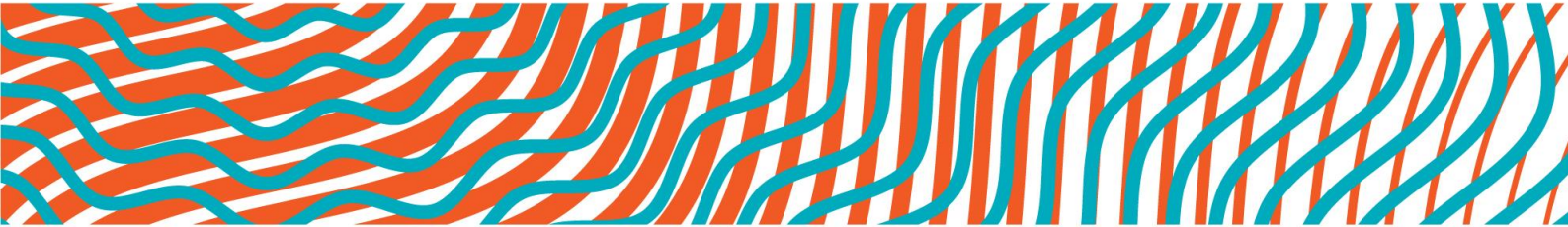# transformative social innovation theory

Paper Abstracts (final)

Synthesis Workshop:

The role of Game-changers in Transformative Social Innovation

01-02 September 2014

Overview of Papers

	Author(s)	Title	Discussant
1	Flor Avelino*, Julia Wittmayer, Tim O'Riordan , Alex Haxeltine, Paul Weaver , René Kemp, Derk Loorbach, Jan Rotmans	Game Changers & Transformative Social Innovation. The Case of the Economic Crisis and the New Economy	-
2	Frances Westley*, Ola Tjornbo, Nino Antadze, Erin Alexuik	Wilderness, Resources and Decision Making: How Technological and Legal Game Changers Catalyze Social Transformation	Derk Loorbach
3	Marc Swilling	Sustainability and Structural Transformation in Africa: Some Preliminary Notes	René Kemp
4	Fjalar de Haan*, Briony C. Rogers	How Game Changers Influence Transitions - A Framework for Analysis and an Application to the Australian Millennium Drought	Jan Rotmans
5	Shambu Prasad	Innovating at the Margins: Sustainable Transitions and Game-changing Ideas from SRI in India	Paul Weaver
6	Per Olsson	The Anthropocene as a game changer for sustainability innovations and transformations	Alex Haxeltine
7	Jürgen Howaldt*, Michael Schwarz	Social Innovations as Drivers for (Transformative) Social Change	Alex Haxeltine
8	Inês Campos*, André Vizinho, Filipe Moreira Alves, Gil Penha Lopes	An ART Approach to Climate Adaptation Research: Action-Research; Reflexivity and Transformation	Derk Loorbach
9	Roberto Bartholo*, Carla Cipolla, Rita Afonso	(Im)mobility in Brazilian Cities: Macro Trends and Innovative Experiences	Gilda Farrell
10	Ariel Gordon*, Mariano Fressoli, Lucas Becerra	Perspectives on Social Innovation from the South: power, asymmetries and the role of the State	Frances Westley

Paper 1: Game Changers & Transformative Social Innovation. The Case of the Economic Crisis and the New Economy

- Flor Avelino* (DRIFT)
- Julia Wittmayer (DRIFT)
- Tim O'Riordan (University of East Anglia)
- Alex Haxeltine (University of East Anglia)
- Paul Weaver (University of Maastricht)
- René Kemp (University of Maastricht)
- Derk Loorbach (DRIFT)
- Jan Rotmans (DRIFT)

This paper discusses transformative social innovation, conceptualised as the process through which social innovation contributes to societal transformation. A conceptual heuristic is introduced that proposes five foundational concepts to help distinguish between different pertinent 'shades' of change and innovation: 1) social innovation, (2) system innovation, (3) game-changers, (4) narratives of change and (5) societal transformation. The paper elaborates on the background and meaning of each of these concepts, with references to existing literature in transition studies and social innovation research, and through empirical illustrations. The recent economic crisis is taken as an empirical example of a 'game-changing' macro-development, and it is explored how this economic crisis relates to other forms of change and innovation. A central hypothesis is that societal transformation is the result of specific 'co-evolutionary' interactions between game-changers (e.g. the economic crisis), narratives of change (e.g. 'a new economy'), system innovations (e.g. welfare system reform), and social innovations (e.g. new exchange currencies or new design practices). The paper elaborates on this hypothesis and formulates challenges for future research.

Paper 2: Wilderness, Resources and Decision Making: How Technological and Legal Game Changers Catalyze Social Transformation

- Frances Westley* (Waterloo Institute for Social Innovation and Resilience, University of Waterloo)
- Ola Tjornbo (Waterloo Institute for Social Innovation and Resilience, University of Waterloo)
- Nino Antadze (Waterloo Institute for Social Innovation and Resilience, University of Waterloo)
- Erin Alexuik (Waterloo Institute for Social Innovation and Resilience, University of Waterloo)

This paper will explore the impact of "game changers" on three problem domains – that of natural resource extraction, wilderness protection and democratic deliberations in Canada/North America. One of these game changers is technological – the Internet. This innovation has offered unprecedented opportunity for small, community based or grass root networks to develop and move niche innovations into the mainstream. The other two game changers were legal: changes through the Canadian legal system that have opened the opportunities for radical change in the forestry, mining and oil industries as well as in indigenous communities; legislative acts created to protect wilderness areas in North America. These game changers represent two quite different trajectories: the legal shifts creating a top-down" trophic cascade", the 3 D internet ostensibly giving legs to bottom up initiatives. This paper will look at the origins of these game changers, the disturbances which they have created/have the potential to create in the status quo institutions in Canada/North America and the social innovations which are thriving in the opportunity context this innovation presents. It will also explore the methodological challenges of historical research of complex problem domains.

Paper 3: Sustainability and Structural Transformation in Africa: Some Preliminary Notes

- Mark Swilling (Sustainability Institute, Stellenbosch University)

For 8 out of the 10 years to 2011 economic growth rates in sub-Saharan Africa were higher than in East Asia, and 6 of the 10 fastest growing economies by 2012 were African. However, at an African Union summit of Ministers of Finance and Economics in Abuja, 27-31 March 2014, there were repeated warnings that this economic boom is too dependent on the extraction and export of primary resources. Primary resources still make up 86% of exports into non-African markets (United Nations Economic Commission for Africa & African Union 2014:17). There seemed to be complete consensus at this Summit that unless Africa implements what was repeatedly referred to as 'structural transformation', the economic fortunes of African economies will be determined by the notoriously unstable global commodity markets.

Three recent reports on Africa's economic future have addressed directly the challenge of structural transformation: the 2014 UNECA Report entitled Dynamic Industrial Policy in Africa (United Nations Economic Commission for Africa & African Union 2014); 2014 African Transformation Report by the Accra-based ACET (African Center for Economic Transformation 2014) and UNCTAD's 2012 Economic Development in Africa Report (United Nations Conference on Trade and Development 2012).

Read together, these three documents from highly influential centres of thought leadership on the continent can be read as responses to the following 'game changers': the commodity boom that has been the primary driver of growth, the rise of the 'BRICs plus' nations who are now the primary importers of African resources and the main investors in Africa, the rapid expansion of the middle class, the transformation of communications by ICTs, democratisation of most African states, the declining influence of neo-liberalism, and in the case of the UNCTAD Report the influence of the sustainable resource use paradigm.

In contrast to these mainstream rather limited responses, there are also numerous initiatives on the African content that respond directly to a much broader set of sustainability-oriented game changers. This has encouraged the Africa Clean Energy Corridor proposed by the influential International Renewable Energy Agency; the South African Government's Integrated Urban Development Framework, and Pretoria Municipality's 'green economy framework'. All three envisage quite radical socio-technical innovations and transformations that respond directly to game changers like climate change, resource depletion, global sustainability discourse and the commercial viability of renewable energy technologies.

This paper will critically evaluate and compare these two different sets of interpretations of structural transformation and associated conceptions of social transformation.

Paper 4: How Game Changers Influence Transitions - A Framework for Analysis and an Application to the Australian Millennium Drought

- Fjalar J. de Haan* (Monash Water for Liveability, School of Social Sciences, Faculty of Arts, Monash University)
- Briony C. Rogers (Cooperative Research Centre for Water Sensitive Cities and Monash Water for Liveability, School of Social Sciences, Faculty of Arts, Monash University)

This article provided a conceptualisation of the game changer concept and embeds it in a transitions-theoretical framework. Using this framework the consequences of a game changer can be analysed in terms of a new set of needs and constraints emerging for the service provision system under study. Transitional change ensuing the game changer can then be understood as the system's response to meeting those new needs under the new constraints. The process of sense making appears to be crucial in shaping the eventual transitional impact of the game changer. This is one of the core notions of the Liquorice Allsorts picture of how game changers influence transitions which will be introduced in the article. The conceptualisation and transitions-theoretical framework will be illustrated with the case of a game changer for the Australian water in recent decades: the Millennium Drought.

transformative
social innovation
theory

Paper 5: Innovating at the Margins: Sustainable Transitions and Game-changing ideas from SRI in India

- Shambu Prasad (Xavier Institute of Management Bhubaneswar)

This paper explores a potential game-changing innovation in agro-food systems, the System of Rice Intensification (SRI) that has spread widely in the world and been accepted, innovated on by over a few million farmers in the last two decades. Farmers and those involved in its promotion have largely benefitted by newer modes of exchange made possible by the Internet through open sourcing the innovation which happens to be rejected by a few international research centres. The paper would use both empirical and conceptual insights on how a bottom-up innovation can spread by working across disciplinary and organisational boundaries. It thus highlights the potential for game-changing social innovation by looking at some of the softer aspects of innovation, such as the role of networks, the potential of open sourcing and the imperative to provide spaces for communities to enhance their innovative capacity. The paper suggests the need for understanding the processes of social innovations to explore diverse pathways for scaling in a sustainable and self-reliant manner. A critical engagement on ideas on knowledge, embedding diversity and appreciating the role of networks and CSOs in social innovations are some of the insights that the paper suggests for the discussions on transformative social innovation theory.

transformative
social innovation
theory

Paper 6: The Anthropocene as a game changer for sustainability innovations and transformations

- Per Olsson (Stockholm Resilience Centre)

Humanity is currently facing major global social and environmental challenges. A key challenge is to secure a good life for people today and in the future while managing natural resources, ecosystems and climate in a sustainable manner. Rockström et al. (2009) argues that ensuring the welfare for nine billion people on earth in 2050 requires new economic and development paradigms and large-scale transformations in which our prosperity and growth remains within the planet's limits. This entails that the current dominant discourses and assumptions, that the planet can supply us with energy and materials indefinitely, need to change. Paradigm shifts and large-scale transformations are nothing new for humanity and history has provided us numerous examples of major socio-technological transitions to deal with social and environmental problems (see for example Grin et al. 2010). However, a key difference is that the sustainability transformations are needed at the global level, more rapidly, and without simultaneously create new major problems. Also needed are fundamental changes in human-environmental interactions and solutions that view humans and nature as an integral whole within which a healthy planet is the premise for economic and social development (Folke et al. 2011). This means that we can no longer see the environment as an isolated issue. All solutions in society - technological, social and economic - need to have environmental sustainability as the basis to secure social and economic development.

This article addresses how new insights about the Anthropocene can be a game changer that challenges some approaches to sustainability transformations and innovations to reach sustainability and a good life on this planet.

Paper 7: Social Innovations as Drivers for (Transformative) Social Change

- Jürgen Howaldt* (Sozialforschungsstelle Dortmund, TU Dortmund University, SI DRIVE)
- Michael Schwarz

Since Schumpeter, the concept of innovation has focused predominantly on economic and technical developments, whereas social sciences were particularly interested in the corresponding social processes and effects. This may explain why social sciences, to this day, have been conducting empirical work on social innovations quite comprehensively, but without labelling them as such and, with few exceptions, without a concept of social innovation informed by social theory.

Technological innovations are elements of the continuous process and, due to the predominant patterns of imitation and invention, have become the centre of attention (cf. Howaldt/Schwarz 2010). They represent a special type of inventions taking the form of artifacts (machines, computers, cars, …). The belief in the central role of science and technologies is still the basis for contemporary innovation policies and the discourse on National Innovation Systems.

Meanwhile, the importance of social innovation successfully addressing social, economic, political and environmental challenges of the 21st century has been recognized not only within the Europe 2020 strategy but also on a global scale. So "in recent years, social innovation has become increasingly influential in both scholarship and policy" (Moulaert et al. 2013, p. 1). However, despite this growing awareness of the significance of social innovation, there is still no sustained and systematic analysis of social innovation, its theories, characteristics and impacts. A plethora of vastly diverging subject matters and problem dimensions as well as expectations for resolving them are subsumed under the heading 'social innovation' without making distinctions between different social and economic meanings, the conditions governing their inception, genesis and diffusion, and without clearly distinguishing social innovations from other forms of innovation.

While culminating social and economic problems identified in public discourse are increasingly prompting a call for extensive social innovation, the relationship between social innovation and social change remains a largely under-explored area in the social sciences as well as government innovation policies. Phenomena of social change are consistently looked at in connection with technological innovation in techno-sociology and technical research in the prevailing paradigm of a social-technical system but not from the perspective of an independent type of innovation that can be demarcated from technical innovations. This is inadequate in light of the declining functionality of the technology-oriented paradigm shaped by the industrial society. In the context of the broad social debate surrounding sustainable development and necessary social transformation processes (cf. WGBU 2011; cf. Geels/Schot 2007), the question of the relationship between social innovations and social change arises again: how can processes of social change be initiated which go beyond the illusion of centralist management concepts to link social innovations from the mainstream of society with the intended social transformation processes?

In light of the increasing importance of social innovation the paper focuses on a theoretically sound concept of social innovation as a precondition for the development of an integrated theory of socio-technological innovation in which social innovation is more than a mere appendage, side effect and result of technical innovation. Only by taking into account the unique properties and specifics of social innovation it will be possible to understand the systemic connection and interdependence of

social and technological innovation processes and analyse the relationship between social innovation and social change.

Against this background the paper gives an overview of the objectives and theoretical concept of the global research project SI-DRIVE which intends to extend knowledge about social innovation by integrating theories and research methodologies. The paper looks at the relationship between social innovation and social change. In particular, recourse to Practise Theories (SPT) and Tarde's social theory allows us to widen a perspective which was narrowed to economic and technological innovations by Schumpeter, and after him by the sociology of technology, to include the wide variety of social innovations and develop a theoretically sound concept of social innovation and the relationship to (transformative) social change.

Paper 8: An ART approach to Climate Adaptation Research: Action-Research; Reflexivity and Transformation

- Inês Campos (Institute of Social Sciences, Lisbon University)
- André Vizinho (CCIAM [Center for Climate Change Impacts Adaptation and Modeling] Faculty of Sciences, Lisbon University)
- Filipe Moreira Alves (CCIAM [Center for Climate Change Impacts Adaptation and Modeling] Faculty of Sciences, Lisbon University)
- Gil Penha Lopes (CCIAM [Center for Climate Change Impacts Adaptation and Modeling] Faculty of Sciences, Lisbon University)

Developing the sustainable dimension of climate change adaptation research we highlight three conceptual tenets: Action-Research, Reflexivity and Transformation (ART). At the center of this triangle is the development and testing of reflexive governance experiments, which upkeep and promote a sustainable transition that incorporates climate adaptation knowledge and actions.

Participatory action-research (PAR) appears as the weaving thread linking transformation and reflexivity within adaptation projects. PAR supports a continuous reflexivity in the planning and implementation stages of adaptation processes that potentially promote transitions and a transformation to more sustainable and resilient territories.

Anchored by a discussion of the ART approach to adaptation research, we characterize PAR, drawing a few reflections on its limitations and benefits, and expand on what is meant by reflexivity and transformations, and their links to sustainable adaptation. We consider that the study of adaptation cases studies through innovative approaches can be part of a transition experiment and opens the scope to areas still under researched in transition studies. Illustrating with the research process of two case studies in Portugal, we argue that this conceptual triad is the basis for the study of sustainable adaptation projects.

Paper 9: (Im)mobility in Brazilian Cities: Macro Trends and Innovative Experiences

- Roberto Bartholo* (Federal University of Rio de Janeiro – COPPE)
- Carla Cipolla (Federal University of Rio de Janeiro – COPPE)
- Rita Afonso (Federal University of Rio de Janeiro – COPPE)

This paper presents two Brazilian macro trends, which are specifically described and analysed in the context of the growth of cities and the mobility (and immobility) issues theypresent. The words mobility and immobility here are considered both in physical terms (ex. the possibility or not to move, using the existing transportation systems), but also in broader terms (ex. the possibility or not to move among different cultural groups or communities, overcoming barriers among specific areas in the city).

The urban immobility is increasing in Brazil, which brings challenges to the transportation systems and the environment. In this article, this physical (im)mobility is considered to be directly related to the non-physical (im)mobility, which is related to the possibility to transit between spaces and experiences that create new spaces of interaction, able to integrate the "broken" city. The interrelations of the physical and the non-physical mobility are exemplified in Brazil by the favelas (slums). The localization and characteristics of each favela in the city is related (also) to the transportation issues (physical mobility), and the possibility or not for its inhabitants and their local communities to be integrated to the other parts of the city (non-phisical mobility). Both issues have been a continuous challenge for policy makers (FLEURY, 2012), community leaders and other actors (VENTURA, 1994; SILVA & ANSEL, 2012; NORONHA, 2013).

Considering this overall framework, the article presents two macro trends analysed in terms of the questions related to the physical and non-physical (im)mobility in the Brazilian context. For each trend is included the description and analysis of related bottom-up and top-down initiatives.

The first macro trend is called reversal of the demographic pyramid, described in terms of the growing number of elderly in Brazil and the characteristics of youth action today. The description of this trend and its challenges includes the presentation of initiatives which are focused on the elderly and young people, or organized by them. For the elderly, it presents for example the description and analysis of the public policy called "Estatuto do Idoso", in which a registration card allows citizens over 65 to use all the public transportation system for free. Another initiative is called "Norte Comum" (Common North) and consists of a collective of young people living in north zone of Rio de Janeiro (the poorest part of the city) without access to public culture equipment (mainly located in the richer areas, far away), who occupied a semi-disabled public psychiatric hospital.

The second macro trend is called social cohesion and slums. Highlighted cases include the public security policy in the State of Rio de Janeiro called UPP (Pacifying Police Unit) which aims to occupy the favelas formerly controlled by the drug dealers. Other initiative is called FLUPP (Literary Feast of Peripheries) which brings together young writers from the periphery, introducing them to publishers and well-recognized authors.

The cases are described and analysed in relation to its contribution to the concept of game-changers and transformative social innovation.

Paper 10: Perspectives on Social Innovation from the South: power, asymmetries and the role of the State

- Ariel Gordon* (Quilmes National University, Argentina)
- Mariano Fressoli (CONICET-STEPS, Argentina)
- Lucas Becerra (Quilmes National University, Argentina)

Social innovation can offer alternative forms of organization and novel solutions to complex problems faced by contemporary societies. As the State is increasingly under pressure from mounting societal challenges, it is assumed that social innovation can help to provide bottom up solutions in ways that can create transformative change. However, the relation between bottom up initiatives and the State can be difficult and sometimes contradictory. Even more, assumptions about the diminishing powers of the state can be misleading and overstress the role of social innovation. Based on the study of the recent South American experience this paper we depart from this assumption seeking to understand what could be the role of public policies as initiators or supporter of social innovation. By adopting a multi-level perspective (MLP), this paper will analyze processes of linkage and direct intervention of public policies with social innovation in Argentina and Brazil. We will analyze the cases of two top-down initiatives promoted by public policies - the organic farming Pro-huerta program and the policies of the National Technology and Social Innovation Program - that ultimately fostered social innovation. This analysis will be complemented the study of a case of bottom up social innovation - the One Million Cisterns, in Brazil - that was later inserted into public policies in Brazil. Together, these cases will allow us to understand the potentialities and limitations of social innovation and the important relation they established with public policies. In particular, we will consider how public policies can be initiators and supporters of social innovation but also what could be the broader role of the State regarding long term asymmetries of power that can affect the development of social innovation. Although we recognize differences between Latin American countries with dual economies and deeper social and economic challenges to those of developed countries, we hope to provide some insights on the importance of the role of State as catalyzer of systemic change in certain context while at the same time reinforcing societal challenges in others.