

Game Changers and Transformative Social Innovation. The Case of the Economic Crisis and the New Economy.

TRANSIT working paper

By Flor Avelino , Julia Wittmayer, Alex Haxeltine, René Kemp, Tim O'Riordan, Paul Weaver, Derk Loorbach and Jan Rotmans

Theme [ssh.2013.3.2-1][Social Innovation- Empowering People, changing societies] Project Full Title: "Transformative Social Innovation Theory project" Grant Agreement n. 613169



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 613169



Reference:

Avelino, F. Wittmayer, J., Haxeltine, A., Kemp, R., O'Riordan, T., Weaver, P., Loorbach, D. and Rotmans, J. (2014) *Game-changers and Transformative Social Innovation. The Case of the Economic Crisis and the New Economy*, TRANSIT working paper, TRANSIT: EU SSH.2013.3.2-1 Grant agreement no: 613169

Date: 2014

Authors: Flor Avelino , Julia Wittmayer, Alex Haxeltine, René

Kemp, Tim O'Riordan, Paul Weaver, Derk Loorbach

and Jan Rotmans

Lead partner: Task-lead: DRIFT

Contact person: Flor Avelino, DRIFT

E-mail: avelino@drift.eur.nl

Contents

| Game Changers and | Transformative So | ocial Innovation. | The Case of the |
|----------------------------|-------------------|-------------------|-----------------|
| Economic Crisis and | l the New Economy | | |

| Abstr | ract | 4 |
|-------|---|----|
| 1 | Introduction | 5 |
| 2 | A Conceptual Heuristic for Exploring Transformative Social Innovation | 6 |
| 3 | Game-changers - e.g. the 'Economic Crisis' | 10 |
| 4 | Narratives on Change - e.g. 'A New Social Economy' | 12 |
| 5 | System Innovation - e.g. Welfare Reform | 14 |
| 6 | Social Innovations - e.g. Complementary Currencies | 16 |
| 7 | Societal Transformation | 17 |
| 8 | Conclusion: Future Research on Transformative Social Innovation | 20 |
| Dofor | ranças | 22 |

Game Changers and Transformative Social Innovation. The Case of the Economic Crisis and the New Economy.

Flor Avelino¹, Julia Wittmayer, Alex Haxeltine, René Kemp, Tim O'Riordan, Paul Weaver, Derk Loorbach and Jan Rotmans

Abstract

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) gamechangers, (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.

Keywords

Transformative social innovation, system innovation, game-changers, narratives, economic crisis, new economy

¹ Corresponding author: avelino@drift.eur.nl

1 Introduction

There is an increasing attention for 'social innovation' as a necessary driver for societal transformation. Howaldt and Kopp (2012:48) argue that social innovations are gaining importance over technical innovations when it comes to dealing with societal challenges, and that social innovations "can contribute proactively with regard to anticipated developments, such as demographic developments or the effects of climate change "to modify, or even transform, existing ways of life should it become necessary to do so" (Giddens 2009: 163)". The idea that social innovation is an effective way to deal with societal challenges, is also manifested in policy discourses across the European Union (EU), as illustrated by EU president Barroso's statement that "if encouraged and valued, social innovation can bring immediate solutions to the pressing social issues citizens are confronted with" (Hubert 2012:vi). The Bureau of European Policy Advisors (BEPA) defines social innovation as "innovations that are social both in their ends and in their means" and argues that they provide an effective way to "empower people" and "drive societal change", particularly in the context of the recent economic recession: "at a time of major budgetary constraints, social innovation is an effective way of responding to social challenges, by mobilising people's creativity to develop solutions and make better use of scarce resources" (BEPA 2010: 7).

These high expectations regarding social innovation raise the following research question: how and to what extent does social innovation contribute to societal transformation that responds to societal challenges, and how are people empowered to contribute to such process? This research question has been taken up in a recently started, EU-funded 4-year research project entitled "TRANsformative Social Innovation Theory" (TRANSIT). The TRANSIT project explores transformations towards societies that are more inclusive, resilient, sustainable, and, thereby, hypothesised as more able to respond effectively to societal challenges. Specifically, TRANSIT investigates the role(s) of social innovation within such societal transformations, combining theoretical and empirical research (Haxeltine et al. 2013). Here 'transformative' is taken to mean an irreversible, persistent adjustment in societal values, outlooks and behaviours of sufficient 'width and depth' to alter any preceding situation. The notion of 'transformative social innovation' can be understood in three distinct ways: (1) as a specific type of social innovation, i.e. one that contributes to societal transformation, (2) as a social innovation with an *intention* to contribute to societal transformation, and (3) as the process through which social innovation contributes to societal transformation. In the TRANSIT projects - and in this paper - we focus on the third understanding, i.e. transformative social innovation as a process. Understanding the process through which social innovation contributes to societal transformation, requires one to distinguish the former from the latter. This leads to another more open, fundamental research question: how does social innovation interact with other forms of change and innovation, and how do we distinguish those?

The TRANSIT projects utilises a conceptual heuristic that provides 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 aim of this paper is to elaborate and empirically illustrate these concepts as a way to explore transformative social innovation. This paper particularly zooms in on the concept

of 'game-changers'. These are broadly conceptualised as macro-phenomena (events and trends) that are perceived to change (the rules, fields and players in the) the 'game' of societal interaction. The dominant understandings, values, institutions and social relationships through which society is organised and defined may fundamentally change in response to game-changing events and trends. The purpose of this 'game-changer' notion is to explore how empirical macro-phenomena are perceived as 'game-changing' – how they are interpreted, (re)constructed, contested and dealt with – by people and initiatives working on transformative social innovation.

This paper elaborates on TRANSIT's conceptual heuristic by using the recent economic crisis as an example of a 'game-changer'. The economic crisis has spurred debates about the unsustainability of our current financial and economic systems. It has drawn new attention to alternative economic narratives and arguably has generated an acceleration of social innovations. Five years after the break out of the recession, attention for the economic crisis has waned, but the concerns expressed by counter-movements such as the Occupy movement live on. They combine with other concerns about inequality and feelings of losing out, anxieties over tax evasion by the wealthy few and multinational companies, the systems of production being environmentally unsustainable, and a range of other issues such as an aging population. Such anxieties interlace with developments on the ground in the form of (transformative) social innovation.

In the section that follows (section 2), we present the background of TRANSIT's conceptual heuristic. Each of the concepts is then elaborated and empirically illustrated, starting with the 'economic crisis' as an example of a macro-phenomenon that is perceived as a **game-changer** (section 3). This particular game-changer comes with various other 'game-changers', e.g. unemployment, budget cuts, social isolation – all developments that are or can be perceived as 'changing the game'. We then move on to discuss the alternatives to mainstream solutions whose emergence, development and diffusion have been or are being influenced by the economic crisis, starting with a discussion of **narratives of change** and related 'counter- movements' around a new economy (section 4), (calls for) **system innovation** in, *inter alia*, financial systems, taxing, state reform, health care (section 5), and **social innovations**, such as new business models, new services, new sharing practices, some of which may hold transformative potential (section 6). We also critically discuss (section 7) how and to what extent the dynamics between all of these can be conceptualised as contributing to and/or shaping a process of **societal transformation**. Finally (section 8), we formulate lessons and challenges for future research on transformative social innovation.

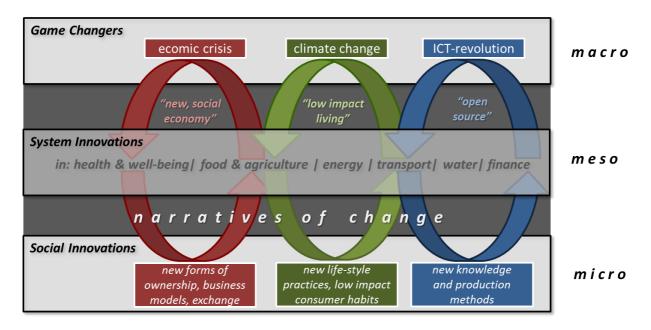
2 A Conceptual Heuristic for Exploring Transformative Social Innovation

The TRANSIT project draws on (1) the emerging field of social innovation research (Mulgan 2006; Murray et al. 2010; Franz et al. 2012, Westley 2013, Moulaert et al. 2013), and (2) the field of sustainability transitions research (Rotmans et al. 2001, Grin et al 2010, Markard et al. 2012). In the very initial phase of the TRANSIT project, the first conceptualisations of transformative social innovation were inspired by the Multi-Level Perspective, a central framework in transition research. The Multi-Level Perspective (MLP) theorises the dynamics of societal transitions (Rip & Kemp 1998, Geels 2005, 2010), distinguishing between three levels: 1) the landscape (exogenous

macro-trends), 2) regimes (dominant institutions and practices), and 3) niches (places of innovative practices). A transition occurs when changes at all three levels reinforce each other into an overall systemic transformation (Schot & Geels 2008, De Haan & Rotmans 2011), one possible pattern being that niche-innovations build internal momentum, while landscape developments (e.g. climate change) create destabilising pressure on regimes (e.g. fossil energy sector), which creates 'windows of opportunity' for niche-innovations (e.g. solar energy).

In its initial phase, the TRANSIT project used the MLP perspective to conceptualise different levels of transformative social innovation. Social innovations were conceptualised as new services, practices or ideas at the micro-level of 'niches'. System innovation was conceptualised as change at the meso-level of 'regimes'. Game-changers were conceptualised as exogenous developments at the macro-level of the 'landscape'. We conceptualised transformative social innovation as a nonlinear interaction between these levels of change and innovation, and introduced 'narratives of change' as a particular communication between these different levels (Haxeltine et al. 2013)². We illustrated these conceptualisations by using three empirical examples of 'game-changers', as depicted in figure 1 below.

Figure 1. Multi-level Perspective on Transformative Social Innovation



As the TRANSIT project evolved, it became increasingly necessary to 'open up' the initial conceptual framework so as to include a wider diversity of empirical phenomena and epistemological perspectives. This 'opening up' also meant a break with the MLP as a foundational perspective, for several reasons. First, the distinctions between 'levels' in the MLP are contested (Genus & Coles 2008, Smith et al. 2010, Rotmans & Loorbach 2010), one particular contestation being the treatment of macro-developments as inherently exogenous contextual factors outside

² Some concepts have been adapted: 'narratives of change' is a reformulation for the original 'transformative discourses', and 'system innovation' is a reformulation for 'systemic change'. The reformulations are based on a process of clarification and translation to more common sense and/or self-explanatory language.

the main research focus: this inherently 'exogenous' status of the societal landscape needs to be questioned (Avelino 2011, Riddell & Westley 2013), and "transition thinking and policy design need to take this context – in the MLP jargon: "landscape" conditions – more seriously" (Van den Bergh, 2013:2). Moreover, the MLP has been associated with a particular meta-theoretical 'evolutionary' perspective (Garud & Gehman 2010). As the TRANSIT project also wants to explore other meta-theoretical perspectives on transformative social innovation, such as 'relational' and 'durational' perspectives, it has been argued that it cannot have an inherently 'evolutionary' perspective (such as e.g. MLP) as a conceptual starting point (Haxeltine et al. 2014).

As a result, the TRANSIT project now has as its starting point a conceptual heuristic 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 (see table 1 for working definitions). This heuristic does not preclude at which levels of aggregation specific types of innovation and change do or do not manifest, nor does it preclude whether they are exogenous or endogenous.

The heuristic serves as a cognitive map to empirically and theoretically investigate the central research question: how does social innovation interact with other forms of change and innovation, and how are actors (dis)empowered therein? The conceptual heuristic is depicted in figure 2 below. The figure implies our hypothesis that societal transformation is shaped and produced by particular patterns of interaction between social innovation, system innovation, game-changers and narratives of change. Individual actors, initiatives and networks, are empowered (or disempowered) to contribute to this process through different forms of governance, social learning, resourcing, and monitoring (Haxeltine et al. 2013).

game-changers system innovation social innovation social innovation narratives of Transformative Social Innovation

The Dynamics of Transformative Social Innovation

Figure 2. Conceptual Heuristic to Explore the Dynamics of Transformative Social Innovation

In this paper, we focus on unpacking the 'left' side of the abovementioned figure 2, i.e. the five foundational concepts distinguishing between different shades of change and innovation. Table 1 below provides short working definitions for each concept,. In the subsequent sections, we then elaborate on each of the five concepts by providing references to existing literature and empirical illustrations.

Table 1. Five Shades of Change and Innovation: Working Definitions (elaborated in sections 3-7)

| 5 Shades of Change & Innovation | Working Definition ³ |
|---------------------------------|--|
| Social innovation | New social practices, including new (combinations of) ideas, models, rules, social relations and/or products (see section 6) |
| System innovation | Change at the level of societal sub-systems, including institutions, social structures and physical infrastructures (see section 5) |
| Game-changers | Macro-developments that are perceived to change the (rules, fields and players in the) 'game' of societal interaction (see section 3) |
| Narratives of change | Discourses on change and innovation, i.e. sets of ideas, concepts, metaphors, and/or story-lines about change and innovation (see section 4). |
| Societal transformation | Fundamental and persistent change across society, exceeding sub-systems and including simultaneous changes in multiple dimensions. (see section 7) |

The conceptual heuristic serves to empirically explore how these different shades of change and innovation interact. The working definitions help to guide explorative research on this interaction, in which one can have various empirical starting points. In this paper, our empirical starting point is the economic crisis as an example of a 'game-changer'. In the following sections we explore how this game-changer relates to other shades of change and innovation.

³ These concepts, distinctions and working definitions are certainly not self-evident or clear-cut. Some scholars (e.g. Westley 2013) conceptualise social innovation as being 'systemic' by definition. In our conceptualisation, social innovation is not necessarily situated at the level of societal sub-systems (but it can be). A new social practice within a local initiative can be considered a social innovation, regardless of whether or not it coincides with change on the level of a societal system. Social innovation and system innovation might overlap, but not necessarily. The same applies to the distinction between game-changers, narratives of change and societal transformation. According to the working delineations presented above, a societal transformation can be perceived as a game-changer, but not every game-changer necessarily refers/leads to societal transformation. A game-changer can also refer to a short-term trend or hype (possibly having a long-lasting transformative impact, but not necessarily).

3 Game-changers - e.g. the 'Economic Crisis'

We conceptualise game-changers as macro-developments that are perceived to change the (rules, fields and players in the) 'game' of societal interaction. At issue is to explore how game-changing macro-trends are interpreted - perceived, interpreted, (re)constructed, contested and dealt with rather than deciding what is or is not a game-changer 'objectively' speaking. As such, our notion of a 'game-changer differs explicitly from the concept of 'landscape developments' in the multi-level perspective of transitions theory, which are considered in that theory as exogenous long term developments (Geels 2005, Geels & Schot 2010). Our notion of a game-changer does not predefine the level of exogeneity or endogeneity, nor its temporal scale. Rather, these characteristics differ across different interpretations of game-changers; some macro-developments may be perceived to be more endogenous than others, or one specific macro-trend may be perceived by some to be exogenous while being perceived as endogenous by others. This means that the notion of a 'gamechanger' can include a wide variety of phenomena that are fundamentally different in kind: a demographic development (e.g. ageing population), an ecological phenomenon (e.g. climate change), a socio-political challenge (e.g. the economic 'crisis'), a socio-technological revolution (e.g. the ICT-revolution), or a positively-construed movement or discourse (e.g. 'environmental movement' or 'the sharing economy')4. The point of the heuristic framework is to acknowledge and map out the multiplicity of game-changing macro-trends. Regardless of what kind of empirically observed game-changer one starts with, the challenge is to explore it from different perspectives.

The 'economic crisis' is a macro-development of international significance that is widely perceived as game-changing and has deeply penetrated public opinion and political discourses over recent years. This economic crisis has an empirical basis in 'factual' events and economic statistics, but it is also a social construction. In a narrow sense, the term economic crisis refers to the world-wide recession which started in 2007-8 which changed the economic circumstances and outlook of investors and led governments to save banks and to stimulate the economy, inter alia through 'bail outs', expansion of the money supply ('quantitative easing'), and low interest rates. It changed the circumstances of many whose employment or work conditions it affected. It also made many more critical about capitalism and the stability of markets, especially financial markets (Murphy, 2011; Stephen and Weaver, 2011; Hudson, 2014; Rifkin, 2014; Weaver, 2014). In Europe, the economic crisis is accompanied by (perceptions of) a debt crisis, a banking crisis and a euro crisis, which are all interrelated (Hudson, 2014). The financial crisis, debt crisis, bank crisis, 'neo-liberal crisis', 'global financial collapse' are not just different names but also refer to different, albeit closely related, empirical phenomena. Importantly, the perception and representation of such phenomena in crisis terms can give scope for motivating and/or justifying responses. This has implications for our exploration of game changers: when a crisis has passed it may be that it can no longer serve as a reference point for responsive action, though a more permanent effect of crises may be the view that the threat of recurrence warrants *pre-emptive* action.

⁴ The only conceptual preclusion is that it refers to a trend at the macro-level, meaning that it exceeds individual subsystems or practices. Even that is up for interpretation, as the concept of the macro-level inherently depends on one's sub-system focus. For instance, for someone who focuses on a city as a sub-system, a national political discourse may be perceived as a macro-trend. The point of the heuristic framework is to challenge the interpreter to think about trends that go beyond one's specific sub-system focus.

A common thread through the perceptions of the economic crisis is the socio-economic perspective, in which the emphasis lies on growth in Gross Domestic Product (GDP), household incomes, poverty and employment⁵. The Economist (2013a:59-61) estimated there could be as many as 500 million unemployed young people in the world. Eurostat (2013) reported that unemployment in the Eurozone reached 12% in February 2013. Youth unemployment throughout the EU rose to 24.4% in November 2012. In May 2012, there were 5.517 million unemployed young people in the EU, leading to a worry that many millions of young adults could become a "forgotten generation". A report by the Federation of the Red Cross and Red Crescent⁶ painted a sombre picture of increased poverty, of a new impoverished middle class, of losing hope and of despair across the whole of Europe. The Federation warns of a deepening social crisis of poverty, xenophobia, discrimination, social exclusion, violence and abuse. In England, young people were found to fall behind the rest of Europe in the basic skills of literary, numeracy and computer-based problem solving⁷. Scholars have argued that this circumstance offers the prospect of a deepening skills shortage, throttling growth, whilst creating in its wake an unemployable underclass, and that this widening inequality breeds the antithesis of any successful transition to sustainability (O'Riordan 2013).

Besides the predominant socio-economic perspective on the economic crisis, there are also socio-ecological, socio-technical, socio-cultural and socio-political perspectives. **Socio-ecological** perspectives link the economic crisis to a concern that it may not be possible to recover growth sufficient for widening global prosperity without crossing planetary ecological boundaries, some of which have already been crossed (Rockstrom et al. 2009). Relentless population growth and other demographic changes combined with the overall growth in the overall claims of the human population on natural resources and ecosystem services, create concern over the rate at which ecological boundaries are being approached. Scholars argue that the ecological transition has already 'reached the tipping point phase' (Rockstrom et al. 2009, Schellnhuber et al. 2009). Holzman (2012) argues that every year we lose 3-5 trillion dollars in natural capital, an amount greater than the yearly monetary costs of the global economic crisis.

From a **socio-technical** perspective, Perez (2013) argues that economic crises are recurring phenomena that often overlap with technological revolutions, and that the recent economic crisis was fuelled by the Internet Bubble created by financial innovations in and with ICT. Geels (2013) contends that the economic crisis has a negative impact on socio-technical transitions, as austerity policies reduce public spending on e.g. renewable energy technology. At the same time, the economic crisis opens up opportunities for green growth and "a Green Industrial Revolution" (ibid). Perez argues that "the golden age of each technological revolution has come precisely after the major bubble bust and the subsequent recessions, which is where we are now", and that "the technological transformation that occurred during the past few decades has already provided the means for unleashing a sustainable golden age" (2013:20-22).

⁵ See e.g. the Economic and Financial Affairs Directorate of the European Commission (2013, p. 5) which put a brave face on its winter 2012/3 economic forecasts.

⁶ Entitled Think Differently: Humanitarian Impacts of the Economic Crisis in Europe (October 2013).

⁷ See report by Organisation for Economic Cooperation and Development entitled Survey of Adult Skills (October 2013)

When perceived from a **socio-political** perspective, it can be argued that the economic crisis has created political anger over the accumulations of wealth in the hands of powerful political and financial elites. Wilkinson and Pickett (2009) argue that inequality breeds a sense of individualism, excessive and environmentally uncaring consumption, and antagonism to the qualities of democracy. Increasing inequality could give rise to social tensions and a resistance and even hostility towards sustainability unless the explanation of sustainability is geared to the improvement of equality. It can also be postulated that the economic crisis has aggravated a collapse in public confidence in the European Union in many of the traditional institutions that have underpinned political, economic and social arrangements during the 20th Century (Murphy, 2011; Hudson, 2014; Weaver, 2014).

From a **socio-cultural** perspective, the economic crisis relates to the way in which the dominant economic model has impacted on senses of identity and feelings of attachment to place and belonging to a collectivity (Yuval-Davis 2006). Changes in our feelings of belonging have been traced through history: Industrialisation, migration or urbanization lead to what Marx refers to as 'alienation' and are at the origin of the classic distinction between Gemeinschaft and Gesellschaft (Tönnis, 1940). The economic crisis has contributed to migration of Europe's Youth and to the search for new life meanings (other than e.g. having a full-time job, a house and a family), which may result in the creation of new communities centred around new ideals and values (e.g. Occupy movement, or sharing platforms such as e.g. blog.peerby.com). Thus, the economic crisis can be related to a changing and contested understanding of what constitutes a community or a place of belonging8. Such socio-cultural perspective can also be extended to the perceived 'loss of the sacred', relating to existential needs of human beings "driven not by material need but by an inner compulsion to understand the world as a meaningful cosmos and to take up a position toward it" (Weber 1963, 116-117). Following Emile Durkheim, the 'sacred' can be understood as that which is set apart from society and transcends the everyday life, and is opposed to the profane (i.e. the everyday mundane things and activities). These socio-cultural perspectives on the economic crisis point out a feeling of loss, while at the same time also opening for potentially new ways. This tension can be associated more fundamentally with a materialist worldview that has characterised modernity (and so-called post-modernity) and that has historically arisen in close association with the technological and social transformation of the different stages of the industrial revolution. From this perspective, the economic crisis can be perceived as being related to a deeper systemic crisis in the culture and worldview of western societies.

4 Narratives on Change – e.g. 'A New Social Economy'

We use 'narratives of change' as an accessible and short summary of 'discourses on change and innovation'. A 'discourse' can be defined as "a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices and through which meaning is given to physical and social realities" (Hajer 1995: 44). Discourses include various 'metaphors' and 'storylines': "a generative sort of narrative that allows actors to

⁸ Communities that are defined through (everyday) face-to-face contact, are not replaced completely but integrated with 'imagined communities' (Anderson 1991) constructed by people who perceive to be part of this community – more interest-based than geographically-based (McMillan and Chavis 1986).

draw upon various discursive categories to give meaning to specific physical or social phenomena. The key function of story-lines is that they suggest unity in the bewildering variety of separate discursive component parts of a problem" (ibid: 56). We use 'narratives of change' to refer to any kind of discourses about innovation or change⁹.

Our concept of 'narratives of change' relates to that of 'generative paradigms' as applied in the Open Book of Social Innovations (Murray et al. 2010), in which sets of ideas and goals that drive and motivate social innovation are characterised as 'generative'. Narratives of change can be considered to co-evolve with such new 'paradigms' on e.g. the economy. In our narratives of change concept, we can distinguish between different types of narratives as proposed by Roe (1994): policy narratives, non-narratives, counter-narratives and meta-narratives. This also relates to the role of 'social movements' and 'counter-movements' (Polanyi 1944, Worth 2013). A social (counter-) movement, such as the environmental movement or the anti-globalisation movement, can be experienced as 'counter-narratives of change' that co-evolve with the development of a new paradigm on how society deals with the environment or how society approaches processes of globalisation. These social movements "struggle against pre-existing cultural and institutional narratives and the structures of meaning and power they convey" (Davies 2002:25), partly through counter-narratives, which "modify existing beliefs and symbols and their resonance comes from their appeal to values and expectations that people already hold" (ibid). Important here is to employ these notions about counter-narratives to unpack any given discourse under empirical study from different perspectives. This challenges us to expand beyond the hegemonic mainstream narrative on e.g. 'the economic crisis', by including a discussion of counter-narratives around the 'new economy'.

The economic crisis is generally perceived to have profound impacts on society. The resulting 'austerity' measures and governmental budget cuts put pressure on public sector employment, transfer payments and social welfare systems, contributing to rising un- and under- employment among young and old and lower disposable incomes for many in society. There is also a growing dissatisfaction with capitalism leading, among others, to a rise of responsibility pressures on companies, a lack of trust in financial institutions, and a growing pressure on democratic political institutions (Castells 2010; Murphy 2011; Hudson 2014; Rifkin 2014; Weaver 2014). These in turn focus attention on the meaning and quality of life which can intensify individuals' desires to live in a more responsible and meaningful way as citizens, workers and consumers, which again are accompanied by an increasing attention to social value creation (based on the attention to these issues in magazines and business literature).

Intertwined with these developments are counter-narratives and movements that propose alternative visions. From anti-globalisation or occupy movements, we can discern a loss of trust in

⁹ Regarding the distinction between 'discourse and 'narrative', Davies (2002) argues that in narratives "past events are selected and configured into a plot, which portrays them in a meaningful sequence and schematic whole with beginning, middle, and end" (11) but that "the boundary between narrative and other forms of discourse is simply not sharply marked off" (10/11)

the dominant economic model of the growth society and its associated livelihood model where most material needs are satisfied through impersonal market exchange. This formalised and impersonal market exchange is questioned, resulting in concepts such as sharing, reciprocity, generalized exchange, or restricted exchange (see Befu 1977, Peebles 2010 for an overview). These are reflected in calls for a more localized or sharing economy, which are now heard increasingly in many Western countries. While the mainstream discourse is still about how to regain adequate rates of economic growth, and underlying longer-sighted discourse (i.e. counter-narrative) is emerging about what might replace the growth-society model. This includes (longstanding and more recent) ideas on de-growth (Schumacher 1973, Fournier 2008), green growth (OECD 2013), or post growth (Jackson 2009). These (counter-)narratives also question the market logic that constructs human beings as well as nature as resources and commodities in the production of goods (Freudenburg et al. 1995).

Contemporary discourses on a 'new economy' include calls to replace, complement, or transform the mainstream economic system with alternative paradigms. These include a wide variety of notions, e.g. 'social economy', 'informal economy', 'solidary economy', 'sharing economy', the 'cooperative movement', 'the commons', 'green economy', 'blue economy', 'circular economy', and so on (e.g. Rifkin, 2014). Many of these narratives and associated ideas are not necessarily 'new' as such. Indeed many have existed for decades (or even centuries), but the 'game-changing' economic crisis has triggered new and revitalised interest in these narratives, thereby translating relatively 'old' narratives into a modern narrative on 'the new, social economy' as a forward-looking response to contemporary challenges (ibid).

Exactly 70 years ago, Polanyi published his influential book *The Great Transformation*, in which he described 'counter-movements' as critical responses to the rise of liberal market economies in the interwar period (1944). Polanyi argued that counter-movements tend to include both 'progressive' and 'regressive' forces, and he related the rise of fascism as part of a 'double counter-movement' in reaction to the rise of liberal market economy (Worth 2013). Similarly, contemporary counternarratives do not only include 'progressive' sustainability-oriented ideas, but also more 'regressive' ideas as e.g. manifested in populist and/or extremist political parties. Moreover, 'counter-narratives' and 'grassroots movements' are also not always easily discernable from mainstream discourses. While discourses on e.g. 'solidarity economy' can be constructed as 'counter-narratives', they have considerable overlaps with mainstream policy discourses on the 'Big Society' (UK) and 'the participation society' (The Netherlands). When comparing discourses on the 'circular economy' and the 'sharing economy', one can find differences in the former being partly associated with a corporate movement (see e.g. McKinsey and the Ellen McArthur Foundation) and the latter being more associated with a grassroots social movement (e.g. Peerby), but the narratives involved show considerable overlaps (e.g. reducing private property and approaching waste as a resource). Different discourses are intermingled, changing over time, forming 'double movements' (Polanyi 1944), or rather multi-layered narratives of change.

5 System Innovation - e.g. Welfare Reform

We conceptualise **system innovation** as a process of structural change at the level of societal subsystems with functional and/or geographic delineations (e.g. energy, transport, city, region). System innovations are "profound transformations in social systems", which involve "changes in established patterns of action as well as in structure, which includes dominant cultural assumptions and discourses, legislation, physical infrastructure, the rules prevailing in economic chains, knowledge infrastructure, and so on" (Grin et al. 2010). As such, system innovation is distinguished from product innovation. In the Multi-Level Perspective (see section 1 and 2), system innovation is conceptualised at the meso-level of 'regimes', i.e. the dominant structures and practices that dominate a societal sub-system. As such, system innovation requires regime change¹⁰. In our conceptual heuristic, system innovation does not necessarily refer to socio*technical* systems or regimes. Various perspectives on societal subsystems can be employed, ranging from socio-technical (e.g. Geels and Schot 2007) to socio-ecological (e.g. Westley 2001), geo-spatial (e.g. Coenen et al. 2012), socio-economic (e.g. Fine and Leopold 1993, Loorbach & Lijnis-Hueffenreuter 2013) or socio-political (e.g. Voss et al 2009, Rotmans & Loorbach 2010).

The economic crisis fosters various system innovations and/or calls for these, from government administrations as well as civil society. So far, such system innovations called for have often been at the level of the financial sector, health care system reform, and reform of the social domains more generally (welfare, care, education etc.). Many developed nations are now changing social support policies, limiting access, decreasing budgets and arguing for more participation in the economy. These dynamics are accelerated by related changes in the demographic build-up of developed societies with a stabilizing and ageing population, in which the balance between workers and pensioners is slowly tilting.

Nations in the European Union witness a progressive collapse in public confidence in many of the traditional institutions that have underpinned political, economic and social arrangements during the 20th Century. These include the institutions of the formal economy (including the tax system, finance, money and banking), state government, representative democracy, social security and welfare systems (including pensions, healthcare, etc.). As the formal economy comes under stress there is also growth in the informal (grey) and illegal (black) economies and a blurring of the distinctions between all of these, such that it is increasingly difficult to establish or to uphold clear distinctions between them (Hudson 2014). Weaver (2014) has argued that the state role as a direct actor in the economy is receding and needs to be re-asserted through indirect roles in providing regulatory and policy frameworks that help facilitate and orchestrate actions by others. Instead, states often tend to compete with each other to offer tax breaks and legal loopholes to transnational corporations and individuals of high net wealth, effectively ensuring a 'race-to-thebottom' in terms of states' capacities to ensure that the wealthiest corporations and citizens pay their 'fair' share of taxes. A two-tier system of taxation is emerging with the richest corporations and individuals paying least tax in relation to gains alongside an increasingly non-level playing field for competition between global/local, richer/poorer and mobile/fixed players (Unger and Rawlings 2008). This is increasing the polarisation of wealth in society, and is argued to undermine

_

¹⁰ If we take the electric car as an example of a product innovation, the equivalent example of a 'system innovation' is the creation of an electricity-based transport system, including e.g. the replacement of gasoline station by charging points, tax-incentives for electric cars, electric buses in public transportation, a new cultural status around electric cars, etc. (Geels et al. 2012). System innovation would require change in the existing gasoline- and ICE-based car regime.

the capacity of the state to act directly to reduce inequalities and provide security for the most vulnerable citizens (Christensen 2011).

The breakdown in state capacity to tax capital adds to the need for governments to find new ways to secure social and economic welfare of citizens. This is stimulating governments to find new ways to engage with the private sector through new models for financing social welfare in which, in principle, all parties (public sector, private sector, and civic society) hold interests as stakeholders. Examples are decentralising care, pension fund reform, welfare privatisation, which aim to deliver welfare and security benefits to citizens while also appealing to the private sector in terms of ensuring favourable operating contexts for business and to the public sector by relieving the state of the full financial and operational burdens of direct provision.

6 Social Innovations - e.g. Complementary Currencies

We conceptualise social innovations as new social practices, comprising new ideas, models, rules, social relations and/or services. By doing so, we follow Franz et al. (2012:4) who argue that the "decisive characteristic of social innovation" lies in the "fact that people do things differently due to this innovation, alone or together. What changes with social innovation is social practice, the way how people decide, act and behave, alone or together" (Franz et al. 2012:5, cf. Howaldt & Kopp 2012). These changing social practices include changing roles, relations, norms and values (ibid, cf. Hochgerner 2012). Howaldt & Kopp (2012:47) define social innovation as "a new combination and/or new configuration of social practices in certain areas of action or social contexts prompted by certain actors or constellations of actors in an intentional, targeted manner with the goal of better satisfying or answering needs and problems than is possible on the basis of established practices".

Social entrepreneurs, organisations and networks across the world are working on a wide range of such social innovations, often through very context specific and bottom-up initiatives. At times they directly address persistent problems in the current economic system, while seeking to establish concrete alternative solutions. Transnational and local networks that have been working on such social innovations for several decades are now experiencing a 'new boost' in response to the economic crisis and to the emergence of narratives around a new economy. We here shortly discuss two (out of many) examples of initiatives working on social innovation, and how these relate to the economic crisis: (1) Time Banks and(2) Transition Towns initiatives.

Time Banks are systems of reciprocal service exchange and manifestations of a 'complementary currency' (Seyfang 2000, 2002, Blanc 2011, Seyfang & Longhurst 2013). Services are traded by a Time Bank network of members on a broader than one-to-one basis. Services range in sophistication from simple services, such as dog walking and car washing, to more complex services, such as teaching piano or languages, to sometimes sensitive personal services, such as child-minding or providing care and help to elderly people or people with disabilities. Time Banks are based on a philosophy of building strong communities, providing care-in-the-community and incentivising and rewarding volunteers. Poverty, unemployment, and skill honing are some of the ways through which the economic crisis comes in. For those with little money, the provision of a

service is a way to obtain a return service of their own choice. For those without a job it is a way, *inter alia*, to contribute usefully to society, to be included in society, to maintain or establish a sense of purpose and identity, to develop contact networks, and to maintain or build skills and experience.

Another pertinent example of social innovation can be found amongst the many local initiatives and networks joined in the Transition Towns movement (Seyfang & Haxeltine 2012). There are now hundreds of communities across Europe and beyond, which empower citizens to build community resilience and pioneer alternative economic and social solutions. This includes the (re)discovery of (new combinations of) old and new skills and services to increase socio-economic independence (e.g. permaculture design principles for urban farming and local food production). Several Transition Towns initiatives have also initiated and experimented with time banks and other complementary currencies (Seyfang & Longhurst 2013), illustrating how different social innovations can spur and empower one another. Interestingly, the concept of Transition Towns was initially formulated as a response to the 'game-changers' of Peak Oil and Climate Change, focusing on a guiding metaphor of 'energy descent' (drastic reductions in levels of energy usage) to prepare communities for a future where fossil-based energy would be absent or prohibitively expensive. After the economic crisis of 2008, the movement was, to a significant extent, reframed as a response to austerity and possible further financial and currency crises. It thus provides an illustration of how such an initiative can adapt its narrative in the face of new game-changers. When we probe a little more deeply it becomes clear that the initiative in fact emerged from a rich historical tradition of radical alternatives associated with the very small town in the UK, Totnes, where it first started (Longhurst 2013). Thus while Transition Towns can be correctly interpreted as a social innovation network that facilitates and empowers responses to the game-changer of the economic crisis, it can also be understood as the latest manifestation or 'wave' in a long tradition of anti-capitalist initiatives that can be historically associated with particular persons, places and portrayals (narratives and discourses).

7 Societal Transformation

We conceptualise societal transformation as fundamental, persistent and irreversible change across society. It is distinguished from system innovation in that societal transformation exceeds individual sub-systems. Examples are the industrial revolution, European integration, or the rise of the market economy and the ideology of economic liberalism, as described by Polanyi¹¹ in *The Great Transformation* (1944)¹². Such societal transformation requires simultaneous change in multiple dimensions (not in only one dimension) of social systems, with these changes occurring widely across society (not in only one place).

¹¹ Karl Polanyi has coined the term "the great transformation" to the rise of the market economy in society, together with the ideology of (economic) liberalism and the use of the gold-standard to extent the market internationally, resulting in inequality, relationships of exploitation and a lesser role for moral considerations, community management and religion (Polanyi, 1944).

¹² Other examples of societal transformation are: female emancipation, abolishment of slavery, rise of the welfare state, secularisation, individualisation, democratisation

We hypothesise that societal transformation can be understood as an (emergent) outcome of coevolutionary interactions between changing paradigms and mental models, new political institutions, new physical structures and innovative developments on the ground. In terms of TRANSIT's conceptual heuristic, we postulate that societal transformation results from a specific interaction between game-changers, narratives of change, system innovation, and social innovation, as distinct but intertwined dimensions of innovation and change (see figure 2)¹³. We refer to this interactive, co-evolutionary process as 'transformative social innovation'.

This concept of *transformative* social innovation overlaps with more systemic perspective on social innovation such as e.g. Westley's (2013) definition: "social innovation is any initiative product process, programme, project or platform that challenges and over time contributes to changing the defining routines, resources and authority flows of beliefs of the broader social system in which it is introduced; successful social innovations have durability, scale and transformative impact". However, rather than defining transformative social innovation as a particular *type* of *successful* social innovation initiative, we conceptualise it as the *process* through which social innovations gain "durability, scale and transformative impact" by interlocking with system innovation, narratives on change, game-changers and societal transformation.

So when we apply this concept of transformative social innovation to our empirical example of the economic crisis – and the processes of change and innovation around it – what do we observe? Which interactions do we observe between the game-changer of the economic crisis, the narratives of change around the 'new economy', the (called for) system innovations in financial and welfare system reform, and social innovations such as complementary currencies and resiliency communities? What evidence is there, if any, that these interactions might be leading to emergent 'societal transformation'?

Over time, the path-dependent development of the neo-liberal, capitalism based financial-economic system has not only led to increasing concentrations of power and wealth, but also to increasing tensions and urgency around the mentioned persistencies. However, the counternarratives and 'alternative' social innovations have also matured over time, gaining (in some instances but not all) increasing attention, support and legitimacy. Combined, these forces could now be understood as facilitating processes of change that can (eventually) provide the right ingredients for a transformative social innovation dynamic that could lead to 'societal transformation' (presumably towards enhancing global well-being and achieving ecological sustainability). A game-changer such as the economic crisis can offer scope for progressive developments, including (renewed debates about) a 'merging' of the public, private and civil

_

¹³ As such, the concept of 'societal transformation' is also distinguished from the concept of 'transitions'. In transition research, the notion of 'transition' is often used to refer to a specific type of change at the level of (socio-technical) subsystems, i.e. what we here refer to as 'system innovation'. We use 'societal transformation' to refer to a more fundamental change at a higher level of aggregation: i.e. 'societies' rather than functional sub-systems. In recent years, some transition scholars have argued that 'societal transitions' also 'transcend individuals systems and comprises various system innovations at different scale-levels and over a long-term period of time' (Rotmans and Loorbach 2010). In that case, a societal transition can be distinguished from a societal transformation in the sense that a transition can be considered to be *a specific form of transformation*. A transition is defined as radical change that follows a particular non-linear path, typically over a period of one to two generations. Such societal transition can be considered a type of societal transformation. However, not all societal transformations necessarily follow such a transition path. As such, societal *transformation* as a concept is broader than the concept of societal *transitions*.

spheres to support social innovation, opening the possibility for all of these sectors to work together in creating/supporting social innovation based around new economic models. The economic crisis contributes to the collective understanding of the persistency and unsustainability of the dominant discourse and practices and seems to encourage a diffusion of alternatives.

However, empirical observations also suggest a more nuanced interpretation: while indeed the crisis has encouraged the search for alternatives, these seem still very diverse, fragmented and small scale to provide a full scale solution. While the legitimacy of capitalism has been questioned, this has not as yet proven to be a 'fatal blow'. The same pressures (and power relations) that led to the economic crisis not being foreseen (and/or allowed to happen) may likely affect the way in which the game-changer is understood and acted upon by society. Actors have developed certain (counter-)narratives in response to the economic crisis, but at the same time, the economic crisis has been used to support pre-existing ideological positions and narratives. Nevertheless, the search for new and adapted models of capitalism as well as for alternative, complementary and blended approaches to how societies meet their needs, has been boosted and given added urgency by the tensions and contradictions that the economic and financial crises have brought to the fore (Hudson, 2014; Weaver, 2014; Rifkin, 2014). The economic crisis can be interpreted then as both a symptom of the underlying persistence and unsustainability of the currently dominant system, as well as a trigger for the acceleration of transformative social innovation.

8 Conclusion: Future Research on Transformative Social Innovation

In this paper, we have discussed the concept of transformative social innovation, as the process through which social innovation contributes to societal transformation. We have introduced a conceptual heuristic that proposes five foundational concepts to help distinguish between different pertinent 'shades' of change and innovation. Our central hypothesis is that societal transformation is *the result of specific 'co-evolutionary' interactions* between social innovations, system innovations, narrative of change, and game-changers, as distinct but intertwined and partly overlapping dimensions of innovation and change (see figure 2 and table 1). We have elaborated on the background and meaning of each of these concepts, with references to existing literature in transition studies and social innovation research, and with empirical illustrations. After introducing this conceptual heuristic for studying transformative social innovation, we have explored its application to various dimensions of change and innovation associated with the economic crisis.

We have taken the recent economic crisis as an empirical example of a 'game-changing' macrodevelopment, and discussed how it is perceived to cause tensions under the prevailing logic of existing arrangements (e.g. unemployment, public funding crises, inability to pay pensions, etc.) that cannot be solved within that current logic. The economic crisis have spurred debates about the unsustainability of our current economic systems, and has drawn new attention to various 'narratives of change' around a 'new economy' (e.g. the 'sharing economic', 'circular economy' or 'Big Society'). Intertwined with those narratives of change, are (calls for) 'system innovation' in the form of e.g. welfare system reforms and new financial investment schemes. Meanwhile, 'social innovations' on the ground provide alternative socio-economic practices, such as complementary currencies and new design principles for local production (as manifested in initiatives and networks such as e.g. Time Banks and Transition Towns). None of these examples are entirely 'new', nor are they explicit 'responses' to the economic crisis. However, the perceived economic crisis has provided these alternative narratives, structures and practices with a 'boost' of renewed interest and with opportunities for new combinations. Combined, these forces can be understood as providing necessary (but not necessarily sufficient) ingredients for a transformative social innovation dynamic that could lead to a 'societal transformation' of modern societies and their socio-economic paradigms.

A major challenge for future research lies in further empirical and theoretical research to (1) scrutinise these hypothetical insights on the dynamics of transformative social innovation, and (2) further develop and deepen the conceptual heuristic. This is part of the mission of the TRANSIT-project for the next three years. Theoretically, TRANSIT aims to draw on a variety of research fields and (meta-) theoretical perspectives on social change and innovation, so as to develop a 'middle-range' theory of transformative social innovation (Haxeltine et al. 2013, 2014). This theory-development is grounded and tested in empirical analysis of 20 networks/movements that (aim to) work on transformative social innovation, including an analysis of the manifestations of these networks/movement in a total of 200 initiatives across Europe and Latin-America¹⁴. This will partly be about investigating how individual actors themselves perceive and (re)construct

¹⁴ An overview of networks/movement under study so far, can be found at http://www.transitsocialinnovation.eu/

different forms of change and innovation, and how actors are (dis)empowered to contribute to transformative social innovation.

This future research will also require a deepening of different 'shades' of such (dis)empowerment. The perspectives introduced in this paper could imply that 'social innovators' can increase the transformative potential of their social innovations, by smartly playing into the societal 'game-changers' of their times, while simultaneously connecting to political (calls for) 'system innovation', as well as linking up with multi-layered 'narratives of change' in both mainstream and grassroots movements. By anticipating game-changers and the inevitable tensions in perceived 'crises', actors can prepare for strategically proposing 'systemic alternatives' when key windows of opportunity open up (Rotmans et al. 2001, Loorbach & Lijnis-Hueffenreuter 2013). A related challenge and aim in the TRANSIT project is to further specify and translate these insights into concrete and accessible recommendations and 'tools' that can be used by social entrepreneurs, activist and policy makers who aim to facilitate transformative social innovation.

The (dis)empowerment of actors also raises questions about the politics and governance of transformative social innovation. Game-changers such as the economic crisis tend to give rise to (or at least coincide with) emerging social unrest, political debates, discussions about the dismantling/redefining of the state, and debates about the (re)scaling of governance mechanisms. Social innovation initiatives such as the examples discussed in this paper (e.g. complementary currencies and resilient communities), often go hand in hand with narratives on '(re)localisation' (Bailey et al. 2010), 'self-governance' and 'self-organisation' (Eriksson 2012, Meerkerk et al. 2012, Boonstra & Boelens 2011). A pertinent question is how these narratives on new forms of governance relate to the role(s) of governments and inter-governmental institutions such as the EU, and how (the interaction between) different type of governance responses and approaches influence the dynamics of transformative social innovation.

By investigating these different dimensions of transformative social innovation, and by developing a conceptual heuristic to do so, TRANSIT aims to contribute to the emerging field of social innovation research (Franz et al. 2012, Moulaert et al. 2013), in particular regarding its increasing attention for issues of 'systemic change' and 'scaling' (NESTA 2013). These issues confront us with a paradox inherent to the social sciences: on the one hand the need to distinguish conceptual levels and scales, and on the other hand the risk of reducing these to abstract ideal-types separated from experiences in practice. Another complicating factor concerns the interdisciplinary context in which the debates on social innovation take place. As argued by Westley (2013): "social innovation is not really a field yet, it is a set of new interests that are deeply grounded in tradition" across a variety of fields and disciplines, including innovation process theory, social movement theory, social entrepreneurship studies, institutional entrepreneurship, research on sustainability transitions and system innovations, resilience and socio-ecological resilience and transformation, and several others. Each of these fields has its own conceptions and languages when it comes to distinguishing different scales and levels. As such, there is a need for a conceptual language that offers flexible distinctions between different dimensions of innovation and change and can be used for an interdisciplinary and transdisciplinary dialogue between academics and practitioners. With our conceptual heuristic and its further development in the TRANSIT project, we hope to contribute to such dialogue on the transformative potential of social innovation.

References

Anderson, B. (1991) Imagined Communities: Reflections on the Origin and Spread of Nationalism. Verso

Bailey, I., Hopkins, R. and Wilson, G. (2010) "Some things old, some things new: The spatial representations and politics of change of the peak oil relocalisation movement", Geoforum, 41:595–605

Befu, H. (1977) Social Exchange. Annual Review of Anthropology. 6:255-281

Blanc, J. (2011). Classifying'CCs': Community, complementary and local currencies' types and generations. *International Journal of Community Currency Research*, 15, 4-10.

Boonstra, B. & Boelens, L. (2011), "Self-organisation in urban development: towards a new perspective on spatial planning", Urban Research & Practice, 4(2): 99-122

Castells, M. (2010) End of Millennium, Blackwell, Oxford (2nd Edition

Christensen, J. (2011) The looting continues: tax havens and corruption, *Critical Perspectives on International Business*, 7, 177-196

Coenen, L., Benneworth, P. & Truffer, B. (2012), Toward a spatial perspective on sustainability transitions, *Research Policy* 41(6), 968–979.

Davies, J.E. (2002) Stories of Change. Narrative and Social Movements. State University of New York Press, Albany.

Durkheim, (1915 [1976]) The Elementary Forms of the Religious Life, London, George Allen & Unwin Ltd.

Eriksson, K. (2012) "Self-service society: Participative Politics and New Forms of Governance", Public Administration, 90(3):685-698

Fine, B., & Leopold, E. (1993). The world of consumption. London: Routledge

Fournier, V. (2008). Escaping from the economy: politics of degrowth. *International Journal of Sociology and Social Policy*. Vol. 28:11/12, pp 528-545.

Franz, H. W., Hochgerner, J., & Howaldt, J. (2012). *Challenge Social Innovation: Potentials for Business, Social Entrepreneurship, Welfare and Civil Society.* Springer.

Freudenburg, W.R., Frickel, S. and R. Gramling (1995) Beyond the Nature/Society Divide: Learning to Think about a Mountain. *Sociological Forum*, 10 (3): 361-39

Garud, R. & Gehman, J. 2012. Metatheoretical perspectives on sustainability journeys: Evolutionary, relational and durational. *Research Policy*, 41, 980 - 995.

Geels, F.W. (2005), *Technological Transitions and System Innovations; A Co-evolutionary and Socio-Technical Analysis*, Cheltenham: Edward Elgar.

Geels, F. W. and J. Schot (2007). "Typology of sociotechnical transition pathways" *Research Policy*, 36(3): 399-417.

Geels, F.W. (2010), "Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective", *Research Policy*, 39 (4), 495-510.

Geels, F., Kemp, R, Dudley, G. and Lyons, G. (eds.) (2012) *Automobility in Transition? A Socio-Technical Analysis of Sustainable Transport*, New York: Routledge

Geels, F.W. (2013), The impact of the financial–economic crisis on sustainability transitions: Financial investment, governance and public discourse, *Environmental Innovation and Societal Transitions*, 6:67-95

Genus, A. & Coles, A. (2008), Rethinking the multi-level perspective of technological transitions, *Research Policy* 37(9):1436-1445.

Grin, J., Rotmans, J. and Schot, J. (2010) *Transitions to Sustainable Development; New Directions in the Study of Long Term Transformative Change*. New York: Routledge

Haxeltine et al. (2014) *List of theoretical questions and hypotheses for Empirical Research Phase I* , TRANSIT deliverable 3.1. TRANSIT: EU SSH.2013.3.2-1 Grant agreement no: 613169

Haxeltine, A., Avelino, F., Wittmayer, J., Kemp, R., Weaver, P., Backhaus, J. and O'Riordan, T. (2013) "Transformative Social Innovation: A Sustainability Transitions Perspective on Social Innovation", paper presented at NESTA Conference *Social Frontiers: The Next Edge of Social Science Research*, 14-15 November 2013, London UK. Available at:

http://www.scribd.com/doc/191799102/Transformative-social-innovations-A-sustainability-transition-perspective-on-social-innovation and the sustainability of the sustainabilit

Hopkins R, 2008 *The Transition Handbook: From Oil Dependency to Local Resilience* (Green Books, Totnes, Devon).

Howaldt, J. and Kopp, R. (2012). Shaping Social Innovation by Social Research, chapter in: Hans-Werner Franz, Josef Hochgerner, and Jürgen Howaldt, *Challenge Social Innovation: Potentials for Business, Social Entrepreneurship, Welfare and Civil Society.* Springer: Berlin/Heidelberg: 43-56

Hubert, A. (2012) Foreword I. Challenge Social Innovation. In Hans-Werner Franz, Josef Hochgerner, and Jürgen Howaldt, *Challenge Social Innovation: Potentials for Business, Social Entrepreneurship, Welfare and Civil Society.* Springer: Berlin/Heidelberg: v-x

Hudson, R. (2014) Does illegality enable or undermine the sustainability of the globalising economy? *Draft* paper prepared as a chapter for an edited collection.

Jackson, T. (2009). *Prosperity Without Growth: Economics for a Finite Planet*. Sustainable Development Commission.

Loorbach, D. & R. Lijnis-Hueffenreuter (2013) Exploring the economic crisis from a transition management perspective. *Environmental Innovation and Societal Transitions* 6: 35–46.

Longhurst, N. (2013) The emergence of an alternative milieu: Conceptualising the nature of alternative places, *Environment and Planning* A 45. pp. 2100-2119

McMillan and Chavis (1986) Sense of Community: A Definition and Theory. *Journal of Community Psychology* 14: 6-23.

Meerkerk, I., Boonstra, B. and Edelenbos, J. (2012), "Self-Organization in Urban Regeneration: A Two-Case Comparative Research", European Planning Studies, DOI:10.1080/09654313.2012.722963

Moulaert, F. MacCallum, D., Mehmood, A. and Hamdouch, A. (Ed.). (2013). *The international handbook on social innovation: collective action, social learning and transdisciplinary research*. Edward Elgar Publishing.

Mulgan, G. (2006) 'The Process of Social Innovation', Innovations, MIT Press Journals, 1(2):145-162

Murphy, J. (2011) Capitalism and Transparency, Critical Perspectives on International Business, 7, 125-141

Murray, R., Caulier-Grice, J. & Mulgan, G. (2010) *The Open Book of Social Innovation*, The Young Foundation, London: NESTA.

NESTA (2013), Setting a future agenda for social innovation, Blog Report about the NESTA Conference on *Social Frontiers - The next edge of social innovation research*, November 2013, London, http://www.nesta.org.uk/blog/setting-future-agenda-social-innovation

OECD (2013) Putting Green Growth at the Heart of Development. OECD Green Growth Studies, OECD Publishing. DOI:10.1787/9789264181144-en

O'Riordan, T. (2013) Sustainability for wellbeing, *Environmental Innovation and Societal Transitions*, 6:24-34, Peebles, G. (2010) The Anthropology of Credit and Debt. *Annual review of Anthropology*. 39: 225-240

Perez, C. (2013) Unleashing a golden age after the financial collapse: Drawing lessons from history, Environmental Innovation and Societal Transitions, 6:9-23

Polanyi K. [1944], 2001. The great transformation. Boston: Beacon.

Riddell, D.J. and Westley, F. (2013) "Mutual Reinforcement Dynamics and Sustainability Transitions: Civil Society's Role in Influencing Canadian Forest Sector Transition", Paper presented at the 4th *International Conference on Sustainability Transitions*, Zurich, Switzerland, June 19 - 21, 2013, special session on "Social Innovation and Systemic Change", Paper nr. 193

Rifkin, J. (2014) *The Zero Marginal Cost Society: The Internet of Things, The Collaborative Commons, and the Eclipse of Capitalism*, Palgrave Macmillan.

Rip, A. and R. Kemp (1998) "Technological change", in S. Rayner and E.L. Malone (eds) *Human Choice and Climate Change*, 2: 327-399, Columbus, Ohio: Battelle Press.

Rockström, J., et al. (2009). "Planetary boundaries: exploring the safe operating space for humanity". *Ecology and Society* 14(2): 32. URL: http://www.ecologyandsociety.org/vol14/iss2/art32/...

Roe, E. (1994) Narrative Policy Analysis. Theory and Practice. Durham/London, Duke University Press.

Rotmans, J., Kemp, R. and Asselt, M. (2001) "More Evolution than Revolution: Transition Management in Public Policy", *The Journal of Futures Studies, Strategic Thinking and Policy*, 3(1):15-32

- Rotmans, J. and Loorbach, D. (2010), "Towards a better understanding of transitions and their governance: a systemic and reflexive approach", part II in: Grin, J., Rotmans, J. and Schot, J. (eds) Transitions to Sustainable Development; New Directions in the Study of Long Term Transformative Change. New York: Routledge
- Schellnhuber, H. J. (2009). *Tipping elements in the Earth System. Proceedings of the National Academy of Sciences*, 106(49), 20561-20563. Chicago
- Schuhmacher, E.F. (1973) Small is beautiful: A Study of Economics as if People Mattered. Blond & Briggs.
- Seyfang, G. (2000). The euro, the pound and the shell in our pockets: rationales for complementary currencies in a global economy. *New Political Economy*, 5(2), 227-246.
- Seyfang, G. (2002). Tackling social exclusion with community currencies: learning from LETS to Time Banks. *International Journal of Community Currency Research*, 6(1), 1-11.
- Seyfang and Haxeltine (2012). Growing grassroots innovations: exploring the role of community-based initiatives in governing sustainable energy transitions. *Environment and Planning C: Government and Policy*, 30:381 400
- Seyfang, G., & Longhurst, N. (2013). Desperately seeking niches: Grassroots innovations and niche development in the community currency field. *Global Environmental Change*, 23(5), 881-891.
- Smith, A., Voß, J.-P. & Grin, J. (2010), Innovation studies and sustainability transitions: The allure of the multi-level perspective and its challenges, *Research policy*, 39 (4), 435–448.
- Stephen, H. and Weaver, P. M. (2011) *Globalization, National Development, and Sustainable Development:* Which pathways and interventions might lead to greater compatibility? Available at: http://www.lucsus.lu.se/globis/D8D9 Synthesis report.pdf
- Tönnies, F. (1940) Fundamental Concepts of Sociology (Gemeinschaft und Gesellschaft), trans. from the German by Charles P. Loomis (New York: American Book Company 1940)
- THE ECONOMIST (2013), "Storm survivors: a special report on offshore finance", London, The Economist 17th February.
- Unger, B. and Rawlings, G. (2008) *Competing for Criminal Money, Global Business and Economic Review*, 10, 331-352
- Van den Bergh, Jeroen C.J.M. (2013) Economic-financial crisis and sustainability transition: Introduction to the special issue, *Environmental Innovation and Societal Transitions*, 6:1-8
- Voß, J-P., Smith, A., Grin, J. (2009) Designing long-term policy: Rethinking transition management, *Policy Sciences*, 42(4): 275 302.
- Weaver, P. M. (2014) The informal, collaborative and 'zero marginal-cost' economies, *Policy Brief, GLOBIS Project*, Brussels Workshop, May, 2014.
- Weber M. 1963. The Sociology of Religion. Boston: Beacon
- Westley, F. (2001) "Dynamic Interactions of Societies and Ecosystems, in Gunderson", chapter in: L.H. and C.S. Holling (eds) Panarchy: Understanding Transformations in Human and Natural Systems Theories for Sustainable Future, Washington: Island Press, pp 195-240.
- Westley, F. (2013) Key Note Lecture *The History of Social Innovation*, at NESTA Conference Social Frontiers: The Next Edge of Social Science Research, 14-15 November 2013, London UK. http://www.nesta.org.uk/sites/default/files/key note speech frances westley on the history of social in novation.pdf
- Wilkinson, R. & Pickett, K. (2009) The Spirit Level. The Equality Trust, York
- Worth, O. (2013). "Polanyi's Magnum Opus? Assessing the Application of the Counter-Movement in International Political Economy." *The International History Review* 35, no. 4 (2013): 905-920.
- Yuval-Davis N. (2006) Belonging and the politics of belonging, Patterns of Prejudice, 40:3, 197-214