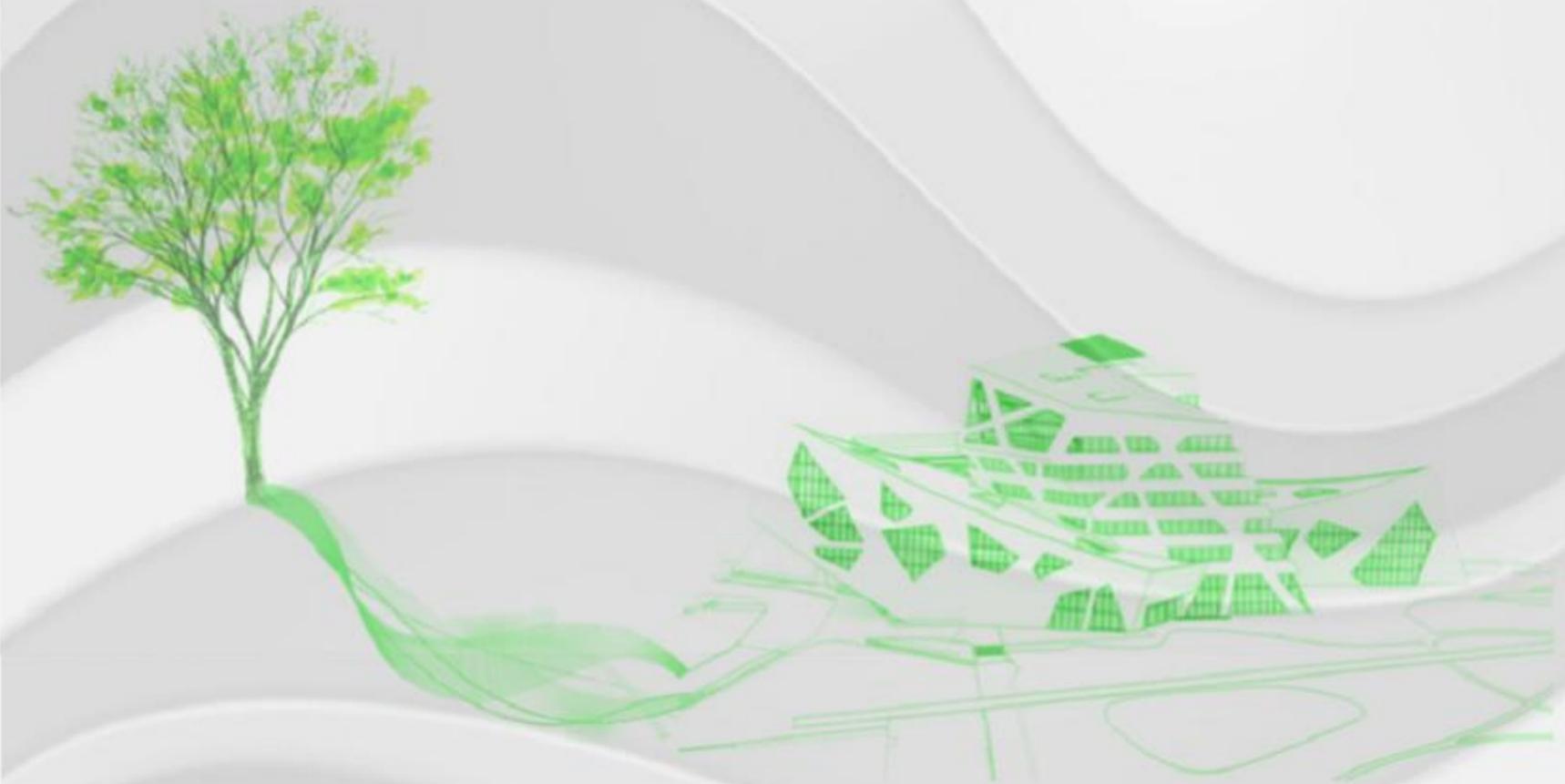




# Leverage Points 2019

International conference on transformative sustainability science  
Leuphana University of Lüneburg, Germany, 6-8 February



Sessions programme

# Leverage Points 2019 Conference

## Session 1 (Wednesday 6. Feb 10:30-12:30)

<b>(1.1) Knowledge co-production for sustainability</b>			<b>(1.2) Destabilizing institutions for transformative change</b>			<b>(1.3) Perceptions of nature</b>		
This session explores learning and knowledge coproduction as an inclusive approach to sustainability, including case studies in Tanzania, and Columbia. Approaches to coproduction, and their associated challenges, are discussed.			There is growing recognition that in order to achieve sustainability it is important to get rid of unsustainable regimes. The contributions to this session focus on the productive role of declining or failing institutional regimes, and how institutions can be destabilized. It also critically reflects on collapse discourses.			Human perceptions, attitudes and values fundamentally shape connectedness to nature. This discussion investigates topics ranging from spiritual dimensions of human-nature connectedness to attitudes about specific elements in nature, such as carnivores.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
108	Franziska Ehnert, Markus Egermann and Anna Betsch	Rethink, Reconnect, Revolutionize: Urban Sustainability Transitions through New Partnerships between Transition Town Initiatives and Local Governments	103	Jesse Schrage	Exploring 'Energy Sobrieties' as leverage for rapid urban decarbonisation.	66	Maximilian Muhr, Lisa Schlesinger and Berta Martin-Lopez	Exploring Connectedness with Nature: The need for an integrated methodological approach
203	Jennifer Rao-Williams	Exploring change through learning journey metaphors	109	Pim Derwort	Sustainability transformations through failure? How institutional failure and decline contribute to fundamental change	70	Pele Cannon	Carnivores, 'Conservation' and Coexistence: a human ecological perspective on what humans think of wolves (and what wolves might think of humans).
234	Josie Chambers, Melanie Ryan and Carina Wyborn	The implications of diverse forms of co-production to address socio-ecological challenges	130	Giuseppe Feola	Breaking out! Six propositions on the deliberate unmaking of unsustainable socioecological systems	245	David Krantz	Navigating Spiritual Depths: The Development of an Interfaith Ocean Ethic
403	Lorae van Kerkhoff, Claudia Munera, Michael Dunlop, Carina Wyborn	Co-producing transformative change? Rethinking conservation under climate change in Colombia	150	Stephen McGrail and Briony Rogers	Institutional decline in sustainability transitions towards water sensitive cities: the case of Melbourne, Australia	250	Andrea Muñoz Barriga	People perception of nature in an Andean ecosystem. Guaylabamba surroundings, Ecuador
79	Michael Bernstein	Transforming Research and Innovation Systems through Responsible Research and Innovation: Real-world Experiments of the NewHorizon Project	162	Sebastian Strunz, Matthias Schröter and Melissa Marselle	Leaving the "sustainability or collapse" narrative behind	58	Maraja Riechers, Agnes Balazsi and Joern Fischer	Human-nature connectedness as leverage points for sustainability transformation
Room	40.146		Room	40.108		Room	40.152	
Format:	world café		Format:	world café		Format:	panel	
<b>(1.4) Communities of collaborative research</b>			<b>(1.5) Socio-ecological transformations</b>			<b>(1.6) Learning; knowledge and wisdom</b>		
This discussion presents different types of collaborative research such as Action Research, Citizen Science, or real-Format: World labs. They all share the goal of transformation and finding solutions to sustainability problems, while navigating challenges. Reflexivity and co-creational approaches are proposed as ways to overcome these challenges.			This discussion focuses on approaches to transformative change from a socio-ecological systems thinking perspective. Talks draw on notions such as ecological succession and leverage points as framings for understanding socio-ecological change.			This discussion focuses on learning in relation to transformative change. Talks range from discussions on Aristotelian notions of practical wisdom, through facilitated and collective learning; playful learning and unintentional learning. The session challenges the dominant paradigms of how and what we learn.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
88	Katja Malmberg, Elin Enfors-Kautsky and Albert Norström	Collaborative explorations of social-ecological system dynamics and positive landscape futures in Helge å catchment, Sweden	90	Rika Preiser, Minka Woermann and Reinette Biggs	Applying a systems thinking paradigm to engaging with social-ecological problems: some practical and ethical implications	216	Shintaro Miyazaki, Viktor Bedó, Selena Savic and Yann Patrick Martins	Learning the Complexities of Commoning. Playful Agent-Based Modeling as Thinking-Toys for Urban Commons.
137	Rebecca Laycock Pedersen	Making long-term changes in the face of transience: Lessons and leverage through action research	221	Maja Schülter, L. Jamila Haider, Steven Lade, Emilie Lindkvist, Romina Martin, Kirill Orach, Nanda Wijermans and Carl Folke	The emergence of social-ecological regime shifts and transformations	316	John-Oliver Engler, David J. Abson and Henrik von Wehrden	Navigating cognition biases in the search of sustainability
158	Gavin McCrory	Developing leverage: A systematic review on societal laboratories for realizing Agenda 2030 through processes of transformation and integration	251	Reinette Biggs, Rika Preiser, Per Olsson, Elena Bennett, Garry Peterson, Albert Norstrom, Clara Raudsepp-Hearne and Laura Pereira	Advancing a theory of change for transformations in complex social-ecological systems: The Seeds of Good Anthropocenes project	359	Guido Caniglia, Christopher Luederitz and Daniel Lang	Practical wisdom for sustainability transformations. Mobilizing old concepts for new problems.
190	Helen Baxter	What challenges are posed by working across sectors, with communities and civil society to: mitigate; prepare for; respond to; and recover from; hazardous events or trends?	374	Gunnar Dressler, Lance W. Robinson and Birgit Müller	How to break vicious circles of land use competition and rangeland fragmentation? Using agent-based modeling to support land use planning	373	Blane Harvey	Learning our way through complex global challenges? Facilitated learning in transdisciplinary research collaborations
387	Sadhbh Juarez Bourke and Ulli Vilsmaier	The semantics of transformation: conceptual work based on Freirean methodology	121	Margaret Haderer	Local Experiments in Socio-Ecological Transformation: Signs of Hope for Transformative Change or Symptoms of a Constrained Scope for Transformative Action? A Macro-Political Perspective.	414	Thomas Grisold, Markus Peschl	From intentional to unintentional unlearning
Room	40.254		Room	40.256		Room	40.176	
Format:	world café		Room	40.256		Format:	panel	
<b>(1.7) Impact, evaluation and accompanying research</b>			<b>(1.8) Dancing with the system</b>			<b>(1.9) Institutions, innovation and change</b>		
We address practices and approaches of evaluation and assessment of transformative research. Besides the question of finding adequate indicators and frameworks, contributions more fundamentally question practices of evaluation and ask how process-oriented, collaborative and accompanying forms of reflection can be applied.			This session explores different ways to conceptualize and engage with the leverage points concept, which fundamentally challenge approaches to achieving sustainability. Key concepts include liveliness, emotion, paradigm, Format: World view, the role of crisis, knowledge processes, metaphor and narrative for change.			This session addresses situations that require fundamental adaptation of governance structures. Such situations include changing policy landscapes (e.g. due to Brexit), and innovations for local and regional transformation planning.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
254	Catalina Codruta Dobre	Co-creating an evaluation framework for a water sensitive valley. The case of Molenbeek valley in Brussels, Belgium.	279	Danielle Davelaar	What if we took into account more systematically that we are a part of Nature?	21	Gabriel Lopez Porras, Lindsay Stringer and Claire Quinn	Corruption and conflicts as barriers to adaptive governance: water governance in dryland systems in the Rio del Carmen watershed
298	Rebecca Freeth and Ulli Vilsmaier	Formative Accompanying Research: A leverage point to strengthen collaborative interdisciplinary research?	120	Petra Kuenkel	Systems Aliveness as a Key Component of Sustainability Transformations	86	Björn Ebert, Engelbert Schramm and Martina Winker	Reusing Wastewater in Agriculture. A Challenge of socio-technical Innovations
342	Alexandra Lux, Martina Schäfer, Matthias Bergmann, Thomas Jahn, Oskar Marg, Emilia Nagy, Anna Ransiek and Lena Theiler	Impacts of transdisciplinary research – How can they be strengthened and traced?	175	Antonietta Di Giulio and Defila Rico	Building on good life – adopting a powerful and appealing narrative for change	106	Kerry Waylen and Kirsty Blackstock	How might Scottish environmental policy instruments allow transformative change in a Post-Brexit Britain?
355	Insa Winkler and Moritz Engbers	Art as a generator of sustainable practice - Freedom versus Indicators	315	Elizabeth Clarke, Guido Caniglia, Dave Abson and Daniel Lang	From pushing levers to dancing with the system: Rethinking transformation for sustainability through metaphor	151	Cristiana Pace	Restructuring institutions for transformative changes: exploring the case of Formula Electric, in the motorsport industry.
144	Saskia Hebert	How to act in fucked-up systems	114	Chad Baum and Bartosz Bartkowski	Exit and voice in the governance of genome-edited food	222	Kathryn Andrews	Scale, normative prescription and complexity: can Australia's regional natural resource management organisations meet challenges of sustainability transformation?
Room	40.175		Room	40.255		Room	40.154	
Format:	world café		Format:	world café		Format:	world café	
<b>(1.10) Developing a theory of transformational change</b>			<b>(1.11) Researcher-practitioner Network for Inner Transitions</b>			<b>(1.12) Transformations timeline</b>		
The term transformational change as used by the SDG Transformations Forum is one of three types of change, involving distinct qualities and issues. However, people refer simply to "theories of change" without distinguishing the type of change they mean. To address this, the Forum is evolving a theory of transformational change (ToTC).			This dialogue session continues an initiative to form a network of researchers/practitioners on inner transitions to sustainability, launched in 2016. For this session, the main objective is to collect ideas to develop a research agenda.			This session will introduce the participatory timeline process and aims that will be co-produced by the attendees during the Leverage Points conference. We will discuss the practice of timeline development and its uses.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
366	Steve Waddell, John Colvin and Ioan Fazey	Developing a Theory of Transformational Change	460	Christoph Woiwode, Stella Veciana, Petra Schweizer-Ries, Christine Wamsler and Iris Kunze	Building and Strengthening a Researcher-Practitioner Network for Inner Transitions to Sustainability (Dialogue Session/Panel)		Glenn Page, David Abson	Introduction to the timeline
Room	40.153		Room	40.165		Room	Forum	
Format:	workshop		Format:	workshop		Format:	special session	

# Leverage Points 2019 Conference

## Session 2 (Wednesday 6. Feb 14:00-16:00)

(2.1) Narratives for sustainability transformations			(2.2) Intergrative environmental governance and policy coherence			(2.3) Landscape change and connections to nature		
This session explores the relation between narratives and leverage points for sustainability transformation, including the role of narrative in climate adaptation and resilience, and changes in meat consumption. We address the building blocks of narrative, e.g. hero, journey, adversary and values.			Complex sustainability problems, transgressing sectoral and scalar boundaries, pose specific challenges to the institutional structures set out to govern them. This session brings together conceptual and empirical contributions that address these challenges through perspectives of integrative environmental governance and policy coherence.			Landscape change is one of the most visible outcomes of global environmental change. How do people navigate such change, and how does landscape change influence people's attachment to particular places? This session explores a wide range of landscapes around the world.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
304	Leslie Mabon	Beyond 'best practices' and 'global exemplars': working with narrative to understand successful environmental governance in cities, through the case of climate change adaptation in Fukuoka.	39	Tolera Senbeto Jiren, Nicolas Jager, Ine Dorrestijn, Julia Leventon, Jannik Schultner, Arvid Bergesten, Feyera Senbeta and Joern Fischer	Governance challenges at the interface of food security and biodiversity: a multi-level case study from Ethiopia	68	Gerhard Reese, Lea Heidebreder and Marlis Wullenkord	From Space to Place: Place Attachment as a function of social and physical changes
308	Aditya Ghosh	'Missing link' in Mumbai: Uncovering how narratives induce inaction in climate change adaptation and resilience governance	59	Chiara Iurato	The "policy package" perspective: what's in it for transformation research?	87	Marina Garcia-Llorente, Irene Perez-Ramirez, Clara Saban de la Portilla and Alejandro Benito	Re-connecting people and nature by farming activities
310	Grit Martinez	Cultural narratives and their potential for leverage	102	Tanira Kingi and Bianca Cavicchi	Adaptation of the agriculture sector in Aotearoa New Zealand to climate change: Role of institutional structures and policy coherence	93	Balazsi Agnes, Riechers Maraja, Hartel Tibor and Fischer Joern	Navigating social-ecological transformation and their impacts on human-nature connectedness in Transylvania, Romania
339	Manuel Rivera	Protection and adversarialism: Two challenges for the persuasiveness of sustainability narratives	212	Julia Ros-Cuellar and Harlan Koff	Understanding transformative development through the analysis of resilience policy interactions: The implementation of policy coherence for sustainable development as a methodology.	220	Maria Garcia-Martin and Claudia Bieling	Landscape values, place attachment, awareness, and personal responsibility as leverage points for landscape sustainability
331	Sander van der Leeuw	The role of narratives in transforming societies	317	Nicolas Jager, Edward Challies and Benedetta Cotta	Bridging the gap between integration and fragmentation in Sustainability Governance – a framework of mechanisms linking governance architecture and system's sustainability performance	306	Girma Shumi, Ine Dorrestijn, Jannik Schultner, Kristoffer Hylander, Feyera Senbeta, Jan Hanspach, Tola Gemechu Ango and Joern Fischer	People and nature connections: the case of a social-ecological system in southwestern Ethiopia
room	40.146		room	40.154		room	40.175	
format	world café		format	world café		format	panel	
(2.4) Exploring the Power of Collaborative Research			(2.5) Levers and leverage			(2.6) Inner transformations		
This session investigates novel and under-explored collaborative research methods such as game-based approaches, theatre as organisational research method, or collaborative conceptual systems mapping. The presented methods aim to create a space for problem-oriented dialogue, and tend to engage with the normative, affective or power related dimensions of doing collaborative research.			This sessions draws in a range of perspectives for identifying where to intervene in complex systems. Talks focus on enabling change agents, transition design, transformation and leverage potential across a number of different systems (food, energy, scientific etc.).			This session focuses on the inner and personal dimensions of transformational change. Talks will address issues related to norms, care, relational values, religion and art and their roles in transformational change.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
74	Leo Reutter	Moving Sustainability Forward: A Game-based Approach For Building Confidence In Municipal Administration	327	Christian Dorninger, Henrik von Wehrden, David Abson, Pim Derwort, Kathleen Klaniacki, Christopher Ives, Cristina Apetrei, Daniel Lang, Nathalie Spittler, Maria Langsenlehner, Maraja Riechers, Julia Leventon and David Lam	Interventions in food and energy systems and their leverage potential for sustainability transformation	240	Jessica Böhme, Zachary Walsh and Thomas Bruhn	Inner Transformation in the Anthropocene
143	Claire Deschner	Collective Theatre for Transformative Self-Organisation	178	Briony Rogers, Katie Hammer and Chris Chesterfield	Diagnosing enabling conditions to identify leverage points and build collective capacity for driving sustainability transformations	349	Christopher Ives	Religion as a sphere of leverage for urban sustainability
187	Ariane Koenig, Isabel Sebastian, Kristina Hondria, Karl Pickar, Bo Raber and Sebastian Manhart	Collaborative conceptual mapping and its potential for transformative dialogue	184	Christian Binz, Alicia Harley and Bill Clark	Systems thinking at the interface of transition studies and sustainability science – A literature review and outlines of a future research agenda	352	Stella Veciana	Connecting inner and outer sustainability: systemic change by self-organisation
211	Jaco Quist	Making Visions for Sustainability Research and Transformation: overview of methods and cases	291	Birgit Penzenstadler, Colin Venters, Leticia Duboc, Stefanie Betz, Christoph Becker, Ruzanna Chitchyan, Steve Easterbrook, Norbert Seyff and Krzysztof Wnuk	Leverage Points in ICT: An explorative analysis of 25 student works	465	Stella Veciana, Taidi Tamm and Oliver Parodi	Connecting inner and outer sustainability: shifting the paradigm by truth and love
257	Angela Moriggi and Katriina Soini	How transformative is participatory research for sustainability? Reflections on the engagement of communities with photo-voice and co-creation workshops.	401	Lotte M Lutz and Annika Weiser	Time in sustainability transformations – identifying the "when" to intervene	466	Stella Veciana, Taidi Tamm and Oliver Parodi	Connecting inner and outer sustainability: recognizing the mindsets and finding the power to transcend paradigms
room	40.153		room	40.176		room	40.254	
format	panel		format	world café		format	world café	
(2.7) Governance of energy transitions			(2.8) Bottom up transitions and governance			(2.9) Knowledge learning, science and sustainability		
Fundamental transitions in the energy sector are a keystone for a carbon-free future, yet strategies and pathways to reach that goal disputed. Contributions to this session provide conceptual insights and empirical examples for the governance of energy transitions. Contributions discuss new venues and strategies to advance energy transitions, and explore the role of new actors.			This session focusses on bottom-up innovations for transformation. It includes complex systems perspectives of tourism, industrial farming, smart cities, social innovation and transitions movements, urban resilience and social justice.			This session focusses on learning, sustainability science and transformative knowledge. The role of emotions, context, motivations, and experiential learning are explored, largely within the context of tertiary education. Here educational institutions and contexts are seen as levers for transformative change.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
141	Larissa Koch and Claudia Pahl-Wostl	The Transformative Capacity of the Water Energy Food Nexus Narrative	30	Amaia Albizua, Elena Bennett and Unai Pascual	Intensive farming and the control of knowledge and resource flows in agriculture: an example from Navarre (Spain)	31	Karin M Gustafsson and Monika Berg	Early career scientists in IPCC. A moderate or radical pathway towards a sustainable future?
205	Toyah Rodhouse, Eefje Cuppen, Aad Correlje and Udo Pesch	Energy system change and the dynamic relationship between perceptions of publics and envisioned futures for gas in the Netherlands	85	Silvio Cristiano, Francesco Gonella, Amalia Zucaro and Sergio Ulgiati	Tourism, urban transformations, and overall life quality in Mediterranean cities. A systems perspective.	323	Jodie Birdman	Pushing the boundaries: Experience based learning in graduate sustainability curricula
247	Jesse Schrage, Kevin Anderson and Isak Stoddard	Regional carbon budgets and leveraging rapid transitions to fossil free futures	426	James Danielsen	Pyramidal Deliberative Democracy	420	Anna Schwachula	German science policy: On route to sustainable development?
275	Eduardo Noboa and Paul Upham	Transdisciplinary transition management arenas for energy policy futures design in illiberal democracies: a conceptual framework	357	Elif Erdogan Oztekin and A. Idil Gazilulsoy	An Exploration into Learning Processes in Networked and Community-led Sustainability Experimentations	269	Rico Defila and Antonietta Di Giulio	Co-production of knowledge – highly valued, rarely realised
295	Sebastian Heilmann	An innovation in sustainable regional governance? The case of the "Energieavantgarde Anhalt"	392	Arcelia Amaranta Moreno Unda, Maria Perevochtchikova and Véronique Sophie Ávila Foucat	"The Autonomous Assembly of the People of Mexico's City Basin". The emergence of a new environmental governance regime and a new trajectory towards sustainability	358	Guido Caniglia, Christopher Luederitz, Daniel Lang and Henrik von Wehrden	What is action-oriented knowledge for sustainability? Rethinking actions and their knowledge in sustainability science.
room	40.108		room	40.165		room	40.164	
format	world café		format	world café		format	world café	
(2.10) Experiments in transformative co-production			(2.11) The power of memes to transcend paradigms			(2.12) A systems approach to identifying leverage points in conservation landscapes?		
In this session 5 cases studies will be presented on experiments on transformation followed by a Format: talks and world café to explore experiences of transformative experiments.			In this workshop, we will discuss the need for current action with respect to, and questions associated with, developing new narratives about how we humans view our place in the world—putting storytellers, mythmakers, and sensemakers of all sorts in the role of today's shaman attempting to heal the world. In particular, we will focus on "memes" as core units of narrative.			This session examines how systems thinking can be applied to key conservation challenges in and around protected areas to identify leverage points. We focus on southern Africa, where conservation and the wildlife economy are an integral part of the rapidly changing social-ecological context.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
407	Bruce Goldstein, Glenn Page, Ioan Fazey, Per Olsson Michelle-Lee Moore	Experiments In Transformative Co-production: A World Café ☐	365	Sandra Waddock, Karen O'Brien and Steve Waddell	The Power of Memes to Transcend Paradigms	48	Hayley Clements and Graeme Cumming	Lock-ins and path-dependence in private land conservation in South Africa
						55	Kristine Maciejewski and Oonsie Biggs	Using regime shifts as an approach to identify leverage points in dryland conservation systems
						163	Duan Biggs	Reframing a crisis to find leverage points for transformation: Insights from Africa's illegal Wildlife trade
						389	Alta De Vos	Using systems thinking to re-frame land claims on protected areas as a conservation and development opportunity
						457	Emmeline N. Topp, Berta Martin-Lopez, Jacqueline Loos	Nature Values, Rules and Knowledge in the Cape Floristic Region, South Africa
room	Room 40.256		room	40.152		room	40.255	
format	Special session		format	Special session		format	panel	

# Leverage Points 2019 Conference

## Session 3 (Thursday 7. Feb 10:30-12:30)

<b>(3.1) Agency, change agents and stewardship</b>			<b>(3.2) Institutional change</b>			<b>(3.3) Urban nature and sustainability</b>		
This session explores human-social interactions and networks in the pursuit of sustainability transformation, including enabling and characterising change agents and local initiatives, notions of stewardship and social capital. Alternatives modes of organising are explored including cooperatives, citizen movements and worker ownership.			This session questions how to describe, and how to trigger fundamental institutional change towards sustainability. The contributions to this discussion present case studies, analysing institutional barriers, path-dependencies and challenges, processes of institutional change, and factors contributing to successful institutional change.			With increasing levels of urbanization Format: Worldwide, how urban residents interact and engage with green areas requires urgent attention. This session explores topics such as urban gardening, green space conservation, urban stewardship and sustainable urban lifestyles.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
18	Philip Hector and Eeva Houtbeckers	"Think twice before you start a co-operative" - Identifying Leverage Points for navigating the diverse economy	25	Nicola Ulibarri, Tyler A Scott and Omar Perez-Figueroa	Environmental hazards, path dependency, and transformative change: Does drought affect the consideration of water and climate impacts in Environmental Impact Statements?	196	Stephan Barthel, Sophie Belton, Chris Raymond and Matteo Giusti	Fostering Urban Childrens Connection to Nature as Deep Leverage Point: The Salamander Case.
84	Esther Carmen	Socio-cultural dimensions of social capital as a leverage point for transformative change	148	Sem Oxenaar and Rick Bosman	The challenges of phasing-out fossil fuels in a fossil fuel intensive economy: the case of the Netherlands	301	Solène Guenat, Andy Dougill, Bill Kunin and Martin Dallimer	Untangling different stakeholders' motivations for urban greenspace conservation in sub-Saharan Africa
134	Claudia Bieling, Tobias Plieninger and Uta Eser	Exploring the normative dimensions of sustainability transformations: The relevance of prudence, justice, and the good life in landscape stewardship practices	154	Ioana Alexandra Duse, Julia Leventon, Nicolas Jager and David J. Abson	Towards a Transformative Food Policy: Understanding Processes and Change in Romania	336	Laura Mumaw, Nadine Gaskell, Helen Corney, Irene Kelly and Ray Ison	Engaging urban citizens in communities of nature stewardship: transformative action in practice
213	Sandra van der Hel, Jennifer Bansard and Manjana Milkoreit	Knowledge and Agency - An environmental governance perspective on the role of knowledge in sustainability transformations	193	Ilonka Marselis and Matthijs Hisschemoller	Institutional Barriers for a Cooperative, Low Temperature trajectory in the Amsterdam heat transition	422	Alan Farrier, Mark Dooris, Adrian Morley	Propagating success? Benefits and challenges arising from a community-based sustainable food model
262	Lakshmi Charli-Joseph, Hallie Eakin, J. Mario Siqueiros-García, David Manuel-Navarrete and Rebecca Shelton	Human agency as deep leverage for sustainability transformations: The transformation lab in the Xochimilco social-ecological system	135	Lars Erik Berker	The leverage behind the points – representative democracy's central institutions as imperative for successful sustainability transformations	12	Matteo Giusti, Ulrika Svane, Christopher Raymond and Thomas Beery	A framework to assess where and how children connect to nature
room	40.108		room	40.154		room	40.152	
format	world café		format	world café		format	panel	
<b>(3.4) Methodologies and frameworks for collaboration</b>			<b>(3.5) Transforming food systems</b>			<b>(3.6) Sustainability solutions and innovations</b>		
This session offers multiple potential answers on how to design methods and frameworks for collaborative transformation oriented research to lever their transformative potential. Propositions include design principles to be followed when applying an ideal-typical transdisciplinary process.			In this session, issues of shaping food system resilience, and narratives of change will be discussed within the key 21st century challenge of transforming food systems towards sustainability.			This session focuses on generating solutions to wicked sustainability problems, with a focus on innovation processes, technology, the identification of social tipping points, stewardship, and nature-based approaches. The talks address solutions in the context of ecosystem services, climate change and universities as hubs for innovation.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
195	Esther Meyer and Daniela Peukert	Approaching problem-oriented transdisciplinary sustainability research based on design practice	94	Michiel de Krom and Anne Gardien Prins	Leverage points for enhancing sustainable food production: lessons from the potato and milk supply chains in the Netherlands	42	Alco Kieft, Robert Harmsen and Marko Hekkert	Toward ranking interventions for Technological Innovation Systems via the Leverage Points concept
219	Andra-Ioana Horcea-Milcu, David Lam and Daniel Lang	Moving beyond complex system understanding to transformation knowledge: design principles from a case-study in Transylvania, Romania	181	Wesley Tourangeau and Kate Sherren	Holistic Management as a leverage point for complex adaptive rangeland systems	176	Mollie Chapman, Terre Satterfield, Hannah Wittman and Kai M. A. Chan	A payment by any other name: Reimagining Payments for Ecosystem Services as Stewardship Support in Costa Rica
236	Martina Schäfer, Emilia Nagy and Gabriele Wendorf	The experimental turn in sustainability research – how scientists deal with new and conflicting roles	246	Verena Seufert, Graham MacDonald, Almut Arneth, Pietro Barbieri, Rachael Garrett, Luis Lassaletta, Hermann Lotze-Campen, Roni Neff, Thomas Nesme, Sam Rabin, Mark Rounsevell and Hannah Wittman	Analyzing wicked food system solutions – recommendations for more transformative food system research	330	Claudia Schmitt and Sophie Palm	Sustainability at German Universities: The University of Hamburg as a Case Study for Sustainability-Oriented Organizational Development
303	Elizabeth Barron, Laura Hartman and Frederik Hagemann	From place to emplacement: The scalar politics of sustainability	325	Tom Oliver, Emily Boyd, Kelvin Balcombe, Tim Benton, James Bullock, Deanna Donovan, Giuseppe Feola, Matthew Heard, Georgina Mace, Simon Mortimer, Richard Nunes, Richard Pywell and Dominik Zaun	Overcoming undesirable resilience in the global food system	340	Heike Zimmermann, John-Oliver Engler, Esther Kohlhaase, Fiona Köhnke, Teresa Russell, Henrik von Wehrden and Daniel Lang	A database of sustainability solutions: implementation, application, findings
380	Johannes Halbe and Claudia Pahl-Wostl	Case-specific design of deliberate transformation processes towards sustainable food systems	400	Cibele Queiroz, Line Gordon, Rebecka Chaglin-Kramer, Elena Bennett, Barbara Frei, Deborah Bossio, Erik Andersson, Matti Kummu, Charlotte Weil, Elin Rööös, Dave Abson and Roseline Remans	Unpacking resilience in local and global food systems research: The power of narratives in shaping pathways and solutions to achieve global goals	369	Stephen Woroniecki	Emancipating Nature-Based Solutions in the Anthropocene
room	40.146		room	40.153		room	40.255	
format	world café		format	panel		format	world café	
<b>(3.7) The role of local initiatives in leveraging change</b>			<b>(3.8) Researcher-practitioner Network for Inner Transitions</b>			<b>(3.9) Transdisciplinary perspectives on land use issues</b>		
Local sustainability initiatives may play an important role as arenas for transformative action and incubators of social innovation towards more far-reaching sustainability transformations. This session unites different perspectives and examples of local initiatives and highlights their potentials as leverage points for transformative change.			This dialogue session continues an initiative to form a network of researchers/practitioners on inner transitions to sustainability, launched in 2016. For this session, the main objective is to collect ideas to develop a research agenda.			This session presents the results of a collaborative experiment (learning-by- doing) that seeks to develop stronger bridges of understanding between natural and social sciences in the often top down, natural science focused-field of Land Use Science.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
136	Eva Wascher	Establishing processes and spaces for the emergence of sustainable practices – the social innovation labs approach	460	Christoph Woiwode, Stella Veciana, Petra Schweizer-Ries, Christine Wamsler and Iris Kunze	Building and Strengthening a Researcher-Practitioner Network for Inner Transitions to Sustainability (Dialogue Session/Panel)	296	Cristina de la Vega-Leinert	"Addressing socio-cultural change" – relevant insights on migration dynamics, emergence of new hybrid communities, social conflict and their impacts on livelihoods and land use
159	Raissa Ulbrich and Claudia Pahl-Wostl	Communities of practice as triggers of structural change: What is the transformative capacity of urban agriculture initiatives in urban sustainability transformations?				52	Kirsten Thonicke	"LULC modelling of Latin American extractive frontiers" – relevant insights that can improve state-of-the-art narratives, scenarios, drivers, processes, indicators and scientific application
167	Annelie Sieveking and Thomas Schomerus	Advisory Councils: Levers for Sustainability Transformation?				432	Jörg Priess	"Incorporating new digital technologies in LULC" relevant insights on how to combine smartphone-based tools to identify, support and develop transformative pathways in agricultural frontiers and elsewhere
191	Leon Hermans and Shariene Gomes	Leverage points for institutional change in urban fringe areas: Experiences with problem- and stakeholder-driven approaches in Bangladesh and India				433	Jahi Chappell	"Making transdisciplinary research on extractive frontiers policy relevant" – relevant insights on how to guide policies towards food security, sustainability, and biodiversity conservation
110	Anna Betsch and Markus Egermann	Re-structuring relations between community-based initiatives and public bodies - How public funding influences community-based initiatives in Germany						
room	40.254		room	40.165		room	40.175	
format	world café		format	Special session		format	special session	
<b>(3.10) Local and embodied knowledge for sustainability</b>			<b>(3.11) Belmont Forum funding call open scoping session part 1</b>			<b>(3.12) Forum Theater workshop</b>		
This session engages with community values and embodied knowledge, learning and practice as key levers for transformative change and resilience. Talks address issues related to collective agency, community knowledge, multiple evidence bases, sense of place and regional identity.			During this scoping workshop we seek to bring together, funders and researchers to understand the potential priorities for research regarding SDG development pathways. The desired outcome of the workshop would be walking away with knowing where we think the community is regarding research progress and current activities, and with an idea of the research that needs to be supported to meet those goals.			The Forum Theatre Workshop offers the opportunity for further reflection and deeper emotional insight into a conference's issues and topics. By initiating a creative process between audience and actors, a theatrical performance is realised in which the participants can review their experiences.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
281	Iskra Rojo and Maria Perevotchkikova	The community monitoring brigade as a green employment alternative towards environmental governance		Josh Tewsbury, Judit Ungvari-Martin and Maria Uhle	Scoping workshop: Part 1		Susanne Mitterhuber	Introduction to forum theaters
157	Laura Donkers	Valuing Community Embodied Knowledge to Re-connect People and Nature						
228	Kathryn Andrews	Northern Australia has resisted attempts at agricultural transformation for two centuries: can landscape literacy help create pathways to sustainable transformation?						
402	Maria Tengó, Pernilla Malmer, Beau Austin and Vanessa Masterson	Partnerships for transformations? Multiple evidence base dialogue as leverage points						
383	John Sinclair, Joanne Moyer and Glen Hostetler	Recognizing the potential for and of transformative learning through existing resource and environmental governance systems						
room	40.256		room	40.704		room	40.176	
format	panel		format	special session		format	special session	

## Leverage Points 2019 Conference

### Session 4 (Thursday 7. Feb 14:00-16:00)

<b>(4.1) Education and learning for sustainability transformations</b>			<b>(4.2) Governance of Sustainability Transitions</b>			<b>(4.3) Sustainable consumption</b>		
This session focuses on the important role of innovation in education and learning in transformational change for sustainability. It explores approaches to systems thinking, navigating complexity, ontological fluidity and skills for inter and transdisciplinary thinking and reflexivity.			How to bring about and govern sustainability transformations? This is one of the pressing questions of sustainability sciences. The contributions of this session approach this question through diverse perspectives and bring together insights into the role of governance as a leverage point for sustainability transformations.			Individual consumption choices fundamentally shape sustainability outcomes. This session looks at how communities consume a wide range of goods and services -- from food to fashion. How and why do people consider sustainability in their consumption choices?		
#	Authors	Title	#	Authors	Title	#	Authors	Title
192	Petra Hansson and Susanna Barrineau	Education as a Leverage Point for Sustainability Transformation	225	Marc Wolfram	Can planning support urban transformations? Insights from a global inquiry	37	Martina Artmann and Katharina Sartison	Edible cities – a leverage to re-connect people with nature and sustainability transformation?
217	Mike Jones, Jan Cincera and Katarzyna Iwinska	Education for Sustainable Development as a Leverage Point for Social Transformation—the WISE Experience	320	Elizabeth Dirth, Giuseppe Feola, Dries Hegger, Sandra van der Hel, Raekhyun E. Kim, Heleen Mees, Joost Vervoort and Arjen Wardekker	Between governance and transformations: insights from a meta-analysis of 180 case studies	75	Magnus Boström	Learning to downsize
261	Pascal Frank	How do I get to know what I think to know? Introducing reflexive knowledge generation within Higher Education	321	Dörte Themann and Achim Brunnengräber	Governance in the Anthropocene – how to govern wicked problems?	105	Kathleen Klaniček, Ioana Alexandra Duse, Julia Leventon and David J. Abson	Applying the Energy Cultures Framework to understand energy transitions: a case study from Transylvania, Romania
263	Geeske Scholz	Re-thinking diversity and complexity in teaching: the use of models and games	375	Eduardo Brondizio, Fabio de Castro, Celia Fudemma, Carl Salk, Krister Andersson and Maria Tengö	Amazonian Governance to Enable Transformations to Sustainability	199	Laura Pereira, Leonie Guerrero Lara and Federica Ravera	How to "flip the tortilla": Traditional Ecological Knowledge (TEK)- driven innovation as leverage points for a more sustainable food system in Spain
345	Claudia Schmitt and Cordula Rütth	Creativity Methods and Serious Play as Tools for Leveraging – Transformation of higher education institutions	399	Jens Newig, Karen Seto, Peter Driessen, Jose Puppim de Oliveira, Nicolas Jager and Bluemling Bettina	Institutions and governance as leverage points for transformations to sustainability	241	Tara Freude	Sifting through the glamorization of Tiny Houses - Perceptions among affordable housing stakeholders in Lüneburg, Germany
room	40.146		room	40.153		room	40.175	
format	panel		format	world café		format	panel	
<b>(4.4) Interculturality and power</b>			<b>(4.5) Systems, models and transformation</b>			<b>(4.6) Transformative design practices</b>		
The session focuses on a broad understanding of interculturality, differentiating the social, cultural and political dimensions. It addresses marginalized perspectives and knowledges and their role in transformative research, considering power asymmetries in and through transformative research practices.			Models are fundamentally important components of systems thinking. In this discussion we will span the space between specific modelling approaches for transformative change (visioning, agent-based models etc.) to broad discussions on the roles of models as leverage points.			Design can be a transformative practice to address complex issues in social, environmental, and political contexts. This session considers design practices such as prototyping, transition design methods and design thinking tools; exploring how they bridge a knowledge-action-gap, develop sustainable innovations, and challenge paradigms.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
95	Nadia Sitas and Odiniwe Selomane	Exploring social-ecological justice through an intersectionality lens	83	Igor Nikolic Nikolic, Eefje Cuppen, Jesse Brinkman and Nourian Peters	Models as boundary objects in inter-organisational collaboration for sustainable transformation	22	Daniela Peukert	Re-thinking Design as a transformative research practice in Sustainability Science
99	Adriana Moreno Cely, Cesar Escobar, Dario Cuajera, Nelson Tapia Ponce and Tom Wanwing	Integrating indigenous knowledge, values and expectations in the territorial planning of multi-ethnic communities in Bolivia	277	Andre Schaffrin and Tanja Nietgen	Transformational change of regional energy systems – A social-network and social-modeling approach	81	Svenja Bickert-Appleby	Technology of transformers – assessing new design practices and tools used by design practitioners to support transdisciplinary societal transformation efforts
194	Andrea Amri-Henkel and Esther Meyer	Post-truth or pre-political – the role of transdisciplinary, transformative knowledge in discourses about the German Energy Transition	309	Jan Hanspach, Tolera Senbeto Jiren, Jannik Schultner, Joern Fischer and Ine Dorresteijn	Participatory scenario planning for reconciling food security and biodiversity conservation in south-western Ethiopia	253	Thomas Eley, Yidan Gong, Robert Managad and Christina Danner	Leveraging Design to Understand and Intervene in Wicked Problems
278	Elisa Oteros-Rozas, Irene Iniesta-Arandia, Sara Mingorria, Marina Garcia-Llorente, Federica Ravera, Ana Paula Garcia-Nieto, Violeta Hevia, Cristina Quintas-Soriano and Fractal Collective	Feminist women collective as leverage point for sustainability transformations	361	Johannes Halbe and Jan Adamowski	Vision Modeling to Generate Target Knowledge for Transformative Change	415	Markus Peschl	Why it is necessary to go beyond social collaboration in future-driven innovation and design processes
61	Rolf Lidskog and Göran Sundquist	Science as means for social transformations: the constitution of global environmental expertise	468	Eva Hummel, Ingrid Hoffmann	The complex phenomenon of nutritional behaviour: Identifying leverage points for modification	54	Michaela Büsse	Towards xeno-design cultures - designing as a process of becoming
room	40.165		room	40.152		room	40.255	
format	world café		format	world café		format	panel	
<b>(4.7) Realising transformation? Early-career researchers</b>			<b>(4.8) Constraining and enabling transformative change</b>			<b>(4.9) Methods for facilitating collaborative processes and learning</b>		
This session will use speed talks and group discussions to co-illustrate and synthesise the relationship between key competencies for individuals conducting transdisciplinary, and transformative research, as well as their enabling conditions.			This session focuses on systemic issues ranging from short-termism and constraining problem framings to the question of whose voice is heard and how we as researchers are engaged with values that shape science and policy making.			This session focuses on interpersonal dynamics in collaborative and collective approaches, including social learning, local and citizen initiatives. Tools to enable such approaches are also explored.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
160	Jessica Cockburn	Exploring competencies for scholars learning the "transdisciplinary triple jump":	73	Tom Beer, Janos Bogardi and Zenda Offir	Coordinated research programs and their management: how to counteract "short-termism" in sustainability research	47	Caroline Lumosi, Claudia Pahl-Wostl and Geeske Scholz	Can designing 'spaces for learning' inform collective learning and transformations?
132	My Sellberg	Challenges and opportunities for individual transdisciplinary PhDs	131	Andra-Ioana Horcea-Milcu, Dave Abson, Cristina Apetrei, Maraja Riechers, Ioana Duse, Christian Dorninger, Rebecca Freeth, David P. M. Lam and Daniel Lang	Approaching values in transformational sustainability science: four discourses for change	156	John Holmberg and Johan Larsson	Shining light on leverage points for sustainability transformations: lessons from three cases working with the sustainability lighthouse
155	Petra Holden	Achieving transdisciplinarity - an interdisciplinary perspective	172	Maria Mancilla Garcia and Tilman Hertz	Towards a Process Epistemology for the analysis of Social Ecological Systems	258	Daniele Brombal	Is fighting with data enough? A reflection on the ambivalence of citizen science in the Chinese anthropocene
152	Jessica Cockburn, Megan Davies, Petra Holden, David P. M. Lam and My Sellberg	Realising transformation? Early-career researchers navigating challenges of practicing transdisciplinary research in a complex world	376	Ida Wallin	How free are Swedish forest owners really? - an alternative narrative of forest management in Sweden	350	Stefan Hilsner	Supporting transformative research by doing transformative research - Empirical evidence about support mechanisms for mutual learning and the potential of wikis as a transformative research method
			469	Johann M. Majer, Matthias Barth, Hong Zhang, Roman Trötschel	Solving Competing Interdependencies: How Negotiating Interpersonal and Intrapersonal Conflicts Impacts Sustainable Solutions	386	Lorenz Hilty and Clemens Mader	The LOTA Methodology – enabling a rational sustainability discourse in the transdisciplinary research process
room	40.108		room	50		room	40.254	
format	special session		room	40.154		format	world café	
format			format	world café				
<b>(4.10) Tipping points and the role of leveraging narratives</b>			<b>(4.11) Belmont Forum funding call open scoping session part 2</b>			<b>(4.12) Forum Theater workshop</b>		
Which narratives create leverage, when, why and how? To explore these questions, we will examine the nature of collective and individual tipping points and narratives focused on determining leverage points. This session will illustrate these questions with case studies and theoretical reflections.			During this scoping workshop we seek to bring together, funders and researchers to understand the potential priorities for research regarding SDG development pathways. The desired outcome of the workshop would be walking away with knowing where we think the community is regarding research progress and current activities, and with an idea of the research that needs to be supported to meet those goals.			The Forum Theatre Workshop offers the opportunity for further reflection and deeper emotional insight into a conference's issues and topics. By initiating a creative process between audience and actors, a theatrical performance is realised in which the participants can review their experiences.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
314	Tetsu Sato	Narratives addressing imminent and momentous challenges can create leverages of societal transformation to achieve sustainability as byproducts		Josh Tewksbury, Judit Ungvari-Martin and Maria Uhle	Scoping workshop: Part 2		Susanne Mitterhuber	Forum theater workshop
92	Elizabeth Clarke, Agnes Balazsi and Agnes Kuhrt	Change agents as deep levers for social innovation in rural Transylvania						
186	Jan Stanley	A Case Study Approach to Understanding Tipping and Leverage Points in Adopted, External Narratives						
313	Kevin Collins, Natalie Foster, Ray Ison and Chris Blackmore	Water governance: Finding a place to stand?						
319	Ilan Chabay	Narratives of Vision and Identity As Levers of Societal Change						
room	40.256		room	40.704		room	40.176	
format	world café		format	special session		format	special session	

# Leverage Points 2019 Conference

## Session 5 (Friday 8. Feb 10:30-12:30)

(5.1) Indigenous and local knowledge			(5.2) State and global sustainability governance			(5.3) Experiencing nature		
This session explores the importance of indigenous and local knowledge in sustainability transformation. The discussion will include the challenge of bringing together local and global understandings, and knowledge sharing across multiple knowledge cultures.			Despite attention on civil-society and market-based initiatives for sustainability transformations, government at different levels plays a central role in their governance. Topics in this session include local level implementation of sustainability policies, the relationship between the state and other actors, and Format: World system approaches to governance.			Experiential connection to nature is widely recognized as a critical component of restoring human-nature bonds. This session highlights the role of experiential connectedness in a wide range of cases and environments.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
7	Silja Klepp, Daniel Morchain and Libertad Chavez-Rodriguez	The role of marginalised knowledge and emotions in building climate resilience	183	Marjan Peeters and Christian Scholl	Environmental procedural rights and sustainable transformation	332	David Abson, Christian Doring, Christopher Ives, Kathleen Klaniecki, Maraja Riechers and Henrik von Wehrden	Sustainability and human-nature connectedness: aligning biophysical and socio-cultural approaches
80	Elvira Hinz, David P. M. Lam, Berta Martin-Lopez, Daniel J. Lang and Henrik Von Wehrden	Indigenous, traditional and local knowledge in transformation research - A literature review	188	Andrzej Strzalkowski	Transformative legal analysis as a new tool for sustainability transitions	326	Charlotte Niekamp	Caring for Peasantry
118	Hella Lotz-Sistika	Counter-hegemonic concept formation - a cross cutting leverage point in sustainability transformations?	185	Victor Galaz, Beatrice Crona, Alice Dauriach, Bert Scholtens and Will Steffen	Finance and the Earth system – exploring the links between financial actors and non-linear changes in the climate system	189	Antonio J. Castro, Adam Eckersell, Cristina Quintas-Soriano and Colden V Baxter	Relational values in river systems in the Western United States
371	David Lam, Julia Möller, Daniel Lang and Berta Martín-López	Understanding sustainability transformations with indigenous and local knowledge systems: an academic perspective	243	Christoph Oberlack, Lara Lundsgaard-Hansen and Joan Bastide	Governance innovations for sustainability transformations: The case of multi-stakeholder platforms on oil palm concessions in Myanmar	341	Vicky Temperton, Jacqueline Loos, Johanna Hoffmann, Katrin Treske-Temperton and Berta Martin-Lopez	Teaching restoration of biodiversity to restore human-nature connections
391	Marie Rappaport and Adriana Moreno Cely	Knowledge sharing for sustainability transformation – Research on transdisciplinary methodology	268	Sylvia Karlsson-Vinkhuyzen	Facilitative Accountability as a Leverage Point in World System Change for Sustainability	423	Dr. Michelle Baybutt, Professor Mark Dooris, Dr. Alan Farrier	Sustainable Health and Justice: Nature-based health promotion for supporting prisoners with complex needs.
room	40.153		room	40.154		room	40.152	
format	panel		format	world café		format	panel	
(5.4) Transformative educational structures			(5.5) Where and when to intervene			(5.6) Transformations, change agents and agency		
How can educational structures foster transformative research? This session discusses collaborative ways of experimentation in academic setting, including the transformative role of secondary schools and the role of young researchers as change agents of academic structures.			This session draws on a range of perspectives for considering leverage points in complex systems. Talks focus on the temporal dimensions of interventions, goal setting, changing mindsets and paradigms, and unpacking the interactions between different interventions for transformative change.			This session discusses change agents and agency in the context of transformative change, with issues ranging from community led initiatives and civil society organization, to barriers to action and the constitution of individual change agency. While talks address a range of contexts there is a particular focus on sustainable production and consumption.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
200	Viktoria Hinz and M.J. Barrett	Towards Ontological Fluidity: Personal Transformations for Achieving Deep Sustainability	395	Per Olsson	Understanding transformative capacities for large-scale systems change: the promises and limitations of the leverage points approach	72	Pedro Macedo	Municipalities in Transition - a transformative game
33	Dirk Marx	The TransLAB*: A vehicle for the methodical application of transdisciplinarity	20	Aisa Manlosa, Jannik Schultner, Ine Dorresteijn and Joern Fischer	Leverage points for improving gender equality and human well-being	78	Ola Persson, Vishal Parekh and Mikael Klintman	Transforming Consumption: The role of civil society organizations in upscaling niche sustainable consumption practices to mainstream
62	Kaisa Raatikainen, Iiona Helle, Linda Mustajärvi, Eini Nieminen, Maiju Peura, Tähti Pohjanmies and Jenna Purhonen	The future of conservation science through the eyes of young scientists	89	Mark Edwards and Guénola Nonet	"Jobs and Growth": An Inquiry into the transformation of organisational purpose	215	Simon West, L. Jamila Haider, Vanessa Masterson, Johan Peçanha Enqvist, Uno Svedin and Maria Tengö	Stewardship, care and relational values
210	Dunja Peduzzi, Oliver Schrot and Lars Keller	The educational option(s) – leverage point(s) of a climate-resilient sustainable development	356	Eureta Rosenberg and Harry Biggs	Is changing the way goals are assessed a key leverage point?	117	Maïke Buhr	Levels of Individual Change Agency for Sustainability Transformation – The Case of the Textile Industry
249	Mandy Singer-Brodowski, Nadine Etkorn, Theresa Grapentin and Julius Grund	Leverage Points for Education for Sustainable Development in the German Educational System	404	Daniel Callo-Concha	Operationalizing systems thinking in research for development: the path of the Center for Development Research (ZEF)	206	Michael P. Schlaile, Sophie Urmeter, Marcus B. Ehrenberger, Kristina Bogner, Matthias Mueller, Andreas Pyka and Michael Schramm	Change agents or drops in the ocean? On the systemic role of transformative entrepreneurs in dedicated innovation systems
111	Idil Gazilulsoy	The Discomfort Zone: An Auto-ethnographic Account of Building a Transdisciplinary Academic Career	room	40.108		room	40.176	
room	40.146		format	world café		format	world café	
format	panel							
(5.7) Transformative co-production experiments for societal learning			(5.8) Scaling and local initiatives			(5.9) A Critical debate on digitalization as leverage point		
This session engages members of a thematic research network on learning in sustainability transitions on the transformative potential of co-production experiments. We will explore learning concepts to understand co-production experiments and their outreach as well as micro (e.g., individual and group) to macro learning (e.g. societal level) concepts.			This session includes a focus on scaling local sustainability initiatives and innovations. This includes a critical appraisal of past experience with scaling, examples of scaling projects and the importance of local actors and initiatives and social networks.			In this session we will critically discuss digitalization and its transformative impacts in the light of the leverage points approach. This will include discussing the role of design and intent, the role of co-creation and power structures, and the patterns and processes related to digital technology.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
408	Bruce Goldstein, Ilan Chabay, Flurina Schneider, Johannes Halbe, Richard Beecroft, Julianna Gwizszcz	Transformative Co-Production Experiments as a Nucleus for Societal Learning	29	Wendelin Kuipers and Paul Shrivastava	Enacting Embodied Leverage Practices for Sustainable Development in and through Organisation and Leadership	427	Carlos Alvarez; Joséphine von Mitschke-Collandei; Maja Göpel	Session: Digital for Life? A Critical Debate of Digitalization as Leverage Point
			11	Seerp Wigboldus	Rethinking the idea and practice of scaling innovations for development and progress			
			57	Amanda Jimenez Aceituno, David P. M. Lam, Berta Martín-López, Daniel J. Lang, Garry D. Peterson, Albert V. Norström and Per Olsson	Scaling for transformations: Analysing local initiatives in Africa with high potential to contribute to more sustainable futures			
			65	David P. M. Lam, Berta Martín-López, Andra I. Horcea-Milcu and Daniel J. Lang	Social networks as levers for transformations: Understanding amplification of impact from non-governmental organizations in Southern Transylvania, Romania			
			44	Marion Glaser and Samiya Selim	Leverage points for pro-poor livelihood transformations in coastal Bangladesh: An initial systems analysis			
room	40.255		room	40.175		room	40.254	
format	special session		format	world café		format	special session	
(5.10) Emerging financing transformations systems part 1			(5.11) Resilience, systems thinking and transformative change			(5.12) Hanother film screening		
Financing systems are one of the most powerful societal systems. Their transformation involves socio-political-economic issues. Integrating social-environmental concerns about sustainability and justice requires deep transformation. This discussion focuses on skunk works in finance.			This session focuses on resilience and systems thinking in relation to transformative change. The talks address resilience related issues such as poverty alleviation, climate change, co-evolutionary development pathways, locked-in traps and resilience's relation to sustainability science.			Hanother film screening and book launch based on the research from the transdisciplinary project "The city as space of possibilities" focusing on bottom-up sustainable urban development.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
409	Steve Waddell	Emerging Financing Transformations Systems	274	L. Jamila Haider, Carl Folke, Belinda Reyers and Maja Schlueter	Coevolutionary pathways for global development		Sacha Kagan	Hanother - The city as space of possibilities
			231	Steven Lade, Jamila Haider, Gustav Engström and Maja Schlueter	Resilience offers escape from trapped thinking on poverty alleviation			
			230	Jürgen Schultze and Stephanie Lübke	Urban Climate Resilience by Integrated Roadmapping Labs (IRL)			
			431	Julia Baird	A leverage points perspective on watershed organizations and resilience assessment			
			467	Zuzana V. Harmáčková, Albert Norström, Garry Peterson	System features building resilience: Comparing evidence across case studies			
room	40.165		room	40.255		room	Audiomax	
format	special session		format	world café		format	Special session	

## Leverage Points 2019 Conference Session 6 (Friday 8. Feb 13:45-15:15)

<b>(6.1) Measuring impact of science and social learning</b>			<b>(6.2) Institutional design for transformative change in water governance</b>			<b>(6.3) Global perspectives on reconnecting to nature</b>		
This session focuses on scientific assessments of the social impact of research and social learning. Individual talks focus on interactions between research and administration, the social impacts of transdisciplinary institutes, notions of relevance and rigor in sustainability science and social learning and cultural change.			Many water-related problems can be attributed to governance failure rather than to the resource base itself. This session presents insights on innovation for the implementation of integrated, adaptive water management and transformative change towards sustainable water governance from Germany, Spain, South Africa and Mongolia from the project STEER.			We live in a globalised world. How do global flows of materials and value systems shape sustainability outcomes? This session features work from earth system science, land use science, as well as research on values and paradigms.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
311	Janina Schirmer, Sophia Becker and Ortwin Renn	Measuring the societal impact of a transdisciplinary institute as a leverage point for the transformation of the science system	347	Franziska Meergans, Nora Schütze, Andrea Lenschow and Andreas Thiel	Identifying incoherencies and coordination challenges as potential points of leverage: A comparative case study of a German and Spanish river basin	10	Tuula Helne	Reconnecting Well-Being to Nature
348	Daniel Lang, Jens Newig, Stephanie Jahn, Judith Kahle and Matthias Bergmann	Relevance and rigor in Sustainability Science – an empirically informed perspective	360	Mirja Schoderer and Ines Dombrowsky	Miles and miles to go - From institutional reform to local outcomes. A case study on mining and water protection in Mongolia	328	Christian Dorninger, Dave Abson, Henrik von Wehrden, Kuishuang Feng, Klaus Hubacek, Thomas Kastner, Martin Bruckner and Fridolin Krausmann	Global biophysical human-nature connections and disconnections
377	Karl-Heinz Simon	Impact as Stabilization of Modes of Interaction Between Research Activities and Administration	390	Evelyn Lukat and Claudia Pahl-Wostl	Implications of Institution Transfers for Regional and Local Governance: The Effects of IWRM Implementation on Water Governance in the uMgeni River Basin, South Africa	362	Hanna Weber, Armin Wiek and Daniel Lang	Typology for local-global food nexus for sustainability transformation of the food system
267	Jayne Bryant and Giles Thomson	Strategic sustainability and culture change in local government: a case study from Perth, Western Australia	396	Daniel Schweigatz, Philipp Gorris and Claudia Pahl-Wostl	Analysing inter-sectoral coordination deficits for sustainable water management: Coupling a network approach with an ecosystem service perspective in the Weser-Ems Region, Germany	421	Martin Reader, Hanneke van 't Veen, Maartje Oostdijk, Vincent De Leijster, Prof. Dr. Maria J. Santos	An Earth System Science Framework to Assess Ecosystem Service Transitions
room	40.146		room	40.108		room	40.152	
format	world café		format	world café		format	panel	
<b>(6.4) Subjectivity, positionality and power</b>			<b>(6.5) Resilience approaches for food systems transformation</b>			<b>(6.6) Emerging financing transformations systems part 2</b>		
This session addresses the roles and positions of researchers in transformative research processes. While relationships between persons in collaborative research are created in their interactions, the theoretical and conceptual research approaches often predefine functions, roles or responsibilities of people.			Global modeling for sustainability rarely imagines or accounts for the real system's complexity. This session puts particular emphasis on the dynamics of food systems over time, using resilience as a lens to both identify present and future vulnerabilities but also management strategies that are successful over time.			Financing systems are one of the most powerful societal systems. Their transformation involves socio-political-economic issues. Integrating social-environmental concerns about sustainability and justice requires deep transformation. This discussion focuses on skunk works in finance.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
179	Jessica Cockburn, Georgina Cundill, Shackleton Sheona and Eureka Rosenberg	Is this for real? An application of critical realism to enable the practice of strong transdisciplinarity	418	Cibele Queiroz; Charlotte Weil; Elena Bennett	Session: Resilience approaches for food systems transformation	410	Steve Waddell	Emerging Financing Transformations Systems
204	Mirko Suhari	Scientists under construction. Negotiating transdisciplinary subjectivities in the energy transition						
363	Maria De Eguia Huerta	Plea for a Grounded Theory-inspired transformative methodology						
287	Irene Iniesta-Arandia, Federica Ravera, Elisa Oteros-Rozas, Sara Mingorria, Marina Garcia-Llorente, Cristina Quintas, Ana Paula Garcia-Nieto and Violeta Hevia	How can researchers play a role in transformation within the current neoliberal academic environment?						
room	40.154		room	40.255		room	40.176	
format	world café		format	special session		format	special session	
<b>(6.7) Inner transformations</b>			<b>(6.8) Panel on sustainability transformations</b>			<b>(6.9) Workshop on formative evaluation of City-University Partnerships</b>		
This session explores various approaches to exploring leverage points. Ranging from the senses (food and nature) via shifts in language and social norms and by exploring the relations between wilderness art and science.			The session explores what we mean by transformations: Which steps make the collective behavior change towards sustainability transformations happen? What is the connection between small scale change and large systems change? And what is the connection between inner processes of transformations and outer processes of deliberate change designs?			Attendees will be guided through (i) a reflective process of evaluating their own sustainability work, (ii) an inductive approach to review parameters and indicators for evaluation, and (iii) a focused discussion on intercultural differences between institutions and how that relates to collaboration.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
170	Nadine Andrews	From subject-object to subject-subject: new social norms to avert ecological catastrophe	122	Petra Kuenkel, Karen O'Brien; Ray Ison and Thomas Bruhn	Panel on Sustainability Transformations	123	Beatrice John, Philip Bernert, Richard Beecroft, Liliana Caughman, Fletcher Beaudoin and Lauren Withycombe Keeler	Workshop on Formative Evaluation of City-University Partnerships for Sustainability: International - Intercultural perspectives
382	Helene Von Oldenburg and Claudia Reiche	Civil Wilderness. Evenly Suspended Science						
297	Karoline Pöggel and Sadhbh Juárez Bourke	Experiential methods as deep leverage points: connecting through the senses						
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room	40.153		room	40.256		room	40.254	
format	panel		format	Special session		format	Special session	
<b>(6.10) Transformations timeline</b>								
In this session we will discuss the results of the participatory timeline and possible further development and use of the timeline								
#	Authors	Title						
	Glen Page, David Abson	Learning from the timeline						
room	Forum							
format	special session							

# Leverage Points 2019 Conference

## Session 7 (Wednesday 7. Feb 18:30-20:00)

(7.1) Transdisciplinarity, research practice and learning			(7.2) Leverage points and sustainability science			(7.3) Sustainability case studies		
Global modeling for sustainability rarely imagines or accounts for the real system's complexity. This session puts particular emphasis on the dynamics of food systems over time, using resilience as a lens to both identify present and future vulnerabilities but also management strategies that are successful over time.			Financing systems are one of the most powerful societal systems. Their transformation involves socio-political-economic issues. Integrating social-environmental concerns about sustainability and justice requires deep transformation. This discussion focuses on skunk works in finance.			This session explores various approaches to exploring leverage points. Ranging from the senses (food and nature) via shifts in language and social norms and by exploring the realtions between wilderness art and science.		
#	Authors	Title	#	Authors	Title	#	Authors	Title
171	Anna Repo, Kyle Eyvindson, Panu Halme and Mikko Mönkkönen	Understanding system dynamics in sustainability transformations – a case study on bioenergy, carbon balance and biodiversity	272	Joana Wensing, Chad Baum, Laura Carraresi and Stefanie Bröring	Consumers' interest in environmental impacts of bio-based packaging and the mechanism of systems thinking	271	Margareta Lelea, Katharine Tröger, Simon Adekunle Oyegbile, Olaide Aderibigbe, Joseph Kudadam Korese and Brigitte Kaufmann	Initializing transdisciplinary engagements with non-academic stakeholders: processes of mutual selection between women's groups and researchers in Nigeria and Ghana
337	Maren Ingrid Kropfeld	Review of Sufficiency-based Businesses Practices and their Relation to Sustainable Consumption	104	Cyrille Rigolot, Chantale Chassaing and Patrice Cayre	The agroecological transformation of French Dairy Mountain farming systems: From the identification of leverage points and their interactions to new action-research activities.	305	Helena Trenks, Colette Waitz and Sarah Meyer-Soylu	Real world experiments: a closer look at four exemplars and results from the accompanying research
397	Josephine Tröger and Gerhard Reese	How to bridge the intention behaviour-gap and promote a societal change? A qualitative interview study with experts from science, politics, and economy exploring the transformative potentials of sufficiency	208	Alfonso Langle Flores, Adriana Aguilar Rodriguez, Julia Ros-Cuellar, Humberto M. Romero-Urbe and Juan J. Von Thade Ugalde	Multilevel governance in a payment for hydrological services program in Pixquiac subwatershed Mexico.	333	Timo von Wirth and Julia Wittmayer	Combining transdisciplinarity and transition management in a translocal European learning process on prosumerism in the energy sector: mainstreaming guaranteed?
133	Mirijam Mock	Regulating the Sharing Economy: A leverage point for the sustainability transformation?	169	Ina Küddelsmann	"Blueing" – An integrating concept of ecosystem stabilization	53	Jan Pollex, Regina Kempen, Shirin Betzler and Franziska Haucke	Reducing complexity to support sustainable consumption behaviour - interdisciplinary insights and research perspectives
145	Kristina Hondrila and Ariane König	Leverage points and actionable knowledge: conceptualising relations	168	Ina Küddelsmann	Reconnecting people and nature cognitively by providing an integrating and easy way of understanding the ecosystem	218	Leo Reutter, Lauren Withycombe Keeler, Richard Beecroft and Beatrice John	Game-based workshops to build transformative capacity.
370	Stephen Woroniecki	In Sustainability Science, it matters how we think about power	368	Gloria Giambartolomei	Engaging with Resourcefulness and Transformation in the South Wales Valleys (UK)	239	Pascal Frank and Laura Stanzus	Personal approaches toward education for sustainable development
161	Takehiro Hatakeyama	Conceptual frameworks of Sustainable Development Indicators (SDIs): From the perspectives of the local administrations towards a sustainable society in Japan	288	Robyn Bartel and Nicole Graham	Ecological Reconciliation on Private Agricultural Land: Moving beyond the human-nature binary in property-environment contests	97	Anu Kumari Lama	Climate change adaptation and local community: An alternative paradigm for advancing science of knowledge system for effective policy outcome
248	Leena Helenius	Transforming paradigms about contradictions – a conceptual tool to approach contradictions dialectically	51	Sina Leopold and Tim Griebel	Resource Revolution in Europe? Circular Economy as a novel transformation pathway to sustainable production and consumption	173	Katharina Schrot and Marina Berchem	Integrated Roadmapping – a new tool for collaboration and collective learning in cross-sectoral issues
264	Silvio Cristiano	On the apparent and leveraging information drivers of contemporary societies	294	Janina Dannenberg	Collective Landownership and the Crisis of the (Re)Productive	182	Tyyra Linko, Satu Lähteenoja, Kaisa Schmidt-Thomé, Armi Temmes and Mika Kuisma	Bees and trees – a novel way for incumbents and startups to co-create sustainable innovation
256	Angela Moriggi, Katriona Soini, Alex Franklin and Dirk Roep	Why care matters to sustainability transformations: The importance of ethically-informed practices, relational responsibility & emotional awareness.	96	Charlott Huebel	The Role of Sustainability Pioneers in Transforming the Meat Industry	385	Clemens Mader and Lorenz Hilty	The Sustainability Profile Matrix (SPM) – a tool supporting participative sustainability assessment and learning
265	Amanda Pasanen	Applying the Leverage Point theory on sustainable degrowth	124	Minna Kanerva	Unmaking meat – Transforming practices	266	Nico Ulmer and Kerstin Wydra	Sustainability in African Higher Education Institutions (HEIs): Shifting the focus from researching the lacks to existing activities
276	Romina Martin and Maja Schlüter	Short-term decisions with long-term consequences – learning from time lags in the simulated restoration of a shallow lake	107	Chad Baum and Olivier Butkowski	In-vitro meat and information contexts: Applying mediation-moderation analysis to explore potential issues for consumer acceptance	312	Fiona Specht, Maraja Riechers and Vicky Temperton	Bridging agriculture and conservation: exploring the motivations behind local heathland farmers forming and joining a nature conservation association
394	Leonie Anika Eising, Ursula Weisenfeld and Antoniya Hauerwaas	Outwitting the Red Queen: Mechanisms in leverage for a city's transition	255	Anna Falkenstein	The Knowledge-Action Gap Related to Meat Consumption in Sustainability Scientists and its Relevance for Societal Transformation	318	Irene Pérez-Ramírez, Marina García-Llorente and Antonio J Castro Martínez	Social connectedness about the agricultural landscape through Participatory Mapping
Room	Forum stage 1		307	Petra Holden, Gina Ziervogel, Timm Hoffman and Mark New	Subsistence grazing to nature-based recreation: Land use transitions and drivers in a mountain case study of a global biodiversity hotspot	413	Matthias Wanner	Urban place attachment, cultural capital and civic engagement on a district level in Wuppertal
format	Speed talks and posters		Room	Audiomax		372	Theresa Hofmann, Dr. Maraja Riechers and Prof. Julia Leventon	How relational values influence communication networks on nature conservation regulations in a landscape under change
	format		format			Room	Forum stage 2	
						format	Speed talks and posters	