processes? How do the applied methods influence the focus and the impact of the social innovation processes?

In the recent years assistive technology has come high on the political agendas in Europe, and many new product designs are currently being implemented in the healthcare sector, which present designers with the new challenges involved in socially innovative design, where multiple users are in focus. Among these multiple users are disabled persons, disability associations and other civil society organizations, as well as public institutions, health care workers and their trade unions, relatives, and industry. The challenge to be discussed within this theme is how to involve multiple users and integrate their different concerns in socially innovative design of assistive technology.

Key questions:

- How are partnerships between multiple user groups, public institutions and industry created? How are socially valuable groups given voice in these partnerships? And how is the co-operation performed and shaped?
- How are the multiple users represented in the designers' scripts with the designers' understanding of the problem in focus and how it can be solved?
- How are the multiple users' different types of experience and knowledge translated into concepts, mock-ups etc.?
- What are the experiences with the use of design or re-design of assistive technologies and systems based on involvement of multiple users?

Theme 3: Co-operation in multicultural contexts – North-South co-operation

Theme 4: Sustainable development: from vision to transition

During the recent 15 years there has been a big increase within activities in engineering, design and development performed within multicultural contexts. Several organizations have provided support to poor communities in solving their problems and building up capacity. This new wave of activity is characterized by an approach that can be summarized as Design for People. This approach tends to believe that only Western academic knowledge is the legitimate basis for developing solutions for poor communities. However, there is a need for efforts where the experiences and competences of the different participants are considered equally important and where co-creation among the participants is a core principle; an approach which can be characterised as Design with People.

Key questions:

- What are the experiences with development and learning from approaches and methods for multicultural co-creation processes where different stakeholders (civil society organizations, universities, local governments, donor agencies etc.) are involved in activities that imply the use of established and new technologies and designs in a multicultural context?
- How to develop new methods and common tools to gather data, co-design, visualize and stage a design process in a multicultural context?
- Co-operation in a multicultural context often challenges all partners involved in coordination and communication (informal, formal and technical).
 Which competences are needed and how to create these competences in order to operate successfully across cultures in a multi-organizational and multicultural design project?

While there often is wide national and international agreement about long-term visions for sustainable development like a fossil-free society or sustainable consumption and production, transition processes towards such visions are often controversial. Disagreements about experiments, investments, etc. and their sustainability aspects are frequent. An example is the controversies about the future roles of bioenergy and the impacts on food supply, nature, climate etc. Civil society organisations and researchers initiate many types of projects at local, national or international level, including experiments with new ways of production and consumption. Some civil society organisations build alliances with local or national governments and some with businesses in order to obtain influence. Civil society organisations and researchers are also members of program committees, commissions etc. The theme focuses on critical reflections from efforts for a more sustainable development, including the roles of navigation, governance structures, visions and plans, experiments, and transfer of experiences from one context to another.

Kev auestions:

- What learning have different stakeholders obtained from sustainable development projects in terms of conditions and strategies for future sustainable transition processes?
- What potentials and barriers have been experienced with transfer of experiences with sustainable transition processes among communities, cities, regions and nations?
- What are the experiences with integration of environmental, social and economic aspects of sustainable development in sustainable development projects?
- What are the experiences from cooperation between civil society and researchers with respect to knowledge production, capacity building, and empowerment?

Theme 5: Developing competences through problem-based learning with civil society

Theme 6: Developing the university – civil society interaction

When students as a part of their education participate in science shop projects or other types of community-based research in co-operation with citizen groups it can be seen as "community-based learning" in an authentic learning environment. This kind of learning has advantages by making connections between abstract concepts learned in the classroom and real applications in the world outside. Furthermore community-based learning enables learning through a cycle of action and reflection. The developed competences are useful in the students' later professional careers.

Key questions:

- What are the strategies and experiences from incorporating science shop projects and other community-based projects into different types of curricula?
- How are experiences from community-based learning and research influencing competences and careers as professionals?
- How to assess students' competences gained in authentic learning environments like community-based projects?
- How to ensure the quality of learning in authentic learning environments like community-based projects?
- How to stimulate the learning and reflection of the students in communitybased projects?

Many national and regional governments are developing strategies and policies for more interaction between universities (and other higher education institutions) and civil society. In some cases the increased strategic focus on interaction with society primarily develops into increased cooperation with businesses, in other cases cooperation with citizens, communities and civil society organisations get an important role. There is need for knowledge about what role civil society plays in the increasing focus on interaction between higher education institutions and society.

Key guestions:

- What strategies are universities and higher education institutions using to develop cooperation with society and how is this influencing research and education?
- What are the roles of communities and civil society organizations in cooperation between universities and higher education institutions, and society?
- What are the challenges for developing strategies and policies to support university-civil society interaction?

Theme 7: How to organize and manage science shops and community-based research units?

Theme 8: Governance of science and technology with civil society

The vision of community-based research and science shops is to support civil society actors in gaining impact on societal issues they are concerned about. Some activities focus on the need for documentation of problems, some on gathering knowledge about new social challenges, and some on design of new systems and services. Science shops and community-based research units are organized in different ways with respect to roles they have in the cooperation with civil society, reaching from primarily mediation of knowledge needs from civil society to researchers and students to participation in research with civil society and attempts to ensure actual civil society influence. There is a need for more knowledge about how the ways, which science shops and other types of community-based research units are organized and work, co-shape citizens' and civil society organizations' societal influence.

Key questions:

- How are science shops and community-based research units organized in terms of competences, economic resources, organizational structures, roles in cooperation with civil society actors etc.?
- How does cooperation with different types of science shops and communitybased research units impact civil society's influence?

The contribution of participatory research projects to policy-making, and the participation of civil society and citizens in research policy-making are not separate issues in the governance debate. Though the scales and mechanisms are different, the governance tools available can be seen as part of a continuum that goes from attempts at better informing policy-makers of civil society's realities, needs and priorities, to finding new ways in which civil society directly participates in policy-making.

Key questions:

- What are the experiences with different participatory methods, like public debates, public hearings, consensus conferences, citizen conferences, citizens' juries, etc. with respect to the framing of the participatory process, the empowerment of civil society actors and the influence on societal development?
- What are the experiences from participatory research projects with involvement of civil society actors, policy-makers, etc.? What are the experiences with respect to project shaping, research organisation, knowledge production, societal influence, etc.?
- What are civil society organisations' research needs and agendas? What are
 the experiences of thematic forums and platforms etc. with researchers, civil
 society organisations, policy makers, etc.?
- How to raise civil society organisations' awareness about research opportunities and make them familiar with the concept of participatory research?
- What can funders do to incorporate CSOs and CSO needs in planning of research programmes, calls for proposals, and the conditions for funding proposals?

AN INNOVATIVE CIVIL SOCIETY



tage archives (117)

David Beel

University of Aberdeen

Fondation Sciences Citoyennes

Online forums, question and answer, and co-creating (208)
Nicola Buckley - University of Cambridge

Wednesday, April 9th

09:00

13:00

Welcome by Michael Søgaard Jørgensen & Søsser Brodersen

Welcome by professor Christian Clausen, Center for Design, Innovation and Sustainable Development, Aalborg University

Welcome by Dr. Henk Mulder & Norbern Steinhaus

Plenary: Citizens, Science, and Democracy

Facilitator: Michael Søgaard Jørgensen - DIST Aalborg University

Alan Irwin, Copenhagen Business School: Public Engagement with Science: from deficit to democracy – and back again? (202)

Katrin Vohland, Museum für Naturkunde, Leibniz Institute for Evolution and Biodiversity Research: Citizen Science and democracy - challenges and difficulties (205)

David Stanners, European Environmental Agency: Improving the science policy interface by engaging with citizens (201)

Martine Legris Revel, University of Lille 2 CERAPS: The scientific activity in the prism of the participatory imperative (180)

12:00 Lunch break

Plenary: Funding research with and for civil society
Session facilitator: Norbert Steinhause, Science Shop Bonn

Gilles Laroche, Head of Unit of Science with and for Society, DG Research and Innovation, EC - The role of Responsible Research and Innovation

to foster institutional change: empowering research organisations to take-up public engagement in research and innovation

Katrin Grüber, Institut Mensch, Ethik und Wissenschaft (IMEW) Berlin - Funding Schemes as Potential Barriers to Transferring Societal Problems to Research Questions (167)

Emma McKenna, Science Shop Belfast - Experiences on research with and for civil society and its organisations within research funding organisations (170)

Ignasi López Verdeguer, La Caixa Foundation - Tools for Responsible Research and Innovation (178)

14:30 30 Minute Break

Whether we bring local governance to innovation or

bring innovation to local governance: innovation will

be done (22)

14:30		30 IV	iinute Break		
	Scandium	Titanium	Aluminium	Oxygen	Iron
SESSION 1 15:00	THEME 1 (T1-5) Social Innovation - theory and practice Session facilitator: Nicola Buckley	THEME 7 (T7-7) Science Shop roundtable Session facilitator: Gerard Straver	THEME 4 (T4-2) Co-Creating and Designing Culture and Sustainability Session facilitator: Maeve Lydon	THEME 6 (T6-4) Methods for developing academia-civil society cooperation Session facilitator: Kirsten von der Heiden	THEME 1 (1-3) Mapping Session facilitator: Padraig Murphy
EXCURSION Copenhagen Food Community 16:00-17:00 (plus transit time)	Experiences from Denmark: Can social, environmental and democratic conditions be improved through action research? (40) Michael Søgaard Jørgensen- DIST, Aalborg University Theory development about transformative social innovations (41) Julia Wittmayer- Erasmus University Challenges in sustaining, supporting and enhancing long term collaborative relationships between HEIs and CSOs working on community based learning and community based research projects (5) Sinead McCann- Dublin Institute of Technology Producing Social Innovation (25) Kirsten Bonde Aarhus School of Architecture	Science shops and participatory civil society (12) Jeroen Kruit Alterra Wageningen UR	Cocreating and designing culture and sustainability: innovations in community planning and resilience from Europe, Canada and Indigenous peoples (62) Maeve Lydon - University of Victoria Philip Kevin Paul & John Elliott - Tsartlip First Nation Nessa Cronin - National University of Galway Nick Gant- University of Brighton Peter Keller- University of Victoria	How to create an online community (120)	Participatory Innovation: The Global Green Map Movement, Scandinavia and Sustainability (1) Ken Josephson- Green Map System/Community Mapping Collaboratory Linnea Uppsäll - Project Coordinator, City of Malmö Wendy E. Brawer- Founding Director, Green Map System, New York CURIOS: building resilience? The co- production of digital community heri-

17:00

End of Sessions Wednesday

AN INNOVATIVE CIVIL SOCIETY



Thursday, April 10th

	Scandium	Titanium	Aluminium	Oxygen	Iron
SESSION 2 09:00	THEME 1 (T1-2) World Café on grassroots digital fab- rication in FabLabs, Hackerspaces and Makerspaces Session facilitator: Adrian Smith	THEME 7 (T7-5) Living Knowledge roundtable Session facilitator: Norbert Steinhaus	THEME 4 (T4-1) CSO-Academic research co-operation for sustainable development Session facilitator: Michael Søgaard Jørgensen and Les Levidow	THEME 6 (T6-5) Whose knowledge counts and how? Session facilitator: Kari Facer	THEME 1 (T1-9) Science Cafe Session facilitator: Balint Balazs
	Introduction to grassroots digital fabrication and makerspaces (157) Adrian Smith, SPRU, University of Sussex Presentations from three makerspaces in Copenhagen and Malmö Vanessa Carpenter, Illutron Collaborative Interactive Art Studio Michael Hviid Nielsen, Copenhagen FabLab Oyuki Matsumoto, STPLN Open House makerspace	Living Knowledge - The Network: its Services and Structure (152) Henk Mulder Science Shop, University of Groningen Developing Regional Knowledge Mobilization Networks (102) Elizabeth Tryon University of Wisconsin-Madison	Michael Søgaard Jørgensen DIST, Aalborg University Les Levidow- Open University Challenging unsustainable development through research cooperation (72) Les Levidow Open University Organizing civil society for sustainable transition (15) John Holten-Andersen DIST, Aalborg University	Investigating Co-production in the Connected Communities Programme (123) Bryony Enright University of Bristol What Counts? Valuing co-designed research	-
10:30		30 Mi	nute Break		

	Scandium	Titanium	Aluminium	Oxygen	Iron
SESSION 3 11:00	THEME 1 (T1-2) World Café on grassroots digital fabrication in FabLabs, Hackerspaces and Makerspaces (continued) Session facilitator: Adrian Smith	THEME 4 (T4-3) Urban Agriculture Session facilitator: Gisela Prystav	THEME 1 (T1-4) Empowering Civil Society Session facilitator: Balint Balazs	THEME 6 (T6-7) Building university-civil society cooperation I Session facilitator: Eileen Martin	
	World Café exploration of makerspaces and grassroots digital fabrication Inclusion issue (158), Johan Søderberg, IFRIS and practitioner Creativity issue (28), Ellen van Oost, University of Twente Sustainability issue (172), Sascha Dickel, Technical University Munich	Urban Agriculture Session (64) Gisela Prystav Science Shop kubus /	Emancipation and power structures - lessons from a PAR process with marginalized Roma communities in	Community-based research for Community empowerment (7) Zoraida Mendiwelso-Bendek University of Lincoln The secret recipe for university-civil society collaboration: a sandwich concept (109) Josette Jacobs Wageningen University Permaculture: a great excuse for building a bridge between civil society and university (114) Juan Sánchez-García Centro de Estudios Ecosociales, Universidad de La Laguna Building broader communities of practice: interlinking Art of Hosting and ICT in the planning of urban ecosystems (128) Ian Babelon Royal Institute of Technology (KTH, Stockholm) Engaging citizens with a new community campus (129) Susan Powell Manchester Metropolitan University Connecting creative communities: the role of community-based research (185) Leanne Townsend University of Aberdeen The role of managers in health- and social services in partnership with professionals in higher education (116) Marit Alstveit University of Stavanger	

	Scandium	Titanium	Aluminium	Oxygen	Iron
SESSION 4 13:30	THEME 1 (T1-1) Social Innovation - co-creation of knowledge Session facilitator: Frank Becker	THEME 7 (T7-1) Poster session Session facilitator: Henk Mulder and Daniel Ludwig	THEME 4 (T4-4) Sustainable transitions Session facilitator: Balint Balazs and Gyorgy Pataki	THEME 6 (T6-6) Experiences from health and social work students' engagement with society Session facilitator: Emma McKenna	POSTER SESSION Poster session Session facilitator: Padraig Murphy
EXCURSIONS Floating City Community 13:15-14:30 (plus transit time) Bicycle Innovation Lab 13:30-14:30 (plus transit time)	Pannel: "social innovation - co-creation of knowledge" (70) Martina Schäfer, René Scheumann, Frank Becker Science shop kubus, Technische Universität Berlin OPEN DESIGN - community integrated product development to improve city's resilience – prospective engineer as social entrepreneur (6) Sven Benthin Grüne Stadt-Planungsgemeinschaft/ TU Berlin Hands On! Mutual learning in cooperation of civil society and scientific community (71) Frank Becker Science shop kubus, Technische Universität Berlin Benefit of reuse of IT hardware for society and environment – a German business case (68) René Scheumann Technische Universität Berlin Co-creation of academic knowledge in TUB's Project Laboratories (108) Johannes Dietrich TU Berlin/ZEWK-Science Shop kubus		Learning from successes in innovation for sustainability (59)	Promoting health and social work students' civic engagement and collaborative knowledge production: Experiences from Norway, Italy and Ireland (125) Helene Hanssen University of Stavanger	Cultural Expressions as Living Knowledge: Community-based and Participatory Approaches to Intangible Cultural Heritage in South Tyrol (23) Emanuel Valentin Free University of Bozen-Bolzano Families as Drivers of Social Innovation in Metropolitan and Rural Areas? (29) Gerald Beck Ludwig-Maximilians-University Munich East Cleveland Online - A Rural Social Enterprise (32) Steve Thompson East Cleveland Online Nature into gray zones (81) Michaela Shields Bonn Science Shop Territorial Mobilization of Civil Society in the creation of activities: the French case (192) Christopher Lecat Reims University Campus Community Partnerships At The University Of Mannheim And Its Use For Shaping The Scientific Profile Of The Institution (199) Julia Derkau University of Mannheim Successful implementation of Knowledge Atelier Wageningen University (196) Ilse Markensteijn Wageningen University Farmer at school (49) Esther Veen

	Scandium	Titanium	Aluminium	Oxygen	Iron
SESSION 5 15:20	THEME 3 (T3-1) Roundtable - And now to work Session facilitator: Hansje Eppink	THEME 7 (T7-3) Evaluation workshop – PERARES Session facilitator: Padraig Murphy	THEME 8 (T8-3) CSO involvement in research Session facilitator: Simon Pfersdorf	THEME 6 (T6-3) Forgotten citizens in research Session facilitator: Nicola Buckley	THEME 5 (T5-4) International collaboration Session facilitator: Catherine Bates
	And now to work! (55) Saskia Visser Science Shop University of Groningen		A World Café on the outcomes of the CONSIDER Project: Discussing guide-lines of CSO involvement in research projects (168) Simon Pfersdorf Institute for Technology Assessment and Systems Analysis Research projects can be complex in nature, both in terms of content and functionality, especially if you involve interdisciplinary groups. Yet the diversity that CSOs bring to the mix of groups can often strengthen a project but it also has the potential to complicate matters. This session is dedicated to examining latest guidelines and recommendations for CSOs, researchers, industry, policy makers and funders regarding the effective participation of CSOs in research projects.	Forgotten citizens in research: How to include marginalised citizens, Civil Society Organisations (CSOs) and their beneficiaries in community based research (CBR)?(113) Perares WP5 & 6 Jozefien De Marrée Vrije Universiteit Brussel	Partnership Education: Action Research & Learning Scenarios (PEARLS) - Community-based learning through empowered voices (95) Peter Day Community Media 4 Kenya, University of Brighton Crossing Regions in Pursuit of CBPR Knowledge & Practice: A Review and Analysis (51) Khan RAHI Loka/Canadian Community-Based Research Network Fabien Paiasecki Executive Secretary of the World Forum on Science and Democracy Moving from volunteering to c urriculum-based collaboration — Wells for Zoe and Dublin Institute of Technology (112) Catherine Bates Dublin Institute of Technology

	Scandium	Titanium	Aluminium	Oxygen	Iron
		THEME 2 (T2-1)		THEME 6 (T6-9)	
SESSION 6	THEME 6 (T6-8)	Fostering independence through the	THEME 5 (T5-3)	From theory into practice: Engagement	THEME 4 (T4-5)
3233.3.1.3	Building university-civil society cooper-	use of Assistive Technology	Learning for social change	Seminar Series	Sustainable energy transitions
46.45	ation II	Session facilitator: Catherine Bates and	Session facilitator: Norbert Steinhaus	Session facilitator: Maeve Lydon &	Session facilitator: Henny van der Windt
16:45	Session facilitator: James Cook	Siobhan Long		Sophie Duncan	
	Building the University of the Village: connecting	English the Ability of the Constitution of	to the second se		
	universities and rural communities in the age of	Empowering Ability - the inscription of			Socio-technological innovation by ener-
	network cultures (118)	independency in assistive technologies (48)	gagement (98) Wilhelm Bauhus	Seminar Series (104) Sophie Duncan	gy cooperatives, a challenge (45) Henny Van der Windt
	Magda Tyzlik-Carver & Michael Wilson Falmouth University, UK	Hanne Lindedgaard	Westfälische Wilhelms-Universität	National Co-ordinating Centre for Public	
	ramouth officers, or	Søsser Brodersen	Münster, Arbeitsstelle	Engagement	NOG
	A New Breed of Innovators: Reflections from Practice and Implications for Research and Higher Education	DIST- Aalborg University	Forschungstransfer (AFO)		Civil Society Promoting a faster
	(119)	DIST Adibolg Offiversity	Torschangstransier (Ar O)	Maeve Lydon University of Victoria	Transition to Renewable Energy in
	Maria Angela Ferrario	A Participatory Action Research	Success factors of health promoting	Oniversity of Victoria	Denmark (58)
	Lancaster University	Approach to Developing Assistive	social innovations by a communi-	Paul Manners	Gunnar Boye Olesen
	The possible roles of experts in local development –		ty-based learning course (3)	National Co-ordinating Centre for Public	SustainableEnergy
	towards participatory action research (130)	Cognitive Disorders (46)	Gerda Wink	Engagement	
	Zoltan Bajomacy University of Szeged @ CRS Association	Daniel Einarson	Wink Works in Health Promotion, Educa-		The municipality as "low-carbon lab":
		Kristianstad university	tion, Research & Development		promises and perils (86)
	Revisionary Civics, Reciprocal Relations: Developing a				Eva Heiskanen
	Co-Creative Class (131)	Assistive Technology: a golden opportu-	Health services and informal carers -		National Consumer Research Centre
	Len Findlay & Isobel Findlay	nity to build a sustainable user-centred	does web-based training contribute to		
	University of Saskatchewan	design community (42)	staff members' capacity for collabora-		
		Long Siobhan,	tion with informal carers? (78)		
	Communication and Collaboration: The Development of a Social Care Partnership Network (135)	Enable Ireland	Anne Norheim		
	Victoria Morris		University of Stavanger		
	Manchester Metropolitan University	In the making. How to enrol vulnerable			
	Community-Led Collaboration for Real Outcomes	actors in co-design – 1:1 mock-ups as			
	(136)	intermediaries or boundary objects?			
	Randy Stoecker	(43)			
	University of Wisconsin	Hanne Lindedgaard			
	The development of a model for collaborative	Signe Pedersen			
	learning between urban researchers and urban planners (93)	DIST- Aalborg University			
	Magnus Johansson				
	Malmö University				
10.00		E 1 (C			

18:00

19:00

End of Sessions Thursday

AN INNOVATIVE CIVIL SOCIETY



Friday, April 11th

	Scandium	Titanium	Aluminium	Oxygen	Iron
SESSION 7 09:00	THEME 1 (T1-8) Citizen Science session Session facilitator: Martin Brocklehurst	THEME 5 (T5-1) Developing University-Civil Society interaction Session facilitator: Hansje Eppink	THEME 8 (T8-4) Participation and resistance of civil society in Global South Session facilitator: Sariola Salla	THEME 6 (T6-1) Research for Community Heritage Session facilitator: Sophie Duncan	THEME 4 (T4-6) Sustainable urban development Session facilitator: Meira Hansson
	How to design citizen science projects (110) Sarah West Stockholm Environment Institute Where is the Social in Environmental Citizen Science? (207) Balint Balazs - ESSRG Increase public engagement with science by the means of citizen science - the Citizen Science Platform Germany (137) Katrin Vohland Leibniz Institute for Evolution and Biodiversity Research Inspiring citizen scientists: the Open Air Laboratories project (144) Laura Gosling & Poppy Lakeman Fraser Imperial College London (Continues)	Developing University- Civil Society Interaction: Rethinking the curricu- lum to bring in CSO experiences and research needs (94) Hansje Eppink Wageningen UR	Drop out or drop dead? Civil society involvement in research regulation in	Jon Lock All Our Stories project lead, Research for Community Heritage Partner Jeff Lewis All Our Stories Research for Community	nities Creating sustainable (city)green; a framework for community projects (80) Derk Stobbelaar University of Applied Sciences Van Hall Larenstein Tale of Two Cities: Sustainable Learning to Hasten Transformation (69) Elizabeth Tryon University of Wisconsin-Madison Ted M. Petith
10.20					

10:30

Break

	Scandium	Titanium	Aluminium	Oxygen	Iron
SESSION 8 11:00	THEME 1 (T1-8) Citizen Science session (continued) Session facilitator: Katrin Vohland	THEME 5 (T5-2) (Re)designing curricula and learning processes Session facilitator: Emma McKenna	THEME 8 (T8-5) Environmental governance Session facilitator: Khan Rahi	THEME 6 WORKSHOP (T6-2) The landscape for community university partnerships Session facilitator: Sophie Duncan & Kim Aumann	session
	your own instruments for citizen environmental monitoring (197) Jaume Piera The Mediterranean Center for Marine and Environmental Research Can a wonky spud, some markers and a packet of crisps change the course of Irish agriculture? (11) Kaethe Burt-O'Dea Desireland Citizen science for surviellance in biosecurity and plant health (21) Alison Dyke Stockhom Environment Institute Engaging people in marine biodiversity monitoring programs (190) Simone Branchini University of Bologna A framework for citizen science and monitoring environment – performance and quality (39) Jari Silander Finnish Environment Institute	Learning and Research (89) Claire McDonnell Dublin Institute of Technology Building a Community-Based Research Infrastructure in a Liberal Arts College from Scratch (99) Randy Stoecker University of Wisconsin	an analytic-deliberative approach to interpret and manage environmental health risks in two industrial hot spots in Belgium (173) Dries Coertjens University of Antwerp Organising Research Institutions Through Action Research (176) Jonas Egmose Roskilde University Public opinion, governance and transitions management: the case of Finnish urban transport (177) Paul Upham University of Leeds	changing the landscape for community university partnerships? (105); Engaged Futures? (106) Sophie Duncan	Non University Science Shops: Challenges and Opportunities (150) Meira Hanson, Kirsten von der Heiden The Heschel Center, Israel / WTT e.V. Saxony, Germany Value-led and mission orientated: a new science shop NGO in Hungary (147) György Malovics Community-based Research for Sustainability Association (CRS) Running an extra-university based Science Shop in Vienna: Experiences, challenges, successes, lessons learned (159) Michael Strähle Christine Urban Wissenschaftsladen Wien – Science Shop Vienna

	Scandium	Titanium	Aluminium	Oxygen	Iron
SESSION 9 13:30	THEME 1 WORKSHOP (T1-7) Reflexive Monitoring and evaluation Session facilitator: Hansje Eppink	THEME 3 (T3-2) Design with multicultural actors/communities Session facilitator: Gerard Straver	THEME 8 (T8-6) Methods and approaches in governance Session facilitator: Glen Millot	THEME 4 (T4-7) Sustainable land use Session facilitator: Michael Søgaard Jørgensen	THEME 7 (T7-6) Applying Grants Session facilitator: Kirsten von der Heiden
	Reflexive monitoring and evaluation; a tool to support social innovations (9) Sol Jifke Wageningen University	Living Knowledge-Based Education: Lessons from design process with a multi-ethnic community (53) Rachel Kallus Technion Design With People – Users As Co-Designers (54) Signe Pedersen Søsser Brodersen DIST- Aalborg University Democratising knowledge: co-creating the future (50) Emma Diemont & Egle Draugelyte OtherWise	Community based learning in Sweden and United states – what works in different local context? (146) Magnus Johansson Malmö University Of Wolves and Sheep: CSO Participation as Innovation Mechanism in the European Security Research (166) Georgios Kolliarakis University of Frankfurt, Cluster of Excellence Results of engaging stakeholders in science and technology: Adapted European Awareness Scenario Workshops in the INPROFOOD project (171) Michael Strähle Christine Urban Wissenschaftsladen Wien- Science Shop Vienna	Bente Hessellund Andersen NOAH – Friends of the Earth Denmark	Applying grants and projects to realize innovative Science Shop ideas (151) Kirsten von der Heiden WTT e.V. Saxony
15:00		End of S	essions Friday		
15:30	PERA	RES outcome and Conference findi	ngs by Dr Henk Mulder, University o	f Groningen,	

Coordinator PERARES and Norbert Steinhaus, Living Knowledge, International Science Shop Contact Point

Next Living Knowledge Conference by Catherine Bates, Dublin Institute of Technology

Closure by Michael Søgaard Jørgensen and Søsser Brodersen, DIST, Aalborg University

WEDNESDAY 9TH APRIL

Public Engagement with Science: from deficit to democracy – and back again? (202)

Alan Irwin - Copenhagen Business School



Based on a recent review and a contribution for the 20 years anniversary edition of the scientific journal Public Understanding of Science, reflections are made about the last twenty years of achievements and failures in the theory, practice and policy of Public Engagement with Science (PES).

The 'deficit theory' which still today characterize many scientific activities that address citizen can be criticized for 'one-way communication', 'sanctity of expertise', and treatment of the publics as 'homogeneous'. When arguing for the need for public engagement with science it is question about not problematising 'the public', taking values seriously and instead educating 'the experts', and recognising both the 'legitimacy of wider concerns' and the 'democratic imperative'.

Public Engagement with Science as strategy is building upon a normative commitment to the idea of democratic science policy, and it is argued that public engagement can be a part of this. It could not have been anticipated in the early and even mid 1990s the extent to which 'engagement talk' would take root in a UK but also more widely European context, with many examples at a larger international level to back this up.

However, maybe public engagement has too often become a procedural response in research and innovation projects to a more fundamental political challenge. The challenge of scientific governance or democratisation dwarfs the small processes of engagement that are put in place. Likewise, the mini-publics brought together for dialogue exercises look microscopic against the backdrop of global science and its governance. Maybe it has been over-promised what such public engagement exercises can deliver.

We can safely conclude that, despite all the 'from deficit to democracy' talk, no such easy shift has been made. At best, partial progress can be claimed. We must be aware about the sometimes-enormous gap between the easy rhetoric of engagement and institutional practice, and to the disjunctures, erroneous

Citizen Science and Democracy – challenges and difficulties (205)

Katrin Vohland Leibniz Institute for Evolution and Biodiversity Science

assumptions and tensions in the very definition of 'public engagement with science'.

The existence of both scientific indifference to social science and of real asymmetries of disciplinary power between science and social science cannot either be denied. Moreover there seems to be a tendency to dump all the difficult socio-institutional challenges into the 'social science' basket – thus liberating scientific institutions from their own obligation to take such matters seriously.

Maybe there is a need to 'bring the political back in when talking about Public Engagement with Science but this would require a reconceptualisation of 'the political'. Other authors have suggested how the field might be reconceptualised in terms of the public representation of science (Jasanoff), 'public interpretations of science and technology' (Wynne), and a focus on political imaginaries and 'necessary fictions' (Nowotny).

Major decisions in political and economic realms are based on scientific achievements and thus much of our progress and living quality depends on scientific outcomes. Climate change can hardly be understood without some scientific background. However, neither scientific results nor scientific methods are sufficiently understood by the wider public. Subsequently, a major assumption here is that enhancing scientific literacy would increase civic participation in decision-making, a major principle of democracy.

Besides education and outreach activities, citizen science can be one approach to increase scientific literacy. Here, citizens engage in different stages of the scientific process, including the development of questions and the collection of data as well as the interpretation of data and, lastly, the communication and implementation of results. Depending on the intensity of civic engagement and the openness of the scientific project, citizen science may empower participants. However, there are also some difficulties; on the level of specific citizen science projects as well as concerning the relationship between "society" and "science". Scientists are trained to be "objective", to develop a neat research design, to proof hypothesis, and often have deep insight in the pros and cons of specific methods. Citizens normally do not have those deep insights the scientists gained through studies and experience, they may have specific interests in specific outcomes, and do not have the time for all the details. That means a) that a specific imbalance with regard to the power of interpretation will remain, and b) that there are research questions which are more suited for citizen science projects than others. In conclusion, scientists should be trained to give more attention to the possible contribution of citizens, mitigating or altogether preventing unrealistic expectations of both, scientists and citizens. This is an important step to ensure the sustainability and success of the current strong movement in citizen science.

European Environmental Agency: Improving the science policy interface by engaging with citizens (201)

The scientific activity in the prism of the participatory imperative (180)

David Stanners - European Environment Agency

Martine Legris Revel - University Lille 2 CERAPS

The EEA is contributing to development of the knowledge base needed to support the transitions required to "Live well within the limits of the Planet", as coined by the EU's 7th Environmental Action Programme (7EAP), Complex and systemic changes are needed to meet the 2050 vision. This will require innovation, prompt feedback and identification of potentially important niche developments and successes to navigate this difficult terrain in order to move in the "right" direction. The EEA, as a boundary and networking EU institution, works at the knowledge-policy interface to facilitate, convene and produce relevant, credible and legitimate information which can support policy and decision-making leading to these transitions. While EEA's work is embedded in the EU intervention framework and in the Eionet network of its 33 member countries, citizens have a vital role to play; they can contribute to a better understanding of the issues in the first place, helping to frame the problems: they can help reinforce and build the knowledge base by contributing their own knowledge and by participating in citizen and community monitoring activities; and they can be a source of inspiration in responding to the issues and identifying solutions, as recognised and called upon by the EU's 7EAP. As people become increasingly aware of the vulnerability, fragility and instability of their living environment (i.e. our ecosystems) and of the unsustainable patterns of consumption and production, their own experiences, insights and contributions are proving of vital worth for decision-makers and placed-based policy development. Sharing information and knowledge is at the heart of this, creating trust and legitimacy in the process and outcomes in a mutually supportive manner.

These ideas will be presented and discussed using a number of examples where the EEA is involved directly such as in the fields of air and water quality, marine litter, and monitoring Bat populations, as well as in some broad health and well-being issues concerning the application of the precautionary principle.

The citizen participation in the scientific approach has so far essentially been studied in an optics very prescriptive or by making citizens a simple obstacle for the scientific rationality which it would be necessary to enlist (Pestre. 2011). The stake in this communication is to wonder more globally about the contemporary modes of citizen participation in the scientific research by anlyzing a set of empirical data considering how CSOs are currently acting in research. This quantitative survey of all European Commission Framework Program 7 projects across all areas of research determines the current landscape of participation practice. It has been implemented via an online survey (Limesurvey.org). Our research problem is based on the hypothesis that there are a variety of practices of CSO participation in research governance. Participatory action research, as well as collaborative planning or technological assessments for instance are very different ways of including Civil Society Organisations in research projects, Still, we infer from the literature, especially from science studies and philosophy, that the participation of CSOs in research is embedded in a set of assumptions and procedures which affect the achievement of internal or external expectations. The main results show that the decision not to resort to CSOs in one consortium of research is linked to a positivist vision of the scientific validity. It seems also bound to the existing funding scheme and to the fact that it is simpler for certain research teams to escape CSOs integration, because the planning of the project and the modes of collaborative work can turn out complicated. We also demonstrate that CSOs involvement in research is still embedded in a rather classical normative setting of research as to their role and attribution. FP7 projects have certain characteristics (length, international collaboration, funding scheme, evaluation, etc) that frame the working and communication context of each research team. Only a third of our CSOs including teams sample are likely to adopt a collaborative working organization and thus to act in a participative governance model.

Wednesday 9th April Plenary 13:00-14:30

Funding Schemes as Potential Barriers to Transferring Societal Problems to Research Questions (167)

Experiences on research with and for civil society and its organisations within research funding organisations (170)

Katrin Grüber - IMEW. Institut Mensch Ethik und Wissenschaft

Norbert Steinhaus - Bonn Science Shop Emma McKenna - Queen's University Belfast

This paper explores the cooperation among an independent research center (Institut Mensch, Ethik und Wissenschaft, IMEW) and a patient organization of growth restricted people (Bundesselbsthilfeverband Kleinwüchsiger Menschen e.V. (VKM). This cooperation constitutes an excellent site to highlight potential barriers to participatory research caused by existing funding schemes. The board of VKM is concerned about the risk of reduced possibility for older members to participate in societal activities and/or being active members of the patient organization. They assume a link between health problems increasing with age. This link constitutes the point of departure for this cooperation. In order to set up a participatory research project, it is necessary to undergo a clarification process. Societal problems have to be translated into questions that can be answered by a research project. The research agenda can be directed to the past, to the present or to the future asking questions such as: what kind of barriers do older growth restricted people face at the moment, what are the expectations of younger people with restricted growth conditions from the future or how could health problems be reduced by prevention? In addition to framing the research question(s), the interests of CSO and researchers need to be negotiated. This is a complicated process. What makes it even more complicated is the fact that the requirements of potential funders, which are imposed on the research questions of potential funding schemes, constitute specific rationales that are not necessarily in accordance with the initial interest of the CSOs. So far, it has been proven very difficult to identify relevant funding schemes that projects fit in. At the moment, a pilot study is financed by the BKK health insurance. Due to BKK's requirements, the project focuses on health issues, especially on prevention schemes and actions. However this is only one aspect of VKM's aspiration to understand and develop policy recommendations regarding the situation of older people with restricted growth condition and societal barriers that prevent them from full participation. This cooperation experience is in line with the recommendation made by the EU project STACS that "Participatory Research calls for projects should be as open as possible".

Over the years, civil society organisations (CSOs) have been relied on to simply channel scientific results to members of the public, limiting the great potential of this resource. Fortunately, there is now a growing interest from both CSOs and researchers to exchange views and work together from the outset of the research process, creating a better symmetry between the needs of society and how science can address them. Research organisations (ROs) and CSOs can both benefit a great deal from working together. There are a number of factors, however, that hinder closer collaboration between the two. In the FP7 project PERARES we examined how research funders across Europe can support publicly engaged research and ioint research projects with civil society organisations (CSOs). For this, policy makers and funders in the UK. Ireland. Germany and the Netherlands amongst others have been interviewed. This work aimed to enable research funders throughout Europe to better assess the options to take the PER activities up in their strategy and thus contribute to the European policy and the future of the ERA. The presentation will give an overview on the results of the study, examining experiences and attitudes in different countries towards Science Shops, Community Based Research and Community University Engagement. It will also outline opinions on and approaches towards research with and for civil society and its organisations within research funding organisations. Feedback will be sought from participants on their own experiences of engaged research, from the position of being funded, seeking funding or being a funder or prospective funder of research.

Tools for Responsible Research and Innovation (178)

Ignasi López Verdeguer - La Caixa Foundation Norbert Steinhaus - Bonn Science Shop

Bridging the gap between Science and Society has been a challenge for decades. Today, there is evidence that we need to involve wider society in decisions about the form and direction of research and innovation to contribute to a smart, inclusive and sustainable growth of our societies. Thus Responsible Research and Innovation (RRI) has become one of the key words on the European stage, transformative science is another one on the agenda. The presentation will outline the concepet of RRI and introduce a project called RRI TOOLS targeting at the grand challenges (science for society) where deliberation and reflection are coupled with action (science with society). A core element of this project will be the training of science leaders in the RRI process and the raising of awareness for the concept.

Background

Some sceptics believe that the public is not qualified to participate in the decisions concerning which research gets funded. An initiative by EPSRC, the Engineering and Physical Sciences Research Council, in the UK, indicates otherwise. Back in 2008, the council conducted a public dialogue, which had a clear impact on the award of research grants. The initiative involved deciding which nanotechnology research for healthcare from among six potential areas, was to be funded. The dialogue with the public provided clear priorities. It emerged that applications for the prevention and early diagnosis of disease were preferred over the first option favoured by the traditional peer-reviewed decision-making approach adopted by the EPSRC. This led to a more socially-robust and better decision-making process. Similar approaches have since been adopted at European level. This is the case of the VOICES consultation process, which gathered opinions and ideas about urban waste from citizens across the EU. Should this be replicated to define future societal acceptable, sustainable and desirable research and innovation? We believe so. But are European research and innovation systems and societies ready for such a change in the relation between science and society?

The RRI Tools Project

In our opinion, the new funding scheme Horizon2020 will definitely set the framework in this direction. Already, some FP7 funded projects are paving the way in this direction. This is the case of a seven million euros research project, called

RRI Tools, which encompasses 26 partners, divided among 19 hubs—such as the South Eastern European hub—that cover 30 countries. The project was launched on 20th and 21st January 2014, in Brussels. Its goal is to develop a set of tools to give training on how to implement Responsible Research and innovation (RRI) in Europe. Members of the consortium range from universities to science centres or private foundations

The concept of RRI has been developed in the academic realm in the past decade. RRI has since been integrated by the European Commission into the new framework program. It is listed as one of Horizon2020's specific objective, referred to as "Science with and for Society". In parallel, it remains a cross-cutting issue to be implemented throughout the framework programme. In a nutshell, RRI is a process where all societal actors—including researchers, citizens, policy makers, business and industry—work together during the research and innovation process. The goal is to align its outcomes to the values, needs and expectations of European society. RRI, according to the Commission's definition, also account of key issues such as the public engagement of science, the relation between education and research and innovation, ethical and gender issues as well as open access.

The project RRI Tools will therefore develop an innovative and creative set of tools comprising practical digital resources and guidelines aimed at raising awareness, training, disseminating and implementing RRI. It will be addressed and designed by all the stakeholders of the research and innovation value chain. In parallel, it will specifically focus on policy makers in order to impact significantly in the future governance of research and innovation. Tools will be based in collective reflection and built on existing good practices identified in RRI, such as the above-mentioned EPSRC initiative, or the council's now formal statement of support towards Responsible Innovation; the another name of RRI adopted in the UK.

Forging the RRI tools

The challenge remains to gather a representative set of good RRI-practices and associated good-practice standards while allowing adaptation to local conditions across Europe. To gather a representative set of tools, the good-practice standards

will embrace six key components: governance, public engagement, open-access, ethics, gender and education. The coordinators of the 19 project hubs—established to manage the activities of the 30 European Research Areas countries partnering in the project—will organise workshops aiming to gather and analyse such good-practice standards. The process to develop the toolkit aims to be collaborative and inclusive. The idea is to foster methods and channels of dialogue to increase creativity and shared ownership of the process. Ultimately, this project is expected to lead to a community of practice in RRI that will assure the use, evolution and enrichment of the toolkit. The toolkit will comprise practical, digital resources and guidelines for actions aimed at raising awareness, training, disseminating and implementing RRI.

Ensuring tools are used

To ensure that the tools developed under the project are used, the hubs will be responsible for training on the use of the toolkit throughout Europe. They will also be responsible for advocating policy makers at a national and regional level, with 120 meeting planned. Finally, they will be involved in disseminating the concept of RRI to a wide audience. Prior to that, the project plan also makes provisions for the training of the trainers in using the toolkit. One major three-day workshop, due to be held in Brussels, will instruct future trainers through an immersion approach. The objective is to train 50 trainers. The training will avoid the traditional 'teacher in front with listening audience' approach. Instead, it will be based on case studies and operate in an interactive way.

RRI Tool is a very ambitious project, which will only help map out RRI capabilities across Europe, through the creation of a tookit. Once this toolkit is available, the project will instruct trainers, who are responsible for ensuring that the tools are used effectively by RRI stakeholders. Ultimately, the project aims to increase the participation of society and stakeholders in making relevant decisions concerning research and innovation.

The project is coordinated by "la Caixa" Foundation, a Spanish foundation which mission is to contribute to the advancement of people and society and works in the

areas of social welfare, culture, education, science and the environment. It funds, among other areas, biomedical and health research, postgraduate scholarships and science in society programs. Some examples are IrsiCaixa, an AIDS research institute—which has an important role in the RRI Tools project as its Deputy Coordinator-, or CosmoCaixa, the science center of Barcelona.

The "la Caixa" Foundation is in line with the Europe 2020 strategy, which states that the growth of our societies must be smart, through more effective investments in education, research and innovation; sustainable, thanks to a decisive move towards a low-carbon economy; and inclusive, with a strong emphasis on job creation and poverty reduction. We are sure that RRI Tools will contribute to this by helping transform R&I in Europe into a process targeted at the grand challenges of our time (science for society) where deliberation and reflection are coupled with action (science with society).

Experiences from Denmark: Can social, environmental and democratic conditions be improved through action research? (40)

Theory development about transformative social innovations (41)

Michael Søgaard Jørgensen - DIST, Aalborg University Annette Bilfeldt - Department of learning, Aalborg University John Andersen - Roskilde University Center

The paper analyses whether and how action research can be democratized and part of citizens' and professionals' efforts to develop new answers to critical societal problems and whether and how such alternatives can become embedded. Action research is an umbrella term for research based on democratic and inclusive values where "democratically developed knowledge" contributes actively to socially innovative, collective actions. Action research is characterized by researchers and practitioners joining in promoting democratic and social changes in a shared commitment to democratic social change. The paper builds on the empirical knowledge from three Danish action research projects about: (1) Better eldercare and working conditions at nursing centres as an alternative to New Public Management. (2) Development of a community centre in a marginalized urban area as platform for residents' and welfare workers' empowerment (3) Prototype development of sustainable housing initiated by an Agenda 21 centre as a way of developing networks and markets for sustainable housing. The background and the goal of the projects, the participants and their roles, important methods, and the results are described. The three cases illustrate conditions for creating better social and environmental conditions in Denmark. Development pools and programmes make it possible to initiate action research projects with the purpose of encouraging and enabling more democratic, inclusive and sustainable agendas. The paper shows that action research with active participation from a.o. citizens, public employees. private employees and environmental organizations, can help strengthening these actors' capacity to influence the development of society and contribute to societal change for better social and environmental conditions. Whether action research creates empowerment outside the work places, local communities, etc. involved in the projects, depends among other things of whether better frameworks for influence on socio-political conditions are created and whether involved actors are able to use and pass on experiences from one project to other projects and initiatives. Finally, the potentials for integration of social, environmental and democratic dimensions in the social innovative research praxis are discussed.

Julia Wittmayer - DRIFT, Erasmus University, Rotterdam Michael Søgaard Jørgensen - DIST, Aalborg University

Social innovation is quickly growing into a recognized field of research and one of the interesting questions that follows this development is regarding the role of research vis-a-vis the social innovation phenomena under study. With social innovations aiming to contribute to solving real-world problems, this paper aims to explore the role of research(ers) in social innovation and sustainability transitions. It does so by zooming in on an EU-funded research project, TRANSIT and aims to understand the researcher's relations with the social innovation phenomena (i.e. transnational networks) that they study as part of this project.

The aim of the TRANSIT project (Transformative Social Innovation Theory) is to build a theory of social innovation useful to academics, policy makers, civil society organisations, social entrepreneurs, and other stakeholders. The starting point for TRANSIT is the need to understand transformative social innovations, which means social innovations that contribute to systemic changes by addressing urgent societal challenges. TRANSIT aims at unpacking the relation between social innovation and systemic change in the context of a rapidly changing world that faces 'game changing' developments (e.g. financial crisis, climate change or the ICT-revolution). The main research question is: How and under what conditions do social innovations lead to systemic change, and how are actors (dis)empowered in transformative social innovation processes? TRANSIT will develop a new theory of transformative social innovation, drawing upon a range of existing theoretical and methodological approaches to innovation and social change, and using a systems innovation and sustainability transition research framework as a starting point. Empirically, TRANSIT takes an embedded case-study approach to conduct a multi-levelled, cross-national comparative analysis of social innovation projects and networks across Europe and Latin America, combining in-depth case-study analysis with quantitative meta-analysis. The new theory of transformative social innovation will thus be grounded in in-depth case-studies, and tested and generalised in a crossnational da! ta-base. Among the cross-national case studies in the TRANSIT project are science shops, sustainable energy movements, eco-communities, time banks, credit unions, solidarity economy, and social entrepreneurs. TRANSIT creates an iterative interplay between empirical research on social innovation, the development

Challenges in sustaining, supporting and enhancing long term collaborative relationships between HEIs and CSOs working on community based learning and community based research projects (5)

Sinead McCann - Dublin Institute of Technology Kaethe Burt-O'Dea - University College

of a new empirically-grounded theory of transformative social innovation, and transdisciplinary translation to capacity building tools. This interplay will involve policy-makers, civil society organisations and social entrepreneurs.

The paper focuses on the interaction of TRANSIT researchers and coordinators, activists etc. from the transnational networks under study. Rather than focusing on concrete methods, the paper focuses on the methodological considerations before choosing methods such as interviewing or surveying: it is about the way researchers and activists relate to and interact with one another. These considerations include a number of challenges which we address in the paper, including: a) proximity and distance in the relationship, b) reciprocity in the relationship, c) networks' participation in the research process as research subject or research object, d) normativity in relation to the studied initiatives. These challenges are dealt with by embedding the discussion in a literature review of different approaches to empirical research (e.g. action research, ethnography, dialogue research, etc.). On the basis of this we formulate a number of recommendations for researchers working with social innovation and the co-shaping of social innovation and society and frame the identified discussions and challenges into the broader debate of the role of science in societal transformations.

This presentation will present the challenges in sustaining, supporting and enhancing long term collaborative relationships between HEIs and CSOs working on community based learning and community based research projects. The Lifeline Project proposes the sensitive regeneration of a disused railway cutting in Dublin's northwest inner city into a productive green corridor, public amenity and inter-model transport link. The LIFELINE project has been collaborating with Dublin Institute of Technology's programme Students Learning with Communities (SLWC) on multi-disciplinary Community Based Learning/Research (CBL/CBR) projects since 2008. Since then staff and students across a range of programmes have been working with the LIFELINE project on a wide variety of CBL and CBR projects for example: Postgraduate students from Msc in Computing (Knowledge Acquistion & Modelling) have worked on individual research topics of significance to the LIFELINE and have produced research reports with their final disserations. Postgraduate students from Msc in Computing (Knowledge Acquistion & Modelling) have worked on practical projects like designing and building a website for the LIFELINE, undergradute final year students from the Bsc in Nutraceuticals worked on individual research topics of significance to the LIFELINE and have produced research reports with their final dissertations. Undergraduate students from the BSc Chemical Sciences with Medicinal Chemistry, tested soil and water in the community garden as part of LIFELINE project and produced research reports with their final dissertations, undergraduate students from the BSc Human Nutrition and Dietetics, carried out research on topics of significance to the LIFELINE and produced research reports through their dissertation, undergraduate students from the B.Sc Planning and Environmental Management, worked on a variety of community based learning projects with the LIFELINE, an undergraduate student from the BSc. Nutraceuticals in Health and Nutrition did a community based piece of research with the LIFELINE on: Urban Renewal: Choosing plants to benefit Health and an undergraduate student from the BA in Visual Communication programme did a community based research project with the LIFELINE on the topic of Designing Educational Packaging for the product lines arising from LIFELINE and it took form in a suite of final concept designs. These projects have contributed towards the development of student learning in a real life context, including their experience of applying their specialist

Producing Social Innovation (25)

skills towards the aims of LIFELINE. Through this application students engage in a socially innovative process where they increase their social awareness of issues facing the citizens in the northwest inner city in Dublin particularly in relation to health-care, bio-diversity and urban agricultue and their capacity to help address these issues through their specific discipline.

The LIFFLINE project with the input from students engagement has successfully responded to the fluctuating contextual influences on planning and sustainable development in this area of Dublin city. LIFELINE has recently won an award and resources to officially launch this project into the public realm. One of the most important challenges ahead will be developing new ways to effectively document and communicate our CBL/CBR to build cooperation between civil society and researchers, enhance knowledge production, build capacity and empower the northwest inner city community who are integral to the project's success. The solution may be the development of an interactive web-based system designed to organize and disseminate cross-platform information gleaned from a range of systems. Key challenges facing the DIT SLWC programme in it's support of multidisciplinary projects like the LIFELINE is the development of processes that build on their expanding catalogue of support to meet the level of commitment demanded by students, academic staff and community partners engaged in CBL/CBR on long term projects. These processes may include; working with each stakeholder to tailor their CBL/CBR for effective dissemination to appropriate stakeholders in the public realm as well as assisting community partners in the utilization of their research results to achieve tangible and positive change within society. For this presentation the programme for SLWC and the community partner who founded the Lifeline project will use their long-term collaboration as a case study. Their different perspectives will illustrate the key challenges each stakeholder faces.

Mie Nørgaard, K. B. Sørensen & P. G. Krogh - Aarhus School of Architecture
A. Seravalli - Fabriken, Malmö, Sweden
M. Bianchini & S. Maffei - School of Design (Politechnico di Milano)

In this paper we present a new research initiative exploring Distributed and Open Production (DOP). We shortly outline the background for the initiative, and present a series of research directions and activities planned for the near future. Finally we report on the first results related to the design interventions we have carried out in both well-established and ad hoc settings highlighting both benefits and potential traps of DOP, showing strengths and weaknesses of such constructions.

The digitization of society, the democratization of technology, the personalization of production, and the gradual opening of the design practice are disruptive phenomena that build a new scenario in which the processes of creation, production and distribution of many goods and services will undergo profound changes. These changes require the development of a mix of "making cultures". The changing of production models is becoming a central theme of the research and innovation policies in many Western countries, and at the same time several bottom up initiatives are growing from citizens and local associations, especially in cities. Moreover, many experts in economics, sociology and technology are studying manufacturing process changes in terms of the development of personal fabrication, growth of new communities of makers and self-producers (DIY), and to new forms of handicraft production. This is an important issue for the design on a global scale.

Recent years' development of computer controlled manufacturing techniques such as laser cutters and low-cost 3D printers (fabrication machines) has provided a potential change in conditions for the production of goods. In praxis, rational, high precision and sophisticated production is no longer only in the ownership of experts and placed in large closed facilities but can be local, open and community governed, responding to local needs and aspirations rather than results of market research (Manzini 2011). We denote such possibilities as Distributed and Open Production—DOP

In this paper we propose that and discuss how DOP contributes to increased life quality in several ways. First, it helps bring production back to the local communities.

Whether we bring local governance to innovation or bring innovation to local governance; innovation will be done (22)

Albert Aalvanger - Wageningen University

Second, it builds on close loops of development based on local desires, interests, capacities, needs and division of labour. Third, it facilitates the establishment and growth of strong local communities, which line with the long Scandinavian practice of organizing ownership and work in co-operations lelps the development of trustful and engaged citizens. This is not a trivial contribution since the strong sense of trust among strangers within the Scandinavian countries, traditionally is credited for being a key factor for the successful running of these peaceful, effective and wealthy communities (Serritzlew 2012).

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Triggered by demands for more direct and participatory forms of decision-making. governments, civil society organisations, researchers, and individual citizens are exploring new forms of local governance. This search is given extra weight due to the budget cuts that many governments face, which erode the possibilities of existing arrangements and institutions and force governments to delimit their role in public affairs and social welfare. An extensive debate and a whole range of initiatives can be found under the umbrella of terms like the Big Society, Active Citizenship or Do-Democracy. Pleas for novel governance approaches can come from many directions and can be pushed forward by various organisations, both public and private. Reflecting on recent developments in local governance in the Netherlands and drawing on particular case studies, we show that the quest for novel approaches might not always be successful. Pleas for novelty can in fact delimit and prevent innovation and reduce the potential of civil society to pick up new tasks and responsibilities. Pushing for innovation can have negative consequences if it lacks a more substantial, contextualized perspective on problems and possible alternatives. and is merely looking for something new because it is new or if it is pushed by organisations whose role in a new arrangement will be limited. We explore how initiatives for novel governance affect citizen's views and motivations, how they deal with new opportunities to take matters in their own hand, how this changes their role and responsibilities, as well as these of governmental organisations and in which ways external parties like science shops, research agencies and educational institutes influence the dynamics of the search process. Drawing on the experiences in the Netherlands we present a number of recommendations. One important lesson is that external parties should avoid pushing innovation. The cases show that the overenthusiasm of external parties, either because they see interesting possibilities or because they require innovation to perform success and sell their 'new' blue-print solutions, can lead to a dead-lock and to disillusioned citizens and governments. There are many ways in which they can inspire and help citizens, but they should also accept that citizens might have different ideas and desires, or do not want to change anything at all. Real innovation cannot be pushed or brought upon.

Science shops and participatory civil society (12)

Jeroen Kruit - Alterra Wageningen UR

Question

The main question of this round table is how to translate specific context based knowledge generated from science shop projects to concepts that can facilitate processes of transition our civil society is undergoing.

Goal

To exchange views and experiences and to reflect on our science shop work. To find partners within the Living Knowledge network to elaborate these views in a (scientific) publication. The ambition is to link the often fragmented project results and thus to better frame our work to the 'outside world'.

Object of discussion

Civil society is subject to transition processes of decreasing government activity and increasing civil engagement to take up roles and responsibilities. The way these civil initiatives organize themselves is diverse and often they break with existing structures of government (social innovation).

Self-organizing initiatives often focus on integrative 'solutions' for multi-topic issues. The often local scaled 'solutions' combine different policy goals and policy categories in one approach (During, 2013). Fitting this integrative way of working with existing policy making often proves to be difficult. Another issue is brought up by Uitermark (2012). He claims that self-organizing initiatives strive for local solutions for specific groups and specific functions. Self-organisation is local, voluntary, spontaneous and unequal in nature. During (2013) thinks that a focus of future government policy on continuity of initiatives instead of a focus on continuity of values could be crucial for a successful transition.

What inspiring examples of self-organisation as a form of social innovation can we distinguish from our science shop research projects? How can we translate these practice based experiences to more general findings (concepts) that can facilitate processes of transition that our civil society is undergoing?

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Co-Creating and Designing Culture and Sustainability: Innovations in Community Mapping from Europe, Canada and Indigenous Peoples (62)

Maeve Lydon, John Elliott, Peter Keller - University of Victoria Nessa, Cronin - NUI Galway

This roundtable includes a diverse group of scholars and indigenous/community activists to share their stories of how they are using community based research approaches and tools such as story-telling, maps and mapping processes to engage communities, students and young people, and indigenous peoples in projects, planning and socio-cultural change.Community based mapping is growing in its wide application as an innovative tool for sustainability learning and planning now widely used by students and researchers, communities,governments and planners-designers to understand and re-present complex systems and issues and to create concrete plans based on mobilizing assets and visions which bridge past, present and future scenarios. In Canada indigenous groups such as the Wsanec people use mapping as part of their overall cultural resurgence and reclamation of space and place.

A diverse group of presenters

John Elliott, Wsanec (Saanich) indigenous elder from the West Coast of Canada, and reknowned indigenous language revitalization leader in Canada will share his community's story of colonial subjugation, resistance and resurgence using the power of maps.

Nick Gant from the University of Brighton who will present his research and regional mapping work with Community 21 http://community21.org/1.2/ and demonstrate some creative and contemporary enhancements on mapping and digital interfaces (augmented reality, wiki-gis) as part of participatory and co-design processes and how this relates to the engagement of the young in particular.

Nessa Cronin, Lecturer in Irish Studies from NUI Galway is the Irish Co-Convenor of the Mapping Spectral Spaces International Collective and and the Galway Space/ Place research Group; she will share her own research and community based work in the west of Ireland

Peter Keller – Dean of Social Sciences at University of Victoria (Canada), Professor

of Geography and former Canadian Cartographic Association International lead and Maeve Lydon from the Community Mapping Collaboratory at UVic in Canada will share their own community and green mapping work over 15 years- mapping.uvic. ca / greenmap.org.

Planning for Research Dissemination: New Tools and Strategies for Impact (188)

How to create an online community (120)

Jane Burpee - University of Guelph

Sofie Verkest - Vrije Universiteit Brussel

In the words of the 2003 Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities, "Disseminating knowledge is only half complete if the information is not made widely and readily available to society." The declaration intersects with the goals and ideals of community based researchers who seek to make positive social change in their communities and beyond. By making research findings, including data, public and fully searchable, the broadest dissemination will take place. Powerful tools can be used which demonstrate shared values and reach. Researchers are embracing new technology and new social media to broadly disseminate their research findings and assess the impact of with support from librarians and other technologists. The presentation will share some of these emerging dissemination strategies, review open access environments, best practices in using social media tools to announce findings and link back to papers, and will showcase alternative metrics which can be used to track usage and assess impact for funders and others wishing to see a return from research investments. Dialogue afterward the presentation will encourage attendees to share their personal strategies and experiences.

From Obama to Richard Dawking: social media have changed the way almost everyone and every institution communicates with the world. The use of media such as Facebook. Twitter or Instragram can create a community to talk about your product, organization, research or cause. It is the fastest word-of-mouth advertisement you can ever get and has changed communication strategies from trying to get people to listen to your message to trying to get people to talk about your message. This degree of participation, rather than spectatorship, makes this medium perfect for developing citizen science and sharing scientific knowledge with a broad audience or a specific group. Creating an online community for science or otherwise, does not happen overnight and involves careful and strategic planning. In this workshop I will explain why starting up a Facebookpage and waiting for it to get picked up is not enough. I will walk through the questions that need to be asked and the steps that need to be taken in order to successfully create an online community. Furthermore I will explain and give some hands on tips in how to use social media for citizen science and communicating scientific results. The workshop consists of an overview of the social media landscape, with useful tips and tricks on how to build your platform, together with practical information on how to evaluate your social media efforts

New "shared spaces" for mutually beneficial science-practice cooperation (195)

Stella Veciana - Federation of German Scientists

Slowly but steadily more and more academics and community activists are engaging in mutually beneficial community-based research. In practice, these science-community cooperation's require "shared spaces" of knowledge exchange. In fact, shared spaces are already developed in manifold ways as by establishing new research structures in universities or by experimenting with innovative formats as interactive interfaces for conferences. The presentation will introduce and discuss examples of new research structures as universities integrating community knowledge or developing sustainability indicators. One example is the postgraduate programme of the Indigenous Intercultural University IIU, a network of 26 universities and higher education where regional and national indigenous organizations play a key role, including their cooperation during the process of course design. Another example is Higher Technological Institute Jatun Yachay Wasi in Ecuador offering study programs based on indigenous knowledge. In Germany a project coordinated by the University of Kassel is developing a new system of indicators for sustainability on a participatory basis for the German science and higher education system. But how can these new approaches be introduced into the mainstream practices of the so-called "normal science"?

A more experimental "shared space" for integrating different knowledge communities as the Andean and scientific communities is "Challenge Yasuní", a participative on-line/off-line art installation and conference tool. It was presented at the conference "Transdisciplinary Research and Development Cooperation" in Bonn organized by BfdW, DUK, Forschungswende and ZEF. "Challenge Yasuní" shows a series of interviews seeking solutions to the extraction of fossil resources in protected sensitive areas, and raises the question of what influences the values of Buen Vivir could have on the science system, specifically development research. The video interviews thereby become "play-able" via a dropdown menu system, which reveals the concepts and ideas held within the interviewees' narratives in the menu classification. Viewers can explore alternate connections across different points of view, and by cross-referencing concepts create new ideas and insight. By making accessible the voices of actors who cannot be physically present at the conference it also encourages potentially new cooperation alliances and the co-design of

development research projects.

This session will discuss these specific shared spaces of science-practice cooperation in multicultural contexts with the aim to inspire a new co-created international project out of the interests of the assisting participants. The potential results will be supported and disseminated by the Research arts platform (research-arts.net). The Research arts community of artists, scientists, engineers and interested citizens develops transdisciplinar research approaches and a research agenda to contribute towards a more sustainable and equitable society.

Linking Science and Society via Online debates (169)

Higher education in the world 5. Knowledge, Engagement and Higher Education: Contributing to Social Change (200)

Kirsten von der Heiden - WTT e.V. Saxony

Crystal Tremblay - University of British Columbia

The International Science Shop Network "living knowledge" provides central (livingknowledge.org) and de-central (e.g. wissenschaftsladen.eu) online communication options for the interaction between Science and Society. Thus Science Shops effect on education, science, society by means of empowering people and linking thematic needs with expert and local knowledge. As intermediaries, Science Shops mostly take over the role as facilitator, free actor, transfer organisation etc. and while doing so, further co-develop tools together with civil society organizations. interchange knowledge between partners and identify or initiate local knowledge by Community Based Research, A reflection on recent online experiences 2013 – 2014 will be highlighted in the paper: A meta-level-reflection about the intermediary role of Science Shops, along the concepts and settings of the derived online-offers and -debates, experiences on matching need and knowledge as well as skills needed for online facilitation will be foreseen inferences of the paper. The analysis of settings will be based on the: * Blended online and f2f-offer on Social Entreprenership convened by the Science Shop Vechta/ Cloppenburg in Co-operation with WTT e.V. as e-facilitator: The opening ceremony of the Science Shop Vechta/ Cloppenburg took place as an event on 'Social Entrepreneurship' organized within the framework of the 'Global Entrepreneurship Week' in Cloppenburg on November 12th, 2013. The event has been organized as an online plus local conference, including online and local expert speeches streamed online under thematic participation of Science Shop experts and thematic experts of co-operation partners, * PERARES online debate experiences: The PERARES project aims to strengthen public engagement in research (PER) by involving researchers and Civil Society Organisations (CSOs) in the formulation of research agendas and the research process. The PERARES online debate series allows civil society organisations, researchers and members of the public to discuss research needs on different topics with the aim of creating new research projects. WTT e.V. – as one of the PERARES partner Science Shops of Saxony- provides a transnational online debate on "agri-environmental advisory needs and structures" until February 2014. "PERARES- Public Engagement with Research And Research Engagement with Society" - a four years project funded by the European Community's 7th Framework Programme started in 2010. Globally the "Living Knowledge" is linked with GACER- "Global Alliance for Community Engaged Research" as a platform for the global dialogue and providing a Transnational Online Debate Website.

The GUNi world Report is a collective work published by Palgrave MacMillan as part of the GUNi series on the social commitment of universities. The objective of the Reports is to contribute to the renewal of ideas, while generating visions and promoting reflection in regards to the contribution of higher education and knowledge to society.

The 5th GUNi World Report Knowledge, Engagement and Higher Education: Contributing to Social Change looks at critical dimensions in our understanding of the roles, and potential roles, of higher education institutions (HEIs) as active players in contributing to social change and the creation of another possible world. The first aim is to look at our changing understandings about who the agents of knowledge creation are and how the creation, distribution and use of knowledge are linked to our aspirations for a better world. The Report offers us elements of a vision for a renewed and socially responsible relationship between higher education, knowledge and society. The second aim is to provide visibility for and critically examine one of the most significant trends in higher education over the past 10–15 years: the growth of the theory and practice of engagement as a key feature in the evolution of higher education.

The report is a product of three years research, consultations, academic seminars and an international conference. Rajesh Tandon of India and Budd Hall of Canada have been the guest editors for this edition. Seventy-three authors from all continents contributed to this most comprehensive report ever done on the global dimensions of community university knowledge partnerships and engagement.

The report covers a range of different objectives. It describes and analyzes the current practice and theory of community university engagement at global and regional levels. It illustrates how HEIs are linking knowledge with society, presenting the different practices, mechanisms and structures, including the impact of engagement in teaching, learning, research and institutional activities. It identifies how the social actors are involved in the engagement practices and interact with HEIs, including leadership, participation and decision making process. It proposes steps for advancing the contribution of higher education to building a more just, equitable and sustainable society.

GUNi has previously published four issues of the Higher Education in the World report (2006, 2007, 2008, 2011), plus a synthesis (2009) committed by UNESCO for the II

World Conference 2009. https://www.guninetwork.org/guni.report

Customizing scenario-workshops for researchers-CSOs partnership developments (111)

Online forums, question and answer, and co-creating research projects (208)

Glen Millot - Fondation Sciences Citoyennes Nicola Buckley - University of Cambridge

Nicola Buckley - University of Cambridge

Key Words: Participatory Research, Civil Society

Scenario-Workshop Developing a participatory research project strongly depends on the way researchers and CSOs first share their views on the topic that brings them together. Mutual learning as well as a clear understanding of the objectives and constraints of each partner is a prerequisite. But, well upstream from the construction of the research project, future partners are not necessarily able to find a common language to start a constructive and efficient dialogue. Many different methodologies can be used to foster dialogue between these very different types of stakeholders for whom backgrounds, proficiencies and objectives may seem incompatible with the elaboration of a joint project. Scenario workshop methodology is one of them. This has previously and successfully been used to help foster partnerships between stakeholders that already knew each other or had worked together on some projects. However the development of participatory research, as a research model able to incorporate the needs of civil society, needs to gather new partners, to facilitate the dialogue between researchers, practitioners and other stakeholders, and to make them consider the added value that can arise from these kind of partnerships. Thus our aim was to see if scenario workshops, as methods to design collaborative projects, could be used with some specific refinements to fulfil requirements to create new participatory research projects. Several scenarioworkshops were organized using this methodology for different topics, different kinds of partners (researchers, practitioners, CSOs representatives, community and social workers, students) who had different level of previous interaction with the other participants and different reasons to take part in a participatory process. From this series of experiments, we found that three different kind of meetings could be categorized, leading us to propose three different kind of scenario-workshops: strategy, synergy and development. This presentation will present the distinction between these types of scenario-workshops and the reasons that led us to choose one instead of another and will show the specific refinements we carried out to the basic methodology for these three kinds of meetings.

Science shops across several countries can make use of an online forum to seek input from citizens and CSOs into potential new research projects to be carried out by students or other researchers. The pilot during the PERARES project has required science shop staff performing a number of functions, including writing stimulus pieces which suggest topics where more research may be needed, reporting questions asked at face-to-face public events, encouraging CSO representatives to take part in online debates and helping to turn points raised in online debates into science shop research projects. Topics covered have included those within scientific domains, including political and technological concerns regarding natural resource issues; and applications of nanotechnology, as well as social science areas of research including domestic violence and research with Roma people.

The online environment does not offer the same conditions as face-to-face meetings can for building understanding, relationships, trust and negotiation between CSOs, science shop staff, students and supervisors as the online environment makes everything visible online in real time. Experience indicates that there are reasons why CSOs and citizens may not want to enter tentative ideas and comments regarding research in a public online forum; and researchers also value having face-to-face meetings to build mutual understanding, as the process of co-creating research projects involves translating between worlds, helping CSOs find out about research that has already been carried out, and working out what is possible as a new science shop research project. Online communication of science shop work through formats like online discussions can help to build some awareness among some CSOs and other stakeholders about the possibility of entering into a research project with student and academic researchers.

Recommendations for the future include helping science shops to offer 'question intake' webpages, with online articles and social media work to promote the idea, followed by the circulation of questions and research ideas among science shop coordinators, researchers and students, leading to reporting back on research carried out as a result. It will also continue to be important to use online communications alongside live and face-to-face engagement activity between members of the public, CSOs, science shops, researchers and students.

Participatory Innovation: The Global Green Map Movement, Scandinavia and Sustainability (1)

CURIOS: building resilience? The co-production of digital community heritage archives (117)

Ken Josephson - Green Map System/Community Mapping Collaboratory

David Beel - University of Aberdeen

The global Green Map system (www.greenmap.org), winner of numerous social and sustainable design awards, has engaged over 850 communities in 65 countries mapping green living, nature and culture with adaptable tools and award-winning icons. This participatory workshop will give an overview of work undertaken to build the global network and will profile locally based examples from Sweden and Canada. Presenters include the Green Map founder and director Wendy Brawer from New York, Ken Josephson, Cartographer and Coordinator of the University of Victoria Community Mapping Collaboratory and Common Ground Network-mapping. uvic.ca, and Linnea Upsall from the City of Malmo Sweden, coordinator of Malmo Green Map and part of the Education for Sustainable Development initiative which includes Sweden and Denmark http://www.oresundsklassrummet.eu/ Building on the first green apple map project in New York in 1995, the Green Map movement has grown with educators, planners, activists, designers, businesses, NGOs and many university-civil society projects resulting. Green Map® System promotes inclusive participation in sustainable community development worldwide, using mapmaking as the medium. Citizens can use and adapt this open source system as a tool to chart green living, ecological, social and cultural resources and to support sustainability initiatives that address a broad range of issues such as climate change. social and green innovation, environmental justice and remediation and intercultural understanding and global cooperation. The workshop will also be interactive with participants receiving how-to resources and guidelines of how to start or enhance their existing research, planning, learning or community action projects.

Rural areas have strong place identities, formed through the reproduction of traditional cultural practices alongside contemporary influences. These identities are performed and constructed through a varied repertoire of knowledges. histories, and customs. Together with material objects, artifacts, sites and cultural spaces, these form dynamic cultural heritages. This reflects both tangible and intangible heritage activity, taking place in remote rural areas. A key trend (in the UK) for such groups has been to digitise these collections, due to the perceived transformational effect for community regeneration and strengthening community cohesion. Thus, the CURIOS project (Cultural Repositories and Information Systems). in partnership with community heritage groups, explores how digital archives can support interest in local heritage. In doing this, it has co-produced software tools to help rural communities to collaboratively maintain and present information about their cultural heritage. The objective has been to investigate the use of linked data technology to build a flexible and "future proof" software platform that could help such community heritage projects maintain a digital presence and be sustainable over time. The interdisciplinary project team (Social Scientists and Computer Scientists) now wishes to critically reflect on a number of key findings. This will include discussing the transformational effects from the digitisation process as well as divulging a number of interesting and on-going tensions that have arisen from the work. The project explores two case studies in rural Scotland, asking how connectivity and digital archives can support interest in local heritage as well as showing how a key discourse surrounding 'resilience' has developed from the empirical research. This paper comprehends the concept of resilience through the lens of cultural heritage, as a means for building more resilient communities. Cultural heritage in many rural locations operates on a number of levels, from professional museums and council run services through to voluntary groups such as historical societies. It is the work of the latter that this paper unpacks in three ways: firstly, what is meant by the concept of resilience, which although problematic, is still a useful lens to think with in this context: secondly, how voluntary work builds resilient communities; and thirdly, how in the contemporary setting their on-going resilience has led to a shift towards digital mediums for heritage collection and dissemination through a project such as CURIOS.

THURSDAY 10TH APRIL

Introduction to grassroots digital fabrication and makerspaces (157)

Adrian Smith - SPRU University of Sussex



Presenters involved

Adrian Smith, Sabine Hielscher, Vanessa Carpenter, Michael Hviid Nielsen, Oyuki Matsumoto, Johan Søderberg, Ellen van Oost, Sascha Dickel

Participants explore the possibilities for inclusion, creativity and sustainability opening up with the international burgeoning of community-based, openworkshops such as FaLabs, Hackerspaces and Makerspaces. In these spaces people access networked, digital design and fabrication tools to make almost anything in collaborative projects. Some argue this presents new forms of democratic and decentralised production and consumption that has sustainability potential.

This two-session World Café activity involves a participatory exploration of the issues from 9:00 until 12:30 Thursday.

9:00 until 10:30: setting the scene

Introduction to grassroots digital fabrication and makerspaces

Adrian Smith, SPRU, University of Sussex

Presentations from three makerspaces in Copenhagen and Malmö

- Vanessa Carpenter, Illutron Collaborative Interactive Art Studio (http://illutron. dk/)
- Michael Hviid Nielsen, Copenhagen FabLab (http://valby.copenhagenfablab.dk/)
- Oyuki Matsumoto, STPLN Open House makerspace (http://stpln.se/)

Questions and preparations for world café

Sabine Hielscher, SPRU, University of Sussex

11:00 until 12:30: discussing the issues

World Café exploration of makerspaces and grassroots digital fabrication

Introduction to process – Adrian Smith, SPRU, University of Sussex

- Inclusion issue see abstract book, Johan Søderberg, IFRIS and practitioner
- Creativity issue see abstract book, Ellen van Oost, University of Twente
- Sustainability issue see abstract book, Sascha Dickel, Technical University Munich

Groups proceed through each theme.

Plenary feedback of discussions for each issue.

Living Knowledge - The Network: its Services and Structure (152)

Developing Regional Knowledge Mobilization Networks (102)

Henk Mulder - Science Shop, University of Groningen

Elizabeth Tryon - University of Wisconsin-Madison

This Roundtable will discuss the structure and services of the Living Knowledge Network, the International Science Shop Network, Originally established in 2000. the Living Knowledge Network provides services to its members and carries out strategical activities on behalf of them. It is there for people interested in building partnerships for public access to research. Members use the network platform and its tools for documentation and to exchange information, ideas, experiences and expertise on community-based research and science and society relations in general. The network's activities range from strategic networking to training of individual skills and from information to mentoring of old and new practitioners in public engagement with research. Living Knowledge so far is an organic network. Those on the e-mail list are seen as 'members'. The overheads for maintaining the network are found in separate EU-funded projects, submitted by ad-hoc consortia of members. In these projects, work packages are written in to maintain the website. produce studies on policy and operational options, and to pilot novel approaches in obtaining Science Shop objectives, Currently, LK supplies information on the website and helps finding partners and information. As part of EU funded projects. mentoring projects are run to help to setup new Science Shops and advance the work of existing ones. The so-called Science Shop Summer Schools have become a welcomed tradition, giving new partners a crash course overview of Science Shops and their operations. Henk Mulder will briefly outline these activities, and show how the PERARES project (WP4) helped move forward the startup of ten new Science Shops throughout Europe. In order to make the Network less depending on separate EU funded projects, we want to discuss the establishment of an official "association". of natural persons and/or legal persons. Norbert Steinhaus and Audrey van Scharen will introduce some options for this and discuss a potential statute for the Network. Feedback from participants is actively sought on this. The discussion will continue with prioritizing potential additional activities, services and trainings to be supplied by the Network, for Science Shops to share knowledge, advance their own operations and through this advance the impact of civil society on research.

There has been an unprecedented shift in U.S. higher education toward integration of community engagement into teaching and research agendas. Service-learning as pedagogy and community-based research as scholarship have moved into the mainstream, recognized by ranking organizations and public and private research funders as indicators of a civically engaged institution. Concomitantly, institutional competition for student enrollment between public, private nonprofit. and increasingly for-profit schools has potential to influence the way the new "community engaged" university or college operates ("who can illustrate their level of community engagement better?"). In the heavily market-driven U.S. higher education environment, institutions that are more community engaged and, more importantly, that are able to successfully illustrate themselves as so, have the potential for real material gain in the form of student enrollment. Consequently, there are systemic constraints to developing multi-institutional networking groups that share knowledge, collaborate on projects, and constructively debate issues in ways that positively impact communities, policies and the society. Models such as the European PERARES (Public Engagement with Research And Research Engagement with Society), seeking to strengthen public engagement in research by bringing together researchers and civil society, seemingly have less chance of developing and thriving in the highly competitive U.S. higher education context. The apparent trend of adding community engagement into marketing of academic institutions makes it even more important to understand how to effectively work across institutions to advocate for equitable partnership with civil society. In response. U.S. practitioners are beginning to align their principles and values with the European and Canadian "knowledge democracy" or "knowledge mobilization" models and practices! to mitig ate the forces exerting pressure on academic behavior. This roundtable discussion introduces an effort in the Midwestern U.S. to develop a network of community-engaged higher education research and outreach centers to share and mobilize knowledge with potential to impact communities. The Midwest Knowledge Mobilization Network (MKMN) emerged out of discussions at the 5th Living Knowledge Conference in 2012. MKMN seeks to be a companion network to promote awareness of and feed into Living Knowledge (LK) in between biennial meetings, providing an informational link to LK for those unable to travel out of the U.S. The MKMN network has met three times: in Chicago, IL. Indianapolis, IN and Madison. Wisconsin, A fourth meeting will comprise a preconference workshop as part of the Community-Campus Partnerships for Health Conference in Chicago to be held shortly after the 6th Living Knowledge Conference in Copenhagen. The roundtable will: (1) introduce the emerging networking model developed by the seven higher education institutions currently participating in MKMN; the presenters will discuss the strategies the universities have developed to develop a more cooperative and collective form of knowledge sharing as a means to illuminate the societal value of community-based research and teaching. (2) describe the role that MKMN seeks to develop in relation to dialogue and project development with civil society organizations: the presenters will present on how MKMN seeks to elevate the voice of community-campus knowledge-producing partnerships within the Midwestern U.S in ways that inform social action. (3) illustrate the challenges faced by the network in developing strategies to collaboratively support interactions between higher education institutions and civil society organizations: these challenges include efforts to determine a shared set of values related to: (a) open exchange of information, (b) shared resources, (c) collaborative project development. (d) fundraising. (e) an infrastructure for inter-institutional research support, and (f) being intentionally inclusive of community organization partners in what is at least initially a higher education-driven network. Following a brief presentation, roundtable participants will be asked to share their experiences with building networks within their specific geographic, political, economic and cultural contexts. In doing so, the presenters seek to initiate a cross-cultural dialogue on successful strategies for developing regional knowledge mobilization or science shop networks that seek to collectively increase interaction between higher education institutions and the broader society.

CSO-academic research cooperation for sustainable development (61)

Challenging unsustainable development through research cooperation (72)

Michael Søgaard Jørgensen - DIST, Aalborg University Les Levidow - Open University

Workshop about civil society strategies and activities for influencing research and innovation agendas and public policy in relation to sustainable development. Although the concept "sustainable development" has scope to open up societal futures, this opportunity has been limited by dominant agendas promoting capital-intensive innovations, like biotechnology and biofuels. Civil society organisations (CSOs) have criticised such agendas, hoping to transform dominant research agendas. This has taken place through campaign activities, participation in political committees and commissions, but CSOs are also intervening in these issues through own research activity and research cooperation with universities, and through development of alternative visions and plans for societal changes. The workshop presents and discusses experiences from CSOs and from researchers participating

in efforts to contest research and policy agendas on sustainable development and

develop alternative visions, plans, programs etc.

Les Levidow - Open University

Although the concept 'sustainable development' has scope to open up societal futures, this opportunity has been limited by dominant agendas promoting capitalintensive innovations. Civil society organisations (CSOs) have criticised these agendas, especially through campaign activities, while also intervening in these issues through research activity. Such interventions were extended by our project. 'Co-operative Research on Environmental Problems in Europe', which brought together CSOs and academics as partners to carry out joint research. Focusing on agricultural practices and innovations, the project analysed divergent accounts of sustainable agriculture. Through academic-CSO cooperation, critical concepts from CSOs (e.g. agrofuels and agroecology) became perspectives for research and for wider stakeholder involvement. In the biofuels study, the CSO concept 'agrofuels' informed the critical analysis of biofuels as a supposed means towards sustainable development. The study identified divergent accounts, while also drawing analogies with drivers and harmful effects of agro-industrial monocultures. The empirical results helped to challenge EU policy assumptions, especially that agro-industrial monocultures will provide 'sustainable biofuels' – e.g. by growing crops only on 'marginal lands' or by applying better 'management' to protect natural resources and rural populations, or by eventually substituting second-generation biofuels. In the study of agricultural research priorities, the concept 'agroecology' was extended beyond scientific disciplines, towards cooperative knowledge production between scientists and peasants. Perspectives from CSOs on sustainable development provided a reference point to compare divergent accounts. This comparison provided a stronger basis to challenge the appropriation of 'sustainable development' language and research budgets by the dominant agenda. In practical terms, this critique informed a workshop bringing together other CSOs, scientists and peasants favourable to agroecological methods. These concepts helped to deepen critical analysis of the EU's dominant innovation agenda, which is seen by many CSOs as unsustainable development – perpetuating sustainability problems in the name of addressing them. In all those ways, the project linked locally grounded experiences with wider policy issues of sustainability agriculture. Itself a societal intervention, the research process also strengthened CSOs' efforts to intervene in EU policy frameworks, to challenge dominant innovation agendas and to promote

Organizing civil society for sustainable transition (15)

John Holten-Andersen - CDIST, Aalborg University

alternatives. For future efforts at intervening in innovation policy, our research has at least two practical implications. First, as an entry point for promoting alternative pathways, divergent accounts of sustainable development need to be made explicit. Secondly, knowledge mediation skills need to be developed further, especially through a cooperative effort between academic researchers and CSOs.

A sustainable transition of our societies demands a strong grassroots movement from below, which again requires the formation of networks and alliances among civil society actors. Following the break-down of the UN-climate negotiations at COP15 in Copenhagen, 2009, a number of Danish organisations decided to form GNBO (Grassroots Network for Sustainable Transition). The inspiration for this network came from the alternative climate conference, Klimaforum09, which took place in Copenhagen during COP15. Klimaforum09 attracted a great number of grassroots activists from all over the world and managed to adopt a far reaching Declaration with the title "System Change" not - Climate Change". It was in the spirit of this Declaration that GNBO was formed.

One of the prime goals of the network has been to try to engage civil society actors outside the traditional environmental NGO-community. One such actor is of course the trade union movement, which traditionally is imbedded in a rather mainstream economic growth paradigm. Together with progressive local trade union leaders GNBO produced a leaflet on green job creation with the title: "100.000 green jobs with sustainable transition". Following this collaborative effort GNBO managed to organize a number of joint conferences. Currently GNBO are negotiating the formation of a formalized collaborative and wide-reaching network involving Aalborg University, a number of trade unions and environmental NGO's. The purpose of the network is to promote green jobs within the overall concept of sustainable transformation. At the Living Knowledge Conference we will share our experiences with this process and discuss the difficulties it entails. We will especially address the following challenges:

- 1: How to overcome the classical divide between trade unions, traditionally fighting for higher wages, more jobs and better living standards, and the environmental movement, who is primarily concerned with the negative environmental impact of economic growth.
- 2: How to engage university researchers in civil society activities, which under the prevailing conditions does not immediately benefit their academic careers, and
- 3: How to raise funding for this type of collaboration, which appears to fall outside the scope of most funding facilities.

The roles of CSOs and academia in Danish controversies about bioenergy, nature and agriculture in transition processes towards a fossil-free society (60)

Michael Søgaard Jørgensen - DIST, Aalborg University

A National Participatory Program For Research and Innovation In France (209)

Claudia Neubauer - Fondation Sciences Citovennes

The previous Danish government's proclamation in 2007 of a vision about Denmark as a society independent of fossil energy in 2050 and the expectations to Copenhagen as host of COP15 in 2009 initiated during 2009-2010 development of several visions and action plans about energy and climate from both national and local governments, NGOs, and business associations. This included three energy and climate plans developed by an environmental NGO, a renewable energy NGO, and by the Danish Society of Engineers. The increased focus on transition to a fossil-free society has made the Danish discussions about the future roles of bioenergy more complex and with more controversies than earlier. The controversies concern both the production and consumption of biomass for energy, including the role of import of biomass, the interaction with animal husbandry and its production of manure, the use of bioenergy as back up energy source to wind energy, and the role of biofuels for transport. Deliberative democracy mechanisms have been applied by the Danish governments as part of these controversies. This includes a forest politics committee with CSO and business representatives, an expert-based commission about nature and agriculture with CSOs and business organisations in an advisory group, and a national biomass analysis coordinated by the Danish Energy Agency where CSOs, businesses and researchers have been invited to analyse and discuss environmental aspects of the present and future use of bioenergy in Denmark. The presentation discusses the roles of CSOs and of CSO-researcher cooperation in Denmark in the controversies about transitions towards a fossil-free society, including the controversies about the roles of bioenergy, nature and agriculture. Theoretically the presentation is inspired by Dryzek et al (2003) and their analyses of greening of states and democratization as a question about advances within extent, scope and authenticity of democracy, and Jørgensen (2012) and the arena of development approach, which draws on actor-network theory and the concepts of actor worlds. path dependency, and path creation.

Not only in France, but more largely in European countries, public research institutions still hesitate in supporting participatory research and alternative innovation processes to build resilience. But public support comes sometimes from regional or national authorities for instance through participatory research and innovation programs. Over the last ten years, three regions in France have launched regional programs ("partnerships of institutions and citizens for research and innovation"). In 2009. the French Ministry of Ecology has initiated a national program on participatory governance of research and expertise, the REPERE program; Network of exchange and of projects on the governance of research and expertise (Réseau d'échange et de projets sur le pilotage de la recherche et l'expertise).

Why this program? A large national consultation on environment, the so-called "Grenelle", took place in France in 2007. At the end of the process the ad hoc committee on research declared that there was a need to create closer relationship between research and civil society. The Ministry of Ecology thus launched the REPERE program and opened two calls for projects in 2009 and 2011. Eighteen projects were financed.

What about was the program?

The program offered a real effort to organize the dialogue between scientists and CSOs, respond to civil society needs, strengthen transparency in expertise, contribute to public policies towards sustainability, integrate NGOs into the governance of research and expertise, initiate reflections in public research structures and in NGOs. and last but not least to legitimate, recognize and share divers forms of knowledge.

Projects on environmental health, sustainable territories, the conservation of biodiversity (for instance on participatory plant breeding for organic agriculture), and on the relation between specific research organisms and NGOs were supported. The projects ran over a period of up to three years.

The program aims at producing recommendations for divers actors (public institutions, ministries, NGOs) in order to promote a sustainable integration of civil society organizations into the research and expertise system. A final conference to draw conclusions from the divers experiences and from the program on the whole will take place in May 2014 in Paris.

Whose Knowledge Counts in the Academy? Investigating Co-production in the Connected Communities Programme (123)

What Counts? Valuing co-designed research across different disciplines (132)

Bryony Enright - University of Bristol

Keri Facer - University of Bristol

The Connected Communities (CC) Programme is a potentially paradigm shifting programme of research, Supported by the UK Research Councils (RCUK) and led by the Arts and Humanities Research Council (AHRC) the CC programme is unique in its commitment to funding research that is conducted with, by and for communities – that is coproduced. Connected Communities is one of the largest cross council research grants in the UK and since the first round of funding in 2010 the CC Programme has funded over 300 projects between UK universities and civil society partners, with more in the pipeline. The academics leading these projects have had to find innovative ways of utilising the knowledge and expertise of civil society partners and embedding this not only into the outputs of the research but into the research design itself. In this way the Connected Communities Programme has challenged 'whose knowledge counts' in research and how we, in the academy, listen to and incorporate knowledge from outside our institutions. These alternative methods of knowledge generation have the potential to empower the everyday knowledge and expertise of civil society not only by consulting them on the relevance of contemporary research but also how these interventions should and could influence their lives

Building on interviews with Principle Investigators on CC projects, their community partners and senior members of the Research Councils this paper explores some of the strategies used in the CC programme to co-produce research with civil society. Using specific project examples it will discuss how the CC programme has practically and conceptually handled abstract and universal academic knowledge and more concrete and particular knowledge embedded within the experiences and expertise of 'other' groups in civil society. It explores this use of knowledge in relation to previous traditions of engagement, collaboration and action research (Calhoun, 2008) in the academy and suggests alternative ways of conceptualising knowledge generation and application which are not dependent on the insider-outsider distinction but instead open the theoretical space for exploring praxis-research (Eikeland, 2012). This paper represents the first stage in a broader endeavour to examine the impact of the CC programme on the wider research landscape and some of the key challenges for developing stronger more sustainable collaborations between universities and civil society.

Research-intensive universities are increasingly engaging with civil society in designing and producing research. What is not well understood at present, however, is how such research differs across disciplines (and their funders); nor the implications for individual academics and the university as a whole of attempting to knit together diverse and potentially conflicting traditions. Co-design of research, after all, includes perspectives ranging from 'participatory' research traditions; public understanding of science; knowledge exchange and user-centred design. Critical theoretical research reflecting on such different traditions is also deeply fragmented, from critiques of neoliberal marketization (e.g. Collini) to celebratory accounts of knowledge exchange and democratic participation (e.g. Torres & Reve. 2013).

This paper seeks to put these different traditions into conversation with each other. In doing so, we want to explore whether there are other impetuses emerging from both the changing nature of disciplines, and the multiple forms of accountability that academics and institutions are seeking to create and respond to, that create new cross-disciplinary commonalities. We also want to move beyond an assumption that this work is producing either an inevitable shift towards instrumental research activities, or to more accountable and democratic research activities. Finally, we wish to understand what can be shared across disciplines, between universities and with civil society collaborators to enhance the different traditions of collaborative research.

To that end, the paper takes a single UK research-intensive university as its focus and reports on a series of reflective workshops conducted in 2013 that brought together: researchers in disciplines ranging from philosophy to medicine; civil society collaborators in areas ranging from media to sustainability; and engagement professionals across all faculties. Findings relate to the changing nature of research; the changing context for co-design of research; and the significance of biographical, personal and generational factors in shaping academic orientation to collaborative research. All of these factors disrupt the production of simple narratives that seek to maintain the illusion of research practices and identities as easily constrained within 'disciplinary' or 'participatory' boundaries.

Using 5Win strategies to build strong community-university partnerships (115)

James Cook - University of North Carolina at Charlotte

Universities have often been "ivory towers" that advance knowledge that is not particularly useful to or applicable within the communities in which they reside. Moreover, universities vary considerably in the values and strategies they adopt in relation to their communities and, in particular, in the degree to which they prioritize serving the community and promoting civil society. One common strategy has been to foster "engaged scholarship" through partnerships with businesses to advance the economic wellbeing of communities and the university. A second increasingly common strategy has been support of "translational research", intended to help community institutions and organizations better use basic research and knowledge created by universities. Both of these strategies can disempower members of civil society, since they either focus on business interests and economic interests of universities, and/or assume that universities are the creators and/or owners of knowledge that they then choose to "share" with communities. This presentation focuses on one key alternative; direct partnerships between universities and local organizations that can engage one another as equal partners to support broader civic engagement among students and citizens, and co-learning and knowledge sharing within a community based participatory research framework. These partnerships can be facilitated by university structures, but can also exist without dedicated university support, when faculty and community organizations develop win-win-win-win (5win) interactions, in which the organization, civil society. faculty, students and universities all benefit. These types of partnerships often must rely on the ongoing social capital of the individual participants, and many university faculty do not have the skills needed to develop and maintain partnerships. Partners must find ways to support one another in the absence of any tangible benefits. and learn to serve as "critical friends" in a climate of trust. Faculty or NGOs can initiate these partnerships, and universities and community foundations can provide support to sustain these partnerships. Several long-term partnerships (across different systems, including child welfare, early childhood education, and mental health.), each with 5win strategies included in the relationship, are described. In addition, particular strategies are suggested for non-governmental organizations (NGOs) and local organizations to develop strong relationships with universities, for the benefit of the organizations and for the broader benefit of society.

Constructing collaborations, strengthening democracy? Reflections on science and society relations through the development of a collaboration with the Portuguese Stuttering Association (4)

Daniel Neves da Costa -Centre for Social Studies, University of Coimbra

This paper aims to present some reflections resulting from the ongoing collaboration between the Centre for Social Studies (CSS) and the Portuguese Stuttering Association (PSA), taking place in the Portuguese science shop Biosense. This collaboration aims to promote the organizational, political and epistemic empowerment of the PSA through the facilitation of a set of relational spaces of dialogue between people who stutter (PWS), speech-language pathologists, psychologists, neuroscientists, linguistics, and geneticists.

The first goal of this paper is to reflect on the merits of this collaborative device to promote an epistemological empowerment and a political awareness of PWS, allowing them to emerge as "experts in experience" (Rabeharisoa & Callon, 2004). This allows their rise as holders of a relevant experiential knowledge (Borkman, 1976) of stuttering. This is central for the PSA to participate in the agenda-setting of both the political discussion and scientific research, being able to develop an "evidence-based activism" (Rabeharisoa et al., 2013).

Given the characteristics of Portuguese patients and health movements, this type of collaborative dynamics between CSO and scientists or research units constitutes a new mode of science-society interaction with new interesting consequences for the development of CSO, for the way we think the role of social scientists and for the construction of Portuguese democracy itself. Like similar health movements, the PSA revealed an extreme difficulty in providing an explanatory political narrative of stuttering that could sustain its political and advocate activities and therefore justifying its existence as a CSO representative of PWS. It also revealed a problematic institutional fragility: its support base was worn out, with a break in the connection between governing bodies and associated members and more generally between PSA and the PWS wider community.

Given this scenario, this paper will discuss the problems arising for social scientists during the development of collaborative devices that, through these intense engagements with scientific knowledge, aim to actively allow the emergence of new collective identities and political narratives. These simultaneously empowers individuals and promotes a capacity-building exercise for CSO' that strengthens the quality of democracy, by creating spaces for new voices to speak out and giving them new epistemological tools for the political work in which they engage.

From Sustainable Consumption to Sustainable Citizenship: Can Engagement with Civil Society Provide a Theoretical Base for Sustainability Studies in Higher Education? (77)

Michael Heiman - Dickinson College and LOKA Institute

Curriculum development in sustainability is the fastest growing sector in higher education. Today six million North American students attend over 850 institutions that are members of the Association for the Advancement of Sustainability in Higher Education--the principal organization certifying their commitment to sustainability education. Following guidelines from a 300-page manual used to score their ranking, institutions fill out an extensive survey on their sustainability practice, education, and research. Among the dozens of criteria for the practice of sustainability that are scored, most concern activities tied to campus operations and administration, as well as student training through sustainability-focus courses, community internships, and lifestyle choices. However, we find no criteria at all recording training in critical reflection on the structural requirements and policy imperatives for sustainability and, in particular on whether the dominant socio-economic system, namely capitalism, is even compatible with sustainability in theory or practice.

Drawing upon my experience at one of the nation's top-ranked colleges for sustainability education according the aforementioned ranking, this presentation opens for discussion two interlocking themes. First, does conventional student training with sustainable practice--principally through a focus on individual choice and consumption--support or actually delay collective civil action challenging unsustainable practice and the commitment to material growth? Second, is conventional civil engagement--for example through our training of local watershed groups to monitor the impact of natural gas shale fracking, our college organic farm providing sustainable agriculture training both for students and the wider community, and through student internships and community service learning-sufficient to envision, plan, and implement a sustainable human-nature relationship absent more formal training in critical self reflection? Following several examples where civic engagement by our students has led to a deeper understanding of the barriers and opportunities for a sustainable existence divorced from capitalist market relations dependent on unsustainable material growth, the presentation creates space for an open discussion on the value of critical theory for successful sustainability education, and where we might introduce and expect critical self reflection to emerge in higher education.

Scientific Citizenship: Deepening and widening participation and raise the debating and decision making quality (20)

Bálint Balázs - ESSRG

Authors, who will present the subject of the submitted abstract

Atta Badii (Intelligent Systems Research Lab, School of Systems Engineering, University of Reading, UK)

Adriana Valente, Tommaso Castellani (National Research Council, IRPPS Science Communication and Education Unit, Italy)

Patrizia Grifoni, Fernando Ferri (National Research Council, IRPPS Social Informatics and Computing Unit, Italy)

Franco Bagnoli (Centre for the Study of Complex Dynamics, University of Florence, Italy)

Bálint Balázs, Györgyi Bela (Environmental Social Science Research Group, ESSRG, Hungary)

Motivation

The group dynamics and mass-effects of engagement and debate on issues of public interest and policy making can expose a democratic process of participative engagement to the risks arising from mis-conceptions by some participants based on poor quality information or superficial consideration of the issues. Ill-informed, misled or simply partially informed individuals could unknowingly adopt a way-of-seeing and a pattern-of-relating to issues in a manner that would be different had they been properly informed. Such individuals may then unknowingly influence the quality, integrity and rationality of the debate adversely as they express their views. This can add further noise into the system beyond that arising from emotive and sensationalised journalism, thus leading to sub-optimal or even irrational group decisions.

Accordingly we motivate the notion of Scientific Citizenship as one that implies a responsibility by information providers as well as participants in any democratic debate to bring about a deepening and widening of the information basis and analysis relating to the factors that need to be considered as relevant to the debate and decision making process. It must be matters of fact, not fiction, that are allowed to underpin shared understanding and sense making.

Implications

The implications of the goal to promote Scientific Citizenship is to facilitate an inclusivist environment that promotes accessibility of knowledge to all and this particularly includes knowledge reaching the disadvantaged, the marginalised and the vulnerable groups who may not be so well-equipped to have timely information through the channels available to them and in an accessible manner so that they can readily assimilate the salient facts and issues relating to a particular matter of public interest and debate. Put simply, making available a forest of words online would not be sufficient to ensure that the requisite insights into the facts has been communicated and assimilated by all, in time, to facilitate their knowledge-full participation in the debate on the matter at hand.

Sophisticated interfaces and persuasive videos may not be accessible to all at the right time and place. The advent of BIG Data can indeed widen the gulf between those who are modelling-savvy and those who are not, hence increasing the risks arising from the inequalities of information access and resources that not only further disadvantage the already disadvantaged but also will increasingly detract from the quality of e-participation and the democratic policy informing and policy making process.

Thus we need to explore how the knowledge can reach the disadvantaged groups in a way that is accessible, and digestible by them through engaging means that are motivational; not necessary through a web of models but adopting the Keep-It -Simple-and-Fun approach.

Facilitation and Empowerment

We plan to make a presentation including highlighting the SciCafe2.0 project objectives, the Citizens' Say Platform, but also examining insights from some related experiences arising from the work of The European Observatory for Crowd-Sourcing.

This will be followed by a round table discussion to explore beyond the above issues:

 main experiences (challenges and opportunities) with Virtual Participatory Engagement, On-line Participatory Methodologies

- stakeholders' needs in respect of ICT-enabled tools for promoting and conducting Public Engagement
- · citizen-led engagement

The roundtable will arrive at some conclusions as to how we might raise the floor particularly for some citizens who could otherwise be unable to reach timely useful knowledge so as to be able to make sense of the real issues at stake; how we might devise and evaluate a facilitative inclusivist environment for knowledge delivery and assimilation to promote the objectives of the vision of Scientific Citizenship.

Inclusion issue (158)

Creativity issue (28)

Johan Søderberg - IFRIS

Ellen van Oost - University of Twente

The abstract here elaborates the 'inclusivity' theme that I will present and lead during the session discussions. A combination of advances in digital design and fabrication technologies; a resurgence in craft activities supported by social media: and the re-emergence of social movements for collaborative production and consumption: is extending the possibilities for civil society innovations in design and manufacturing. Makerspaces. Hackerspaces and FabLabs are networked workshops where these developments find a pronounced practical expression. They involve voluntary associations of people coming together in physical spaces and learning how to make things in self-directed projects using digital fabrication technologies and platforms, and networked to other spaces through social media as well as physical meet-ups at events. The World Café session will guide participants through three critical issues associated with developments in grassroots digital fabrication: sustainability: inclusivity: and creativity. This abstract elaborates the second critical issue; inclusivity. A brief presentation and then guided discussion will explore whether and how grassroots digital fabrication reconfigures innovation into more inclusive forms. Digital fabrication is accessible for user-led and grassroots innovation. Despite surveys indicating individual users being predominantly male and university-educated, grassroots initiatives, like the FabLab experiment at Sustainable South Bronx, try deliberately to cross the digital divide and include and empower people through the innovation capabilities presented by digital fabrication. Makerspace networks discuss the empowering and community-building potential of their activities. However, as well as potentially empowering, digital fabrication extends concern about labour exploitation, as users create open innovations susceptible to appropriation by firms, and as suggested by the growing use of design challenges, prizes, and entrepreneurial strategies whereby firms and investors tap into crowd-sourced user-ingenuity. Such concerns raise questions about the social exclusions and economic po! wer relations involved in grassroots digital fabrication.

The abstract here elaborates the 'creativity' theme that I will present and lead during the session discussions. A combination of advances in digital design and fabrication technologies: a resurgence in craft activities supported by social media; and the re-emergence of social movements for collaborative production and consumption: is extending the possibilities for civil society innovations in design and manufacturing. Makerspaces. Hackerspaces and FabLabs are networked workshops where these developments find a pronounced practical expression. They involve voluntary associations of people coming together in physical spaces and learning how to make things in self-directed projects using digital fabrication technologies and platforms. and networked to other spaces through social media as well as physical meet-ups at events. The World Café session will guide participants through three critical issues associated with developments in grassroots digital fabrication; sustainability: inclusivity; and creativity. This abstract elaborates the third critical issue; creativity. A brief presentation and then guided discussion will explore whether and how grassroots digital fabrication relocates innovative possibilities closer to people and thereby augments their creativity. The learning, skills, ideas and networks people acquire through involvement in digital fabrication are important means by which grassroots innovation capabilities develop. And vet, studies historically have debated whether managerial introduction of computer controlled machine tools in industry de-skilled and dis-empowered operator initiative. Does grassroots digital fabrication imply a restricted or a transformational reclaiming of these technologies for skill enhancement, creativity, and livelihoods? Or rather than seeing digitisation, automation and its relationship to craft as a skilling/deskilling issue, might it be better to consider just how human-centred and fulfilling grassroots digital fabrication can be?

Sustainability issue (172)

Sascha Dickel - Technical University Munich

The abstract here elaborates the 'sustainability' theme that I will present and lead during the session discussions. A combination of advances in digital design and fabrication technologies; a resurgence in craft activities supported by social media; and the re-emergence of social movements for collaborative production and consumption; is extending the possibilities for civil society innovations in design and manufacturing, Makerspaces, Hackerspaces and Fablabs are networked workshops where these developments find a pronounced practical expression. They involve voluntary associations of people coming together in physical spaces and learning how to make things in self-directed projects using digital fabrication technologies and platforms, and networked to other spaces through social media as well as physical meet-ups at events. The World Café session will guide participants through three critical issues associated with developments in grassroots digital fabrication: sustainability: inclusivity: and creativity. This abstract elaborates the first critical issue: sustainability. A brief presentation and then guided discussion will explore whether and how grassroots digital fabrication recalibrates innovation toward the goals of sustainability. Materially, we explore whether and how grassroots digital fabrication enables re-localisation and re/up-cycling of goods in local productionconsumption systems. Whilst culturally, discussion will explore how citizen participation in 'making' is argued to cultivate post-consumerist values and longevity in goods through stronger associations with the objects produced by makerspace participants. However, we also consider critically whether consumption might also intensify through decentralised digital fabrication enabling throw away, personalised fabrication and mass customisation. Diminished scale efficiencies could heighten resource use, rather than reduce it; and decentralised dispersal might disrupt waste collection and reprocessing infrastructures. Experiences and viewpopints will be captured on flip charts and written up afterwards as part of a session report.

Urban Agriculture (64)

Gisela Prystay - Science Shop Kubus, Technische Universität Berlin

In many parts of the world urban agriculture (UA) is part of the food provision of the urban and peri-urban population. Urban gardening in the Western industrialized countries is a new social phenomenon which contributes to social cohesion in neighbourhoods or is an activity of environmental education. With world wide increasing urbanization the need to preserve green space becomes more obvious. Available land and agricultural experience becomes more and more rare. The shortage of natural resources, climate change and globalization of the agricultural market puts the topic of urban and peri-urban food production on the global agenda.

Three presentations will give us insights on experiences with urban agriculture on three continents.

Urban Agriculture for changing Cities - potential for a better life

ROOF WATER-FARM and other projects as a field of science shop work (Prystav, G.) gives a flashlight on urban gardening activities from grassroot level gardening to research on the building-integrated production of fish and vegetables with treated waste water in Berlin, Germany.

Urban Agriculture in Casablanca: Sustainable solutions for a dynamic city development

(Chahed, A., Saidi, A.) report the challenges which an UA project in an informal settlement in the peri-urban faces since 30.000 (!) new build apartments are mushrooming around the village and incorporate it in the urban centre of Casablanca. Morocco.

Cities Without Hunger: How urban agriculture changed the urban landscape and the lives of hundreds in Sao Paulo (Barbizan, Th., Temp, H.) reports, how the NGO "Cidades Sem Fome" (Cities Without Hunger) acquires land for UA and improves

the livelihood of the residents of informal settlements and about the benefits of cooperation with a program to upgrade social housing in the 20 million people City of Sao Paulo. Brazil.

The presentations and further input e.g. from the online debate on food and gardening in the PERARES project and from the audience will give as a basis to reflect about the potential of UA for a sustainable transition of cities and its contribution to food security, social coherence, green infrastructure and resource recovery; we also want to identify what science can contribute to society regarding UA and vice versa and the role of science shops to foster interaction. Last not least our intention is to exchange experience and knowledge, learn mutual and build up contact and collaboration among the audience.

Urban Agriculture for changing Cities – potential for a better life ROOF WATER-FARM and other projects as a field of science shop work (66)

Gisela Prystay - Science Shop Kubus, Technische Universität Berlin

In many developing and emerging countries urban agriculture (UA) is a standard practice; In Africa 40% of the urban population is said to be involved in UA (FAO 2012); in 1999 34% of the meat and 70% of the eggs consumed world wide were produced urban or peri-urban. (FAO 1999)

Even in Europe urban gardening has a long tradition that dates back to the industrial revolution. Still today Berlin is the capital of allotments in Europe with over 76,000 spots (Tschacher, 2009). In industrially developed countries, a new social movement grows around community gardening. In recent years the science shop kubus is involved directly or indirectly in several projects of UA and decentralized sustainable waste water treatment and reuse and could gain experience and expertise in this field.

The lecture presents the ROOF WATER-FARM project(1) and the potentials of UA for a transition towards a sustainable urban development. The aim of ROOF WATER-FARM is to test building-integrated water treatment technologies and water purification for the irrigation and fertilization of building-integrated greenhouse farms. In an inner-city housing complex in Berlin a closed-loop water cycle for the production of fish and vegetables is implemented and investigated. Further questions are: What is the potential for food production in cities? What buildings are suitable? What are the ecological and social benefits? What are environmental and human health risks of urban agriculture, e.g. related to water and soil pollutants and hygiene?

Urban agriculture and decentralized water treatment and reuse contribute in several ways to a sustainable development of cities, s.a.:

- Local food production for subsistence and income generation
- Recovery of nutrients (phosphate and nitrate) from waste water
- Closed-loop water and nutrient cycles for urban fish and vegetable production
- Conservation of open green space in cities

- Better microclimate and less energy demand for cooling of buildings
- Community gardens are places to meet people, for recreation and learning from each other

Further examples of current local UA initiatives and research activities of the TU Berlin focus on the need for and the added benefits of science-society interaction in this particular field. The methods of science shops are illustrated by concrete examples. The intermediary role of science shops in UA is subject of discussion with the audience.

References:

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Cities Without Hunger: How urban agriculture changed the urban landscape and the lives of hundreds in Sao Paulo (73)

Thiago Soares Barbizan - Cities Without Hunger NGO

Increasing urbanization rates coupled with irresponsible management and governance of land for agriculture are main causes for food shortages and rising prices lately. Food security in urban areas, where more than half of the worldwide population lives, is one of the greatest challenges of our time, nevertheless, land is a scarce resource in urban environments where is threatened by informal urban growth.

Having urban agriculture as a backdrop this paper explores a NGO initiative in São Paulo: the "Cities without Hun-ger and Community Gardens Project" which introduced a sustainable alternative in connection with food produc-tion in informal settlements by implementing farming activities in vacant land having dwellers as its main source of workforce while acting positively on issues of social, economic and environmental relevance for a metropolitan region.

Most of the gardens are placed within communities located at São Paulo east area, which stands out as grim sprawl of poverty and violence with poor sanitation and high unemployment rates. The project methodology is built over a four-phase cyclic approach: awareness-raising, participatory planning, capacity building and dissemination. Such approach seeks to involve local community in order to offer them a holistic view of the food chain and promote autonomy and entrepreneurship by creating self-managed small businesses.

Promotion of training and social empowerment of socially vulnerable groups is essential to raise commitment and responsiveness, indispensable elements for supporting such initiatives. In addition, daily contact with the garden, sharing of crops and recipes is very helpful to improve relationships between participants raising the level of indi-vidual solidarity among each other, generating a sense of belonging and strengthening the ties between families

While building a systematic income generation opportunity from selling added value processed goods from organ-ic agriculture the project also contributed to overcome

food insecurity with environmental and economic sustain-ability. The community gardens are almost self-sustainable and it is expected that households will become entre-preneurs with the necessary skills to assume total control over the project.

The land management tools provided by the City Statute, the incentive to family farming through food security policies in Brazil and the institutionalization of Urban Agriculture in the city of São Paulo ensures the consolidation of actions such as Cities without Hunger and Community Gardens, and seems to favor the replication of such mul-ti level strategy approach.

In long term, a stronger articulation between urban farmers could provide them a level of organization and also recognition by government institutions allowing them to claim for larger investments and pushing for public poli-cies that encourage and facilitate their activities.

Scientific research also has a relevant role in helping to identify new potentials for Cities Without Hunger actions. While domestic organic waste is already used for composting thereby reducing the need for land-fills, research may be conducted on building a sustainable plan for reusing and managing urban wastewater and solid waste, while conserving land and water resources. Safe wastewater reuse is still not clearly incorporated into Brazil's national or local policy. Furthermore, the NGO could also benefit from academia's insights from different actors and different lines of research then contributing with better ecosystem services for São Paulo.

Urban Agriculture Casablanca: sustainable solutions for a dynamic city development (101)

Ahmed Amine Chahed - ZEWk, Kubus TU Berlin

Building up on the presentation at the 5th Living Knowledge Conference Capacity building in a periurban area of Casablanca (1), the paper tells about the rapid growth of the city and how it surrounded the village Ouled Ahmed during the last year. The paper will reflect the problems caused by the mushrooming of social housing (30,000 new apartments over the last 4 years), which was built for the local people as well as to resettle informal dwellers. We will discuss the activities of the project partners and local actors to transfer and expand urban gardening and decentralized water treatment on the social housing blocks and what opportunities and advantages it offers. With regard to this setting, we will not reflect Community Supported Agriculture (CSA) or other relationships between citizens and farmers outside the city of Casablanca. Countryside farmers figure in another pilot of the project.

In the beginning, the pilot project 2 "Urban Agriculture and Informal settlement" was a model to disseminate urban agriculture in the informal settlement Ouled Ahmed as approach to improve the dwellers livelihood, generate income and create green spaces. To reach most of the inhabitants, the project team initiated a solidary farm and a school garden as examples of micro gardening and location for trainings in organic gardening. A constructed wetland was installed to treat the grey water of the nearby Hammam for irrigation.

The new social settlement around Ouled Ahmed offers the opportunity to examine the transferability of the approach of pilot 2 "Urban Agriculture and Informal settlement". Having environmental problems in the new buildings (no sewage infrastructure, high density, lack in Green spaces...), the pilot project team recommends to implement new low tech solutions e.g. decentralised water treatment with constructed wetland and new forms of agriculture e.g. roof gardening, community gardens, school gardens. This could also improve the social acceptance of the buildings as well as the social life and build up ties among the inhabitants.

Furthermore, the paper will highlight the challenges of the cooperation between

science, administration, institutions and civil society. In Morocco there is no tradition of cooperation neither between universities and civil society nor between universities and administration. The professors' function within university is mostly limited to teaching. They rarely participate in new developments and applied research. Moreover most of the citizens in the region are illiterate, which makes it difficult for professors to cooperate with local people and identify problems.

Through the partnerships with various Moroccan universities, institutions and NGOs, the project became a platform for exchange, in order to discuss and proactively solve problems in collaboration with involved stakeholders. The nucleolus of an intermediary, maybe a science shop has appeared.

Emancipation and power structures – lessons from a PAR process with marginalized Roma communities in Hungary (13)

István Szentistványi - CSR - Szeged

By responding the needs of people and communities, participatory action research (PAR) can help to empower marginalized social groups and make the voice of the unheard heard. However, in the same time PAR face serious challenges when empowerment of an isolated and extremely disadvantageous minority group has to be supported in a hidden but constraining power structure.

Our paper reports on the dilemmas and challenges emerged during a participatory project with marginalized Roma communities in the city of Szeged, South-Hungary. The research has been conducted within the framework of an EU 7 Research Program "Public Engagement with Research and Research Engagement with Society" (PERARES). The overall aim of the project was to enhance the advocacy capabilities of the marginalized Roma people in Szeged, to articulate their views and concerns in public discourse and to facilitate self-organization within the community. Over the past two and a half years, our research group has been working closely together with different stakeholders: Roma leaders, community members, families, social workers and different experts. The project itself has brought substantial positive results in many respects: two new afternoon-schools for Roma children started their operation in the city (and raised funds successfully), the political voice of the representatives of the Roma self-government have been supported and strengthened, the visibility of the Roma issues have been improved as well. However, the work itself has been challenged in many aspects as the underlying power-structure of the community became more apparent and conflicts, tensions arose.

In our presentation we also reflect on the challenges of the PAR process according to the following topics:

- 1) Managing unexpected events, sudden changes (e.g. willingness to cooperate) as well as fierce conflicts.
- 2) PAR and methodological rigour in the case of unexpected events in the PAR process.

- 3) The role of gatekeepers and internal power structures in collaboration via PAR.
- 4) Ethical dilemmas such as: what happens if we empower (certain) members of the community as well as try to influence power structures and authority-issues? How can we collaborate with an informal leader who seemingly has enough power to either help or block the process, but is in fact involved in usury or other illegal activities?
- 5) How does our commitment as researchers and activists toward democracy, empowerment and equality shape the project and its outcomes?

How do Civil Society Organizations Become Builders of Theory? (26)

Waiting to be Heard: Preliminary Results of the Equity & Sustainability Field Hearings (75)

Victor Friedman - Masar Institute for Education

Bálint Balázs - ESSRG

The goal of this paper is to examine how civil society organizations (CSO's) can be builders of theory that change social reality, using the experience of the "Educational Innovation Incubator- Empowering Civil Society. " The Incubator is a collaborative project involving four Civil Society Organizations (CSO's) working in the fields of educational change, leadership development, women's rights, and social inclusion: two in Israel, one in the Palestinian National Authority (PNA), and one in Germany. The Incubator's goal is to use local innovative practices as a stimulus for policy discussion and change at the field level. Furthermore, it attempts to generate knowledge about how new forms of collaboration among CSO's can increase their impact on larger fields of strategic action. The starting point for this project is the realisation that "alternative schools" and socially innovative organizations often function as "enclayes" whose philosophies and practices are fundamentally different - and even opposed to- those of the larger field in which they are embedded. While these enclaves are sometimes tolerated by the larger field, the knowledge and innovation they produce rarely has a wide impact. To the contrary, enclaves often find themselves forced to gradually conform to the "rules of the game" of the larger field. The Incubator attributes this problem, in part, to the fact that CSO's are generally considered "doers" rather than legitimate shapers of "real" knowledge – i.e. building and testing theory. They may generate "practical knowing" but theory remains within the academic domain. As part of its work, the Incubator addresses this enduring split between theory and practice. In this paper we will use the experience of the Incubator so far to ask: (1) What is meant by "theory" that can be informed by practice?. (2) How can these kinds of theory be built and disseminated by CSO practitioners?, (3) What prevents CSO practitioners from becoming theory builders and how can these barriers be overcome?, and (4) What kind of collaboration between CSO's and academia can lead to a shifting of roles such that CSO's become legitimate builders of knowledge?

The people most impacted by inequality – the very poor – have almost no opportunity to be heard in the global dialogue on development, inequality, and sustainability. The Equity & Sustainability Field Hearings is a rapidly expanding global movement of community-based researchers, activists and academics with circa 250 partner organizations (local civil society groups, NGOs, academic and research institutions) in 79 countries aiming to give voice to communities with the greatest need but least power to influence the Sustainable Development Goals dialogue.

In an innovative project started in 2012, we used the field hearings methodology (public meetings, focus groups or individual interviews) with impoverished and marginalised communities around the world to ask about everyday experiences and the transition towards greater equity and ecological sustainability. In this unprecedented movement a strong global network of organizations, researchers and communities have been built to work towards more equitable and sustainable development. Never before have so many poor and marginalized communities around the world come together to speak out – collectively – to influence policy, and to take their rightful place at the table as solutions are developed.

Preliminary results show worsening inequality, income insecurity, social breakdown, environmental degradation, and corruption. All communities expressed modest and sustainable aspirations, hoping for a future in which their basic food, housing, health care, education, and job security needs could be met. Many communities asked the Field Hearings partners to continue the discussions and help them seek solutions.

As for the main impacts in 2012 Field Hearings have been conducted in 34 communities across Asia and Africa (and Europe) through interviews with over 2700 individuals, and resulted in a publication with 60 co-authors ("Waiting To Be Heard: Preliminary Results of the 2012 Equity & Sustainability Field Hearings"). These results were then presented at several side events during the Rio+20 Summit in Brazil. June. 2012.

Learning towards agroecology: re-organising research for change (63)

Leonardo van den Berg - OtherWise

012, the United Nations Secretary-General Ban Ki-moon started preparations for the Post-2015 framework, which will implement the outcomes of the Rio+20 Conference and build on the Millennium Development Goals. The Post-2015 process presents a unique opportunity to address poverty eradication and sustainable development in one single and universal set of goals. This commitment was reaffirmed in the outcome document of the Special Event on the MDGs at the 2013 United Nations General Assembly. Negotiations on the Post-2015 framework will be launched at the 2014 United Nations General Assembly. At the request of the European Commission Equity & Sustainability Field Hearings also contributes to the post-2015 framework.

Interest in agroecology, both as a practice amongst farmers in the Netherlands and as a science amongst students of Wageningen University, is increasing. To engage with this emerging issue, and fill the gap between scientists and practitioners, agroecology has been made into one of the core themes of OtherWise's research mediation program (RMP). OtherWise is a NGO that seeks to connect students to grassroots and social movements. Through the RMP, research requests put forward by members of our network of farmers and small NGOs are taken up. Students are sought to conduct the research. In this paper we present a framework for conducting research that deliberately links the knowledge of students and researchers with farmers. We also discuss some of the outcomes and how this has challenged us to reshape our framework.

Agroecology is defined here as the use of local resources and ecological processes to strengthen the farm. When it comes to finding agroecological innovations two key learning processes can be distinguished. First is in finding what "local resources and ecological processes" are best suited. Second is finding what is understood by "strengthening the farm". Both are highly dependent on the local context and on the knowledge, values and aspirations of the farmer. To take this seriously, and ensure that contextualized and locally relevant knowledge is co-created, the RMP includes farmers in all stages of the research process.

Interviews, meeting accounts and surveys were used to assess the unfolding of the programme. We found there is a great deal of interest amongst both farmers and students. Farmers were prepared to invest a lot of time in meeting with students, put forward a large amount of research requests and showed interest in agroecology. Students' interest was based on learning in a different way, looking at how studied topics are related to the "real world", gaining inspiration from the ideas of farmers, and being able to contribute to solving actual problems.

There were also some challenges that forced us to revise our framework. Farmers were not always familiar with the term agroecology. Due to a reductionist bias

in many scientific disciplines not all questions put forward by farmers could be approached adequately. Some farmers moreover were not primarily interested in research but saw it as a tool to for example find what solutions other farmers had come up with or to alleviate constraints that were of a political nature. These and other issues pushed us to step out of our role as mediators and become "facilitators of change". This involves creating spaces where interaction and learning between farmers, students, researchers and other (unexpected) stakeholders can take place, seeking inspiration in existing practices and taking an open attitude as to what research is

Community-based research for Community empowerment (7)

Zoraida Mendiwelso-Bendek - University of Lincoln

While the quest for 'social innovation' is hardly a new one for Civil Society Organisations (CSO), their own capacity to demonstrate their contribution in meaningful terms and using appropriate methods remains limited. There is a tension, indeed, between evaluations that answer policy makers' desire for 'quick fixes' and the production of robust evidence on the real impact of innovative programmes, both in terms of what is being measured and of how the evaluation process is experienced. Using participative approaches to research, the UK Third Sector Research Cluster on Active Citizenship in the UK, Taking Part?, enabled community-based research in the form of university-community partnerships. This presentation offers a summary of the research findings of this national research project, examining the opportunities and challenges experienced by organisations, as well as the methodological lessons learnt from the researchers' experiences. It offers examples of how community-based research can:

- enable CSOs, groups and communities to map social need, identifying where and what type of innovative interventions are required, especially for the promotion of active citizenship and community development
- critically explore the impact of public policy concepts and interventions on CSO's and communities, contributing to public policy debates and providing feedback directly to CSOs
- critically examine strategies to strengthen self-organisation in CSOs. Examples from the research cluster include a wide range of groups, communities and settings
- identify tools and practices for evaluation in order to build CSO's capacity for demonstrating and disseminating their contribution to social innovation
- facilitate reflective practice, supporting CSOs in developing strategies to analyse their contributions more effectively, without losing sight of their overall missions and ethos

Although the research projects took place in the UK, the issues posed by neo-liberal strategies aimed at increasing efficiency, choice and 'biographical solutions to systemic contradictions' (Bauman, 2011:53) and turning to the private sector and civil society to fill the gap left by public services (NEF 2012) are likely to be shared by organisations in most countries. The question is how university-community partnerships can 'empower' organisations committed to an agenda of social justice, in this context. To this, the presentation will contribute a number of valuable insights from practice. It will present how this partnership is speeding up healthy coexistence removing barriers and boundaries empowering vulnerable people.

The secret recipe for university-civil society collaboration: a sandwich concept (109)

Permaculture: a great excuse for building a bridge between civil society and university (114)

Josette Jacobs - Wageningen University

Juan Sànchez-Garcia -Centro de Estudios Ecosociales, Universidad de La Laguna

Working together between MSc education and (civil) society is easy to say but difficult to do. This collaboration has a high priority on the agenda of Wageningen University, University of life sciences. With regard to this collaboration between academic education and (civil) society, the structure of the organisations of education and society encounter each other. These organisational structures determine for each organisation what the underlying ideas en pre-suppositions are with regard to the co-operation. We show the secret recipe of a successful co-operation between (civil) society and academic education, on the basis of experiences of collaboration between the Knowledge Atelier and students from Wageningen University, Knowledge Atelier is an example of community based learning. It is a network of regional actors, education and research. The focus is on collaboration, development of the region and reducing the distance between education and labour market. Successful collaboration is based on mutual understanding. Understanding is however not non-committal, according to the philosopher Hans-Georg Gadamer. When having a dialogue we need to open up ourselves. Understanding exist in the dialogue. Translated to community based learning this imply 'well informed expectations'; what are the wishes of the commissioner and what can the students offer? To come to successful collaboration it is important to get the essence of the problem. The starting point should be the critical attitude of the student, as well for the university as for the commissioner. It belongs to the main task of the commissioner. Beside this, it is important that all parties involved are willing to learn from each other. That implies self-reflection. And it makes mutual learning within collaboration successful. Working together on creating the research question is an important part of this process. In several casestudies of collaboration between Knowledge Atelier and Wageningen University MSc course we observe what happens if both structures work together, which challenges faces both parties involved and what are the secret ingredients of successful collaboration. In our presentation the philosophy of Gadamer is prominent. By applying his theory we come to the sandwich-concept; on the one hand, to determine the collaboration (the assignment) and on the other hand the finishing of the co-operation (reflection, feedback, what have we learned).

"The promise of permaculture as an effective protector and restorer of biodiversity should be explored and enhanced", said the European Commission for the first time in 2010. The Asociación para el Desarrollo de la Permacultura (ADP), a good practice under the UN Habitat Programme (2012), unofficially started in 1996 in Tenerife (Canary Islands) and it was formally set up as a CSO in 2001 with the aim to foster the permaculture principles. It accomplishes those from a series of perspectives: making the most of local organic farming production; conversion of neighbourhood waste products into resources; and labour integration of persons with long-term mental illness using permaculture as therapy.

Permaculture is highly knowledge-intensive, based on techniques that are not delivered top-down but developed on the basis of farmers' knowledge and experimentation. ADP represents an experience which, although centred in a 1 hectare farm (Finca El Mato), has an area of influence which goes beyond its perimeter, thanks to the network that it has been weaving during the last 18 years. Since 2010 ADP and Universidad de La Laguna (ULL) started cooperation by sharing and spreading the ADP highly knowledge-intensive feature, generating a multiplying effect by attracting new stakeholders. It follows a picture of such cooperation: the annual ULL interdisciplinary course at the farm into a university-community engagement framework; a 3 years agreement (2012-15) with local and regional governments in order to transfer the ADP experience to the school kitchen gardens and the curriculum of future psycho-pedagogues; and, ULL students' compulsory practices in their curriculum.

To enhance the promise of permaculture as an effective protector and restorer of biodiversity (EC 2010), ADP-ULL cooperation currently goes into the direction of helping to scale up permaculture through public policies within the island government by focusing on the establishment of an enabling framework for its development. Different workshops are under way in order to achieve what the ADP experience might be: a resource in those public programs supportive of social inclusion and sustainability; a training reference center; and a platform for the dissemination of best practices. In summary, a public policy of targeting small-scale permacultural systems by forging public and private partnerships, increased public research and extension investment helps realize existing opportunities as the ADP.

Building broader communities of practice: interlinking Art of Hosting and ICT in the planning of urban ecosystems (128)

Engaging citizens with a new community campus (129)

Ian Babelon - Royal Institute of Technology

Susan Powell - Manchester Metropolitan University

About twenty years into the participative turn in planning theory and practice, public participation in urban planning processes can still often be ranked as "tokenism" on Arnstein's ladder of participation. In Sweden as in other countries, consultation processes often reach limited numbers of stakeholders and do not usually provide the guarantee that participants' opinions will be integrated in the political decisionmaking process. The case is made here that the building of broader communities of practice can foster more sustainable urban planning, with special focus on the planning of urban ecosystems. The notion of communities of practice is taken from Snyder and Wenger's (2010) use of the term, of which social learning is a vital part. Social learning is meant as an iterative process where a diverse group of participants work together to manage "complex, multifaceted and value-laden problem situations" (Woodhill, 2010, 62), Innovative tools exist that can broaden existing communities of practice in urban planning to include individuals that would not normally participate in consultation, and whose views and knowledge can prove valuable input in the often complex planning of urban ecosystems. This research project explores how tools and dialogue approaches borrowed from the Art-of-Hosting organization can be interlinked with various ICT end-user applications. As urban planning practice is increasingly informed by multi-scalar strategic development orientations, it will be assessed how Strategic Environmental Assessment (SEA) can serve both as an appropriate platform for interlinking Art of Hosting and ICT tools and approaches, and as a powerful planning instrument to integrate them in political decisions made in the planning of urban ecosystems. In turn, integration of these tools in planning processes has the potential to raise stakeholders' institutional capacity, as described by Patsy Healey, International case –studies are considered, with a special focus on the Stockholm metropolitan region. Together, the case-studies will map the main challenges and opportunities for creating broader communities of practice. Despite existing challenges, the imperatives of sustainable urban development call for an exploration of the social learning opportunities which the interlinking of innovative participation tools and approaches can provide.

Manchester Metropolitan University is a major contributor to the North West Region of England, with 34,000 students, 4,300 staff and an income of 236 million pounds sterling. New forms of public engagement strategies are being pioneered, including a new 350m pound sterling community campus in Hulme and Moss Side, one of the most deprived areas of Greater Manchester, England. This campus will house the Faculty of Health, Psychology and Social Care and the Faculty of Education from September 2014. Both faculties are committed to being good and responsible neighbours, offering employment, education and training opportunities and to the regeneration of the area. The university wishes to engage with citizens to develop effective and sustainable working relationships, transfer of research into the community and the integration of community experience into learning (Zass, Ogilvie and Hudson 2012) and community use of the campus ground floor.

A community stakeholder group has identified local health and wellbeing priorities, 2013-2014, as helping to improve people's mental health and wellbeing, supporting the community in improving their own health and wellbeing through education ,information and involvement and finally, getting the youngest people off to the best start. The university is a key partner in this stakeholder group.

In response to this, a Health Action Plan, 2012-2015, has been co-produced with the community health and wellbeing stakeholder group, the health service, local government and the university. The overall aim of this plan is to involve the community in the co-production of curricula design and delivery and research strategies. It also facilitates embedding outreach activities such as health screening into the curricula of health students and to engage students in voluntary work. The first three health screening activities in a community setting, have resulted in 'hard to reach' groups being supported in accessing health services. There has also been a workshop on the use of social media and visual ethnography, which will result in a co-produce exhibition at the opening of the campus. In addition, the outputs of the plan will inform local health and wellbeing strategies delivered by the health service and local government.

The impact of the Plan is being evaluated using modified forms of the Wenger and MacInnis, 2011, community participation tools.

Key words: community; university; engagement

Two different approaches/methods to involve students in community based project (184)

Connecting creative communities: the role of community-based research (185)

Pauline Diaz - ADReCA, Grenoble

Leanne Townsend - University of Aberdeen

Supervising civil society based research with the students leads to provide to the students an educational support. Before starting any researches or works with the students, we want to make sure that it makes sense for them. We want to raise awareness and make them realise that theirs researches and studies in general have a real impact on society. So they can see that the choices they make as students and as future professionals are actually political. Sometimes, students actually come to us for this educational support. We have different approaches to trigger the partnership with them and the poster will explain it.

It will describe our experiences of different projects that we're doing now with students from Grenoble universities.

It will present each experiences describing context, method, feed back of the participants, limits and new possibilities. We will try as much as possible to produce it with the participants.

- -The first experience will describe a workshop for students who want to question theirs studies and/or to propose a community based project.
- -The second one will present a project in which we supervise 5 students of the TSD master (Technique Science and Democracy) on a collective research that they have to do during their curriculum. The research is asked by a local CSO, an organization that does sustainable organic agriculture for reasonable prices, by involving the customers in the field work.

This poster presents Cornwall's Creative Communities and Broadband (CornCCoB) - participatory research at dot.rural Digital Economy Hub, University of Aberdeen, a partnership between academia, local government, industry and a community of creative practitioners. It explores the role of broadband for creative industries and their communities of practice and place. It asks: What role does broadband play in the development of cultural, social and economic capital within creative communities?

Initially, in-depth interviews explored creative practice and community participation, focusing on the mediating role of broadband applications. Participants were creative practitioners recruited through snowball sampling. Results suggest that online applications facilitate creative communities in building social, cultural and economic capital by enhancing networks, increasing community participation, providing an environment for peer critique/support, and expanding their reach to a national or global marketplace. This is particularly valuable for those based in peripheral places such as Cornwall, England.

A key finding was that regardless of skill level, all participants desired dialogue with peers and experts to explore how they might better embrace digital technologies, particularly social media. To respond to this finding, a community-based research (CBR) approach is employed. Tapping existing networks and utilising snowball sampling to expand on this, it brings together a community of creative practitioners (including participants of the in-depth interviews) alongside researchers, industry, digital skills facilitators and local government within a participatory workshop environment. The goal is to create new knowledge, to share skills (between all stakeholders), to increase confidence and subsequently digital engagement, and to co-produce innovative approaches to social media which respond to the shared challenges of the group e.g. in relation to peripheral geographies and low digital self-efficacy.

The research explores how Universities can interact with civil society to produce innovative research that responds to societal challenges and opportunities. This is increasingly critical in a time of austerity which brings limited support to communities. The poster presentation welcomes discussion on CBR in the context of this research, the role of the expert, and the process of collectively translating research and reflection into positive actions.

The role of managers in health- and social services in partnership with professionals in higher education (116)

Marit Alstveit - University of Stavanger

Background: Previous studies describe that professionals in health- and social service seldom apply research in their daily practice, although the Norwegian government expect that professionals in the welfare system provide high quality research based services. Service agencies are expected to deliver high quality services that are in accordance with the needs of the users and with official requirements, including special attention to developing evidence- or research-based services. This implies a challenge to the service agencies, especially to management. Furthermore, higher education institutions have an obligation to develop and deliver professional education and research in ways that will contribute to improved health and – social services. Both service agencies and higher education institutions have a responsibility to develop high quality research based services, and this calls for closer collaboration arrangements. Research indicates that managers have a key role in linking partnership between higher education and the services.

Aim: The aim of the project is to explore the role of the managers in linking healthand social services with higher education in partnership research.

Method: The study will have a qualitative, explorative and descriptive design. The research questions are: 1) what kind of research collaboration are the service and higher education system involved in; 2) what is the role of the manager in the research collaboration and; 3) how do the research collaboration influence on the service. The participants will be purposively selected. Criteria of inclusion are that the participants are managers and/or other key persons in the health — and social services, and who have taken part in mutual research projects with higher education. The data will be collected by means of focus group interviews; three focus- groups, including between 6-8 participants in each group. The data will be analysed by using a qualitative content analysis that focus on description on the phenomenon under investigation. The data collection and analysis will take place in January- March, 2014.

Findings: Our hypothesis is that managers focus on improving the services, and that they have a central role in linking health- and social services with higher education in partnership research.

Social Innovation - co-creation of knowledge (70)

Open Source Hardware - prospective engineers as social entrepreneurs – prospective engineer as social entrepreneurs (6)

Martina Schäfer, René Scheumenn and Frank Becker - Science Shop Kubus, Technische Universität Berlin

Sven Benthin - Grüne Stadt-Planungsgemeinschaft/TU Berlin

New patterns of- co-operation between civil society and scientific community and - engagement of researchers, students and science shops are requested to deal with pressing problems of climate change, loss of resources and social injustice. Research activities, knowledge mobilisation of civil society actors and hands on engagement can interact and lead to synergy effects. The proposed session covers the presentations- "Bottom-up" sustainable consumption and production: the role of social innovations (Prof. Martina SCHÄFER)- Benefit of reuse of IT hardware for society and environment - a German business case (Dr. René SCHEUMANN)- Hands On! Mutual learning in co-operation of civil society and scientific community (Frank BECKER) The presentations discuss wavs from vision to transition from different angels: How can transdisciplinary research support the development of social innovation? How can sustainble entrepreneurs be assisted by research on measuring environmental effects? How can co-evolutionary processes between civil society organisations and unversity benefit as well education and research at university level as solutions on the way to sustainable living? The three papers are submited separately and with the annotation "part of the proposed pannel *social innovationco-creation of knowledge* of Science Shop kubus.

Open innovation also works with hardware- a real product wants to be developed in a community based process.

Libre Office, VLC media player – these are well-known software products- installed in many computers. Each of them is open source.

In many cases at the beginning of open source software productions volunteers worked together for a variety of non-economic reasons, such as intellectual interests, a wish to express their opinions, to contribute to a community etc. [Lindmark, 2009]

In europe Free/Libre Open Source Software (FLOSS) provides opportunities for new businesses, a greater role in the wider information society and a business model that suits European small and middle sized enterprises; FLOSS in Europe is threatened by increasing moves in some policy circles to support regulation entrenching previous business models for creative industries at the cost of allowing for new businesses and new business models. [UNU-Merit et al., 2006].

For European Union the usage of free open source software is generally recommended to work more cost-efficient and to make innovations possible in a faster way.

Due to internet innovation processes increasingly come from outside of the corporate walls, even in case of hardware production [Chesbrough, 2003].

SÖREN is the title of an open source irrigation system, improving urban climate due to storage and evaporation of rainwater – a project of public interest.

The participants are invited to adapt the construction to individual requirements by using other materials, inventing other possibilities to bring the water from point a to point b or think of marketing strategies.

Hands On! Mutual learning in co-operation of civil society and scientific community (71)

Frank Becker - Science shop kubus, Technische Universität Berlin

Working on this, SÖREN takes up different practically questions which form the main difficulties for community based/Open Design:

- What is the optimal form of presentation for an Open Source Hardware (wiki/blog/homepage/workshops/radio/TV)?
- How to redact optimally the user's proposals for improvement regarding the construction guide line/ feature list?
- What is the most promising characteristic (product/ project/ way of production/ kind of material/ effects on environment/ abstraction to other Open Source Hardware) concerning as broad as possible societal participation?
- What might be the best way to prepare the community for the rethinking of given production conditions, present impairments to the environment, and social aspects of production?

The experiences, Sven Benthin made working on these questions for two years, will be introduced in the presentation. Discussions on some outstanding issues and critical debates concerning Open Source Hardware and SÖREN are intended.

Sven Benthin studying Urban Ecosystem Sciences (M.Sc.) initiated the community-based learning project laboratory Greening in Modules in 2011 at Berlin Institute of Technology which was supported by Science Shop kubus. A spin off out of this project is the planning partnership grüne Stadt-Planungsgemeinschaft. It was founded by an interdisciplinary team of six students to experiment and improve the different stakeholder's co-work in community based projects.

The construction guide line for the irrigation system can be downloaded on the website: www.gruenestadtplanung.wordpress.com/5 bewasserung/

There is a wide spread discussion about necessary steps towards sustainable conditions in social development of mankind together with planet earth. But the situation is still pressing: There is a tragedy about harmful impacts of climate change and the negative societal outcome of economic activities. There is still a lack of sustainable solutions that tackle and combine the economic and the personal life spheres.

Many people have started to work on developing these requested solutions and civil society is regarded as producer of relevant knowledge, civil society organisations are partners in research and innovation.

Based on experiments and experiences of science shop kubus, Technische Universität Berlin, the paper will discuss: What is to learn from civil society initiatives for science shops? Co-creation of knowledge is a "two-way-road"! Learning from civil society might improve results of science shop's work.

Integrating co-operation with societal actors into university curricula, research, and students' projects, seminars or theses is promoted by kubus.

kubus has started some promising experiments of co-operation between civil society, researchers and students. The authors discuss new patterns of co-operation and co-creation of relevant results occurring in these co-operations. Aspects of a new self-concept of science shops are analysed.

Considerations about adjusted patterns of co-creation of knowledge are illustrated by two examples:

- mauergarten e.V., an urban gardening initiative in the Berlin districts Wedding and Pankow
- COOLMÜHLE e.V., an intergenerational community some 80 km away from Berlin.

Benefit of reuse of IT hardware for society and environment a German business case (68)

René Scheumann - Technische Universität Berlin

It is proposed to bridge the gap between vision and reality of a sustainable and resilient living by personal and hands on engagement of researchers, students and science shop staff. Civil society organisations, researchers, students and science shops are at the key of solving problems of social injustice and environmental damage. They focus on solutions as part of the transition process within society hands on. The Great Transformation will process in small activities.

Based on experiences from co-operation with mauergarten and COOLMÜHLE, kubus expects to start the "Think Farm" experiment as a co-evolutionary process: COOLMÜHLE is considered as a learning place where students can conduct selforganised seminars and the like. Instead of money reciprocal exchange will be used as offset for using infrastructure.

Finally the paper shows how these considerations and ideas influence new conceptualisation and innovative design of further projects.

Several studies have shown that the reuse of computer hardware has a positive influence on reduction of potential environmental burden. Often neglected in the debate of efficiency for the use of electricity is the consumption during the production, in other words: the look at the burden backpack from the upstream processes. Still, the willingness to buy used computer hardware is low or even none existing in many procurement departments in companies. One of the reasons can be seen in the definition of waste, which are any substances the owner wants to get rid of, missing warranty, etc. Nevertheless, the case of the German remanufacturer AfB Arbeitsgemeinschaft für Menschen mit Behinderung gemeinnützige GmbH shows a concept of collecting used IT hardware from enterprises and public administration in order to resell the products at private customer. Around 70% of the devices can be reused. The rest will be treated for material recycling. In addition, the company provides a working area for people with disability in a first employment market. In combination with offering high quality devices at a low price, AfB is a sustainable entrepreneur addressing all three dimension of sustainability: economic, social and environmental benefits of their business model. One of the main arguments to hand over their old device to AfB is not only the fact that they employ people with disability at an equal level to the other employees, but that through the reuse and recycling environmental benefits are generated. The environmental benefits in terms of reduction of global warming potential (GWP), metal consumption and primary energy have been calculated. Such stakeholders, e.g. AfB or initiatives like the ReUse e.V. (a registered association dealing with the question of gathering acceptance of used products), may play a key role in transition movements within communities. Together with their members or customers they can create long lasting value by deriving a common decision on the purchase of next IT generation in a company either used or high quality primary devices suitable for at least a second lifetime. Reuse of IT products offers a way to future sustainable transition processes: High quality products are sold at a lower price (economic value generated), the reprocessing and material recycling employ people with limited qualification and the potential environmental burden due to production is reduced.

Co-creation of academic knowledge in TUB's Project Laboratories (108)

Johannes Dietrich - TU Berlin, ZEWK-Science Shop kubus

.With good reason there are actually numerous activities in society addressing sustainability issues, resilience and post-growth strategies. In this context, self-determined student projects at Technische Universität Berlin (TUB) are in the upswing since 2012, receiving public funding as so called tu projects.

The didactic concept of tu projects is based on Project Laboratories which have been introduced at TUB already in the mid 1980's. In Project Laboratories and tu projects (summarized in the following: "P-Labs"), students take over teaching within self-invented, practical, biennial projects, that both deal with pressing environmental and/or social concerns and blend into regular studies.

The issues of the projects are rooting in the problems and shortcomings the applicants experience as students of a certain discipline and as members of society. In order to get approval from the university's Commission for Teaching and Studies, applying students are obliged to include in their project description detailed information about the problem they perceive as relevant and how they are going to tackle it interdisciplinarily within the project duration.

During the application and the project implementation, students are assisted by Science Shop kubus and TUB professors in order to

- ensure the quality of social and technical learning,
- professionalize the project tutors through further education,
- promote co-operations with societal groups and institutions,
- communicate results of self-determined learning.

From kubus' experience, self-determined education as well as societal collaboration

across the university walls leads to a continuous innovation of teaching and learning at the university. The chance of this innovation lays in the formation of self-empowered students who are used to take over collective responsibility by science-society-collaboration at eye level. To this effect science and society do not only take advantage of the knowledge of each other – they are creating it in a mutual process. Taken on a broader level, these processes can help working on society's problems in a new way.

Retrospectively, more than a hundred P-Labs have been conducted since 1985. Actually (February 2014) there are 22 P-Labs running, dealing for example with implementing permaculture in cities, accounting common welfare and set-up a low-tech repair shop.

The presentation will unroll the conceptualisation of P-Labs as well as the tasks of Science Shop kubus. Examples of running P-Labs will highlight areas of activities and success factors for continued inter- and transdisciplinary self-determined engagements. In this context, results from a recent evaluation of the projects will be provided.

From Europe to Lyon: the learning of a cultural adaptation (138)

Davy Lorans - Université de Lyon

In June 2013, the board of the Université de Lyon validated the launch of a science shop for the territory. A satisfying result after 3 years used to address this challenge: how can we translate a successful concept, as shown by existing science shops throughout Europe, into a specific context?

At a first sight, the environment in which our Science & Society department aimed to set up a science shop-like initiative wasn't very favorable for three main reasons:

- A cultural background: the gap between science and society. Moreover, unlike countries with "community organizing", French civil society is structured with a high number of registered groups: mainly "associations", and more recently "neighborhood councils" or cooperatives.
- An academic pattern: the engagement of researchers in mediation tasks or events is not promoted. Either it hinders their official collaboration with civil society, or forces them (as the students) to act as volunteers, what has proved to be a major reason in the failure of numerous previous attempts to build science shops in France.
- A new kind of institution: the restructuring of the French higher education encourages the clustering of universities, high schools, etc. This resulted to create with the Université de Lyon a federation of 20 members.

With these starting conditions, we implemented a three stages action plan:

- The adaptation to the academic environment: we adjusted our project to the local research policy, what consisted in the specialization in "global health and society" and "science and engineering for sustainable development". It ended in a funding for the next three years while starting to "prime the pump" of social demand with questions of patent societal interest.
- The mapping of our territory: we analysed our environment through the potential

stakeholders of a shop (CSOs, laboratories, courses...).

- The adaptation to the cultural context: we created a specific session of "intercultural training", what consist in giving to each project team (CSO + student + researcher) some basic communication schemes in order to facilitate mutual understanding, exchanges and... output.

A sustainable model in our environment is the goal of this intercultural adaptation of the science shop concept

Digital and Personal Ways of University and Society Interactions (139)

Growing a Knowledge Mobilization Unit (141)

Christine Groeneweg - Science Shop Vechta

Krista Jensen - York University

The paper/presentation refers to the experiences at the newly founded Science Shop Vechta/Cloppenburg as a university based satellite in Germany. The aim is twofold. On the one hand it refers to the process of identifying the niche for the science shop in an environment of well-established research institutions as a gateway between the worlds of science and society. On the other hand it pictures out web-conferences as a possibly medium of multidirectional knowledge transfer to promote civic science. Finding the Niche: Inside out, outside in...Dialogue with Societal Actors Establishing a new university based science shop in a rural, traditional area around the cities Vechta and Cloppenburg, it needs to take some challenges within the University itself and, especially, within society. Taking the concept of civic science serious. first steps of Science Shop work is being sensible for the issues that are relevant to different societal actors. This part of the paper describes the strategic way of accessing and interviewing the actors as internal and external stakeholders of the University of Vechta respectively the Science Shop. Information has been collected in semi structured interviews which have been half-transcripted. The results will show the cognitive maps of different actors as an action schedule for the Science Shop Vechta/Cloppenburg's work and identifying relevant research areas as well as future work. Open Access to Knowledge with Web-Conference The second part of the paper evaluates weather a web conference could be a tool to promote and develop civic science. The Science Shop Vechta/Cloppenburg organizes 4 web conferences regarding different entrepreneurial and societal issues in 2013 and 2014. A webconference provides the worldwide possibility to easily and actively take part in exchange and knowledge transfer processes. It will be discussed if web-conferences are a sustainable, cheap and barrier-free method of transferring knowledge in a multidirectional way and how it could or should be modified to become an universal instrument for science shops work. The paper ends with a brief contrast between both access methods

The Knowledge Mobilization (KMb) Unit at York University in Toronto, Canada is a service unit that works to connect academic research and civil society. Established in 2006, the Unit has transformed from an externally funded project to an institutionally supported unit employing two full time knowledge brokers within the university, who work with an additional knowledge broker working within the local community at the United Way York Region. Working from a co-production model, the KMb Unit works across all disciplines at York University and into the local community to support the mobilization of practice and policy relevant research. Instrumental to this is the support of research partnerships through knowledge brokering services. To date, the KMb Unit has assisted in brokering over 300 collaborative research projects, worked with 265 faculty member, 148 graduate students and 226 civil society organizations. This presentation will provide discussion on:

- KMb Unit services at York University and how the Unit developed over time
- The KMb Unit's partnership with United Way York Region to support Housing and Economic Vulnerability in York Region research
- Lessons learned and ongoing concern

Environmental Research and Education in a New Science Shop at Sapientia University of Miercurea Ciuc, Romania (145)

Accès savoirs (Québec, Canada) : Account of the long birth of a (thriving) science shop (148)

Rodica Stanescu - InterMEDIU Bucharest

Piron Florence - Université Laval

In Romania there is a Science Shop network – INRO- setup more than ten years ago in the most important universities. The Science Shop InterMEDIU Bucharest has a good experience in environmental research and environmental education. Based on the good relationship with the staff of Sapientia University of Miercurea Ciuc, Faculty of Science, the base of a new scienceshop was started. InterMEDIU Bucharest mentors the small group of staff and advice for setting up a new Science Shops in Romania. The poster will present the first projects that were developed at the Sapientia University by the faculty and several talented students in nature science research and education and the progress in developing contacts and collecting research questions from locals. Many of the research projects are based on the questions coming from citizens of Harghita county and address local issues concerning the quality of environment. Since 2010 the LabWorm competition for secondary school students is held annually in the laboratories of the University. based on hands-on lab work. In the same time another action for science popularization was started- the Open Lab Doors program- where interesting lab experiments are available for visiting public. Interesting experiments in chemistry. physics and biology were also presented with the participation of local people at several events as City Days (Miercurea Ciuc. Sfântu-Gheorge), summer camps (Bálványos Summer Camp, Peninsula Festival) and other events (Talents' Day, Researcher's Night). Recently, the first issue of a science popularization journal was published, having as main aim to inform, inspire and involve students and teachers interested in nature science research

The idea of creating a science shop in the area of Québec city (Canada) appeared in 2008. Now properly anchored in Québec city's main university (with 2 part-time employees), featuring a strong network of external partners and a growing number of projects, Accès savoirs remains precarious. In this presentation, I will reflect on the strategies used by its promoters: what were the most favorable conditions? The biggest obstacles? What lessons could be learnt? For instance, the support of the University's leaders seemed essential, but the hiring of an employee coming from civil society with her "address book" and her intimate knowledge of community groups' culture appeared equally important. The two biggest challenge for Accès savoirs are the following: getting concrete support from professors and circulating among University bureaucracy.

Science Shops in the Balkan countries (155)

Integrading Science Shops into University Practices: The case of EUC Science Shop (149)

Rodica Stanescu - InterMEDIU Bucharest

Andreas Efstatiades - European University Cyprus

Under the PERARES project, new Science Shops was set up in the Balkans. In particular, these initiatives refer to Science Shops established in the University Politehnica of Bucharest (Romania) and the Technical University of Crete (Greece). Similarities and differences between the new Greek and Romanian Science Shops will be presented, showing their strengths with emphasis on local and national conditions. The comparative presentation will take into account the distinctive characteristics of the area, like the poor economic conditions, the sensitivity to environmental issues, and the adoption of a new idea to provide participatory research support to Civil Society Organizations (CSOs). Based on these, the main aim is to highlight the ways of linking community needs with academic research, given that they are approached in different ways in relation to the research topics. Identifying and analyzing similarities between the two countries may help to share the expertise in working with students for common research fields. Examples of the ways of developing the students through research and the research with students will be also presented.

Intergrading Science Shops into University Practices: The case of EUC Science Shop Efstathiades Andreas, Oikonomou Michalis European University Cyprus, 6, Diogenes Str., Engomi, 2404 Nicosia, Cyprus EUC Science Shop is a newly established Science Shop in the European Cyprus under PERARES programme. The aim of this paper is to present the existing University academic management practices that are followed in research project assignment and supervision. Through a thorough investigation of the above practices the paper proposes a rationalization of the existing process and integration of the operation of the Science shop into those practices. A detailed description of the practices that are followed together with a critical analysis based on the first pilot application is presented. The critical analysis comes out with problems and proposed best practices that safeguard the proper operation of Science shops in universities.

The UC Berkeley Science Shop: a roadmap for community-engaged scholarship in California (153)

The Community-University Exchange: evaluating the structure (154)

Karen Andrade - University California

Elizabeth Tryon - University of Wisconsin-Madison

Many undergraduate students at the University of California enter the fields of science, technology, engineering and mathematics with a desire to make a positive impact in society and apply their skills to real world community problems. While UC Berkeley provides its students with many opportunities to obtain academic research experience, many students are frustrated by the tenuous link between their work on campus and important local issues. At the same time, the defunding of public education in California has placed pressure on the University to deepen its commitment to public service and its engagement with communities. This disconnect is at odds with an increasing need for access to scientific knowledge and research by many civil society actors in their efforts to affect social change. Access to science and research often dictates who has a voice in policy and societal decision-making processes. Yet, in the City of Berkeley and communities across the San Francisco (SF) Bay Area, civil society organizations tend to have a very minor role in setting the university research agenda, and community access to research expertise is often fragmented and based on personal relationships. To answer this need, students and faculty are spearheading the establishment of the UC Berkeley Science Shop in the College of Natural Resources. This organization is ideally positioned to coalesce and support several disconnected efforts taking place in the university to support community-engaged scholarship on environmental issues. Given the high concentration of environmental non-profits and civil society organizations in the SF Bay Area, the UC Berkeley Science Shop is well positioned to meet local community needs. The current working model is to match research questions from environmental community organizations with both an undergraduate student working on a thesis project, as well as a graduate mentor with the necessary expertise. Faculty are involved as advisors, however, the everyday support of both the student and the community partner is done by Science Shop staff and the graduate mentor. This two-student model provides for increased support for the partnership and multiple possible levels of engagement for students. A critical need and challenge as a largely student-run initiative is to create a sustainable infrastructure such that community organizations have a consistent and reliable point of entry for creating partnerships with campus.

At the University of Wisconsin-Madison in the United States, a Science Shop hybrid structure has been in a pilot phase for 3 years, with seed funding from the administration and some small grants. Now, the staff of this shop, called the Community-University Exchange (CUE), are undertaking a program evaluation to determine the extent of this structure's effectiveness in managing CBR and other experiential learning projects. Because in the U.S. Science Shops are not as prevalent as in the EU. documentation of the benefits of the model over traditional methods and pathways of research has proven needed in order to maintain institutional funding. The stakeholders involved in all 7 of the initial projects – students, faculty. staff, and community partners – were interviewed or participated in focus groups over the last year. Projects ranged from a participatory study on bias in the media with community mentors in teams with graduate and undergraduate students, to developing a specialized literacy tutoring curriculum and training staff at community centers to deliver it, to a community gardening class, to culturally relevant professional development workshops for mentors of youth in middle grades with especially challenging circumstances. Preliminary analysis of results have shown:

- Synchronization: The Science Shop structure helps the community and university synchronize projects, knowing what has already been done, and determining where the gaps are. Then they are able to put resources where they will result in better impact.
- Leverage: It is helping leverage resources from the City, the local elementary and secondary school districts, and other community entities when they can see that we are able to coordinate with each to move together in the same direction.
- Learning: It is helping students with learning outcomes because they are coming into projects that are already "in motion", saving them set-up time and bringing them up to speed quickly, in authentic trust relationships that were previously nurtured before they came onboard.

Science Shop UT: Advice and research that meets your needs! (194)

Anne van der Ham - University of Twente

- Tenure: It is helping especially junior faculty be engaged with community because CUE has already spent the time building community relationships, which can too time-consuming for faculty on the "tenure clock".

This poster will describe the results of the evaluation and be available during a poster session to discuss with attendees how they might either move to a science shop structure in their own work or improve management of their current Science Shop.

Science shop come in many different shapes and sizes. Sometimes the shops are run by university staff or students, sometimes a combination of both. They may be located in- or outside the university. And, of course, the expertise that Science shops offer varies from university to university, depending on the research that is being done. However, all shops have one thing in common: they all respond to civil society's needs for expertise and knowledge (1).

In our poster, we present the successful procedure, based on over thirty years of experience, used by us at the Science Shop at the University of Twente. Our approach is characterized by our focus on innovation and tailor-made research and advice. We strive to help our customers translate their ideas into new and innovative research questions. Furthermore, we aim to provide our customers with an end product that is practically useful for them and will bring them one step further.

Because of our focus on innovation, we have recently expanded our activities to include small businesses in the region as a result from our collaboration with Knowledge Park Twente, which aims to stimulate innovative entrepreneurship in the region. So far, there has been considerable interest and the number of requests is growing!

With our poster, we hope to provide a source of inspiration for our other Science shop colleagues and we are looking forward to many fruitful discussions.

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Culture & Science Shops (189)

Ruutger Lenzen - Radboud University Nijmegen

The quality of the output of a science shop is linked to the culture of its organisation. The purpose of this poster is to make science shops aware of this. Hofstede (1991) would say that the scientists who are looking for the culture, are peeling off the scales of the science shop. According to Karsten (1998) there is not one ideal culture for an organisation. Cameron and Quinn (1999) distinguish four types of cultures; clan, adhocracy, hierarchy and market culture. In our poster we give an overview of the four different cultures in a hybrid public organisation, such as the science shop. The science shop of Wageningen UR is used as a case study.

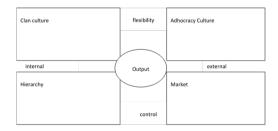


Figure 1. Spectrum (Cameron & Quin 1999)

Lenzen (2013) claims that the science shop of Wageningen UR is tested positive on all indicators of the clan culture and a few of the adhocracy culture. An organisation with a clan culture is family typical. The main characteristics of a clan culture are a friendly environment for the employees, shared moral ideas, cohesion and high investment on employees. The managers stimulate and facilitate the participation, dedication and loyalty of the employees (Cameron & Quinn, 1999). The science shop of Wageningen UR is placed in this spectrum (figure 1).

One of the weaknesses of a clan culture is for example that good qualified researchers, who could be a gain for the organisation, are out of reach. To involve these researchers the organisation needs to be dynamic within the spectrum. For example move from internal search to external search and use the characteristics of a different kind of culture.

If the science shop acts dynamic within the spectrum and knows its position, the organisation can gain awareness of its culture and could know its strengths and weaknesses.

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Strengths, Weaknesses, Empowerment and Disruption analysis (191)

Wouter van Andel - Wagening University

Science generates an abundance of knowledge, but this is usually hard to apply to complex problems in society. In a project consisting of multiple problems it is crucial to analyse the pros and cons of solutions, and to identify potential bottlenecks between those solutions. Therefore, we have developed the SWED analysis (Strengths, Weaknesses, Empowerments, and Disruptions), which is derived from the SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats – Learned et al., 1969). The original SWOT method analyses individual applications qualitatively, and indicates opportunities and threats from the outside. The SWED method varies by quantitatively analysing the strengths and weaknesses of an application, and by testing if the applications empower or disrupt each other internally, meaning that also combinations are analysed. It also incorporates the priorities of direct stakeholders when selecting the most appropriate solutions to a problem.

This SWED method has already been successfully implemented in the case of 'St. Martenshof, Arnhem, The Netherlands', a science shop project at Wageningen University and Research Centre (Veen et al., unpublished). On October 24th, 2013, the planning of a city garden was started in which the design was based on a SWED analysis. Here, the situation was firstly divided into categories, e.g. biodiversity and child friendliness. Within these categories different applications are formulated. These applications (modules) are tested on the basis of certain criteria, e.g. price and maintenance. Following this, modules are quantified on their strengths and weaknesses based on these criteria in a well-informed way. In the case of 'St. Martenshof', experts were utilised to accomplish this. This quantification occurs via a relative points distribution on the pros and cons of each module in the categories. The objectiveness of the quantification can be enlarged by the use of measurable scales. As the prioritization of the criteria can differ, direct stakeholders are asked for input on relative weighing measures. Consecutively, the internal empowerments and disruptions are analysed for the selected modules within the categories. Finally, the SWED method gives advice on which modules can be applied most appropriately, but allows space for stakeholders to make their own decisions.

way. Through this interaction of knowledge and application, new innovative potential arises to tackle complex problems. Transparent collaboration keeps projects interesting and engaging for all the involving parties. Merging the groups forms an unequalled possibility to creativity. This represents the dynamic character of this conference.

The tool can be used in projects which include multiple problems and/or multiple parties, and it helps integrating these multiple components into a whole. Another asset of this method is that it includes all stakeholders in the decision-making process. Finally, the involving of civil society is inherent to the SWED method. It offers transparency between science and society, resulting in more robust cooperation and a shared sense of responsibility between parties. In this way both groups are greatly empowered.

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The SWED analysis is a tool which integrates science and society in an interactive

Learning from successes in innovation for sustainability (59)

Action, Research and Participation: Roles of Researchers in Sustainability Transitions (67)

Meira Hanson - The Heschel Center

Julia Wittmayer - DRIFT, Erasmus University Rotterdam

While international and national efforts at transition to sustainability frequently offer a rather gloomy horizon, we at the Heschel Center for Sustainability have decided it is time to paint a more optimistic prospect for the future. We will do this by showcasing a variety of successful sustainability initiatives, which have evolved locally within the Israeli civil society, to be published in our first annual 'Optimism Report'. As part of this process we collected over a hundred examples of local initiatives in such fields as local food and urban agriculture, revitalizing the local economy, educational initiatives and alternative transport. We have set out to engage in a learning process from these cases so as to discover what works, when and why and in particular how to replicate successes elsewhere.

This is no simple challenge, as the necessary know how cannot be reproduced by simply applying pre-existing theory. Successful innovation for sustainability in many ways redefines society's very notion of 'success'. What is needed, therefore, is a process of reflexive and participatory learning to translate the tacit knowledge held by the local innovators into actionable and transferable knowledge that can be shared in the broader sustainability community. Thus, we have set out to develop both the knowledge and the capacity and tools for learning from success stories, which can themselves be replicated in the future.

To this end we will adopt, and attempt to adapt, the 'learning from success' method developed by Jona Rosenfeld: a structured method for identifying, making explicit and documenting the tacit knowledge underlying past successes. In the first stage we will learn from two success stories using Rosenfeld's method. In the next stage we plan to use participatory workshop methodologies to engage a group of social entrepreneurs from selected initiatives in examining and verifying the lessons learnt based on their grounded experience of 'success'.

Insights from the first stage of this process will be presented at the 6th Living Knowledge conference, which provides us with a unique opportunity to garner ideas and share experiences with others involved in similar endeavors.

In sustainability science, the tension between more monodisciplinary and outcome oriented and more inter- and transdisciplinary or process oriented approaches has recently received more attention. Particularly the latter comes with differing roles for researchers, which are underexplored in literature. Based on the rich tradition of action research as well as a specific form thereof in the context of sustainability transitions, transition management, we establish an in-depth understanding of activities and roles of researchers in process-oriented sustainability research.

We do so by conducting a literature review of action research and transition management literature and specifying ideal type roles that researchers take when dealing with critical issues in creating and maintaining space for learning in these processes. The ideal type roles of researchers that we identified are change agent, knowledge broker, reflective scientist, self-reflective scientist and process facilitator. We take these ideal types as an analytical frame for exploring a case of transition management in a disadvantaged neighbourhood in Rotterdam, The Netherlands.

Creating and maintaining a space for learning is key to both action research and transition management. It is the space where researchers and other actors (e.g. business, state, third sector actors) meet and where issues of ownership (i.e. who owns the problems, process and results), sustainability (i.e. definitional power), power (i.e. internal group dynamics and political context of change processes) and action (i.e. real life change as goal of the process) are emerging as crucial. In the presentation we focus on these critical issues and illustrate it by zooming into the interactions of researchers and other actors in the action research in Carnisse, Rotterdam.

Circular economy between civil society, state and market: swapping and recycling of clothes (85)

Charlotte Louise Jensen - PLAN, Aalborg University

Analysis of stakeholder interaction in sustainability in regional issues and conflicts with a focus on the role of scientists (87)

Jana Dlouhá - Charles University Environmental Centre

Based on the arena of development approach the paper analyses activities within reuse and recycling of clothes developed in Denmark the recent years. Citizens create informal swap activities like when a resident put some worn out clothes on the top of the waste container in the courtvard in case somebody else want to have it. Simple swap corners have been set up in some court yards as part of the waste separation facilities. Recently, swap markets have been formalized by a NGO supporting circular economy and a public owned waste management company. This initiative offers to organize local swap markets in front of shopping malls, city halls etc. Statistics are made about the number of people, the kilos of goods brought to the swap market and brought home and the remaining amount a charity organization gets. A recent public green fund for local citizen initiatives has funded several initiatives with focus on clothes swapping. Chartity organisations have for many years sold clothes for re-use in order to generate income for charity projects either in Denmark or in developing countries. The donation of clothes for reuse in developing countries has been reduced the recent years in order not to destroy the local clothing industry in developing countries. This implies that only a small part of the clothes which the charity organisations receive for re-use actually are re-used. Also commercial re-use initiatives have been developed. Some are high end fashion second hand shops, others on 'average' quality. One shop focuses on a voucher system where one piece of clothes handed in give the right to bring home one piece of clothes. Within clothes for babies both informal swapping to parents with younger children and shops with second hand sales of baby and children clothes are common. Also a green children clothes company has initiated baby and children clothes swap parties. The same company has launched a product service! system like model based on subscription to a regular supply of new and re-used children clothes. The fashion industry's own research institute recognizes the need for a better image of the clothing industry and has organized an annual swap market in connection to an annual fashion exhibition. Some clothing retail chains have set up recycling systems where they receive used clothes and give the person a youcher for a small discount on new clothes bought in the shop. This type of initiative looks like a way of keeping the citizen as customer in the shop.

The Czech Republic has a relatively long tradition in environmental or sustainability oriented programs and initiatives, especially within the educational system, including higher education (HE). Consequently, many environmental specialists are already working in different spheres of society, but something is obviously missing – in practice there are numerous conflicts between different social groups that occur in controversial environmental issues at the regional level which seem to have no solution. Typically, these social conflicts have damaging repercussions for the actors and their relationships, the environment, and the economy of the region – communication "deadlock" has a negative influence on many aspects of regional development and always results in limited, short-term and non-strategic solutions

The authors share their experience with a recently completed 3-year nationalwide project aimed at fostering cooperation between four HE and two research institutions, two NGOs and one business representative organisation, the outcome of which are (besides numerous practical activities, see MOSUR) a database of case studies from different regions of the Czech Republic (and some from abroad) and a special journal issue elaborating upon the same theme. An analytical perspective of both focuses on the roles of actors in a dialogue on regional sustainability issues within cooperative or conflict situations, and describes some of the communication processes, especially at the science – policy interface. An analytical tool (actor analysis) is employed to explore network characteristics, the relationships of the actors involved and the process of the deliberation itself where different approaches to "nature", "environment", and/or "sustainable development" were conceived but often not agreed upon. In some of the cases, scientists speak in the name of nonhuman nature and environmental values and thus they act rather as knowledgeable activists; sometimes, conversely, their expertise is misused and/or misinterpreted in the name of other policy priorities. Under specific circumstances, the involvement of scientists might reinforce the momentum behind regional development as they are (for example) able to identify and explicate its opportunities for which some of the other cases provide evidence. In general, to agree upon workable scenarios and implement practical solutions at the regional level, the development of an appropriate communications framework is needed, and possibly also facilitation

Danish fund for green community-based initiatives as contribution to green transition (203)

Sune Kirkegård Rotne - Enviromental Protection Agency

of a dialogue between the actors, as well as (scientific) reflection on the process itself – this is one of the experiences highlighted in the successful cases. As part of communication between actors from different backgrounds, a social learning process is likely to have the potential to transform viewpoints and approaches of those involved so that final agreement is made possible. A comparison of different cases helped to formulate a hypothesis that respect for actor diversity and their viewpoints, as well as a will to contribute to the "common good" is a rather implicit sine qua non for success although it is exactly this that is still often missing in Czech society.

The fund for green pioneers is a new initiative in under the Danish Ministry for the Environment (Danish Environmental Protection Agency), agreed by the center-left Danish government and The Red-Green Alliance party.

The fund provides financial support for bottom-up community-based initiatives, which underpin a green transition of the society. Focus is on concrete activities that stimulate behavioral changes and changes in consumption patterns with a lower environmental impact as a positive consequence. Focus is also on debate generating activities with an objective of dissemination of knowledge and information.

The fund provides support for individuals, organisations, self-governing institutions, municipalities, regions etc., but not for initiatives aimed at industry and entrepreneurs with a commercial objective.

The fund has a total amount of around 3 mio Euro in 2013, and 1.5 mio Euro a year for 2014-2016. The secretariat received in 2013 237 applications, representing a total amount of more than 8 mio Euro. 84 projects received financial support from the fund in 2013.

Projects are varied and cover a very broad thematic spectrum. Most projects are found within one of the following categories: sustainable cities and communities, circular economy and cradle-to-cradle as environmental strategies, community gardening and other types of sustainable food production, sustainable mobility, local climate adaptation, local sharing schemes, swapping markets, waste prevention (including food waste prevention), waste separation, and other types of greening of communities.

The majority of projects that have received financial support have come from organisations, which account for 58 % of the total grants. Self-governing institutions and individuals account for 22 % and 12 % respectively

Promoting health and social work students' civic engagement and collaborative knowledge production: Experiences from Norway, Italy and Ireland (125)

Helene Hanssen - University of Stavanger

This presentation explores the learning from health and social work schools in Norway, Italy and Ireland, that have setup and implemented community-based research (CBR) initiatives ('Science Shops') as part of a European project over the last 4-5 years, 'Science Shops' are "small entities that carry out scientific research in a wide range of disciplines- usually free of charge and- on behalf of citizens and local civil society", (Living Knowledge, 2012, p. 1). The presentation will briefly examine what participatory community-based research looks like when applied to student dissertations and how it contributes to the development of research mindedness. The key part of the presentation will be to compare the differences and similarities in approaches and models of 'Science Shop' adopted in the three countries, which also reflects their different political, organizational, cultural, policy, and resource contexts. Challenges and opportunities involved in setting up 'Science Shops' will be discussed, from universities perspectives. Question s that will scaffold this proce ss. include: 1. To what extent are health and social work students civically engaged and how can universities promote such engagement? 2. To what degree will students' and practitioners' development of research mindedness encourage their interest in. and application of, research into practice? 3. How can relationships be developed between regional civil society organizations and Higher Educational Institutions to engage health and social work students in collaborative knowledge production? 4. In what ways does CBR meet academic research standards and contribute to Higher Educational Institutions' strategic objectives? Keywords: community-based research, collaborative knowledge production, civil society organizations, research mindedness.

Cultural Expressions as Living Knowledge: Community-based and Participatory Approaches to Intangible Cultural Heritage in South Tyrol (23)

Families as Drivers of Social Innovation in Metropolitan and Rural Areas? (29)

Emanuel Valentin - Free University of Bozen-Bolzano

Gerald Beck - Ludwig-Maximilians-University Munich

On October 17th, 2003 the UNESCO has adopted the Convention for the Safeguarding of Intangible Cultural Heritage (ICH) in Paris, Ratified by Italy in 2007. this Convention understands ICH as "liv-ing heritage" and defines it as "practices. representations, expressions, knowledge, skills [...] that communities, groups and, in some cases, individuals recognize as part of their cultural heritage" (Art. 2). According to this Convention the ICH is manifested in a) oral traditions and expressions, in-cluding language; b) performing arts; c) social practices, rituals and festive events: d) knowledge and practices concerning nature and the universe: e) traditional craftsmanship. Local cultural practices and ICH can act as brake lever and retarding element towards globaliza-tion and as cultural reserve against the accelerated world of today. According to the watchword "in-novation through tradition" - which might seem paradoxical at first sight - ICH bears a big potential for sustainable regional development, not only for tourism. Studies have shown that where participa-tive approaches have been absent, this potential has been missed and conflicts between the social ac-tors involved have been the result instead. Hence, the civil society plays an important key role in the identification process and for a sustainable management of its own cultural heritage. The project wants to shed light on following questions: How can ICH in South Tyrol be identified and safeguarded by following a community-based and participatory approach? The current re-search design consists of three blocks: a) community-based and participative identification of ICH in the South Tyrol; b) analysis of selected examples through ethnographic methods (case studies); c) elaboration of guidelines for the realisation of a community-based and participative inventory of ICH in South Tyrol.

With the proposed paper we would like to discuss first results from a study about young families as drivers of social innovations. Our target is a better understanding of how families engage in what kinds of civil society projects. These activities can be studied by the scope of the intended change (cf. Martinelli 2010) and by the scope of inclusiveness. The following table shows important lines of discussion.

		Scope of intended change		
		Niche, alternative actions, processes of accepted deviance	Community-based initiatives, processes of collective learning	
Scope of inclusiveness	Organization of group interests	Self-help initiatives & alternative lifestyles residential projects for tamilies (gated communities?), producer-consumer- communities	Group oriented cooperative problem-solving after-school care, nursing services etc.	
	Public interest orientation	New place-based movements co-operative habitation, eco-lifestyles etc.	Social innovation for transformation new modes of providing public services (cflizens' bus, energy co-operatives)	

We will compare these activities in metropolises and small towns. To date the latter are underrepresented in urban studies literature compared to the number of inhabitants (60% of German population). Urban development is facing serious challenges. While prospering metropolitan areas like Munich, London or Copenhagen are exposed to high pressure coming form investment and growth (affordable housing space, public spaces, exclusion of less wealthy citizens etc.), shrinking regions face the challenge of how to supply for public services (public transport, health services, shopping opportunities, education, etc.). In both cases it is crucial to restructure previously "invisible infrastructures" in a socially and ecologically fair way. Governments capacity to act proves to be limited in the light of economic crisis and austerity and the invisible hand of the market is rather intensifying the spacial disparities than catering for common welfare. There is hope that more participation and social innovation can invent more democratic, legitimated and affordable solutions. In this context, families are one of the cornerstones of civic engagement. Most of the engaged are in "family age" (35-49 years) and have, through their children, a two-generations-perspective. We seek to learn more about their innovative potential to co-create new forms of urban life but also of the inherent ambivalences which become visible in new forms of familyoriented gated communities. Keywords social innovation, families, urban lifestyles, public services.

East Cleveland Online - A Rural Social Enterprise (32)

Steve Thompson - East Cleveland Online

East Cleveland Online (Ecol) is a new Social Enterprise. The social aim is "To create a sustainable network of Communities and Organisations in East Cleveland using ICT and Digital Media". Primarily the group shares the cost of web hosting but it is planned to develop e-commerce and various online activities including a Community Media Channel and a Citizen Journalism Network.

East Cleveland is to the South of the region of Teesside in the UK and consists of the southern-most wards of Redcar and Cleveland Borough. Using data from the Census 2001, the main industries in these wards appear to be manufacturing, wholesale & retail trade including the repair of motor vehicles and health and social care. The area is peppered with the remains of declining industries, fishing, steel and mining. There is evidence of some migration of young people. The area is high in deprivation.

The project came about as a result of Teesside University support for three East Cleveland community organisations: Be All You Can, Skinningrove History Group, and Cleveland Ironstone Mining Museum. The University's Community Engagement Coordinator suggested to these groups that if they were to share web hosting space then, when ERDF support ended they could all share the costs of maintaining this space. They readily agreed. Then the University suggested that the Community Engagement Coordinator may wish to bid for a small about of "Unlimited" funding to set this up as a Social Enterprise. And so with £2000.00 workshops were run with a social enterprise facilitator and East Cleveland Online are set up as a C.I.C. (at the time of writing this is being put in place). As a result of public meetings others have joined: Lofus Town Crier (a community newspaper), Loftus Digital Village (a small group at the library). Friends of St Germains Cemetery. Freebrough Academy have joined and through their media centre will provide a Community Radio for East Cleveland, Community Television and through their feeder primaries will form a citizen reporter network feeding into the Loftus Town Crier Website. The project is not just about websites but is a means for each of the component parts to grow and prosper, Loftus town Crier will obviously increase their coverage, Freebrough Academy's students will gain real life experience and the Academy will be assisted in engaging with their community. Cleveland Ironstone Mining Museum are developing ecommerce and Be All You Can, no longer able to maintain their presence in a large expensive Edwardian property will be looking to deliver more of their training and development online.

The Community Engagement Coordinators words in the Unlimited Social Entrepreneurs bid describes the ethos behind the project.

"I have worked with various community groups and small organizations in rural East Cleveland for several years. The activity of these groups ebbs and flows. There has been a loose association between these groups but there is now a drive to develop a more formal structure. We've met recently and agreed that to form a social enterprise would be advantageous. Particularly they would be able to share the cost of web hosting so that the cost is negligible. I want to develop this project out of a sense of social responsibility. I have skills that can make a life changing difference when deployed for community good. I'm also interested in pushing the envelope with technologies to find new ways of economic growth for small organizations and community groups. Many of the participants are already social enterprises but this scheme would create a network of Social Enterprises (online). Because the participant groups see benefits I'm pushing against an open door when I want to experiment with new technologies. Developing East Cleveland Online formally will offer great opportunities for action research and exploring innovative use of new technologies provides learning opportunities".

East Cleveland Online has been set up as a low maintenance low turnover social enterprise and is therefore highly sustainable. It is expected that the constituent member organisation will grow and prosper as a result of involvement in the network.

Nature into gray zones (81)

Michaela Shields - Bonn Science Shop

Bringing nature into grev zones- this is the motto for a three-year campaign for unsealing and close to nature greening of urban industrial areas which started April 2013 and is led by the Bonn Science Shop. The campaign aims raise awareness among both, corporate representatives and citizens for the urban margins for biodiversity conservation in urban areas and to make them actors. Representatives of companies should understand that also small green spaces of 50 m² with close to nature greening can mean new habitat for insects, soil animals and birds. Nature and functionality are not mutually exclusive, but can complement each other. The campaign will address ten companies in each of the three German pilot cities Duisburg, Erfurt and Wiesloch. In every city there is scope for biodiversity, but hardly been used. In order to achieve a change in thinking and an opening towards natural design elements, it requires more than a mere technical information- it needs a mood change, which is borne by the company together with the citizens of a city. They will realize, that native close to nature greening provides more animals, insects and birds food and habitat. Moreover the native, close to nature plants are more resistant against climate fluctuations and need only an extensive maintenance – an important economic aspect.

Why company premises? Near-natural company premises are contributing valuably to the preservation of biodiversity and in addition, they have an important exemplary function for society. Especially in populous and urban regions, these areas can create precious ecological habitats and work as stepping stones in the biotope network. Bonn Science Shop invites and informs corporate representatives about the image advantages of a 'green business card' and the valuable contribution for the support of biodiversity in their city. The companies that participate in the campaign will unseal parts of their functional floor area and will design theses with professional advice of landscape gardening with focus on near to nature.

The Bonn Science Shop works in the three pilot cities closely together with the community foundations who work locally and get involved with different backgrounds for to make their city more livable. Also strategic alliances between those community foundations, business representatives, environmental NGOs and

municipal representatives have been initiated. An informative website, publications, parallel workshops and field trips to reference areas and also an online competition addressed to the citizen of the pilot cities raise the awareness of the issue. On public planting days on the involved company premises the staff and also citizens are invited to participate in the guided planting of these areas with native planting, building dry stone walls, etc..

To ensure that the project does not remain without consequences, the aim is to strengthen through their own experiences, acceptance by businesses and citizens for natural vegetation and disseminate among others by plants sponsorships to achieve a stabilization of the measures. Contact on site are the local community foundations in the three cities.

Territorial Mobilization of Civil Society in the creation of activities: The French case (192)

Campus Community Partnerships At The University Of Mannheim And Its Use For Shaping The Scientific Profile Of The Institution (199)

Christopher Lecat - Reims University

Julia Derkau - University of Mannheim

Since the Great Depression of the XXth century, the public authorities aim at mobilizing various actors from the civil society in order to identify, introduce and drive social innovations. This paper focuses on the role played by the Third Sector in a territory in order to generate the social innovation. The special feature of the French case is that it is based on a centralizing State, whereas many responsibilities are delegated to lower levels (regions, departments and municipalities). The Regional Council seeks, by different ways, to link actors to the construction of a local identity. The case study of the French region Champagne-Ardenne emphasizes that this diversity of strategies, variation and instability of intermediary scales introduce a complexity, which is difficult to control. Meanwhile, actors, who are solicited to innovate, begin with the identification of the territory's needs and the specific resources that could be mobilized for innovation.

The study aims at pointing out the Champagne-Ardenne Region is actively seeking the development of social innovations. There is a collective mobilization of multiple stakeholders around the concept of social innovation. The regional authority is facing difficulties to support innovations. A paradox must be point out: The capacity of the actors to innovate is mobilized in response a demand which does not necessarily meet their expectations. On the contrary, the social needs that have been locally identified (such as population ageing) don't find a satisfactorily answer due to government's limited resources.

We explain it with a two-stage process. First, we draw a network by looking at two emerging projects ("territorial diagnosis of association's needs" and "development of proximity services"). This network analysis aims at emphasizing that the network strategy isn't a sufficient reason for innovating. Then, we explain the construction of a tool of social coordination, the "Territorial management of employment and skills". This tool introduces actors collectively in a long-term learning situation. We observe an evolution of the methodology. Originally, the concerned public actors aimed at searching how to produce social innovation. Facing the inefficiency of this approach they want to constitute groups of actors. Their goal is to build their own specific way of producing innovation. They are now required to constitute a collective framework in order to innovate.

In 2003 the University of Mannheim offered as one of the first German universities service learning-courses. Today, the responsibility for service learning-activities is placed at the universities' Board of Management. Social responsibility is part of the universities' mission statement. Service learning at the University of Mannheim stands for innovation in teaching and research in all areas as well as for outreach to the community. Research projects on social innovation are encouraged.

Evolving teaching and research while meeting societal challenges: Project example "Learning and teaching in cultural diverse settings"

Following various changes in education policy, classes in German secondary schools grow more and more heterogeneous regarding the pupils level of knowledge and their educational background. Thus new educational concepts for employed teachers are required: likewise the education of future teaching staff has to be adapted.

To tackle those challenges, a broad service learning-project series has been initiated at the Area Educational Science and Psychology, aiming at a long-term cooperation focusing on school development and further education of the teaching staff. Community partners are local secondary schools and the Department of Educational Planning of the City of Mannheim. Within the scope of service learning-courses, students work on issues that are submitted to the university from local schools. Topics are e.g. successful intercultural co-operation between parents and teachers and individual diagnosis and support. The benefits for all involved are wide-ranging.

The university enhances and improves its teaching and research. In addition, it shapes its profile by developing experts in the field of learning and teaching in cultural diverse settings. Results of these local projects are of national importance as well.

The involved students are introduced to the personal and professional requirements of future fields of work. Additionally, opportunities for student engagement are provided.

Successful implementation of Knowledge Atelier Wageningen University (196)

Ilse Markensteijn - Wageningen University

The participating schools get academic support in developing and furthering each individual pupil by considering their individual differences.

Last but not least, a benefit for the community is created by supporting the City of Mannheim in its goal to develop a manifold educational culture in order to foster educational justice.

Objectives and benefits:

- Enhancing and improving the academic programs, teachings, and research (Benefit for the university).
- Introducing the students to the personal and professional requirements of future fields of work and provide opportunities to engage (Benefit for the students).
- Support school teachers in developing /furthering each individual pupil by considering their individual differences (Benefit for the schools).
- Supporting the City of Mannheim in its goal to develop a manifold educational culture in order to foster educational justice. (Benefit for the community).

Since 2008, Wageningen University is one of the partners in the science shop Knowledge Atelier ('Kenniswerkplaats'). Knowledge Atelier is a regional collaboration between authorities, entrepreneurs, non-profit organisations, intermediate vocational institutes, applied universities. Wageningen University and research institutes in the Netherlands. The aim of Knowledge Atelier is 'community-based learning': all parties involved are learning and working together on regional issues in a durable setting. Through regular BSc and MSc courses, students of Wageningen University are taking part in these Knowledge Atelier communities. In 2013 the number of Knowledge Atelier projects in curricula of Wageningen University has grown substantially. For instance: in comparison to 2012 the amount of projects grew with 63 percent in 2013. The scope of the poster is to share the underlying conditions and experiences from incorporating Knowledge Atelier projects in the curricula of Wageningen University in the period 2008-2013. These conditions are based on literature study. experiences of communities of practices and semi-structured interviews with actors involved. One can conclude that the participation of Wageningen University in the Knowledge Ateliers corresponds with the idea of 'Science in Transition'. Initiators of 'Science in Transition' indicate that science has to be more appreciated by its societal added value: besides scientists societal actors also have to have an influence on the production of knowledge. In case of Knowledge Atelier students and teachers of Wageningen University contribute to society by providing theoretical knowledge. At the same time, the regional actors and other education institutes feed the students and teachers of the university with practical knowledge, in order to create new knowledge and societal added value together. When implementing the concept of Knowledge Atelier in multiple courses, Wageningen University is introducing the idea of 'Science in Transition' to its students. In the poster we consider this as an innovation and therefore we will analyse the introduction of Knowledge Atelier as an innovation project. In the poster we show that the successful development of Knowledge Atelier is a result of satisfying the needs that are necessary for such an innovation project to succeed. However the poster is also mentioning points of improvement and will focus on the requirements that are needed in the (early) future.

Farmer at school (49)

Esther Veen - Wageningen University

This presentation shares experiences of the project 'Farmer to School', mostly focusing on its strategy and learning experiences. This project was executed by Wageningen University researchers together with an intermediate vocational education (IVE) institution. Students of the programme Sport, Recreation and Tourism (3rd year, 17/18 years old) designed and executed workshops on food growing and preparation for primary school children of two schools in a deprived neighbourhood. This was part of the curriculum of the IVE students but the course was treated as a pilot. Experiences were used to build a website (http:// stadslandbouw.weebly.com/. in Dutch) informing primary schools. IVE institutions and the IVE students themselves. The website also advices on how to improve the course, for example by having the students work with students from other disciplines and by giving them more input in the design of the workshops. In the presentation we will elaborate on the strategy we used to create this course, and the learning experiences for both the IVE students and the primary school children. In order to think critically about the value of the course and how it can be changed for specific target groups (i.e. older students), we created a matrix containing all the different activities the IVE students were to carry out (i.e. planning workshops. buying supplies), and the learning goals to which these lead. The matrix is also used as a staring document for the IVE students. Most positive aspect of the course was that IVE students learned 'on the job', having to think through all steps of organising the workshops and experiencing how to work with children. As the students prepared workshops for two different schools, they could learn from mistakes made. For the primary school children – especially those with difficulties with theory – learning by doing was seen as very useful by their teachers. The workshops became part of the primary school curriculum in various ways, i.e. by writing about it. The website that was created is to enthuse IVE teachers, to advice IVE students and to serve as a medium to share experiences. That way, we would be able to learn from the different ways in which the course is executed. The difficulty now is how to advert the course and how to trigger IVE teachers to adjust it to their specific circumstances- and share their experiences for other schools to use.

And now to work! (55)

Saskia Visser - Science Shop University of Groningen

The problem with long distance co-operation is, that it's often not a real co-operation. International partners merely contribute something small to a locally performed plan, actions and results are unevenly distributed and funding criteria decide what is done. We think that it's essential to make a good start, where participants sit face to face and have their own questions, expertise and possibilities recognised in the plan for co-operation in an early stage. The LK-Conference provides an ideal opportunity for starting such co-operations. So what are you waiting for?

We will form 5 round tables all concerning a different topic.

- A. Informal care; How can it be organised? What are the effects on people and organisations?
- B. International exchange projects; Schools, local governments or organisations build partnerships, but what are the effects? How can these partnerships improve?
- C. Sustainable local energy; which questions face local groups working on sustainable energy and how can they help each other?
- D. The value of stories; how can stories (oral or written) be used and valued by different readers and listeners? What is the effect of cultural exchange of stories?
- E. Social innovation and cohesion; when (local) government funding is running low, how do we organize participation of communities to fill in the gaps? What kind of factors (like cohesion) support the social innovation needed to find answers for those challenging local demands?

Participants are asked to bring their own questions and idea's to the table. We will provide a recipe for brainstorming, discussion, reflection on the competences needed and a checklist of things to agree on and ensure further action.

Opportunities for funding possibilities on each topic are made available by the presenters, who will also play an active role in the discussions. The goal is to start new really co-operative international projects.

THURSDAY 10TH APRIL Session 5 - 15:20-16:35

Evaluating Your Science Shop PERARES Self-evaluation Workshop (140)

Padraig Murphy - Dublin City University

The co-authors present a workshop targeted towards emerging and established science shops, and the many different variants of science shop activity under the community—based research rubric, whether higher education institution-based, or other. A toolkit has been developed by the PERARES project for all partners, and particularly community-based research leaders, to perform validation measurement checks at four key stages of the science shop project design, and with room for feedback and process input.

The four stages are: 1) Checklist for early?stage evaluation; 2) Questionnaire for mid?point evaluation; 3.) Questionnaire for end?point evaluation; 4) Questionnaire for post?project evaluation. Workshop participants will, at a particular point, break into groups of expertise eg Higher Education Institution management, CSOs, science shop admin, academics etc.

The workshop facilitators will set tasks for each group to analyse selected existing workshop projects and report back to the main group. Target Audience • Science shop admin and/or academic staff • Researchers • CSOs • HEI staff

0 - 10 mins Introduction [full group] P Murphy

10 – 20 mins The theories of science / society evaluation [full group] Andrea Participants divide into their assigned groups [non-registered attendees are assigned at this stage by identifying their expertise] and review evaluation surveys 20- 40 mins PERARES evaluation – final results [full group] Henny and Diana S.

40–90mins Breakout session – groups assigned on the basis of area of expertise, with colour-code badges [breakout groups] P Murphy and Diana Groups are told to pick 3-4 projects from their combined experiences within their group one for each stage of evaluation ie start, mid-point, end, and post (if appropriate). Each group has a convenor. Each group will also: • Identify who is responsible for overseeing the evaluation for each project • Identify stakeholders and partners to be included in the

evaluation • Discuss the purpose and procedures of the evaluation with other group members and set out the scope and aims of the evaluation • Identify potential issues where evaluation results may not be universally welcomed • Clarify any differences in relation to the objectives of evaluation; any such differences should be dealt with openly

90~mins - 120~mins Groups re-assemble. Convenors report back [full group] Discuss and debate around contexts from each group experience based on barriers and solutions for community-based research projects. Feedback on using evaluation toolkit and recommendations. Outcomes and learning points for future evaluation recorded

A World Café on the outcomes of the CONSIDER Project: Discussing guidelines of CSO involvement in research projects (168)

Simon Pfersdorf - Institute for Technology Assessment and Systems Analysis

The involvement of CSOs in research poses challenges to the governance and structure of scientific projects. Research projects are complex in nature, both in terms of content and functionality, especially if you involve interdisciplinary groups from different cultural background. Adding non-scientific groups to a research project only complicates matters further. Previous literature tells us that the complexity of CSO participation is eased if research projects are structured according to one of four main objectives: 'influencing the scientific efficiency in research projects,'' solving CSO-related problems', 'providing social legitimacy to projects and outcomes' and 'improving technology development'.

This session is dedicated to analysing the guidelines and recommendations for CSOs, researchers, industry, policy makers and funders regarding the participation of CSOs in research projects. The guidelines are the result of the CONSIDER (Civil Society Organisations in Designing Research Governance) project which has been exploring the normative construction and empirical reality of CSOs' involvement in research governance. As a research project funded by the European Seventh Framework Programme (FP 7). EU activities provided the basis of the project. Over the course of two rounds, the project team surveyed all FP 7 projects and found general patterns of CSO participation in research. Having reviewed this quantitative data, the consortium selected 20 FP 7 and 10 non FP 7 projects for further qualitative analysis. We found deviating expectations regarding CSO participation in research. Several barriers and enablers came to light during the analysis, as well as the sheer variation in the collaboration processes between CSOs and researchers. These empirical insights provided a foundation for the development of guidelines and recommendations. Throughout this process, face-to-face conversations and online discussions with CSOs, researchers and industry have been extremely helpful.

This session at the Living Knowledge Conference focuses on the experiences and expectations of conference participants with regards to the recommendations and guidelines that CONSIDER has developed. The guidelines provide specific recommendations for each of the stakeholders – researchers, CSOs, policy makers, funders and industry. They are related to the overall process of a research project and beyond.

The Session

After a short introduction to the project, the participants will be divided randomly into four groups to work on four different tables. At each of the four tables, the groups will discuss one set of guidelines which relate to a specific stakeholder. They will change tables at regular intervals until they have reviewed all four of the guidelines. Moderators will be stationed at each table to inform the groups about the guidelines and highlight previous issues raised at their table. Once all the groups have discussed the guidelines for each of the four stakeholders, the moderators will come together and present the results of the discussions from their tables.

Civil society participation in science affects CSOs, industry, policy makers and researchers in different Oways. The workshop allows stakeholders to clarify their own needs and better understand the needs of other stakeholders involved. They are therefore essential to the development of civil society participation in research and innovation for a positive impact across society.

Forgotten citizens in research: How to include marginalised citizens, Civil Society Organisations (CSOs) and their beneficiaries in community based research (CBR)? (113)

Jozefien De Marrée - Vrije Universiteit Brussel

This session tries to offer an innovative format for researchers to formulate new research frameworks to work cooperatively with hidden and marginalized communities on sensitive topics

The PERARES project aims to strengthen public engagement in research by involving researchers and civil society organisations (CSOs) in the research process. Two PERARES pilots involved community based research with students, CSOs and science shop or mediating university based mechanisms in different European countries. Those pilots both targeted groups who are marginalized or at risk of marginalization, and were situated in two sensitive research domains, namely domestic violence and Roma rights. The Roma rights studies following a common research design were implemented independently in Ireland, Spain and Hungary. The domestic violence studies involved students, CSOs and institutions from the UK, Belgium and Norway, sharing a research question and method.

Both pilots showed that the context of working with civil society differs in every country, depending on national/local context characteristics and the topic within this context. But also, European societies cannot benefit from the contributions of all of their members if they are not also socially inclusive, and if the benefits of development are not experienced by disadvantaged social groups. By responding to the needs of minority groups, participatory action research and community-based research can help to strengthen the voice of the unheard, and articulate their concerns into research processes and public discourse. Nevertheless, this kind of research needs reflexive researchers, as well as important precautions and special attention in methodology to succeed. So, we aim to listen once again to CSOs and their beneficiaries, against a background of PERARES-experiences. Some suggestions:

How difficult or easy is it to cooperate as a CSO with university structure, academics and/or students? Is the outcome of a study helpful? Or does it only identify more underlying problems that need real policy changes and higher leverage? The issues faced during both pilots also showed the importance of reflecting on ethics, since

there may exist differences of interest between CSOs, academics and students. So: what kind of codes of conduct or guidelines are needed for science shop, participatory action research and community-based research projects, especially with potentially marginalized groups? How do we build up a relationship of trust? And: if CSOs initiate or inform research questions, what effect does that have on community-based participatory research? But also: we need to consider that CSOs may not stand for all citizens who belong to the study target group. Are citizens who are less engaged with CSOs then left out in studies? Can CSO questions for a university be said to represent concerns in society as a whole? And can CSOs really influence research? During a vivid and interactive roundtable we try to provide answers to these questions by, with and for civil society (organisations).

Partnership Education: Action Research & Learning Scenarios (PEARLS) – Community-based learning through empowered voices (95)

Peter Day - Community Media 4 Kenya, University of Brighton

This paper is co-authored by representatives of groups and Youth NGOs from marginalised communities in Kenya; students from the University of Brighton and an academic lecturer. It tells the story of a community media partnership through the voices and experiences of the collaborators. Founding partners of the network include the International Youth Council of Kenya; Faces for Peace; Focus Youth Initiative; K-Youth Media; a number of NGOs working in rural Kenya and the Community Media 4 Kenya (CM4K) students at the University of Brighton.

Now in its 4th year, CM4K started, in partnership with a group of former students – some of whom were Kenyan – who wanted to apply the principles and practices of community informatics learnt as part of their Media Studies degrees courses in Brighton (under- and post-grad) in Kenyan civil communities. The partnership with our former students started as an experiment, in community-based or service learning, in which students and community became the focus of a mutual knowledge and learning environment, in which community media tools, spaces and processes were developed and shared in order to empower local voices; support opportunities for socio-economic development; promote diversity and mutual cultural understanding between students and community.

Totally self-financing, Media Studies students raise the funds to finance the trip and ensure that their skills, knowledge, expertise and enthusiasm can make a difference each year by addressing the needs and aspirations of the community partners. In addition to this knowledge exchange, students also engage in fund raising and proposal writing in order to equip the training workshops and leave equipment behind to ensure that the trainers, we have trained, can continue both the training and the community media activities after the UK contingent of CM4K departs. Students are also currently planning fundraising events that will support connection to the electricity grid for a partner school in a remote rural area.

Participants from marginalised communities; NGOs representing disenfranchised youth; women's groups; farmer's groups; etc. in Kenya are identified by CM4K's Kenyan partners. This year for example, International Youth Council of Kenya, in co-

operation with the UN Volunteers, the Government's new Youth Enterprise Fund and Rongo University College in dialogue with the University of Brighton drew up a programme for capacity building workshops and discussions in Nairobi, the rural community of Rongo and the very remote community of Nyandiwa on Lake Victoria with whom we are collaborating with in establishing a community media centre. Invitations to participate are generated through local community, policy and civil society networks. Participating communities gain from the participatory, learning (community media) workshops through the acquisition or improvement of practical media skill. The PLW approach facilitates and encourages: collaborative inter and intra community dialogues; learning by doing; active project planning and implementation; experience in knowledge sharing; confidence and capacity building; self-expression and community voice; the articulation of community needs and; finding local solutions to these needs.

Drawing on experiential learning the PEARLS approach requires students to engage with partners to map assets and identify needs; assess how assets might be used to address needs; plan and develop all aspects of the partnership activities; create and test the interventions in the field; and reflect critically in dialogue at each stage. To date, much of the CM4K work has been geared toward assessing the capability of students and community partners collaborating with limited finances and resources. However, the interest among community partners has been compelling enough for the University of Brighton to formalise the fieldtrip into the UG curriculum.

After a critical discussion of the methodological challenges, the paper outlines a number of exciting partnership developments currently under discussion and concludes with the argument that even in difficult economic climates it is possible for HE institutions to: 1) shape the competencies and career prospects of students and community partners alike; 2) make themselves more accessible to communities and civil society; 3) support and sustain community development activities; 4) stimulate both community-based and community learning; and 5) incorporate exciting curricular developments that contribute to mutual knowledge sharing development and learning.

Crossing Regions in Pursuit of CBPR Knowledge & Practice: A Review and Analysis (51)

Khan Rahi - Loka, Canadian Community-Based Reseach Network Fabien Paiasecki - Sciencescitoyennes

Community-based participatory research (CBPR) is a method whereby the tools and organization are provided to assist communities in posing questions, identifying a research agenda, gather data, uncover "hidden-transcripts", and recognize the community strengths and assets in order to articulate the depth of research questions with a greater degree of authenticity and clarity (Meredith Minkler and Trevor Hancock, 2003). In our view, CBPR plays a pivotal role in uniquely engaging researchers, civil society organizations (CSOs), and community members as equal partners in every aspects including: defining the research topic and questions, developing the methodological design; data collection, analysis and interpretation and, dissemination strategies; and application of results.

However, from the presentations and the discussions that followed at a workshop we organized at the 3rd World Forum on Science and Democracy (Tunis, March 2013), we learned that local and regional CBPR practices, point out to serious limitations of specificity and transferability of community-based research for broader application. This forum confirmed our understanding of the necessity of developing methods to facilitate mutual sharing to increase our knowledge across regions and disciplines and to deal with the pitfalls of transferability, including lack of recognition of non-Western CBPR practices, insufficient capacity building and training competencies, increasing the size and scope of civil society participants and the lack of longer term funding to go beyond the project treadmills, inherent in most of CPBR practices.

Further, the forum informed us about access to capacity building to develop governance and to translate knowledge to achieve effects in policy matters beyond the specificity of the local context across regions.

This presentation provides a forum for discussion and analysis of the dynamics of the local and regional specificity of CBPR. We will encourage the participants to identify what CBPR means to share their dissemination of results from their practices to support the translation of knowledge and action beyond their cultural practices and regions.

The presentation will feature a few local and regional CBPR cases based on the wide ranging discussion we organized in Tunis (2013). It will focus on the experience gained in Senegal, Kenya, the USA, Brazil, France and Canada.

Guiding question: Is the local and regional specificity of CBPR too narrow to provide a generic basis for wider dissemination and, if so, what challenges should be overcome to support CBPR knowledge production and capacity building practices across regions?

Moving from volunteering to curriculum-based collaboration – Wells for Zoe and Dublin Institute of Technology (112)

Catherine Bates - Dublin Institute of Technology

We will present the story of how interaction through volunteering between an NGO and a Higher Education Institution (HEI) can lead to curriculum-based interaction and community-based research, so that others can learn from our experiences. Wells for Zoe was established in 2005 by a retired Irish couple. Mary and John Covne, primarily to build and install pumps to provide clean water to communities in rural Malawi. Since then the charity has grown, and has become involved in early childhood education, teacher training, test farming, local manufacturing, and community development activities. The earliest interaction between Dublin Institute of Technology (DIT) and Wells for Zoe was in the form of volunteering, as some students spent holiday time volunteering in Malawi helping to dig wells and install and maintain pumps. One DIT Business student worked in Malawi with the charity in 2009 for his work placement module, and then introduced the Covnes to the staff in DIT's Programme for Students Learning With Communities (SLWC). who support community-based research and community-based learning in DIT. Following an initial meeting to explore ideas and research questions from Wells for Zoe. SLWC staff disseminated these ideas to interested lecturers and students. with the result that DIT students from many disciplines have now been involved in curriculum-based projects with Wells for Zoe, and continue to be. These have ranged from digital marketing projects by Marketing students, to pump design projects by Manufacturing and Design Engineering students, and students in Chemistry and Computing have also undertaken work placements doing participatory action research in Malawi. Due to her extensive experience on these projects. Mary Covne is now on the Advisory Board for DIT's Programme for Students Learning With Communities, where she offers support and advice on policy and practice development to DIT staff in the area of curriculum-based community engagement. The story of this developing interaction will be of interest to Higher Education staff and Civil Society Organisations who wish to replicate this mutually beneficial model, and we will conclude by sharing the learning from our ongoing collaboration, particularly how this could be of benefit to other HEIs and community partners.

Using 5Win strategies to build strong community- university partnerships (115)

Building the University of the Village: connecting universities and rural communities in the age of network cultures (118)

James Cook - University of North Carolina at Charlotte

Magda Tyzlik-Carver & Michael Wilson - Falmouth University, UK

Universities have often been "ivory towers" that advance knowledge that is not particularly useful to or applicable within the communities in which they reside. Moreover, universities vary considerably in the values and strategies they adopt in relation to their communities and, in particular, in the degree to which they prioritize serving the community and promoting civil society. One common strategy has been to foster "engaged scholarship" through partnerships with businesses to advance the economic wellbeing of communities and the university. A second increasingly common strategy has been support of "translational research", intended to help community institutions and organizations better use basic research and knowledge created by universities. Both of these strategies can disempower members of civil society, since they either focus on business interests and economic interests of universities, and/or assume that universities are the creators and/or owners of knowledge that they then choose to "share" with communities. This presentation focuses on one key alternative; direct partnerships between universities and local organizations that can engage one another as equal partners to support broader civic engagement among students and citizens, and co-learning and knowledge sharing within a community based participatory research framework. These partnerships can be facilitated by university structures, but can also exist without dedicated university support, when faculty and community organizations develop win-win-win-win (5win) interactions, in which the organization, civil society. faculty, students and universities all benefit. These types of partnerships often must rely on the ongoing social capital of the individual participants, and many university faculty do not have the skills needed to develop and maintain partnerships. Partners must find ways to support one another in the absence of any tangible benefits. and learn to serve as "critical friends" in a climate of trust. Faculty or NGOs can initiate these partnerships, and universities and community foundations can provide support to sustain these partnerships. Several long-term partnerships (across different systems, including child welfare, early childhood education, and mental health.), each with 5win strategies included in the relationship, are described. In addition, particular strategies are suggested for non-governmental organizations (NGOs) and local organizations to develop strong relationships with universities, for the benefit of the organizations and for the broader benefit of society.

With the rise and availability of massive open online courses (MOOCs), the information technology revolution seems to have finally caught up with the ivory towers of the academy. Institutions such as MIT and Stanford offer online courses, in collaboration with edX and Coursera, for which everyone can enrol to study one of the many subjects offered in their growing portfolio. Taking advantage of the availability of existing web-based technologies, universities are able to reach out to the general public through streamed and online educational material in the shape of lectures, seminars and other media presentations. This has opened the possibility for universities to upscale their delivery and to reach diverse and non-traditional students in large numbers.

However, MOOCs are not without their critics. It has been argued that the MOOC is essentially a scaled-up version of the model which universities have always practised and as such they are not, in and of themselves, a radical rethinking of the pedagogical models in Higher Education (Daniel, 2012; Riddle, 2012; Sharma, 2013; Bady, 2013; Hill and Waters, 2014). It can be argued that the MOOC model is driven by economic factors (and specifically economies of scale), rather than a desire to explore how new technologies might lead to innovation in teaching and help us reimagine the relationship between universities and community-based learners.

There are, however, examples of different approaches to teaching with online technologies, which actively make use of the collaborative and networked features of these technologies. One example of such an approach is the Distributed Online Collaborative Course initiated by FemTechNet, which involves instructors from fifteen North American universities and colleges which offer NODAL courses to their students (Balsamo et al., n.d.).

This paper introduces the case study of 'The University of the Village', a pilot project funded under the Arts and Humanities Research Council's Connected Communities Programme in 2011 and 2012. The project investigates how superfast broadband capabilities can help universities to re-engage with rural communities through codesigned learning programmes that draw upon the resources of the community and

A New Breed of Innovators: Reflections from Practice and Implications for Research and Higher Education (119)

Maria Angela Ferrario - Lancaster University

turn the village itself into its own networked university campus. The focus has been on connecting with communities and groups of learners rather than just individuals. The 'University of the Village' promotes a blend of tools and environments in which learning takes place and recognises that expertise is distributed among the participants who engage together in learning situations and create and share knowledge. This paper will focus on the role universities perform in facilitating and supporting rural communities of learners through such pedagogical approaches.

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This paper reflects on the implications that working in partnership with hard-toreach communities, charities, the public sector and local businesses have on digital innovation research and education. These reflections emerge from Catalyst and HighWire Doctoral Training Centre interdisciplinary [2] and participatory innovation research [9] which aims 'to understand and find solutions to real problems'. We argue that a radically new breed of community-academic innovators is emerging which strives for meaningful and mindful research [11] with human values at its core [10]. These innovators are scholars as well as practitioners who are acutely aware of the global challenges of unsustainable economic models, climate change and the inadequacy of current governance structures to tackle both [1]. Against this complex and deeply connected context, our strategy is to get on with it by taking small but well paced steps [5], learning by doing and reflecting through practice [8]. Through our work, we indentify three immediate challenges to innovation research and turn them into the following objectives: engage in deep civic-actions at all levels of society including not only the hard-to-reach but also the hardly-reached (i.e. policy makers): foster an interdisciplinary academic-mindset which understands both the strengths and the limitations of specialism: sustain radical innovation outside the short-termism of the current funding structures. Our contribution is a reflective journey through examples on how these challenges are being addressed by i.e. adopting new learning practices [3] and reflecting on the ethical implications [4] of the innovation that we make [6]. This paper has emerged from the collaboration and conversations with academics, activists, students, charity volunteers and public sector staff. Academics include experts in distributed computing, software engineering, forecasting, environmental sciences, creative media, game design , product innovation and citizen science. Above all it! has been inspired by the passionate and visionary work of radically new voices which engage with youth and the hard-to-reach, foster new ethical trading practices, action on environmental sustainability, investigate the values of digital innovation [7] and unveils the challenges of paradigm-shifting research

The development of a model for collaborative learning between urban researchers and urban planners (93)

The possible roles of experts in local development – towards participatory action research (130)

Magnus Johansson - Malmö University

Zoltan Bajomacy University of Szeged @ CRS Association

Today, there is a common understanding that universities and the stakeholders in the society need to collaborate in order to handle big societal challenges. Sometimes this is mention as a need of developing mode 2-knowledge. Other times it is describe as a need of developing triple helix processes. A general problem for these kinds of collaborations is different needs of knowledge and different conditions for knowledge production. University knowledge are mainly general and focal, are disseminated mainly through text. Knowledge among stakeholders outside the university, like citizens or professionals, is situated and tacit, and is mainly disseminate through practice.

The aim with the paper is two-fold. First, we would like to describe a model for knowledge development between urban researchers and professional public planners. The model was developed by a group of urban planners together with the authors of the paper, who were engaged as on-going evaluators of an urban regeneration project. The aim with the model was to summarize their personal experience of working with collaborative urban planning. The model could therefore be seen as a way for those urban planners to conceptualize their personal experience of an urban developmental project, with the help of urban researchers. During the work with the model, we need to handle the tension between theoretical knowledge versus tacit personal knowledge. How could we as researcher support the transformation of tacit knowledge into a more general model based on focal knowledge?

Based on this experience, we take a step back in the second part of the paper, and try to understand the process which leads to the development of the model. Here we will use this process as a way to illustrate what we see as the main challenge in university – society interaction: different needs of knowledge, and different ways to develop knowledge. We will argue that collaboration between university and the society, irrespective of which stakeholders is included in the collaboration, must handle the tensions between different conditions for knowledge production within the academia and outside it. Our way of working is one way to this.

The participation of citizens and laypersons are increasingly discussed issues in the local development literature. In spite of the shift (at least rhetorically) towards public participation, experts still play a vital role in local development decision making processes.

Present paper attempts to classify the possible roles of experts alongside two dimensions: the construction of the "valid knowledge" and the construction of the "collective will". Today, the former is characteristically the monopoly of experts (backed up by scientific methods), while the latter is the monopoly of delegates. Therefore in local development inhabitants are divided into experts versus laypersons, and delegates versus ordinary citizens. Accordingly, most of the people affected by local development are laypersons and citizens.

The paper argues that under the circumstances of radical uncertainty both the deficits of representative democracy, and the monopoly of experts to produce valid knowledge might be challenged. We conclude that experts have an important role in sustaining or overcoming either one or both of these delegations. Participatory action research (PAR) may be a useful approach to overcome this double divide.

In our paper we present a case study which shows how PAR might be able to overcome the aforementioned double divide. In the last three years researchers, social activists, local Roma leaders and Roma families living in segregates in Szeged (Hungary) have been working together in a PAR process to overcome problems of social integration. The cooperative work is action-oriented and manifold; embraces activities from health issues. through education, to political activism.

On the basis of our experience, PAR, on the one hand, enables a meaningful knowledge exchange and mutual learning among experts and laypersons in an enduring process of cooperative work. On the other hand, the political (activist) element of PAR provides an opportunity to push local political processes towards a more participatory direction. And last but not least, the empowerment component of PAR helps unheard social groups to become able to participate in local political processes. Our conclusion is that a meaningful PAR process is a potentially useful tool to overcome the double divide of conventional local development.

Revisionary Civics, Reciprocal Relations: Developing a Co-Creative Class (131)

Communication and Collaboration: The Development of a Social Care Partnership Network (135)

Len Findlay & Isobel Findlay - University of Saskatchewan

Victoria Morris - Manchester Metropolitan University

Revisionary Civics, Reciprocal Relations: Developing a Co-Creative Class In recent years, thanks to Richard Florida and others, there has been concerted investigation of and debate about "creative classes" and the kind of amenities they expect and utilize in the urban settings where they pursue their careers. This debate, and the policies deriving from it, exude a cosmopolitan elitism and consumerism which needs to be countered by the notion of co-creativity so aptly foregrounded by the Living Knowledge Conference 2014. To this end, we will look at the university/civil society interface through the lens of co-creativity while drawing on our experience directing two research centres in our home university in Canada. One of us has for more than twenty years directed the Humanities Research Unit at the University of Saskatchewan, moving that entity from elite aloofness to public programming engaged with and receptive to multiple communities 'outside' the University. The co-presenter directs the Community-University Institute for Social Research which has a rich. 14-year history of outreach, engagement, and respectful partnering with local groups, especially First Nations and Métis organizations, working together on issues of poverty, housing and homelessness, quality of life, social economy, and sustainability. We are both active also in our Centre for the Study of Co-operatives. and in an Indigenous Humanities initiative. From complementary vantages we show how co-creativity makes more supple and innovative the key but often tokenist or rigid notion of civil society. The humanities in Canada face a crisis of confidence and credit, and the challenge to make themselves "socially relevant," while the social sciences are urged to partner with industry to enhance their utility in policy and other domains. Their difficulty is deciding where to start dealing with pervasive societal challenges in a country that allegedly survived the global financial crisis better than any other, and how to do so without using communities simply as sources of data and academic advancement. By pooling our experience, and using concrete examples of initiatives and events that have built trust through the redistribution of intellectual authority and modest resources, we will show how to replenish the notion and revitalize the practices of civil society. Co-creation can result in Human Sciences 'shops' and 'shopping' where intellectual and social capital circulate in new ways.

In my capacity as Placement Coordinator for students enrolled on the BA (Hons) Social Care Degree I am committed to the University's public engagement strategy. As such a Social Care Partnership Network has recently been established to foster and develop links with local voluntary and community organisations in the social care sector. In May 2013, we invited our placement provider colleagues to an inaugural event to kick start this which was highly successful. The intention, to create a sustainable partnership which will provide a key point of contact, enable organisations to develop ideas into projects, source funding, and develop collaborative networks.

The aim of the event was to ensure the organisations we work with are key in developing this partnership. During the event we gathered information about their challenges and constraints, project ideas, funding issues, training and research needs.

Predictably, the most pressing issue facing our social care colleagues is how to sustain their services during these austere times especially given recent welfare reform. Sustaining high levels of training when under such financial constraints is also a real issue.

When discussing ideas for alliance, we and the partners unanimously acknowledged that we can learn so much from each other. All were keen to explore ideas such as collaborative funding bids and joint research projects. We also discussed how we can work together to improve students' employability within this growing field.

Regardless of the activity, the sole purpose remains the same; to share our knowledge and expertise for our mutual benefit and, for the benefit of the future social care workforce. We have agreed to hold a network meeting every quarter, with a mixed programme of social and academic events.

In July last year we began with some complimentary Equalities and Diversity training. In September, we held a 'fair' to which we invited the partners in to meet our students and talk to them about their organisations. In January this year an esteemed visiting speaker delivered an insightful and motivating talk about values

Community-Led Collaboration for Real Outcomes (136)

Randy Stoecker - University of Wisconsin Brian Christens - University of Wisconsin

and culture within the social care sector

From the network we have now recruited a smaller steering panel who, with us will guide the partnership into the future. Currently, the members of this panel are currently working with us on curriculum development. The Department of Social Care recognises that the field of social care provision is forever evolving and we acknowledge that the best people to inform us of these changes are those who are experiencing them first- hand. By listening to them, we can in turn seek to educate our students most appropriately.

This presentation will follow the journey from the beginning to the present. It will recall the work undertaken over the past nine months with our partner agencies, and share our plans for the coming months.

How do higher education faculty and students collaborate with actual communities. compared to service organizations? Most cases of "community-based research" are more likely to have as their partners formal nonprofit organizations, government agencies, schools, and other organizations that are neither controlled by nor truly represent community members. Thus, the projects they do are more likely to support service activities rather than community development activities where grassroots community members lead the collaboration and build grassroots power. We will describe a collaboration between two professors, a public health nurse from Public Health Madison Dane County (PHMDC), and the grassroots group SouthWest Madison Community Organizers (SWMCO)--an organization representing residents and resident organizations across five neighborhoods in southwest Madison. Together we wrote a successful proposal for an internal University of Wisconsin-Madison grant to support further organization building among youth and adults in a specific underserved neighborhood in southwest Madison. In one case, a group of residents came together around a vision to convert a vacant duplex into a community center or "neighborhood house." SWMCO, the PHMDC nurse. and students from two courses taught by one of the professors provided organizing and research support that empowered residents to build their leadership and organizational capacity and convince the city government to buy the property for a community center. In another case, a graduate assistant hired through the grant organized and empowered youth groups to build their leadership and organizational capacity and work on community issues. Thus, the project achieved concrete community development results and built the capacity of grassroots residents to advocate for themselves. We will discuss what is required on the university side of such a relationship in order for faculty and graduate students to freely follow the community's lead, as well as build the community's capacity to lead, and how we are using our experience as a model for continued work in this neighborhood and others

Empowering Ability - the inscription of independency in assistive technologies (48)

Hanne Lindedgaard - DIST, Aalborg University Søsser Brodersen - DIST, Aalborg University

In the Scandinavia disabled and elderly citizens are entitled to receive domiciliary care from the municipality. Meaning, that assistive technologies are available to assist the disabled person to stay or become more self-sufficient in their home. But the dilemma is that the assistive technologies are designed for institutional settings such as hospitals and nursing homes, and this causes some citizens to reject the artefacts due to their stigmatizing scripts that often do not fit their personality or into their home. Thus, when sought implemented into private homes conflicts raises, since these institutional assistive technologies in most cases are not designed for multiple users (Brodersen & Lindegaard, 2013). In this article, we examine the private home and how continual optimization of professional healthcare practices involving assistive technologies often collides with the disabled's expectations and practices. This concerns both the number of technologies, the 'functionality' inscripted and how the design (visual, style, semiotic) influences whether the home feels homey or not. The notion of script (Akrich, 1992) conceptualizes that some assistive technologies are designed to assist the caregivers in their work (often in an institutional setting), while others are designed to assist disabled persons. This means that designers has not only in-scripted the user but also the whole network. including workspace, safety, longevity, etc. Oudshoorn et al. (2005) draw attention to the fact that artifacts are not neutral actors in the socio-material configurations: they are active and worth examining in a symmetric analysis of human and nonhuman actors. When assistive technologies designed for institutions enter the home, the everyday practices of disabled persons and their relatives change in interaction with both the institutionalized artefacts and with the multiple actors involved in domiciliary care. But is it possible to design assistive technologies that include disabled persons wishes for being more independent? How can disabled persons find the artefacts attractive to such an extent that they will include them into their everyday life? Based on ethnographic research, the article discusses these dilemmas and illustrates how a family succeeded in rebuilding their house to accommodate their daughter's disability without turning the home into an institution. The authors further introduce a group of patients with Chronic Obstructive Pulmonary Disease. who was fighting with the ability to move their oxygen, so they could participate in the social activities outside their home. They were not satisfied to stay dependent

of help from others or stationary artefacts. Through an emphasis on scripts and domestication, the article illustrate how relations are developed – or not developed – between the disabled person, the relatives and the non-human artefacts. Assistive devices are not just assistive 'products' that can be distributed from a municipality, but non-human actors that play an active part in what Latour (1999) calls a sociomaterial assemblies. A tendency within private home decorations tends to be to predesign the home to accommodate future disabilities (adjustable sinks and toilets). In this trend the 'assistive' technologies are in-scripted and kept in a style of private homes. Our argument is that designing assistive technologies needs to consider both the scripts of the technology but also that domestication of assistive technologies is influenced by the meaning of things and their materiality.

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A Participatory Action Research Approach to Developing Assistive Technologies for People Suffering from Cognitive Disorders (46)

Assistive Technology: a golden opportunity to build a sustainable user-centred design community (42)

Daniel Einarson - Kristianstad University Diana Saplacan - Kristianstad University

Siobhan Long - Enable Ireland Bernard Timmins - Dublin Institute of Technology

Cognitive disorders, such as disorders on the autistic spectrum. Downs's syndrome. etc. often imply significant constraints on communication between persons suffering from those, and the environment where they act. Meanwhile, governmental propositions on human rights emphasize equality concerning information. where overcoming such interaction challenges should be considered as strongly encouraged. This contribution discusses studies that have been performed towards municipalities, public institutions, and non-profit organizations, in southern Sweden. The studies aim to involve users throughout the development of an innovative concept of communication assistive software technology, by involving multiple types of users, such as: persons with disabilities, personal assistants, teachers for students with special needs, academics, and others. The studies and the resulted findings are discussed in regard to the participatory action research framework.

Kevwords

eHealth, Action Research (AR), Participatory Action Research (PAR), People with Communication Disabilities, Multiple types of users, Communication Assistive Software Technology (CAST)

Dublin Institute of Technology and Enable Ireland, a national disability service provider established a partnership in 2007 which focused on building undergraduate Product Design student awareness of the needs of users with disabilities. The approaches used to promote user/student engagement included; focus groups. individual mentoring of students by experienced AT users and design workshops. This academic activity starts with 4th year students of DIT's Product Design programme discussing AT devices with users and finishes with students presenting and discussing their concepts with AT users. Student assessment of all learning outcomes is achieved through continual assessment. Students are asked to create a concept AT device and report. The report brief asks the student to address typical AT device user concerns such as cost, support, aesthetics, texture, and an understanding of the personnel challenges of the target AT user. Students are encouraged to contact and/or visit the Enable Ireland AT service at any time to seek feedback. From these modest foundations, a multi-layered approach has been adopted to promoting user-centred design. This has entailed a number of interwoven elements including: Assistive Technology users presenting to undergraduate students as part of their third year Medical Design module: the development of a Community Design Challenge competition wherein users and diverse students collaborate on specific design ideas, generated by the user, based on his/her experience of previous technologies, as well as on barriers to participation experienced in daily life; a doctoral research project focusing on the development of a design framework for user-centred collaboration through the creation of an alternative computer input device, and the launch of a blog; www.userdrivendesign.org, the aim of which is to bring users, designers, manufacturers and funders together to create innovative solutions to address issues of social exclusion. The discussion will include consideration of the ethical challenges of user engagement in a meaningful way, facilitating ongoing contact between users and design students, promoting shared ownership with manufacturers and industry and a report of some of the outcomes for AT users themselves. These will include consideration of enhanced personal goals as reported by AT users/participants in this initiative. Next steps in this evolving partnership will also be considered, as well as opportunities to expand partnership activities beyond the realm of Assistive Technology.

In the making: How to enrol vulnerable actors in co-design – 1:1 mock-ups as intermediaries or boundary objects? (43)

Hanne Lindedgaard - DIST Aalborg University Signe Pedersen - DIST Aalborg University

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'In the making' How to enrol vulnerable actors in co-design – 1:1 mock-ups as intermediaries or boundary objects? By Hanne Lindegaard & Signe Pedersen. Center for Design, Innovation and Sustainable Transitions, Aalborg University Copenhagen, Denmark How is it possible to enrol and engage local citizens and social vulnerable groups in design processes? How do we stage the enrolment and mobilize knowledge sharing processes?. And to who's benefit, the designers or the vulnerable actors? In the paper we present and analyse different design experiments engaging and facilitating dialog processes with vulnerable actors such as drug users and children with disabilities. In the experiments the designers use 1:1 mock-ups in the process and we discuss if these 'objects' are acting as boundary objects for dialogue or if they mediate translations (Latour 2005). The use of tangible mock-ups (Brandt 2007) helps the designers in the dialogue and knowledge sharing process with users. Knowledge can be shared and inscribed into the concepts based on the outcome of the process of using mock-ups as three-dimensional boundary objects or intermediaries. With inspiration from the theoretical concepts of mediators vs. intermediaries (Latour 2005) and Callon's (1991) four phases of translations: Problematization, Interessement, Enrolment and Mobilization (Callon 1991) the paper unfolds how theoretical analysis, field studies and co-design activities are helping the designers to give voice to less privileged groups. In the paper takes it empirical outset in two cases: Case 1: Mobilizing enjoyable therapy: In this case the design team wanted to enrol children with disabilities who ride ponies as a therapy activity. The aim of the therapy was to improve balance, co-ordination and reducing spasms, but the research and field studies (observations and interviews) showed that neither the helpers or the children had joy or were motivated by the therapy. The sole focus on 'therapy' didn't motivate the disabled children. During development of different concepts and the use of 1:1 mock-ups the designers engaged the children, the helpers, the parents and the physical therapist, Case 2: Enrolment of different citizens 'On location': In this case a local CSO (Civil Society Organization) and social workers wanted to help drug addicts who were injecting drugs in the streets in an urban area. The idea was to try to find solutions for a 'safer place' for the drug users but also for the citizens living in the area. The enrolment 'on location' was at the beginning a Plan B strategy but seemed to be a method

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where the design team actually went from observing the users (user-centred design) to engaging the user (participatory design). The design team involved the drug addicts as well as the local CSO at an early stage in the design phase and gave, with help from the mock-up, voices and engagement to the vulnerable.

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Lense- learning enduring society engagement (98)

Wilhelm Bauhus & Nadine Ogonek Westfälische Wilhelms-Universität Münster

The Lense: What is it all about?

The Lense is exactly what its letters stands for, namely a concept with which pupils and students can experience and learn how to engage with their surrounding society in a sustainable way. It is a service learning concept that was developed by the Arbeitsstelle Forschungstransfer (AFO), the innovation office of Münster University and is being implemented by one of its divisions, the Expedition Münsterland, which aims at bringing science to the people. Thereby it deliberately does not limit itself to the city of Münster, but communicates scientific events where they actually happen(ed), which is oftentimes in the barely known urban hinterland of Münster. Three objectives are pursued by this approach: On the one hand to arouse interest in science by delivering it in an appealing way right to the people, to overcome the seeming distance and indifference of the university for its surrounding area, which the university often is reproached with and thirdly by bringing the students into the region, to show them that there are more attractive places to stay than just the city of Münster.

The Lense targets integrating social and responsible teaching and learning experiences in universities and schools as an integral part of the curriculum. Pupils and students train their social competencies by reacting to real existing challenges or problems within their community. The Lense is being implemented in close cooperation between school/university and regional partners. Pupils and students become aware of their surrounding region and can assume responsibility for it. Like this, students and particularly pupils working in Lense-projects get the feeling of having done something really interesting, which at the same time serves the community.

There are two primary target groups, i.e. pupils and students. Only the involvement of both groups makes this concept as successful as unique. The Lense succeeds in activating both groups in such a way, that their dedication and commitment are a lot higher than when executing theoretical tasks, since all the Lense topics come from the direct social reality of the students' and pupils' private lives and they get the chance to make a difference in every respect when getting involved in a Lense

project. Until now only senior classes of secondary schools participated in these kind of projects, but an expansion to other school types, like primary schools e.g. has already been discussed and is planned for the near future.

Sustainability is not only guaranteed through anchoring the Lense in the school curricula but also by enabling continuing education in a variety of sectors ranging from ecological and social to entrepreneurial and historical topics, that it always remains up to date and true to the experiences and environment of the children.

Not only university teachers are included, but it is intentionally the students' expertise, which will be relied on, since this means a twofold advantage: The societal engagement as objective of the service learning is being achieved through the social commitment in the education sector on the part of the students. On the other hand, pupils support actively research activities through their participation, which is not only rising the pupils' motivation and arouses interest, but also delivers new results on research questions.

Especially through the integration of students in the on-site activities as e.g. student assistants, within trainings, courses or a final project, a win-win-situation for the promotion of young skilled staff can be achieved for the region. The students hold another kind of credibility than within the traditional teacher — pupil relationship. Students act from their point of view and convey their own motivation and interest in the subject on to the pupils. Furthermore, early contacts are being created towards the university and potential future employers. This reduces thresholds, too.

To give an example of such a cooperation: During one project, a school class rediscovered an old moat system that once most probably belonged to a huge historic building that has disappeared unnoticed over time. Before the pupils' work, only aerial photos and the repeated discovery of a special kind of stone suggested the existence of such a complex, but it could not be proven until then. Guided and instructed by geoinformatics students and a geology and geoinformatics professor

Success factors of health promoting social innovations by a community-based learning course (3)

of Münster University they were able to retrace the old system and also delivered valuable results for a local regional authority, the LWL, who themselves would not have had the resources to do this research on their own. The pupils did not only do the field work, but also communicated their progress via a self-created homepage to the outside world. All their findings were then presented publicly at the end of the project. Only this 'special' cooperation led to the desired success. That is why the project payed off for all involved parties. The pupils learned a lot and were very committed, also beyond the actual assignment, because they got the feeling of being an equal member of a research team. The students were able to adopt their previously, within their studies, acquired knowledge, and to act as guides for the

pupils. And last but not least, science was actively exercised and new findings could

The Lense enables schools to discover exciting places together with science, to examine them in closer detail, to research them together with scientists and to present the results in public. Especially this last point has already proven to be very crucial, since it boosts the pupils' self-confidence and increases their willingness to participate in further projects of that kind. Social engagement is thus being practiced and strengthened in an environment, which the pupils are familiar with, i.e. their concrete neighborhood. This leads to further discoveries of the bordering region. Schools normally operate independently and very close to what is provided in the curriculum by the respective state. Extracurricular cooperations are thus very rare. Especially cooperations with universities, where pupils can become a vital part in (parts of) the research are normally out of reach or not even thought of.

Gerda Wink - Wink Works on Health Promotion Gerda Casimir - Wageningen University Margriet Goris - Foundation OtherWise

This is the success story of a community-based learning (CBL) course addressing the concerns of the international community of students and staff of Wageningen University and Research Centre (WUR). A joint effort of this community, WUR and social entrepreneurs resulted in positive actions (social innovations) for this community: an informative website and film about the available healthcare, explaining cultural differences.

During the WUR introduction days, this film is shown to newly arrived students (approximately 400 in August 2013). The film is embedded in the websites of WUR and the WUR attached General Practitioner. At 8-2-2014 the film had 1.554 views on YouTube.

At WUR every year over 150 teams execute a 'real-life' project in the CBL course 'Academic Consultancy Training' (ACT). In this course advanced Master students execute assignments commissioned by external commissioners in multidisciplinary and multicultural teams (Scheepers et al., 2012).

What can be learned from this particular case of CBL that successfully resulted in social innovations?

The following factors contributed to the results of this ACT project:

1) Collaboration and/or involvement of stakeholders in the different steps, before, during and after the ACT project 2) Every step fitted within an interest or existing initiative of involved stakeholders 3) The ACT team made the stories of international students about health care explicit 4) The stories reached the WUR board 5) The ACT team proposed constructive recommendations which supported follow up action 6) The social action-oriented commissioner with network enabled follow up action 7) The commissioner discussed sensitive issues. Leeuwis and Aarts (2011) argue that three processes deserve particular attention in order to support innovation. These are network building, supporting social learning and dealing with dynamics of power and conflict. The listed factors are in line with these three processes.

be safeguarded.

Health services and informal carers – does web-based training contribute to staff members' capacity for collaboration with informal carers? (78)

Anne Norheim & Helene Hanssen -University of Stavanger

Lessons learned for the selection and guidance of future course projects:

1) This case confirms the importance of attention for stakeholder involvement in the projects 2) Projects in which stories of a community are made explicit, can be powerful in raising concern for this community 3) Importance of formulation of constructive action-oriented recommendations 4) Probe potential commissioners about how they expect they will use the results, how society will benefit e.g. how results will be shared.

Introduction

An important goal of recent national health policy in Norway has been for informal carers (next of kin/relatives) to become active and visible partners in the health services. However, research has revealed that informal carers still experience health services as closed and unreceptive rather than collaborative. As a result, the national Directorate of Health financed a web-based training programme for health professionals in order to strengthen their capacity for collaboration with informal carers. The programme is based on principles of problem-based learning (PBL) with short case presentations, e-lectures, exercises and questions for discussion. The training programme was introduced in spring 2012.

This presentation is based on a study focusing on the introduction and follow-up of the training programme in four organizations; one home-based health care service, one nursing home and two health and social service agencies. The study was conducted during 2012 and 2013.

Aim

The aim of the study was to obtain knowledge about whether the introduction of a web-based training programme influenced health and social workers' attitudes to and practices towards informal carers.

Methods

The methods are inspired by the study of complex interventions and for this reason a mixed methods design was used; a questionnaire was distributed to all staff prior to as well as five months after the introduction of the training programme, in addition to focus group interviews with a sample of staff members from two of the organizations involved, individual interviews with those who introduced the programme and the managers of the organizations involved.

The quantitative data were analysed statistically (SPSS), while the qualitative data were analysed by means of content analysis. Two researchers analysed the text independently, and this was regarded as a cross-validation of the coding process.

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Results

The introduction of the training programme was quite similar in the four organizations, but the follow-up differed, depending on management involvement and monitoring related to different management style. In organizations where the programme was structured, supported by management and formed part of on-the-job training, it seemed to have a significant impact on staff attitudes towards informal carers. Staff in such organizations reported that the programme strengthened their awareness of and motivation for collaboration with informal carers. In contrast, the programme was of very little benefit in organizations with low management involvement.

Key words: web-based training, informal carers, hea

From theory into practice: Engagement Seminar Series (104)

Sophie Duncan - National Co-ordinating Centre for Public Engagement Paul Manners - National Co-ordinating Centre for Public Engagement Maeve Lydon - University of Victoria

It is well recognised that despite a range of discipline specific theoretical framings for engagement, engaged practice rarely draw on this. For this reason we are planning to run a series of seminars as wrap arounds at engagement friendly conferences (ie happening before the conference begins). We would be interested in talking to you about whether this would be an appropriate addition to the LK conference, and if so how we might organise and facilitate this, including how we could advertise it to conference delegates. The series will seek to stimulate delegates to learn from some of the theoretical bases for engagement practice, and apply it to their own work. To this end, delegates will commit to reading a selection of articles drawn from a specific theoretical area eg organisational learning; how publics are constituted; ethical issues in engagement practice. The session will then provide an opportunity for people to reflect on their own practice in the light of the reading that they have done. This will be translated into a output paper for wider dissemination. One of a series of seminars, delegates will be encouraged to join an online community to discuss the work emerging from these discussions.

Socio-technological innovation by energy cooperatives, a challenge (45)

Civil Society Promoting a faster Transition to Renewable Energy in Denmark (58)

Henny Van der Windt - RUG

Gunnar Boye Olesen - SustainableEnergy

Initiatives in the field of local renewable energy appear to be very successful in several countries. Because of their activities, the share of renewable energy and the involvement of citizens and civil society organizations in energy transition have increased. They also lay the foundation for innovation: changes in the organization of supply, social cohesion and new technologies. So, social and technological innovations are linked to each other. It is unclear, however, if these local energy initiatives can play a significant role in the energy transition in the Netherlands. Many initiatives lack money, support, knowledge and other resources, Probably they should develop a common idendity and common practices. In addition, it is still unclear how these initiatives can be embedded in larger physical and societal structures, Examples of energy cooperatives in Denmark, Scotland, and Germany show how personal, legal, financial-economic, organizational and technological factors sometimes slow and sometimes encourage the innovative power of these initiatives. The question is how we can understand and probably facilitate learning processes of these initiatives. And how can we scale up these initiatives of civil society organiations to the mesolevel and macrolevel of society? In other words, how to challenge existing regimes, routines and habits, i.e. regulations, policies. organization, finances, culture and technology? In our research projects we study several Dutch local energy cooperatices to find out how they overcome the hurdles and how they learn from their experiences. We also study the impact of a learning process initiated by some research groups, environmental organisations and civil society organisations, supported by provincial governments.

The presentation could be part of the session proposal from Michael Søgaard Jørgensen and Les Levidow about CSO-academic research cooperation for sustainable Development. Denmark has decided in principle to change energy supply to renewable energy until 2050. This was agreed by the vast majority of Danish political parties in 2012. Some civil society organisations, including SustainableEnergy and NOAH- Friends of the Earth Denmark, has proposed strategies and scenarios for a faster transition to renewable energy until 2030. There are good reasons for a faster transition to renewable energy than until 2050; for success in reducing global climate change to sustainable levels, some countries must lead the way fast, and in addition Danish fossil fuel resources are fast depleting. In addition. Sustainable Energy has presented analysis showing that a fast transition will not be more expensive for Denmark in 2030 than a slower development. If fossil fuel costs are increasing faster than internationally expected, the fast transition will even be an economic benefit for Denmark. While the political level is not ready for a faster transition to renewable energy than until 2050. Sustainable Energy has taken a new initiative to promote the faster transition. The organisation will document in more details what the faster transition will include, how it can be organised, the policies needed to promote it, and the costs of the transition. It will also organise discussions with interested stakeholders and open public discussions of the fast transition. The aim is to increase the interest and understanding of the opportunities and benefits of a faster transition to renewable energy, among experts and stakeholders as well as among the interested public. The fast transition will be based on experiences of past increases of renewable energy, and increased energy efficiency, as well as adopted plans for increase of energy efficiency. It will also build on visions for a sustainable transport system that will not only be 100% renewable energy, but will also solve some of the problems of the current transport system with city congestion and slow public transport. The conference presentation will include an overview of the proposals in the plan for a fast transition to renewable energy, evaluation of effects on economy, employment, and environment, as well as experiences from the development of the plan and from debates with stakeholders, experts and the public about the plan and about our previous plan for transition to renewable energy.

The Municipality As "low-carbon Lab": Promises And Perils (86)

Eva Heiskanen - National Consumer Research Centre

Experimentation in bounded local contexts has gained attention in the sustainability transitions literature. Within a socio-technical transitions approach, strategic niche management (SNM) conceives of local experiments (niches) within protected spaces as important initiators of learning and empowerment of new sustainable technologies (Raven et al. 2008). It is thus apt that some local governments in different countries and continents have decided to forge ahead of their national governments in climate policy. Local attempts to develop more sustainable solutions in urban planning have been explicitly compared to strategic niche management (Quitzau et al. 2012), and relevant similarities but also differences and limitations have been found.

I expand on this perspective by examining a local experiment from the perspective of "lay people": local politicians and residents, and national policy makers. The data derive from a Finnish programme called Carbon-Neutral Municipalities (CANEMU) (2008-), which has engaged five small municipalities as "low carbon labs". As part of a research project called LAICA (http://laica.fi), we have interviewed 40 people (ordinary residents and local politicians) in one of the participating municipalities on their views about the programme, its achievements, focal areas, risks and benefits. The national perspective derives from 10 interviews with programme coordinators, ministry officials, and technology funding bodies.

Bulkeley and Broto (2012) and Hodson and Marvin (2007) have highlighted the role of politics and local strategic behaviour in local experimentation, whereas Quitzau et al. (2012) emphasize the broader mandate and concerns of local planning compared to the technology-oriented strategic niche management. I build on and complement these perspectives with evidence on the personal experiences of local and national-level decision makers. The SNM literature can benefit from an understanding of how it feels to be part of an experiment and how lay people and policy makers interpret the outcomes of experiments.

My specific perspective is that experimentation is a science-driven notion, which may find common cause with the concerns of local people and politicians on different levels, but may also run into conflict with the everyday concerns and mandated responsibilities of different parties. On the basis of the data, I suggest that low-carbon experiments can offer promise to the daily realities of ordinary citizens and politicians by focusing on the deployment and use of new technologies, contributing to local

learning, offering outside input, and offering "proof of principle" that greenhouse gas emissions can be realistically reduced. Experimentation can also offer as a source of learning: in the case of CANEMU, the national-level coordination (technical support person travelling between the municipalities) has enabled learning from successful and failed experiments in other municipalities. As the group of participating municipalities has expanded, there is more and more diffusion of experiences. However, the most readily transferable experiences are "off the shelf" technologies like LED lighting, biomass boilers and heat pumps, where experimentation deals with local configuration rather than development of the core technology.

The data also reveal a number of potential points of conflict (perils) from the perspective of the "experimental subjects". Experimentation is not the main task of ordinary lay people (e.g. local politicians), and hence they need to balance how much to invest. Experimentation entails risks to the individuals participating, their families, neighbours and electorates. Because of this, people tend to choose market-ready cost-effective solutions, and more innovative local ideas are difficult to materialize. Fundamentally, experimentation in real life is judged by lay people on different criteria than experimentation in the lab. In order to serve as "proof of principle" and encourage people to persist in local climate action, local low-carbon experiments cannot afford to fail.

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Sarah West - Stockholm Environment Institute



Citizen science projects are those in which citizens partner with scientists to answer real world scientific questions. These projects have dual benefits: engagement of participants in science and the scientific process, and advancing scientific knowledge. However, within this broad scope, citizen science projects vary widely in their aims. For example, projects vary from focusing largely on public engagement to those which focus almost purely on the scientific question; they may have a very wide geographic coverage or be concerned with only one site; they may aim to collect a huge amount of data or only a very small amount. More participatory citizen science projects may consider empowerment of participants to be an essential part of the process, whereas other projects may simply use participants as a way of collecting data.

When designing a citizen science project, it is important to fully consider what the project aims to do, in order to select the most appropriate methods for implementation. This often involves making decisions about trade-offs due to limited resources, for example, between the amount and quality of data that can be collected. To help people design citizen science projects we are developing a decision support tool, and the aims of this workshop are 1) for participants to become familiar with some of the decisions needed to be made when designing a citizen science project and 2) to help refine the decision support tool. Participants will be asked to think about citizen science projects they have been involved with (examples will also be provided for those new to citizen science), and answer a series of questions that those implementing the project would (or should) have considered. For example: Is this an effective education project? What prior knowledge was needed? How long would it take? How much did you learn? Is this an effective science project? How novel is the science? How robust is the data? The aim is that this process will help those wishing to design citizen science projects. Responses will also be collated and used to refine the decision support tool

Online forums, question and answer, and co-creating research projects (207)

Increase public engagement with science by the means of citizen science – the Citizen Science Platform Germany (137)

Bálint Balázs - FSSRG

Katrin Vohland Leibniz Institute for Evolution and Biodiversity Research

Citizen Science as a term has been introduced by a social scientist Alan Irwin to describe expertise and effort of lay people to avoid environmental risks and uncertainties. In practice a diverse range of Citizen Science projects have been implemented by natural scientists as a data gathering technique relying on a mass of (online) volunteers or local people to generate experimental knowledge on local environments. The aims of Citizen Science initiatives are complex so it is hard to separately analyse scientific, activist, social, educational attributes, but apparently the most emblematic Citizen Science projects often fail to reflect on the collaborative and social aspects of the initiatives.

Whereas several social science research approaches (participatory research, community-based research, collaborative and cooperative research methods) seek to involve the public (through e.g. stakeholder engagement, giving voice to people) already in the design of projects to better address conflict intensive sustainability issues. In particular Ecological Economics thinking has been always open to link research with knowledge domains outside the academic world extending to all those who have a stake in the issue. Participatory, democratic processes, and citizens empowerment favoured by ecological economists, as well as the concept of an extended peer community by Funtowicz and Ravetz also points to the recognition that relevant knowledge is increasingly located outside the academy.

Nevertheless, the potential societal value of (environmental) citizen science projects has not been fully considered by social scientists. Hence the following questions could be raised: What are the most important societal values that define the practice of environmental citizen science? What are the social outcomes, impacts of the projects as well as positive and negative experiences of engagement? What are the social benefits of interaction between local communities and scientists (from proposing research through analysing data to enacting changes in society)? Where is the role of empowerment (of disenfranchised communities) and community building in citizen science? How lay citizens and professionals successfully engage in and benefit from scientific research? How citizen-led engagement is possible? How the social and citizen is understood in environmental social science? How awareness raising, fun and gamification, community building relate to citizens science objectives? In an effort to find a meaningful place for citizen science, and elicit the most important social aspects this presentation will illustrate the above issues from environmental social science research projects.

In order to make research more relevant for society, citizens have to be empowered to become scientifically literate and engage with science. Citizen Science, the involvement of volunteers in suitable scientific projects, could increase the public understanding of science, provide scientists extended data sets and enhance the exchange between scientists and other parts of the civil society. In Germany, we are currently developing a Capacity Building Programme. Scientists attached to scientific organizations such as universities, institutes of the Leibniz-Association, the Helmholtz Association and others will be trained to integrate citizens into scientific projects and scientific deliberation processes in order to enhance co-creation of knowledge. The key points to consider are that scientific progress benefits from ideas, data, and values contributed by citizens while citizens profit from deeper insight into scientific processes, increase their understanding about nature and culture, and develop ownership for scientific agendas. To provide one central exchange facility for scientists and citizens, a science-society platform is developed, addressing both scientists and citizens.

Three main components are part of the approach. First, scientists and citizens can place their information on a webportal and inform each other about interesting projects and opportunities for participation. Second, a dialogue forum with a series of workshops in different format offer several topics on public engagement with science and the scientific communities' engagement with citizens. For example, data quality, its maintenance and verification are expected to be a trade-off between supervision intensity and usability of data for scientific interpretation. In addition, feedback to citizens is known to be a key factor for the success of a citizen science project, such as meetings, joint publications, expense allowances or education. Joint living documents of best practices will result from the workshops dealing with these issues. Last but not least, the approach has to be scientifically evaluated following evaluation criteria to be developed in the dialogue process. Citizens and scientists should both profit from the citizen science process. This will include methodological aspects - what functions well and where are barriers such as differing value systems and funding schemes that prohibit public engagement with science? Finally, the platform activities should foster the effective establishment of new citizen science projects in Germany – and beyond, for instance within the framework of the European Citizen Science Association (ECSA).

Inspiring citizen scientists: the Open Air Laboratories project (144)

Laura Gosling & Poppy Lakeman Fraser - Imperial College London

Co-authors: Poppy Lakeman Fraser, Kate Martin, David Slawson and Linda Davies, Imperial College London

Open Air Laboratories (OPAL) is a citizen science programme engaging the public in science and the natural world. Since its inception in 2007, the programme, backed by multi-million-pound Big Lottery Fund grants, has directly engaged with more than 850,000 people of all ages and abilities, of which one-fifth are classed as being from 'hard to reach' communities. OPAL's objectives are to get more people outdoors exploring their local environment; to educate them about and inspire their enthusiasm for the natural world; and simultaneously, to gather valuable information about the environment. The programme also aims to promote collaboration between the community, voluntary and statutory sectors.

Managed by a team based at Imperial College London, a vital factor in the way OPAL manages community-based research is through strong partnerships with other organisations. Having started as an initiative in England, OPAL is now UK-wide with 12 partner organisations, ranging from wildlife trusts to universities. Members of staff based across England, Scotland, Wales and Northern Ireland work with the public, arranging training sessions, biological monitoring activities and nature events to engage with people directly. This face-to-face approach is a key element of OPAL's success as a citizen science programme.

As the primary method of engagement, OPAL developed a series of national surveys, each addressing a specific environmental theme and each constructed by a team of expert scientists. In May 2013, OPAL launched the OPAL Tree Health Survey, enabling people to assess the general health of trees and look for signs of pests and diseases that can affect them. The survey has been incorporated into UK Government management plans to protect native trees.

Throughout the project, participants have submitted their survey results using the OPAL website and other digital tools, generating valuable scientific results.

Publications arising from these results (e.g. Bone et al 2012, Seed et al 2013) have indicated that the public can make significant contributions to environmental research and governance, not only by submitting data but by becoming more informed about the world around them

This paper will explore how the OPAL project has generated useful scientific data and supported reform within the civil service, while achieving its central goal to provide more people with the enthusiasm, skills, tools and knowledge to get outdoors, explore and record the natural environment.

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Developing University- Civil Society Interaction: Rethinking the curriculum to bring in CSO experiences and research needs (94)

Hansje Eppink - Wageningen UR

Proposed by

Emma McKenna and Eileen Martin, Queen's University Belfast Catherine Bates, Dublin Institute for Technology Kenneth Burns and Catherine O'Mahoney, University College Cork Hansje Eppink, Wageningen University Gerard Strayer. Wageningen University

Theme 5

This proposal seeks to build on work undertaken as part of workpackage 7 of the PERARES project, where partners have been sharing and exchanging models of practice, particularly at postgraduate level. The focus of the session will be having a discussion about what has worked, what hasn't worked, where blockages are and how they might be overcome. We are interested in models right through from undergraduate to PhD level. This workshop will build on a workshop held at the NCCPE Engage conference in November 2013 and there will be a particular focus on sharing practice internationally.

Introduction:

The introduction will be a brief overview of the models of practice exchanged in the PERARES project, such as exercises, scenarios, case studies etc'.

- Developing policy to support curriculum change
- Postgraduate module on community based research
- Models of student awards to publicise and celebrate student work
- Examples of Science Shops embedded in curricula

Whilst the workshop proposers can share experiences across these subject areas, they are very keen to understand how this has been accomplished elsewhere and what lessons are that can be learned from all participants in these processes. If there are a lot of participants in the session, we would break into smaller groups facilitated by the different workshop proposers with a few minutes at the end of the

session to feed back one or two key points from each group.

Objectives are to

- enable participants to understand and share models of practice where public and community engagement is facilitated within the curriculum
- examine how such initiatives have become embedded
- examine practice in this area what has or hasn't worked (for students, communities and academics/facilitators) and why
- discuss issues which have arisen in the process of trying to embed public and community engagement within the curriculum
- feed this back into the PERARES project and other networks

Who are you hoping will participate in the session?

- People who have participated in curriculum based research from academic, practitioner, community or a student perspectives
- People who have experience of embedding public and community engagement within the curriculum and are interested in discussing their lessons learned.
- People who are currently considering ways of embedding public and community development within the curriculum and want to hear about models of practice elsewhere and ask questions/discuss issues.

Participation and resistance of civil societies in networks around Science, Technology and Medicine in the Global South (175)

Drop out or drop dead? Civil society involvement in research regulation in India? (174)

Sariola Salla - University of Oxford Rachel Douglas-Jones - IT University, Copenhagen

Sariola Salla - University of Oxford

Participation of various publics in policy-making and knowledge production is almost an unquestionable good today. Participation is seen as having intrinsic value, and the increase of Community Advisory Boards, lay representatives in policy-making bodies, consultations with expert patients, etc., suggests that the notion has been widely adopted. Momentum to institutionalise participation is driven by ideas of socially robust knowledge, and how and why science, technology and medicine can be more democratic. This panel explores participation and resistance of civil societies in various forms of governance focusing on the Global South. In these countries, neoliberal policies and structural adjustments have largely led to the reduction of the role of the state in taking care of its citizens. This has created spaces for new assemblages with various kinds of actors, such as donors, international collaborations, public-private partnerships, local and international NGOs, and social movements. These actors have joined to fill the gaps in healthcare, social welfare and development, armed with ideas of participation. The panel asks how and why such civil society groups take part in governance of science, technology and medicine, and how and when they are excluded. Participation in these assemblages, with various degrees of cooperation, can be conceptualised on a spectrum from facilitating to problematizing the issues at hand. For example, NGOs frequently consult the World Bank and provide services like Monitoring and Evaluation, raising questions about independence and co-optation of civil society. Simultaneously, social movements continue to question and reshape the conditions within which innovation and design are implemented. This panel examines with ethnographic detail and historical depth such assemblages. How are non-governmental organisations and social movements organised and what is at stake for them? How do they gain and maintain their legitimacy in the networks? How might they change internally when joining the assemblages? What kinds of knowledges are employed and how are differences acknowledged or not? What kinds of tools are used to mobilise activities and deliberative methods used for decision making? Addressing these questions will show the uses and limits of tools and theories for public participation developed in the 'West' and provide an opportunity to create new theories. Speakers: Rachel Douglas-Jones, Colin Millard, Matthaus Rest, Salla Sariola

Gender relations in India and the status of women is again in the news, following the persecution of the men who gang raped and murdered a female student in a bus in Delhi in December 2012. Persistent sexual violence and practices like dowry. female infanticide and foeticide, are often cited as examples of stark inequalities between men and women in contemporary Indian societies. This paper analyses how such gender inequalities in India are manifested within medical research and how civil society has been involved in research governance. The paper introduces two case studies that describe the gendered nature of human experimentation in India: a HPV vaccine study from 2010 during which seven girls died; and a study on the natural history of cervical cancer conducted in the 1970s and 1980s. Using multiple methodologies such as interviews and archival sources, we reconstruct these studies and put forward an analysis of both the controversies that followed. The studies generated a heated public debate about ethical research conduct; follow-up was deemed poor and the ways in which consent was obtained was seen as problematic. Critique raised by various civil society groups such as women's rights movements. bioethics networks and public health activists played an important role in the public debates. Following the attention that the organisations raised by politicising medical research, public discussions led to expansions in regulation of medical research nationally and, along with other factors, brought about changes in bioethical guidelines and legislation. The paper discusses the roles of civil society in shaping research governance in India, and drawing on literature regarding social movements and feminist bioethics, analyses the relationships of gender, research governance. state and civil society, finishing with questions of reconciliation. This paper is part of the 'Participation and resistance of civil societies in networks around Science. Technology and Medicine in the Global South' – panel, organised by Salla Sariola. under Theme 8: Governance of Science and Technology with civil society.

How to produce an invisible dam The collaboration of global civil society and the World Bank in the cancellation of the Arun-3 hydropower project in Nepa (165)

Matthäus Rest - University of Zurich

In August 1995, the newly appointed President of the World Bank Group, James D. Wolfensohn announced the end of all credit negotiations between his institution and the government of Nepal concerning the Arun-3 dam. Nepalese officials, local staff of the Bank and the majority of the people in the Arun valley were outraged. A small group of activists in Kathmandu and their friends around the globe, on the other hand, were celebrating their victory. They had campaigned against the project for years and finally brought it before the newly established World Bank Inspection Panel. To this day, both opponents and advocates of the dam remember their relationship with each other as clear-cut confrontation. My paper will propose a different reading. It will argue that we can also understand this process as an early example of what since has become the norm in donor agency funded infrastructure projects; an exercise in collaboration between governmental bodies, civil society groups and affected citizens. Only the fierce opposition led the Bank to re-evaluate the project and while the cancellation was definitely a gesture meant to pacify global civil society, at the same time it was due to growing concerns within the Bank about the project's economic and ecologic viability. As Michal Goldman has convincingly argued, following the Arun-3 debacle the World Bank increasingly integrated activists, social scientists and ecologists into its mode of knowledge production. Through this 'participatory turn' the Bank was able to emerge out of a moment of severe crisis with a highly invigorated position – it now knows more about the world then ever before. My material on the Arun-3 project from Nepal and Washington, D.C. will show, however, that the blueprint for this new form of collaboration was far from being equitable. While the Bank was highly interested to open its business model to the newly emerging discourses on sustainability, transparency and indigenous rights, it refused to engage with the activists' main claim; that Arun-3 was economically a bad project. Considered as a contribution to Salla Sariola's panel titled "Participation and resistance of civil societies in networks around Science. Technology and Medicine in the Global South," I will argue that this selective integration of critique is still at work today. Furthermore, my paper will ask what this turn means for transnational activism on the example of the recent resumption of the Arun-3 project.

This interactive session is hosted by academics and community partners from the UK, who will describe what happens when funders join together to support community university heritage projects (91)

Sophie Duncan - National Co-ordinating Centre for Public Engagement

Presenters in this Interactive session

Jon Lock

All Our Stories project lead, Research for Community Heritage Partner

Jeff Lewis

All Our Stories, Research for Community Heritage Partner

Sarah Lloyd

University of Hertfordshire, Research for Community Heritage

Judith Mills

University of Nottingham, Research for Community Heritage

Julie Moore

University of Hertfordshire, Research for Community Heritage

Abstract

In the UK in 2011 the Heritage Lottery Fund and the Arts and Humanities Research Council joined forces to run a new programme of activity: Research for Community Heritage. The programme aimed to create more opportunities for academic researchers to work with community based organisations developing understandings of their local heritage. This mutually beneficial partnership between two funders was aimed at developing more effective local community heritage projects and building capacity within universities to support community led projects. The two funders ran two separate funding schemes. The Arts and Humanities Research Council offered funding to universities to work with community based organisations wishing to develop local heritage projects. The funding enabled key staff to be available to support enquiries from community based organisations and work with them to support the development and delivery of their project ideas. It offered open days, capacity building events, training and encouraged groups to make

use of university facilities and expertise. In addition universities funded through this programme, could apply for funding for research projects initiated in their interactions with community based organisations. The Heritage Lottery Fund offered grants to community based organisations who wanted to develop their heritage projects. The funding was aimed at creating 100 new community based projects, but the initiative was so successful that over 500 projects were funded! Each project had the opportunity to work with a university should they so choose. The project led to a range of successful projects across the UK, and energetic and thoughtful partnership working. This workshop will offer key insights gathered from the Research for Community Heritage Project. It will share some of the highlights from the partnerships between academics and community members developed in the project: share some of the lessons learnt; and explore the tension and opportunity offered by two funders working together for societal benefit. The workshop will provide an opportunity to hear from some of the project stakeholders, and discuss how to cultivate effective partnership working between funders, universities and community based organisations.

Lifestyle Changes as Environmental Strategy (14)

Creating sustainable (city)green; a framework for community projects (80)

Ditley Nissen - Danish Network of Sustainable Communities

Derk Stobbelaar - University of Applied Sciences Van Hall Larenstein

An ecovillage is a settlement that includes all aspects of life: All ages, culture, working life, local production etc. They strive to integrate human activity into the surrounding natural environment in a gentle way. They seek to bring down the energy consumption and the environmental impact. The goal is working towards a healthy development that ensures good living conditions for future generations. Ecovillages are living laboratories for a sustainable future.

The progress occurs in the shape of a spiral. From the individual's desire for a good life in a sustainable setting, to unfolded the vision in cooperation with others. Buying land, making a local development plan, preparing the building sites and building houses. Families with young children get involved with kindergartens and schools. The operation and self-governance is based on voluntary efforts. Self-sufficiency and enterprises hatch and grow into workplaces. It is about living and learning. Certain communities suffer from conflicts; others grow through them. Often the communities, which are impaired by conflicts, are the ones that solely focus on the ecological and financial dimension. Communities that also accommodate the social and spiritual dimension seem to grow through conflicts.

A survey from 2009 shows that that CO2 emissions in 3 Danish ecovillages are 60 % below the national average. Studies from Germany show that the CO2 emission of Sieben Linden is 30 % of the German average. Studies from Scotland show that the ecological footprint of Findhorn is 50 % of the British average. The Danish ecovillages encourage the universities to start an interdisciplinary action-research project, to investigate and develop the effects of ecovillages in relation to energy consumption, environmental impact, lifestyle changes and new forms of welfare. What can the World learn from more than 40 years of citizen run social experiments?

After 20 years the municipalities begin to discover that ecovillages bring resources to the local area. For example Dyssekilde Ecovillage is the 5th subject in the business strategy of the council of Halsnæs. The council of Odsherred has set up an office for settlements with the purpose of attracting green communities to the municipality. Our vision in DEN is that there will be at least one ecovillage in every municipal in 2020. We see a lot of unprecedented opportunities for local development: Tourism, education centres, job creation and new kinds of local economies.

A critical reflection on community-based research projects, has learned that despite the great diversity in such projects, the basic elements are often similar. This notion made it possible to develop a framework for working with communities on (city)green projects. This framework consists of an overall governance structure in which the following aspects all have its place: a pro-active attitude. coalition forming (between communities, municipalities and other stakeholders), conflict management, interventions, managing the internal organisation, integral development and expectation management. All these aspects are related: gaining insight into how these aspects and their relations work in a specific situation make it possible to create sustainable solutions for neighbourhood questions. This model has been deducted from several Wageningen University Science Shop projects with multiple stakeholders in the domain of rural and urban landscapes with at first sight often conflicting interests. The model creates awareness of the many aspects an actor in such situations has to pay attention to in order to operate successfully, with respect to both ecological and social goals. It stimulates actors to integrate different stakes in one plan. We will illustrate this with two case studies of interventions of Wageningen University Science Shop. The first case resulted in an integrated rural development plan for a former mining area in the south of the Netherlands, the second in a plan for city gardening in the city of Utrecht which was beneficiary for many stakeholders. In both cases the capacities of local groups, students. researchers and teachers were combined. This process not only led to knowledge development, but also to capacity building and empowerment. In fact, the latter was the most important aim of the intervention. This paper is based on a book: Communities creating (city) green (2012, in Dutch: Bewoners maken het groen). Often, interventions such as those of the science shop are of vital importance, but the insights of the book make it easier for communities to find their own sustainable solutions

Tale of Two Cities: Sustainable Learning to Hasten Transformation (69)

Elizabeth Tryon - University of Wisconsin-Madison Ted M. Petith - GreenLink Projects

How does a profound experience of another place change the nature and potential impact of place-based sustainability-oriented education and activism in one's home place, to move from incremental to transformational change? This storytelling session will tell the tale of two cities: Freiburg, Madison Wisconsin's German sistercity, is widely considered one of the world's "greenest" cities; 40% carbon neutrality. Freiburg is home to many established green industries. Madison considers itself a very environmentally forward-thinking city. However, our partners in Freiburg point out that we pat ourselves on the back for incremental changes, and the window of opportunity may close before we are prepared to transition to a sustainable future. Many people in the U.S. lack time, money or inclination to go abroad, so they honestly don't know what they don't know. It is hard to just read the newspaper and understand the chasm of difference. For the last three years, an exchange between the UW-Madison and the University of Freiburg, the two city governments and civil society organizations has blossomed into a robust two-way exchange of knowledge and resources. Our vision is to utilize college students as motivators to bring about that transition in Madison in a quicker timeline. The GreenCity Freiburg officials are elated to have this message repeatedly being carried back to Madison, as they work to develop a business hub for the Midwest and open U.S. markets to their products and "know-how transfer." Every other summer, UW undergrads visit Freiburg for 6 weeks, exploring aspects of renewable energy and energy efficiency technologies. Some whose German is fluent are placed on research teams at the Fraunhofer Institute for Solar Energy. Others study the bio-waste digester system, passivhaus building, public transportation, conservation education, Students completed an inventory of Green Space planning, brownfield remediation, Green policy government comparison, and Green Marketing strategies. Unanticipated outcomes include UW students demonstrating to their German friends that Americans are not all driving gas-guzzling SUVs from the bedroom to the bathroom. as some media would have people believe. The students return to Madison and present their findings to UW student groups, conferences, developers and City & mayoral staff. They intern in sustainable businesses & agriculture/composting efforts. recycling initiatives, as legislative aides and policy researchers. This year, students returned with the OberbÜrgermeister of Freiburg and his entourage in tow for a

visit to Madison. Students were highlighted at a reception with the mayors of both sister-cities and showcased their research in a poster session. During the alternate summer, students in Madison who cannot afford to travel to Germany are treated to visiting professionals from Freiburg as well as the findings (videos, papers, etc.) of the previous year's cohort. Students research! models implemented in Freiburg and compare with those implemented or planned for the Madison area. UW students and faculty are now planning all sorts of new initiatives. Already a sustainably-built commercial development that the City of Freiburg is partnering with will utilize students as researchers in a living lab as well as in service-learning courses as educators of the community in sustainable products.

Close-up on grassroots initiatives in sustainability transitions—motivations, success factors and evidence of social learning in three German case studies (204)

Niko Schäpke - Leuphana University of Lüneburg Nina Langen, Gesa Maschkowski & Janina Grabs -Rheinische Friedrich-Wilhelms-University of Bonn

Ethical consumption enjoys an ever-growing demand and popularity. This is not only documented in the increasing market shares of organic and fair products, but also in studies on consumer behavior: consumers show a mounting interest in how to reduce the negative environmental impact of their own consumption: Which products should one buy and how can they be used sustainably? Traditional areas of concern are climate-friendly and low-carbon products and services. In recent years the topics of food waste and sustainable food production have received an increasing public and political interest in Germany. Both issues, climate-friendly consumption as well as food waste, are addressed by bottom-up grassroots initiatives. Examples for initiatives to reduce carbon emissions by consumer activism are carrot mobs. Examples for initiatives to fight food waste and develop alternative food supply schemes are food sharing as well as community supported agriculture.

In the recent discourse on the driving factors of a "big societal transition" (WBGU 2011) towards sustainability, grassroots initiatives are highlighted as potential catalysts which develop, trend-set and mainstream innovative and more sustainable consumption alternatives (e.g. Geels et al. 2007, Kristof 2011). Initiatives are considered to be an expression of social learning and (self-) empowerment, as founders develop consumption (and prosumption) alternatives that correspond to the community's particular needs, values and context, and which are not provided by traditional market actors. Alternatives developed by grassroots groups can thus contribute to fundamentally reshape the traditional relations of consumers and producers and go well beyond making consumption sustainable: their final goal is often societal transformation. This is reflected in the self-concept of initiative founders as "change agents", who oftentimes even refuse the term of consumption completely. To realize an impact on larger societal developments, and therewith potentially drive a societal transition, initiatives need to expand and grow or to link and connect to similar initiatives to jointly form a larger movement – processes known as broadening and scaling-up (van den Bosch & Rotmans 2006). This poses a challenge to initiators as the character of the grassroots is changing from a small initiative to a (potential) social movement.

The concrete conditions that allow grassroots initiatives in the mentioned sectors to develop and become successful are known to a little extent so far (for broader analysis of grassroots see e.g. Middlemiss and Parrish 2010; Baier 2012; Feola und Nunes 2013). The importance of grassroots for enabling and spreading sustainable consumption, and therewith contribute to sustainability transformation, sparked our interest in a case study of three concrete initiates (namely: Carrot Mob Cologne, Food Sharing Cologne and SoLaWi (CSA)). We focused on the founders of the very initiatives, as they are core for the initiatives to develop: What are their values, attitudes and motivations? What are their skills and which learning processes help them to develop an initiative successfully?

Concepts which are assumed to positively influence the development and success of grassroots, such as social learning, motivations and self-efficacy as well as (self-) empowerment, are used to guide and analyze semi-open interviews with initiative founders. Since initiatives are largely understood as expressions of learning and empowerment processes of consumer citizens, their success is not primarily defined by objective criteria, such as the number of users or tons of CO2 reduced, but by founders and users themselves: In how far did they evaluate the initiative as an success, did they manage to meet their own goals? Which learning experiences are considered essential? What is needed to scale the movement up and what is needed to contribute to the great transformation? Objective success criteria as mentioned above may be used in a complementary way to assess the overall sustainability impact.

The presentation will give a brief overview on the conceptual framing, highlighting the roles of grassroots in transitions towards sustainable consumption, as well as the case study design (three initiatives studied, mainly by way of semi-structured/ qualitative interviews, complemented with quantitative data). It will introduce criteria assumed helpful to understand the development and success of grassroots (social learning, motivation, self-efficacy/empowerment) and present respective evidence from interviews with the founders of the three selected case studies (6 interviews).

Theme XX

Do-it-yourself technologies: creating your own instruments for citizen environmental monitoring (197)

Assistive Technology: a golden opportunity to build a sustainable user-centred design community (11)

Jaume Piera

The Mediterranean Center for Marine and Environmental Research

The great technological advances in embedded systems and sensor have increased the interest of people in creating their own instrumentation equipment. One of the main advantage of this new technology, known as DIY (Do-It-Yourself), is that DIY developers may share easily the collected data with the community by using existing communication channels (social media, mobile devices, ...). DIY is one of the key technologies to build Citizens' Observatories

In the framework of environmental monitoring based on Citizens' Observatories, the Citclops European project aims to develop systems to retrieve and use environmental data (water quality) by using low-cost sensors combined with contextual information. Given the ubiquity of mobile devices and the high density of people in coastal areas, environmental monitoring based on Citizens' Observatories can achieve an unprecedented level of coverage in both space and time for observing events of interest in the, usually complex, coastal environments. The proposed DIY technology, a low cost buoy that measures water transparency, is based on open-source electronics, easy-to-use hardware and software which facilitate

Kaethe Burt-O'Dea - Desireland

The Sustainable Potatoes United Development Study (SPUDS) uses citizen science to explore the sustainability of the Irish food system through the eye of the potato. Many renowned Irish food producers believe that Ireland's island nature provides us with a unique opportunity to stay GM free and capitalize on the growing market for pure wholesome food that people can really trust. SPUDS was launched in 2012 as proactive response to Ireland's decision to trial genetically modified (GM) blight resistant potatoes (2012-16). The project aims to prove that Ireland will generate higher levels of innovation and employment by concentrating our research energy on the development a food system that focuses on lean production, enhanced nutrition and environmental health. Potato blight has plagued Irish farmers for decades. Increasing applications of fungicide are used to keep new, more virulent, strains of blight in check, making the potato one of our most chemically dependent crops. Fungicide residue is effecting our groundwater, leading to EU fines. Generous funding is available for GM research but there is also strong resistance to GM. both in Ireland and throughout Europe. According to the EU Commission only 27% of citizens are interested in GM food product. Their statistics also reveal that consumers prefer products that benefit the environment and increase food safety. GM technology is designed for industrial agriculture, a model ill suited to the Irish landscape (139,900 family farms- avg 32.7 ha). Irish farmers have grown naturally blight resistant potatoes for many years with considerable success. Although these varieties have the potential to reduce fungicide use and lower our carbon footprint they are not considered commercially viable. To create public debate around what determines commercial viability in the food sector SPUDS sourced 1.5 tons of non-gm blight resistant potato seed and gave it away to anyone willing to join our study. Over 300 growers countrywide took part. In possibly the worst season for blight since the famine, 'citizen scientists' documented the performance, vield, quality and taste of these varieties. Results were fascinating! Over 90% of those who responded did not get blight, enjoyed the taste of the varieties and wanted to grow them. again. In just one year demand for naturally blight resistant potato seed has outstripped supply and one variety is now being grown for comparison to GM in our national trial.

Citizen science for surviellance in biosecurity and plant health (21)

Engaging people in marine biodiversity monitoring programs (190)

Alison Dyke - Stockhom Environment Institute

Plant health and biosecurity is receiving hugely increased attention in the UK following high profile introductions of new pests and diseases and increasing populations of invasive species. This follows a period where plant health and biosecurity has received little interest and investment. Government policy is increasingly turning to public effort to monitor pests, diseases and invasive species and to provide surveillance for new threats. The ability of these initiatives to meet the expectations that are put on them. together with the motivations of participants to take part are both under researched. This paper presents work in progress reviewing relevant projects and initiatives in the UK and looks at how the expectations of policy makers, research initiators, participants and end users meet. Initiatives often have aims such as improving distribution data and knowledge of the characteristics of threats (Ashtag, OPAL tree health survey, Conker Tree Science), surveillance (OPAL tree health survey, Tree Alert, Observatree) or focus on a defined geographic area where they will take on both of these roles and perhaps contribute to management (Invasive species local action groups). Initiatives provide varying levels of training and support to participants and expect varying levels of input and active participation over varying timescales. Research initiators often have dual aims of public engagement and addressing scientific research questions, but have accompanying concerns about data quality, quantity, geographical distribution and data cleaning and verification. Ensuring that data comes to the end user in a useful and useable form, is also essential but there can be very real obstacles, such as getting data through government firewalls. Government staff operating with limited resources may be fearful of the potential volume of data that might be generated and need to be verified. Many projects rely on the assumption that increased awareness of participants will lead to increased concern, which will in turn lead to seeking out more information and eventually to a sense of social responsibility for biosecurity to maintain participation. What participants gain from their involvement as an intentional part of the initiative or otherwise is little understood. Is some increased scientific literacy and the warm glow of a social responsibility fulfilled enough or are participants hopeful of a greater involvement in or influence on environmental policy?

Simone Branchini, Francesco Pensa, Patrizia Neri, Bianca Maria Tonucci, Lisa Mattielli, Anna Collavo, Maria Elena Sillingardi, Andrea Garuti, Corrado Piccinetti, Francesco Zaccanti, Stefano Goffredo - University of Bologna

The last decades have seen a broad degradation of natural environment. Large-scale monitoring is needed for effective management to prevent biodiversity loss and climate change impacts; yet governmental agencies are often underfunded. In some cases, Citizen Science can overcome economic constraints on data collection by using the skills of non-specialist volunteers, providing reliable data and increasing the environmental awareness and public education.

We have been testing a novel biodiversity monitoring method based on citizens' involvement which ensures the reliability of collected data and citizens' education, while not diminishing the enjoyment of leisure time ("recreational monitoring"). Our goal has been to unite research and recreation, placing citizens at the forefront of the conservation drive. Our method is based on a pyramidal training. With the collaboration of targeting diving agencies, our group has trained hundreds of diving professionals whose daily work ensures the participation of a huge mass of volunteers, triggering a cascade effect. This friendly approach has resulted in the participation of several thousands of volunteer divers into the marine conservation monitoring efforts.

We first designed the project "1999-2001: Mediterranean Hippocampus Mission" involving volunteer recreational divers to assess the distribution and abundance of Mediterranean seahorse species along Italian coasts. The second project, "2002-2005: Divers for the Environment" (www.subambiente.org), collected information on the status of biodiversity of the Italian costal seas. Since 2007, "STE: Scuba Tourism for the Environment" (www.STEproject.org) has monitored the status of Red Sea coral reefs. Using specifically formulated questionnaires, non-specialist volunteer divers reported the presence of key marine taxa, encountered during recreational dives. A volunteer sighting-based index was elaborated to assess the status of biodiversity, allowing analyses of spatial and temporal variations in relationship with human activities and conservation management plans. Validation trials, performed to assess the reliability of recorded data by volunteer divers, showed that they were comparable to those recorded by specialist divers.

Our "recreational monitoring" method represents a novel, reliable and cost-effective model, which can be sustained and embedded within long-term monitoring programmes, and extended to include a wider geographical scale..

A framework for citizen science and monitoring environment – performance and quality (39)

Seawatchers: a citizen science project to involve society in marine research (198)

Jari Silander - Finnish Environment Institute

The Finnish Environment Institute (SYKE) coordinates national monitoring of environmental pressures and the state of the environment. The Environmental Monitoring Strategy 2020 sets the guidelines for example monitoring water, biodiversity and air. We have over 100 000 lakes and ponds to be monitored, so there is a demand to increase role of citizen in environmental monitoring to enhance also participatory lake restoration activities. This paper explores the performance of a developed collaborative web service for Finnish lakes, as well as the quality of data produced by citizens using a camera and a smart water quality sensor. The web service Lakewiki is a collaborative wiki service about Finnish lakes over 1 ha in extent. The service developed includes a smartphone app for sending and browsing selected observations, which includes now a developed low cost water quality sensor based on image analysis. The service includes data from both professionals and citizens. We have analyzed the system performance and data quality. The quality of data produced by citizen is compared to data produced by professionals both overall index and successfulness of classifying images. Additionally sensor data is compared with a traditional sensor and against laboratory results.

Jaume Piera The Mediterranean Center for Marine and Environmental Research

The Seawatchers project (www.seawatchers.org) aims to strength the links between marine research and society (including general public, policy makers, administrations, fishermen, schools, universities, and private companies). The project pursues to shear with the general public the scientific understanding of the ocean and its decisive role within the Earth system while participating in the data collection for research projects focusing on the assessment of ocean health status.

Within this project citizens have the opportunity to participate in the research actions collecting a large panel of qualitative and quantitative data such as first sights and distribution of invasive species, detection of mass mortality events, effects of pollution, distribution of seabirds species and key physico-chemical parameters. The potential of this volunteer-based observation project is especially important for oceanographic research, due to operational complexity and economic costs of ocean research campaigns. Finally, this kind of social participation in current research project can also significantly contribute to a major consciousness of current environmental problems in the society

Social Hub for Community and Housing: Students evaluate change (100)

Curricular and Extra-curricular Modes of Operation and Impact Evaluation, a Novel Initiative in Israel (97)

Rachel Kallus - Technion

Michal Sela - Holon Institute of Technology, Israel

The Social Hub for Community and Housing is a flagship project of the Faculty of Architecture and Town Planning at the Technion, funded by the Israeli Council for Higher Education. It aims to change professional practices by training a future generation of architects, planners, and designers to be socially engaged and committed. The Social Hub creates a framework for students and faculty to learn and work together with communities and builds a shared learning process that empowers local residents and links them to professionals and decision makers.

To achieve its goal of educating socially committed professionals, the Hub adapts teaching strategies aiming to provide tools and methods for working with communities. This is achieved by developing new courses, but also by devising new specialized modules in existing courses, and integrating consulting experts in fields such as anthropology, community work, community organizing, conflict resolution and mediation. Special lectures further expand on issues related to working with communities on relevant topics such as: spatial justice, poverty and social marginalization, self-help and sweat equity.

In Israel, where planning is mostly a governmental system and architecture a market based operation, working with NGOs and community based organizations aims to support civil society. Thus, an important goal is to broaden students' perspective and open them to new career opportunities with NGOs and community based organizations, which often take a more critical view of government spatial policies.

The paper explains the Hub's raison d'être within the social and political context of Israel and presents a longitudinal evaluation research of students' reflections on courses offered by the Social Hub. The conclusion addresses the dilemmas of education aiming to socially engaged professional practice, in general and in Israel in particular.

Curricular and Extra-curricular Modes of Operation and Impact Evaluation, a Novel Initiative in Israel The Holon Institute of Technology, (H.I.T), is an institute of higher education, located in the center of Israel that focuses on the teaching of sciences, engineering, computer science, mathematics, management of technology and design. In addition, it emphasizes on multi-disciplinary theoretical and practical research. A major concern for the section of community relations has been the instigation of a shift in the concept of Academy-Community partnerships from "learning on" and designing projects "for" communities, to partnerships based on joined research. Establishing a "science Shop" which was promoted by government funding via the Israeli Council of Higher Education seemed as the appropriate platform for encouraging combined research and partnerships. H.I.T's science shop is operated by a core of active students and staff members from different disciplines. Projects arise either by outreach to civil society organizations or by direct requests from community groups, NGO s. etc. After the stage of a project planning there are 3 major strategies in which it can be carried out: a. Service learning courses: involving both students and faculty in theoretical research combined with civic engagement and thus enabling mutual influence between these two methods. b. Expanded Final Projects: designed with community agents, the project exceeds the academic requirements and has an additional phase of completion or implementation with the community partners. For the additional effort the student is granted a scholarship. c. Problem-based learning in multidisciplinary groups, (Extracurricular). This strategy involves both staff and students in multidisciplinary teams working with community members on a regular basis co-creating access to problems that have been displayed by community members. The operation of the science shop has been accompanied by evaluation research that included all stakeholders. The preliminary results indicate that students were highly enthusiastic with the opportunity to work in multidisciplinary teams. For some, it has been their first experience in problem- based project. All of them commented that the experience was highly valuable in developing skills and competence as professionals. On the other hand they emphasized the need for tighter work with civic organizations, the need for multidisciplinary instruction and noted a better understanding of the gap between planning and the execution of a project. Academics noted the unique educational challenges they had to face and the contribution to their teaching and instruction skills.

From Chemical Reactions to Community Interactions – A Case Study on The Development of Community-Based Learning and Research (89)

Building a Community-Based Research Infrastructure in a Liberal Arts College from Scratch (99)

Claire McDonnell - Dublin Institute of Technology

Randy Stoecker - University of Wisconsin

Two community-based learning pilot projects for chemistry students were launched in 2007 at Dublin Institute of Technology (DIT), an institution which did not have a well-established culture of applying this pedagogical approach at the time. The DIT Students Learning with Communities office was established in 2009 to provide a first point of contact for community partners. With their support, three community-based research projects that contribute to cross-disciplinary projects have been implemented. These relate to road safety awareness (College Awareness of Road Safety project), soil analysis in a community garden (the Lifeline project) and a development project in Malawi (Wells for Zoe).

This case study is informed by the analysis of student reflective accounts of their experiential learning, pre- and post-evaluation questionnaires and assessment grades as well as the application of Shumer's Self-Assessment for Service Learning. An improvement in learner engagement and confidence and in their appreciation of how their subject is applied in real-world situations is evident from the data. Students also often express that they now realise the contribution that they can make to society as professional chemists in the future. Issues were identified in relation to the level of critical thinking and self-awareness in the reflective writing of some students. These learners are generally not experienced at reflecting on action and personal experiences because it is not a feature of their scientific discipline. To address this, a framework to support reflective practice has been introduced with the assistance of the Students Learning with Communities office.

How does a higher education institution begin to develop a community engagement program? When a group of faculty at Kenyon College, a private liberal arts college in Ohio in the United States, asked that question, they came up with an innovative process and an alternative philosophy. The process began with a partnership between the lead Kenvon professor, Clara Roman-Odio, and an outsider, Randy Stoecker, Clara was successful at getting internal funding to coordinate the overall process and organize a group of three faculty to do pilot community-based research (CBR) classes with Randy serving as a resource on planning and carrying out the courses. While these courses were underway. Clara and Randy started organizing a three-day summer seminar for faculty. The process of designing the seminar tried to emulate a basic CBR process, asking potential faculty participants what they wanted to learn and then developing the seminar to fit their interests. In contrast to most such trainings, there was much emphasis on the community aspects of CBR and service-learning. For example, the seminar started with a brief discussion of definitions of CBR and service-learning, followed by a longer discussion of community development and community power to provide an alternative philosophical basis for higher education community engagement and focus on how to maximize the community impact of CBR/service-learning. Clara and Randy then trained faculty in using a project-based model and an appreciative inquiry process to support each other in redesigning one of their courses for a CBR/servicelearning project. The seminar itself followed CBR principles, such as organizing the constituency (in this case, the participating faculty) to direct the process. In doing so, the first day it became clear that the faculty wanted less one-directional training time and more time on developing their courses, so we shifted the focus of the next two days to allow for more of that, including significant time for individuals to get group feedback on their course designs. Because we had faculty from across the curriculum (languages, math. natural science, social science), we had many unique courses. Based on the Summer Seminar, several faculty members carried out pilot projects in their classes ranging from exploratory to complex. From the pilot projects faculty learned about the importance of laving the groundwork prior to beginning a project, such as developing the logistics of student placement, orienting students. completing project agreements, gaining research ethics approval, tracking projects

Academy-Community Partnership with Excluded Women: The Relationship Between Students and Women of neglected neighborhoods in Jerusalem (134)

Edith Blit-Cohen School of Social Work and Social Welfare, The Hebrew University of lerusalem

through journaling, establishing regular group gatherings, and exiting projects. These preparatory strategies were fundamental both for the success of projects and for the institutional support we have received to institutionalize a CRB /SL Program at Kenyon College. In this presentation, we will discuss the positive impact CBR and SL can have in terms of academic and community outcomes and reflect on the ways the Summer Seminar influenced such outcomes.

This article describes, analyzes and evaluates a course held in the framework of Academy-Community Partnership between the Paul Baerwald School of Social Work and Social Welfare and the Faculty of Law at the Hebrew University in Jerusalem. The objectives of the course were to provide the student with basic concepts in the field of social exclusion, human rights and social change, to recognize the basic terms in the field of feminism, accessibility to law and social and legal strategies to cope with the effects of control and oppression and to examine the phenomenon of social exclusion among different groups of women. Additionally, the course was designed to allow collaboration between students of law and social work, and between them and the women's groups marginalized in Israeli society.

27 students from the School of Social Work and from the Faculty of Law attended the course, who in addition to frontal lessons, worked with groups of women from different backgrounds and in different community services. During the course the students received group supervision, and worked together with the women at various projects in their communities, such as Rights brochure in Arabic and Hebrew, A mock trial, the organization of a community meeting about Women's rights and so forth.

This article is based on a formative assessment done during the course. Training sessions with the students and the students' encounters with women were documented and women and students who participated in the course were interviewed. The article describes the process of the course and its products. The principal findings of the assessment are related to both the students and the women. The students were exposed to the "real world" of social exclusion, and gained an understanding of the social and political struggles that exist in this arena. They became familiar with the difficulties faced by the women. Another challenge the students mentioned was the encounter between students from different backgrounds (SW and Law), specially topics regarding different perspectives and jargon.

There is no doubt that the course was an interesting encounter between ideologies, culture and values. The contribution to students is particularly important, because this kind of course enables them to leave the ivory tower and experience the

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situation in the field, which is often very different from the theoretical models that they are taught in the classroom. Undoubtedly, the experience they acquire will make an invaluable contribution to their personal and professional maturation process. The course enhanced students' awareness of social problems (civic conscience) and civic engagement (social involvement). As for the women, they gained a better understanding of the contribution of civil society to preserving civil rights, liberties, and well-being.

Deciding on complex knowledge issues: an analytic-deliberative approach to interpret and manage environmental health risks in two industrial hot spots in Belgium (173)

Organising Research Institutions Through Action Research (176)

Dries Coertiens - University of Antwerp

Jonas Egmose - Roskilde University

Post-modern reflections on risk analysis stress the importance of stakeholder and citizen participation in the governance of complex risks. One of the main arguments is that in many contemporary risk issues the authority of both science and politics is increasingly contested due to inherent scientific uncertainty and the inability of policy makers to decide on solutions that reconcile conflicting societal claims. This is especially true for environmental health risks, since the (causal) relation between environmental pollution and public health is to a large extent scientifically uncertain but at the same time arouses considerable public concerns.

While the advocacy for participation in science and policy is growing, examples on how to put this ambition into practice are scarce. We will present our practical experiences of two local cases where this post-modern principle was implemented. In two industrial hotspots in Belgium environmental health studies were carried out using human biomonitoring (HBM), a technique to measure internal exposure to chemical substances and their biological effects in human tissue. To interpret the large amount of quantitative data derived from these studies and to facilitate the formulation of policy action, we developed and implemented a hybrid analytic-deliberative process that involves experts, policy makers, local stakeholders and citizens.

Practical experience with this approach regarding the successes, difficulties and choices made during the process will be presented with a particular focus on the empowerment of civil society. During the process a range of civil society actors participated in a local advisory committee, together with representatives from local governments and industry. This committee was founded already from the start of the HBM research, which allowed both stakeholders and researchers to learn from each other in an iterative way. Special attention was devoted to the representation and equal treatment of all relevant perspectives. For the citizen's perspective an additional focus group was implemented. Both the human exposure data from the HBM research ('pollution gets personal') and the opportunity to participate in the research and policy process did contribute to the empowerment of civil society actors, mainly in terms of improved understanding, networking and agenda-setting power. Nevertheless, important barriers remain regarding scientific complexity, historical distrust and competing values.

This paper analyses potentials for action research enabling knowledge-creation responding on societal challenges as faced by local communities. This particular challenge represents the inherent paradox of the knowledge economy, that increased contextualisation of knowledge production does not necessarily lead towards greater acknowledgement of peoples' everyday life experience as part of understanding and developing sustainable solutions. To meet this challenge the paper presents the findings of a three-year action research project aiming to provide local communities with a greater say in future sustainability research. Analysing the findings of this project it is highlighted how collaboration across sustainability experts and local urban residents can allow for new orientations within science to emerge. The findings are analysed building on the methodological framework of Critical Utopian Action Research, First it is showed how the process of enabling free space for local residents to share their experiences of living in their local area can provide the possibility collectively to identify and articulate societal dimensions of urban un-sustainability. Secondly it is examined how this process can offer a free space for sustainability experts to confront the role of science, how it is done. and whether it meets the challenges faced by urban communities. In this way epistemological challenges for social learning between community participants and scientists are examined and conceptualised providing a better understanding of the opportunities and barriers for local communities to have a qualitative impact on future research orientations. On this basis interaction between science and civil society is discussed in particular relation to future urban sustainability. The paper argues for the need to address sustainability and the role of science in society, not merely as scientific but as democratic questions. The paper addresses contemporary opportunities and barriers for community based action research doing so, taking into account the way contemporary science is institutionalised, and calls for increased knowledge democracy meeting the inherent challenges the knowledge economy.

Public opinion, governance and transitions management: the case of Finnish urban transport (177)

Paul Upham - University of Leeds

This paper discusses how online public opinion polling can be used to gain insight into the role that civil society can play in sustainable transitions. It strengthens the case for citizen consultation in socio-technical policy planning by evidencing the varied nature of public opinion on options for change in a key policy area, (land-based) passenger transport.

The paper also adds specifically to the limited practical and theoretical work on the role of public opinion in socio-technical transitions thinking. Frameworks such as the multi-level perspective (MLP) deal with the dynamics of socio-technical systems in which 'the public' and technologies are variously embedded. Yet the roles and interconnections of citizen and consumer behaviour, concern, attitudes and beliefs in system change are little referred to in socio-technical transitions theory. Seeking to remedy this, the paper reports and uses the results of a large scale (1000 people) opinion survey in Finland that documents opinion on innovation policies and technologies relating to lower carbon urban transport, including demand management and technological substitution options. This work is part of a broader study of transport innovation policy and governance in Finland.

The opinion survey referred to uses a demographically stratified population sample based on travel to work areas, using questions partly drawn from existing surveys of public opinion of transport options and climate change, for comparison. Additional, new questions probe public opinion of transport innovation priorities to provide additional information on attitudes to policies intended to shape transportation futures. Question selection and development was undertaken so as to represent a range of technological, behavioural and legislative options. Existing Finnish opinion surveys were also taken into account to avoid duplication and to provide additional context. These include an online public and stakeholder survey conducted by the Ministry of Transport and Communications and results for Finland of a 2010 Flash Eurobarometer poll on the future of transport.

In terms of theory, our purpose is to explore the how the role of public opinion might be considered in analyses of innovation governance, and particularly in transitions management, a sub-field of the transitions literature that explicitly addresses governance. This also links to recent recognition of the agency of a variety of actors

in innovation policy (e.g. Flanagan et al., 2011). We use the empirics to discuss a number of issues, analytic, practical and normative, including the structuring role of public opinion and public expectations; the influence of the public relative to other actors; engagement procedures; and the relationship of public opinion to change and stasis at the 'landscape', 'regime' and 'niche' levels posited in the MLP. Working within the MLP framework, we are interested in the implications of public opinion, public participation and other literatures for both innovation-related policy analysis and for policy practice.

Reference

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UK Community Partner Project - changing the landscape for community university partnerships? (105)

Engaged Futures? (106)

Sophie Duncan- National Co-ordinating Centre for Public Engagement Kim Aumann - UK Community Partner Network, Boing Boing

Community partners are not one homogenous group and hold different experiences and expectations of partnership working with universities. The UK Community Partner project is a new initiative funded by the UK Arts and Humanities Research council. Through two national summits, focus group and an online survey, a range of opportunities and issues have been identified that community partners share in common and want to address. Whilst excited about the potential of community university partnerships – and recognising the mutual benefits afforded by this type of working, some issues remain. Joint decision making, power differentials. funding, capacity, sustainability and legacy are all high on their agenda. How might community partners, universities and research funders help ensure that these issues are addressed, and how can community partners influence these agendas? Communities provide a rich focal point for uncovering new knowledge, translating findings into action, and sharing innovations, however there are obstacles to keeping communities at the heart of partnership working that encourages community designed, community owned, or even community managed research and practice. For example, in the UK, we frequently hear academics citing issues of limited training and payment, complexities of peer review, institutional requirements and ethical approvals as frustrating barriers to partnership working. In a climate where public and voluntary sector funding cuts make the inclusion of community partners even harder. we wonder what the next resilient move might be. How do we weather the storm and create enduring partnerships for the future? Community partners participating in the UK Community Partner project suggest they need infrastructure support and read decision making powers to build capacity and a legacy with sustains this way of working. What does this mean for universities, funders and community based organisations? This session will explore some of the findings from the UK Community Partner project, and encourage delegates to consider how might we create conditions where community university partnerships flourish. Using artefacts we will encourage delegates to share some of their experiences: share highlights from the UK Community Partner project – including resources developed to support practice; and encourage delegates to come up with suggestions of how we might best support community university partnerships and overcome some of the current challenges in our practice. The session will be convened by three stakeholders in this project: a

community partner; an academic and the NCCPE.

Sophie Duncan- National Co-ordinating Centre for Public Engagement Paul Manners - National Co-ordinating Centre for Public Engagement

How might universities engage differently in the future? What trends and drivers will affect their engagement models? What do civil society actors want from the engaged university, and what can universities learn from partnership practice in other sectors? In 2013 the NCCPF launched a consultation process to explore these questions. Community based organisations; academics; university staff and students; charities and cultural organisations came together to imagine futures for the engaged university in 2025, and to explore how they could be delivered. This session will introduce the results of this consultation and discuss how these might help us rethink how universities engage with society. Nine visions of the engaged university will be presented, and delegates will have the opportunity to interrogate these visions, and discuss their relevance to the universities that they work with. Drawing on a range of tools developed to take conversations about the future of the engaged university into the heart of university practice – delegates will have the opportunity to discuss how great practice in other sectors could transform the higher education sector. Our collective visions include opening up the physical and intellectual assets of the university; developing more effective co-production partnerships; blurring the boundaries between universities and their local communities; supporting and stimulating social innovation: learning ways to value different forms of expertise: and creating cultures within and outside HE to value these forms of interaction. We would be interested in presenting the results of our consultation in a plenary session, but would also be keen to host a round table workshop, that would enable delegates to interact with the outputs from the consultation, and to develop their own visions of the future. The consultation has made use of a variety of interactive exercises, including developing strong visual imagery to help stimulate thinking and debate: visioning exercises that encourage aspirational thinking about how the future could be different; use of allegory to capture key ideas; and lots of opportunities for discussion and debate both on and off line. We will draw on this methodology to engage delegates in the content of the consultation, and invite them to reimagine the future of their own work with universities.

Non University Science Shops: Challenges and Opportunities (150)

Meira Hanson - The Heschel Center, Israel Kirsten von der Heiden - WTT e.V. Saxony, Germany

Our current knowledge base about the formation and organization of Science Shops and similar initiatives is predominantly about university based Science Shops, the Dutch model and the Berlin model "kubus" at TU Berlin – ZEWK prominent among them. At the same time, there is a growing number of Science Shop type initiatives based outside the university, whether for practical, organizational or even ideological reasons. These initiatives are diverse in their history, structure and objectives, yet often face similar operational and other challenges. At LK6 we would like to create a space for representatives from Science Shop type initiatives working outside the university to meet and learn from each other in a conference session designed as a workshop. We will invite initiatives to share their experiences with the group and then facilitate a structured discussion of common themes and concerns. We hope this session will generate new knowledge and useful materials on possible models for non-university Science Shop type initiatives.

Value-led and mission orientated: a new science shop NGO in Hungary (147)

Barbara Mihók Community-based Research for Sustainability Association (CRS)

Non-university science shops Value-led and mission orientated: a new science shop NGO in Hungary Barbara Mihók*. Zoltán Baimócy, László Czmarkó, Judit Gébert. Szilárd Ledán, György Málovics, Katalin Margóczi, Réka Matolay, György Pataki, István Szentistyányi Community-based Research for Sustainability Association (CRS), Szeged. Hungary *crshungary@gmail.com; barbaramihok@gmail.com As a result of the PERARES project, a new science shop was established in Hungary in the beginning of 2013. The idea of a new NGO arose during the participatory action research (PAR) on local human rights and marginalized Roma people conducted in the county-seat town of Szeged. During the first two years of the PERARES work it became clear that emancipatory and participatory action researches alike 1) are quite difficult to incorporate into a traditional academic context, 2) are novel approaches in social science and interdisciplinary research, 3) are deeply transformative in terms of personal attitudes and research interests. 4) can have far-reaching implications in many other areas (such as conservation, urban development etc.). As a response to these outcomes, a new NGO called Community-based Research for Sustainability Association (CRS) was formed in Szeged by 10 individuals including researchers. activists, academic lecturers, students, local politicians and civil servants. According to our mission, "being committed to sustainability, social and environmental iustice and solidarity, CRS aims to study and shape social, ecological and economic systems and their relations through (1) participatory action research and (2) citizen activism." Our aim is to bridge the gap between the academic sphere and the local communities. with a special emphasis on the most vulnerable groups of the society. CRS is a community-based research entity, operating independently but connected to the University of Szeged through many links. During this session we aim to get to know the experiences and "know how" - s of other science shops and community-based research centres operating in a multi-actor arena effectively. In our presentation, we would like to initiate knowledge-share and discussion around the following points: 1) Science shop or community-based research centre? What challenges can a value-led action research group face when functioning also as a science shop? 2) How do other independent science shops build their strategic partnerships? Is there any ethical/ conceptual consideration on possible partners (politicians, academics, for-profit organizations etc)? 3) Operating independently but in strong collaboration with the university/academics - experiences from other NGOs

Running an extra-university based Science Shop in Vienna: Experiences, challenges, successes, lessons learned (159)

Michael Strähle & Christine Urban Wissenschaftsladen Wien / Science Shop Vienna

Located in Europe's largest self-governed NGO centre, the Science Shop Vienna is an independent research institute conducting research on the needs and demands of non-profit organisations such as charitable organisations, action groups, local authorities and civil initiatives. Being a small institute, it is nevertheless pioneering research topics and approaches to involving NGOs in research processes, topics and approaches, which are regularly taken up later by research organisations and policy makers. Established in 1991, the Science Shop Vienna was always an extra-university based science shop since then. As most Austrian science shops. Along the more than 20 year long history of the Science Shop Vienna the presenters will report how it all began, what opportunities and challenges such a setting presented and presents, how the present activities of the Science Shop Vienna evolved, and what the presenters have learned from their activities.

(This abstract was submitted for the session Non University Science Shops: Challenges and Opportunities (ID 13), on which Kirsten von der Heiden (WTT e.V., Germany) and Meira Hanson (Herschel Center, Israel) submitted a proposal.)

Reflexive monitoring and evaluation; a tool to support social innovations (9)

Sol Jifke - Wageningen University

Reflexive monitoring and evaluation: a tool to support social innovations Proposed by Jifke Sol and Hansie Eppink, Education and Competence Studies Wageningen UR. Introduction Social innovation is part and parcel of society. The level of innovation processes depends on among others the strength and power of governmental structures. The economic crisis and our feeling of losing ownership of our own living environment makes that social innovation or community based learning projects are gaining more momentum. Working together in social innovation groups reflection and learning must be part of it if system innovation is desired. Reflexive monitoring is an approach supporting such a system innovation process. It stimulates the participants to keep on learning and reflecting. This process of social learning can be stimulated by using reflexive tools. In this session the principles of reflexive monitoring will be discussed and participants will get the opportunity to practice tools based on the principles of reflexive monitoring. The session closes by reflecting on the method itself and the tools used for own projects. Objectives • discuss the usefulness of reflexive monitoring tools in community based learning and social innovation projects • enable participants to practise with reflexive monitoring tools for community based learning and social innovation projects • examine practice in this area – what are the challenges and benefits of using reflexive monitoring tools in community based learning and social innovation projects • discuss issues which have arisen when discussing reflexive monitoring and practising the tools Participants of the session • People who are participating in projects about community based learning or/and social innovation projects • People who are currently considering ways of empowering civil society using reflexivity

Living Knowledge-Based Education: Lessons from design process with a multi-ethnic community (53)

Design With People – Users As Co-Designers (54)

Rachel Kallus - Technion

Signe Pedersen - DIST, Aalborg University Søsser Brodersen - DIST, Aalborg University

Planning with the Community, as its name indicates, is a community-engaged course offered to architecture and planning students. It focuses on theories and practices that link architecture/planning with community participation. Its premise is that professional practice is a framework for social commitment with far-reaching effects, especially in conflict zones where economic and cultural differences are accentuated. Professional responsibility is devised both within the physical and spatial realm and as a mediator between ethno-national communities and their sociopolitical environments. Students use professional tools, encountering local communities in the design process and thus working with rather than for them. This process not only calls for a more conscientious approach, but also engages students in the world they live in. The dialog with marginalized urban communities empowers those communities and creates a space for the students to reflect upon their own social position, to become aware of their complex identity vis-a-vis their professional training and, often for the first time, to consider the possibility of an alternative career with third sector organizations and community activists. The paper examines a design process with a local mixed community in Haifa in which students worked with residents threatened by the construction of an inter-city road. Residents of different ethnic and national groups had no previous contacts, but the arrival of the bulldozers forced them to get organized. Working with the students enabled them to understand the planned road, to visualize the change it brought and to fantasize alternative solutions. Although unable to stop the road, residents were able to negotiate positively with the municipality. This process revealed to the students as well as to the residents the potential of spatial visualization, which turned out to be an empowering tool for civic action. It turned passive and bitter residents into engaged urban citizens who work successfully with the authorities to improve their lives. Although the road was not stopped, an underground passage which aroused concerns of turning into a crime area was halted, a rail required by the residents was installed, and a spacious public park was designed and built with residents' participation.

For several decades the Western's answer to alleviate poverty in the Global South has been to implement technologies to meet the needs of the poor. However two crucial issues are at stake here: firstly how, and by who, are the needs of the poor identified and defined, and secondly how to ensure domestication of the implemented technologies (Lie & Sørensen, 1996). The Western answer to both issues has been 'participation' and empowerment of the poor people. In this article the authors questions this, and argues that despite a participatory approach. solutions are mostly predefined from the beginning as being technical solutions (Chambers 1983: Cornwall and Scoones, 2011: Mikkelsen, 2005), The authors argue, that there is a need for approaching development in a more open and holistic sense, that involves co-design activities with relevant stakeholders from the entire value chain, to support the design and development process of appropriate technologies. Especially valuable is the involvement of end-users as co-designers who can contribute in making the technologies intuitive: making them fit the local context and creating ownership and pride among the end-users, which ensures the appropriateness of the technologies. The authors propose the concept of Design WITH People (DwP), as the first initial step to alleviate poverty by developing appropriate technologies. DwP as a concept is a work-in-progress, however it emphasises the involvement of users as co-designers to develop technologies that are suited for the everyday practice of the poor and thus become domesticated. Empowerment is not the goal in itself in this concept, but is considered a natural, positive side-effect grounded in the domestication of technologies. Empirically the authors draw on their own involvement in designing a sustainable energy solution: improved cooking stoves for the rural population of Nepal. Based on the authors experiences in Nepal, where users involved in the whole value chain (manufacturers, end-users, NGOs, Governments) participated as co-designers through design games, interviews and by being observed during their everyday practice, the authors draw out the conceptual framework for DwP. Further, they argue that in such processes it is important to manage how knowledge about different stakeholders, with a special focus on the end-users, is gathered, packed and brought into the design process of new solutions and technologies. Theoretically the article is based within STS, and finds its inspiration in ANT, political process theory (how knowledge is shared and

Democratising knowledge: co-creating the future (50)

Emma Diemont & Egle Draugelyte - OtherWise

communicated across knowledge boundaries – e.g. with boundary objects and intermediaries), co-creation and participatory design.

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Citizens knowledge and laymen knowledge are increasingly recognised as valuable assets in creating innovations to reach social or environmental benefits. This entails a deep form of knowledge democratisation, where different groups in society are involved in the process of knowledge construction. Acknowledging the plurality of worldviews can therefore ensure that not only the views and interests of dominant groups are reproduced, thereby making the arena of knowledge production more democratic.

However, democratising knowledge may sound beautiful, but bringing it into practice successfully is highly context dependent and not as straightforward as one might hope. Enabling circumstances have to be in place to include all relevant actors, give everyone a voice, and create inclusive processes of participation.

During the iWeek 2013, an unconference on 'interactive methods for social change', organised by OtherWise (the Netherlands), various case-studies were presented on recent experiences with interactive methods for fostering participation.

In this paper we will look at three case-studies, in Haiti, Kenya and the Netherlands, which were explored during the iWeek 2013. The participatory process and its outcomes were analysed. The analyses suggests that, whereas in some cases co-creation might be considered as the ultimate stage of participation, in others codesign might be more effective to reach social and environmental benefits.

Community based learning in Sweden and United states – what works in different local context? (146)

Magnus Johansson - Malmö University

Today, there is a well established consensus about the need for collaboration among stakeholders to address increasingly complex social issues. Many of today's wicked problems, like segregation, youth unemployment and social disintegration within cities, need new forms of collaborative learning where different stakeholders and groups can contribute their knowledge and experiences. There are numerous methods for collaborative and social learning. However, we often forget that social learning always is situated within a specific local and institutional context, which creates unique circumstances. What works in one place, may not be useful in another.

The authors have extensive experience organizing different forms of collaborative learning processes where stakeholders outside the university collaborate with researchers and students in different forms of local knowledge production such as research-circles and resident-led research. In this paper, we will compare methods for collaborative learning in community work which takes place in two middle-size cities in Sweden and the United States: Malmö and Rochester, NY. We will compare how local circumstances in Sweden and the United States affect how we could organize community-based research approaches. We will base our analyses on our own experiences of working with community-based research in the city of Rochester, NY and the City of Malmö in Sweden. Both cities have experienced transformation from industrial to post-industrial and both cities are challenged by similar problems. But the situation in a Swedish city differs in many aspects from the situation in an American city particularly with respect to conditions for establishing collaborative learning. In Sweden, the welfare-state is often an important partner in local community development, which means that professional public administrators often take an active part in community development, but in in the US, other local groups, such as resident-led groups, play a more active role in addition to local government.

Our main focus in this paper is to explore how the local and institutional context in Malmö and Rochester respectively affects processes of knowledge development in local community development. What kinds of knowledge about local conditions in a specific neighborhood are emphasized when the process is dominated by public

administrators or when local community groups take the lead? In our comparative analysis we observe distinct differences in process and outcomes. Community work in Sweden needs to adapt processes and organizational structures to rules or regulations formulated by the local municipalities, with the consequences that community work in the end becomes very similarly organized. A majority of those regulations are based on national regulations and policies. This creates a uniformity of community work in Sweden. In the US, where community development work is often driven by resident-led initiatives, processes and structures are more strongly reflective of the unique comuunity characteristics within which the work takes place. Priorities and outcomes are driven by the wants and desires of the residents. Public administrators may play supportive or consultative roles, but do not dominate the processes or determine how community development initiatives will be structured.

Of Wolves and Sheep: CSO Participation as Innovation Mechanism in the European Security Research (166)

Georgios Kolliarakis - University of Frankfurt, Cluster of Excellence

This paper examines the issue of societal stakeholder participation, particularly that of Civil Society Organizations (CSOs), in the European Security Research Programme (ESRP), and explores the untapped potential for social innovation. While there is a track record of multi-stakeholder engagement in deliberations on sensitive policy issues, there is no precedence in engaging civil society actors in the field of emerging ICT and security technologies, Particularly the area of Security Research. budgeted with ca. EUR 1,6 B for the period 2014-2020 under the Horizon 2020 Framework Programme, and administered by DG Enterprise- instead of DG Research -, has already been criticized for overly focusing on surveillance, detection, and pattern recognition technologies. This high-tech bias, in turn, can be attributed to unbalanced stakeholder participation (e.g. mainly defence and security industry) largely neglecting end users, and almost sidestepping civil society actors. Particularly after the large scale US National Security Agency privacy infringements of the past year, the calls for mainstreaming the Responsible-Research-and-Innovation (RRI) template of the European Commission have become louder: RRI should entail. among others, participatory deliberation mechanisms and equal benefit distribution from research results

Drawing upon his experience from a multi-stakeholder, multi-disciplinary project on leveraging CSO-engagement within the ESRP, and on his participation in agenda consultations on the Ethical Review and the Societal Impact Assessment of the ESRP, the author points to the potential of bringing CSOs earlier and more comprehensively into the research policy process.

The proposed paper first, maps the stakeholder landscape of the ESRP and classifies the involved actors operating with diverging logics and competing frames within an interest/power matrix, and shows the discrepancies among them in terms of influencing the policy agenda; Second, it explores post-normal-science conditions for an interactive learning process among researchers, policy makers, and CSOs. The focus on non-technological, i.e. organizational and institutional aspects of innovation, could empower civil society actors, as the ultimate beneficiaries of security technologies, to become active agents rather than merely serving

as research objects during the policy process. This entails finding out which stakeholders should be engaged, how, in which stage of the policy process in order to enhance transparency, legitimacy, and accountability, and make the ESRP more demand-driven; Third, the paper reflects upon the conditions for valorizing publicly funded research and the risk of non-intended consequences such as misfiring, or even backfiring. Not least, this should enhance the potential for establishing new evaluation criteria for goals and results of research, and more broadly adapt the governance regime of science, particularly in contentious fields such as that of public security.

Results of engaging stakeholders in science and technology: Adapted European Awareness Scenario Workshops in the INPROFOOD project (171)

Michael Strähle - Wissenschaftsladen Wien Christine Urban - Wissenschaftsladen Wien

2012, at the Living Knowledge Conference in Bonn, the authors presented their concept for adapted and refined European Awareness Scenario Workshops (EASW), a method they apply in the FP7 project INPROFOOD, Now, after all workshops have been conducted and their outcomes analysed, they present the outcomes of the workshops and some lessons learned from this rather large scale engagement activity. Since about 20 years EASW have been conducted in many countries. Usually this method is applied in urban planning in local contexts to create balanced participation of stakeholders in developing sustainable solutions. In general EASW are geared at reaching a shared vision on a given topic among different actors and to gather their knowledge about barriers, experiences, and needs. Furthermore, EASW participants propose steps to make these visions come true. It is a precondition for EASW that they are on topics where decisions still can be made. That way, they aim at promoting debate and democratic participation in decision making and form a basis for further discussions and assessments among policy makers, and, with outcomes being communicated widely, a broad range of stakeholders and society at large. In INPROFOOD the EASW approach was applied on national and European levels for developing shared visions of how to reconcile health concerns and innovations in food technology. In 13 European countries. three workshops series were conducted. Among others, participants included policy makers, health and food professionals, representatives of consumer organisations. business associations, organisations in public health, self-help groups, environmental organisations, research funders, and scientists. Connecting food technology with health and sustainability is a constant task, irrespective of different views, because there are many varying needs in populations, and conflicts are inevitable. In such a conflict area, stakeholder involvement has to be as credible as possible and methods have to be optimised for and tailored to sensitive issues. The authors present the methodology they applied and its limits, their efforts to make this approach credible and transparent, lessons learned and an analysis of the workshops outcomes.

Framing Governance Challenges in Biodiversity Policies (56)

Rose Egelhoff - Pomona College/Loka Institute Rick Worthington - Pomona College

Since the 1970s, policymakers at all levels of government have instituted sensible measures to protect environments and (sometimes) to pursue the larger goal of preserving biodiversity, but these efforts have been ineffective in reversing the decline of biodiversity. There is very little controversy among natural scientists about the benefits of biodiversity and the sources of its decline, nor is there much of the industry-manufactured controversy that is present in the climate change arena. On the other hand, there is significant concurrence among government, industry, expert and even environmental elites on schematic policy frameworks, so one must dig into the details to grasp where differences lie. This variegated landscape of biodiversity policy creates many ambiguities and complexities that keep policy implementation out of public view. This estrangement of biodiversity policy from citizens is exacerbated by the multiple levels at which governance is organized, and the obscure nature of the term "biodiversity." Taken together, these characteristics of the biodiversity policy field impede the fundamental changes in production and culture that seem necessary for a sustainable balance between people and the planet.

In principle, citizen deliberation could improve biodiversity policy in two basic ways. First, deliberations could document the views of a diverse range of citizens who have studied balanced information on the issues and considered them together, providing a picture of citizen views that is otherwise not available and that might stand out in this policy arena. Second, citizen deliberations could provide input on the implementation of existing policies. This critical component in effective policy is especially removed from the citizenry at the international level.

This paper focuses on the United Nations Convention on Biological Diversity (CBD) in exploring how the integration of citizen deliberation into biodiversity policy might make a difference in a specific policy venue. We argue that deliberation can play a constructive role in making biodiversity policy more effective in five specific ways:

- dentify and assess policies that have been proposed in the past, but have been rejected, ignored, or weakly implemented. Changing circumstances and a clear citizen voice may cast a different light on potentially beneficial policies that engenders serious consideration of them by policy makers.
- 2. Support deliberation among people in the global south, and between them and people in the north. Policy discourses among ordinary citizens that cross these boundaries, whether deliberative or not, are rare. "South-south" and "triangular" deliberation can provide voices that are absent from the discourses affecting the intertwined interests of these citizens.
- 3. Inform research policy. The science policy interface is critical in biodiversity policy, but citizen preferences and knowledge are virtually absent from it.
- 4. Increase public awareness by amplifying deliberative results to the general public in addition to policy makers. Biodiversity is rarely a prominent issue in public discourse despite its significance and the growing body of scientific knowledge and detailed policy making it has generated. Informed citizen voices would be unique in this environment, and might be more readily embraced by the public than conventional scientific and policy discourses.
- 5. Assess emerging technologies that have major implications for biodiversity, such as geo-engineering and synthetic biology.

Towards a participatory vision of sustainable development (SD): Challenges of a transdisciplinary research-project with multi-ethnic actors in the South Caucasus/ Georgia (79)

Anja Katharina Salzer - Free University of Bolzano

As the access to natural resources but also strategies of securing livelihood have received diversification during the processes of socio-economic and political transformation in the former Soviet republics of the Caucasus new challenges for the local eco-social systems arise. In transforming these challenges into action, a common perception of "sustainable regional development" among the respective stakeholders is seen as a key.

The transdisciplinary project (BIOMAN) – staffed with a biologist, a hydrologist and an anthropologist – is working on the interrelation of local land-use practice with the sensitive biodiversity of alpine steppe-ecosystems of the Javakheti region in Southern Georgia aiming to transform its findings into sustainable practice. As pasture systems can not be considered independently of their wider socio-economic embedding the research is taking into consideration sustainable regional development issues at large. In particular the pass on of knowledge within (traditional), local social structures, and the Soviet legacy play a mayor role in local perception, practice and needs, and inform production and use of knowledge for sustainability. In order to realise a participatory vision of sustainable transformation with respect to the co-construction of knowledge and empowerment of civil society actors cognitive-mapping processes were chosen as one of the first steps towards the development a local notion of SD. Such an methodological involvement of stakeholders allows a holistic identification of real life problems and thus guide and determine research targets and transformation paths. Although this type of process and transformation oriented research is consequently based on qualitative, participatory approaches, some theoretical considerations for the discussion of a vision of local sustainability are important: At first the character of the concepts "sustainability" and "SD" as multifaceted, integrative, normative and highly sociopolitical requires a reflection on different levels. In this context "development" is seen in therms of Amartya Sen (2009) as freedom (instead of development as needs satisfaction or economic growth). As a heuristic tool, the "capability approach" by Sen and Nussbaum complements the attempt by depicting the objective of the concept of sustainability. It offers a reflection of "justice" and is encouraging a conversion of the diffuse therm of "needs" of future generations within the concepts of sustainability/SD.

The paper will discuss first findings of the ongoing research process and will depict some insights and challenges in therms of project shaping, research organisation, knowledge production as well as cooperation, integration and capacity building that arise from transdisciplinary work on sustainable transition processes with multiethnic actors in the South Caucasus.

Unfavourable bioenergy policies remain despite solid international CSO cooperation (88)

Bente Hessellund Andersen - NOAH - Friends of the Farth Denmark

The reinforced use of bioenergy in the renewable energy systems set by EU mandatory targets for renewable energy goes hand in hand with a growing global population and changing diets towards increased animal products consumption, while there is no decrease in the use of other bio-based products. The resulting pressure on global land has stressed the need for cooperation between civil society organisations (CSOs) across borders and between CSOs and researchers. It has also revealed constraints to CSO cooperation and disagreements amongst CSOs and between CSOs and researchers.

Some predictions have come true, although they were doomed as scaremongering, e.g. predictions that the EU mandatory targets for agrofuels would lead to land-use changes, competition for land, rising food prices and evictions of small farmers and indigenous peoples from their territories. However, economic interests and corporate lobbying appear to be stronger drivers than scientifically substantiated arguments in relation to politics development.

Researchers may be reluctant to propose 'unrealistic' solutions, although their findings indicate the need for such 'unrealistic' solutions. For instance, some researcher have found severe problems regarding the scale of agrofuels use induced by the EU mandatory targets. Nevertheless, they suggest to plaster the wounds with sustainability criteria rather than abandoning the mandatory targets or avoiding the use of agrofuels because the more radical solutions are considered unrealistic.

Co-operation amongst more radical CSOs and researchers across borders including South-North has shown to be beneficial, although not sufficient to achieve the desired goals. The work of the more radical CSOs' is not getting easier by the fact that some CSOs themselves participate in the invention of certification schemes and thereby support the strong interests of the business sector in the plundering of the Earth's surface for bioenergy. When politicians include CSOs and researchers in decision-making processes they tend to listen to so-called pragmatic viewpoints rather than the radical ones. Politicians may need to be pragmatic and make

compromises, but this is not the case for CSOs and researchers. The 'pragmatic' attitude practiced by some scientists and CSOs therefore does more harm than good by legitimizing politics that continues the plundering of the Earth's surface. The presentation aim to discuss ways to include marginalised positions in developing societal transitions on a holistic basis.

Applying grants and projects to realize innovative Science Shop ideas (151)

Kirsten von der Heiden - WTT e.V. Saxony

Advanced Science Shop members prevent Know-How on steps to reach grants or project funds to get innovative Science Shops' and partners' ideas realized in future. WTT e.V. — as one of the PERARES partner Science Shops of Saxony — provides this workshop addressed to Science Shops, NGOs and non-university based partners. We are working out steps to - Get from the initial idea to an innovation description - Find grants or project funding for innovative project/development ideas- Learn by examples of advanced Science Shops' projects- Formulating topics for an initial application scheme To be prepared on the Horizon 2020 call and future ones, this workshop wants to empower young Science Shop members and partner-members to realize joint innovative project and activity applications for grant or fundings.

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