UiO: University of Oslo



Centre for technology, innovation and culture P.O. BOX 1108 Blindern N-0317 OSLO Norway

Eilert Sundts House, 7th floor Moltke Moesvei 31

> Phone: +47 22 84 16 00 Fax: +47 22 84 16 01

http://www.sv.uio.no/tik/ info@tik.uio.no

TIK WORKING PAPERS on Innovation Studies No. 20150127

http://ideas.repec.org/s/tik/inowpp.html

Social innovation futures: beyond policy panacea and conceptual ambiguity

Working Paper for the TIK Group Series

Paul Benneworth*, Center for Higher Education Policy Studies, University of Twente, the Netherlands.

Effie Amanatidou, Manchester Institute for Innovation Research, Manchester University, UK

Monica Edwards Schachter, CSIC-INGENIO, Valencia, Spain

Magnus Gulbrandsen, Centre for Technology, Innovation & Culture (TIK), University of Oslo, Norway

* corresponding author: p.benneworth@utwente.nl

O. ABSTRACT

Social innovation is once more an increasingly popular notion circulating as an apparent means to solve the Grand Challenges of the 21st Century. But this common-sense idea of social innovation is based on a quasi-concept, where processes of innovation are absent. To restore some academic rigour to this important concept, we argue more attention need be paid to these innovation processes in social innovation, and that there is value in using innovation concepts drawn from other areas of innovation studies (disruptive innovation, innovation systems, institutional innovation and socio-technical transitions) in highlighting how small-scale social experiments can ultimately lead to the solution of pressing societal problems. Through a subtle critique of the current policy conception of social innovation, it is possible for the field of Innovation Studies in general to help provide better insights into social innovation processes and ultimately to lead to better support frameworks and interventions for promoting solutions to these Grand Challenges.

JEL Codes: O31, O33, O38

Keywords: social innovation, grand societal challenges, disruptive innovation, innovation systems, institutional innovation, socio-technical transitions.

Social innovation futures: beyond policy panacea and conceptual ambiguity

D. ABSTRACT	1
1. THE EMERGENCE OF THE NOTION OF SOCIAL INNOVATION	3
2. SOCIAL INNOVATION AND THE RHETORIC OF THE GRAND CHALLENGES	4
3. THE PROLIFERATION OF THE NOTION IN PRACTICE	7
4. TOWARDS A 'SUBTLE CRITIQUE' OF THE SOCIAL INNOVATION CONCEPT	8
5. WHERE ARE THE KEY INNOVATION IDEAS IN SOCIAL INNOVATION?	11
5.1 System change: social innovation as radical innovation	12
5.2 COLLECTIVE CO-ORDINATION: SOCIAL INNOVATION AS INNOVATION SYSTEM	12
5.3 RECURRENT ACTIVITIES: SOCIAL INNOVATION AS INSTITUTIONAL INNOVATION	12
5.4 CHANGING POWER RELATIONSHIPS: SOCIAL INNOVATION AS SOCIO-TECHNICAL TRANSITIONS	13
5. TOWARDS A FUTURE RESEARCH AGENDA FOR SOCIAL INNOVATION	13
6.1 HOW CAN WE BETTER UNDERSTAND AND CONCEPTUALISE THE EXTENT OF THE 'FUZZINESSES' IN THE CU	IRRENT POLICY
CONCEPT OF SOCIAL INNOVATION?	14
6.2 What social innovations underlying innovation concepts?	14
6.3 What might a more coherent set of social innovation definitions and principles look like?	15
6.4 WHAT MIGHT POLICY APPROACHES OR PROPOSALS BASED ON THESE PRINCIPLES LOOK LIKE?	16
6.5 What kinds of future research agendas are necessary to address the shortcomings in Co	ONTEMPORARY
SOCIAL INNOVATION APPROACHES?	17
7. ACKNOWLEDGEMENTS	18
B. BIBLIOGRAPHY AND FURTHER READING.	19



1. THE EMERGENCE OF THE NOTION OF SOCIAL INNOVATION

Scholars of innovation studies cannot help but note the emergence relatively recently of the concept of social innovation initially in predominantly policy spheres (Jenson & Harrisson, but also increasingly in academic literatures (cf. Edwards-Schachter et al., 2012; Benneworth & Cunha, 2014). The term 'social innovation' is not of itself particularly new: the concept has been used in various incarnations for almost two centuries (Godin, 2012) and the phrase itself really entered the scientific literature to discuss changes in organisation of the worksphere to improve worker quality-of life (Garvey & Griffith, 1966). The phrase first attached the connotations we today associate it with Drucker (1987). He noted how the rise of the contemporary industrial society was dependent on the development of a set of organisational innovations - including the rise of the idea of 'management' - that had slowly co-ordinated widespread social change (hence their description as "social innovation"). But from 2005, we see an explosion of the term in academic, policy and practice spheres (cf. cf. Edwards-Schachter et al., 2012; Benneworth & Cunha, 2014). So how to make sense of the rapid re-emergence of this concept in the early 21st century, and how should the field of innovation studies, wrestling with its own challenges related to responsible innovation and avoiding an excessively technological-centric approach engage with the concept a way that is mutually-prpfitable, avoids thin concept-borrowing or knowledge colonisations.

In this paper, are starting point is that a threshold in the social life of the concept has recently been crossed, marked by the idea's growing importance. Social innovation has been identified by a range of stakeholders as being an essential component in delivering a substantial set of macrochanges, the so-called Grand Challenges of the 21st Century. In Europe, the current overarching strategy Europe 2020 effectively frames social innovation as a mechanism for responding to an array of the non-economic elements of these Challenges. With the smart specialisation concept (cf. McCann & Ortega-Argilés, 2013) having become as an ex ante condition for Structural Funding (Foray et al., 2013), the inclusion of social innovation as one kind of innovation worthy of consideration (alongside public innovation, green innovation, open innovation) is certainly significant. Every region and Member State is encouraged to work social innovation into their territorial development strategies. A tremendous volume of activity is taking place in the field of social innovation, with think tanks and consultants becoming increasingly active in 'scripting' these behaviours through best practice models, user guides and checklists (cf.. Leadbeatter, 2007; Mulgan, 2007; Murray et al., 2010). Latterly, with policy- makers and practitioners starting to ask the question of how to best define the concept, and indeed to call for a clear singular definition (Vienna Declaration, 2011), academics are also starting to come to grips with this notion (Djellal & Gallouj, 2012).

This paper argues that something has been lost in this rapid rise of the concept and that is its clarity and rigour. The facts that there are demands for better definitions we argue derives from an ambiguity in the way the idea is currently used: it has in effect become a kind of 'holding concept' into which all kinds of meanings and values have been imbued. It is simultaneously expected to carry the weight of delivering social justice and sustainable development, whilst also being associated with a spectrum of cognate concepts such as social enterprise, social





entrepreneurship and the social economy from whence any meaningful notion of innovation has been lost. We argue that a vital first step to sorting out this evident conceptual confusion means distilling out its intellectual elements specifically related to *innovation*, and teasing these out into their respective disciplinary strands, using a methodology of 'subtle critique'.

On that basis, a future research agenda should attempt to build links back to more heartland traditional innovation perspectives, to equip the concept with deeply nuanced understandings of innovation and hence to empower inform policy-makers and practitioners to unlock its true social development potential. We contend that a key element is not in arguing that innovation studies need embrace the widest form of social innovation, with its often heavily politically-activist focus on particular readings of social justice. Rather we believe that the concept of social innovation can be strengthened by confronting it with the 'stylised facts' of innovation salient to its underlying processes and frameworks. With the grand challenges already being highlighted as critical drivers and contexts for science, research and innovation policy (Kallerud *et al.*, 2013), we are struck that this rather comprehensive document makes no specific reference to social innovation nor social change. We contend that the time is ripe for the scholarly field of innovation studies to embrace social innovation and provide some much-needed intellectual leadership to this research domain with vital future salience. In this paper, we seek to provide a framework to initiate a rigorous discussion leading to that new research agenda.

2. SOCIAL INNOVATION AND THE RHETORIC OF THE GRAND CHALLENGES

The meteoric contemporary rise of the concept of social innovation cannot be divorced from the wider policy context within which it emerged, an increasing awareness by policy-makers that there are a number of looming threats to social order (such as demographic ageing, global security, climate change and resource scarcity). Social stability therefore becomes dependent on developing societal capacities to co-ordinate efforts to respond to those threats, and attempts to mobilise macro-scale concepts such as Sustainable Development or Local Agenda 21 to drive widespread social change geared adapting to these 'Grand Challenges' had proven unsuccessful (STEPS, 2010; Van den Hove et al. 2012). Against this backdrop the rise of social innovation was intimately bound up with the rhetoric and use of 'grand challenges' as a political rationale for policy intervention that avoided political unpopularity in taking difficult decisions, by devolving the responsibility for taking those decisions from formal governance institutions to societal partners (Reid et al., 2010; Amanatidou, Giesecke & Warnke, 2013; Kallerud et al., 2013).

The orientation of policies to deal with 'global intractable problems' or 'global challenges' is by no means new, arguably dating back to the Club of Rome report Limits to Growth (1972) which likewise explicitly names social innovation, in parallel to technical change, as being a precursor to change political processes and structures to better accommodate sustainable development. There are nonetheless some novel features in how 'global challenges' are addressed, primarily in terms of a new mission-led approach to innovation policy. This has suggested a broadening of its orientation beyond stimulating exclusively economic competitiveness towards serving these more





societal goals intertwined with these problems (BEPA, 2009; Depledge, Bartonova & Cherp, 2010; Cagnin, Amanatidou & Keenan, 2012; Amanatidou, Giesecke & Warnke, 2013).

The Vienna Declaration (2011), which sought to create a common scientific basis for social innovation research, stated addressing the 'major societal challenges' as being central to the concept.

'The necessary co-ordination of scientific as well as practical activities in the wide domains of employment, RDI (Research, Development and Innovation), climate change, education, and social inclusion will be impossible without major changes in social practices in the domains of business, the civil society, and the state'. (p.1)

It also referred to the 'indispensable transition from an industrial to a knowledge and services-based society' where 'fundamental societal changes require the inclusion of social innovations in a paradigm shift of the innovation system'. The conference foregrounded a number of themes that had emerged since the 1990s, as requiring a multi-dimensional plan of action focused on social innovation particularly at the boundary of particular spheres (economic, ecological, social). These dialogues, often under the name of sustainable innovation, sought to find alternative and better ways to meet existing needs and to more effectively address the unintended consequences of industrial development upon society (STEPS, 2010; Howaldt & Schwarz, 2010).

It is also perhaps tempting to link the rise in social innovation within recent 'macro' narratives of Responsible Research and Innovation (RRI) that emerged within the EU Framework Programme for Research and Innovation 'Horizon 2020' related to the responsive and adaptive answer to grand challenges (Owen, Macnaughten & Stilgoe, 2012; von Schomberg, 2013). The RRI concept acknowledges the power of research and innovation as a mechanism for genuine and transformative societal change to shape our collective future. Nevertheless, RRI is primarily concerned with new forms of innovation governance in technological domains (shaping the way technologies are implemented in society to produce the best public outcomes) rather than new forms of innovation *per se* (Stilgoe *et al.*, 2013).

In words of Geoghegan-Quinn (2012),

'Research and innovation must respond to the needs and ambitions of society, reflect its values and be responsible ... our duty as policy-makers (is) to shape a governance framework that encourages responsible research and innovation' (cited in Owen *et al.*, 2012).

In that sense RRI is far closer to a new paradigm in public engagement with science, a deepening of relationships and responsibilities of societal stakeholders for granting scientists and innovators' (license to practice' (Benneworth, 2009). One area where we see the confusion emerging is as the notion of Living Laboratories are becoming increasingly hegemonic in Europe, even to the point of being a criteria for involvement by some research councils in funding programmes. Living Laboratories are predicated on a belief in the need to stimulate 'business-citizens government partnerships as flexible service and technology innovation ecosystems; integrating technological and social innovation in an innovative 'beta culture' (Helsinki Manifesto, 2006; EC, 2009). But at the same time, Living Laboratories are not unproblematically good for all in society; as a form of scientific governance, they obscure the questions of whose needs, rights and responsibilities are





heard in these arenas behind roles of lead users in supposedly democratic, open innovation processes (cf. Chesbrough, 2003; Von Hippel, 2006). The report 'Fostering Innovation to Address Social Challenges' (OECD, 2011:14) is rather explicit in this regard, affirming that

'The multidimensional package of existing social challenges and the systemic failure in fostering social innovation clearly call for a reform of the research and innovation system governance' with participation of multi stakeholders (e.g. universities, research institutes, private companies, government, civil society, citizens).

'Today's social challenges are numerous, complex, and urgent, from ageing societies, climate change, to energy efficiency and security. There is a wide consensus that the disconnection between economic growth and well-being is increasing. At the same time research and innovation have become one of the main engines of growth. However, these two overarching trends have not yet been reconciled: there is a clear lack of exploitation of innovative solutions to address these social challenges. Failing to mobilise innovation to address some of the issues that affect populations at the global and local level has very high opportunity costs. Social innovation can be a way to reconcile these two forces, bringing growth and social value at the same time' (OECD, 2011, pp. 7-8).

Weber & Rohracher (2012) maintain that a new policy for transformative change is emerging focused more in the role of research, technology and innovation towards societal challenges rather than economic growth. Given these emerging conditions of unsustainable growth and rising social innovation, social innovation has become identified with new forms of self-management and innovative bottom-up initiatives proposed to help groups and communities cope with marginalization and deprivation (Boyle & Harris, 2010; Moulaert et al., 2013; CE, 2013). But viewed from some more radical perspectives, social innovation strategies run the risk of making these problems for those specific groups, who already bear the costs, and make those problems then the responsibility of the groups, and not for society as a whole, who benefit from the structures that produce that underlying inequality who are often the least equip to invest in and command innovation to (STEPS, 2010; Smith, Voß & Grin, 2010). This 'pull yourselves up by your own bootstraps' paradox situates within a difficult middle ground between sustainable aspirations, production and consumption models associated with politically-inflected discourses on economic growth, efficiency and competitiveness.

This political framing of social innovation makes it hard to define what social innovation is doing, particularly around ideas of improvement in social capacities and welfare (Corea, 2007). It can be tempting to reverse-apply the label to things that appear to be successful non-market solutions to societal problems. Whilst the 'transition towns' concept is a social innovation devoted to solving the challenge of resource scarcity, its unintended gentrification effects may work against promoting urban inclusion, arguably as important a challenge (North & Longhurst, 2012). Likewise, there is also a political effect from embracing the social innovation agenda, with some voices gain more legitimate positions in policy-making while others are marginalized or silenced: policy-making pays attention to certain discourses that construct specific versions of social innovation while excluding others less palatable; in situations where policy actors do not place a high value on the needs of those groups, this can lead to exclusionary-regressive versions of

social innovation being privileged over inclusionary-progressive. Dominant social constructions of social innovation may therefore have implications for how undesirable consequences of innovation are addressed when strategies of social innovation are implemented. This implies that the contexts in which texts are located and discourses are generated are important and must be taken into consideration when exploring discourse and discursive effects (Segercrantz & Seeck, 2013).

The problem is not just that social innovation needs better understanding (Neumeier, 2012), or current versions are just 'buzzwords' (Pol & Ville, 2009) and 'catchwords' (Godin, 2012) and provide an answer to the 'desperate quest for a definition' that is usually attributed to social innovation (Djellal & Gallouj, 2012: p. 121). The political framing of social innovation makes it hard to understand precisely what processes we are talking about, reducing the discussions to particular kinds of epiphenomenon being more or less desirable. We argue that what is necessary is to get beyond this political ping-pong and foreground changes taking place in social contexts that follow trajectories guided by processes influences by actors and stakeholders. As a first step in dealing with this confusion, we argue that it is necessary to look at the ways in which the notion have been used in practice and isolate the underlying innovation processes involved.

3. THE PROLIFERATION OF THE NOTION IN PRACTICE

From the institutional perspective, social innovation resides in an interpretive processes whereby choices are experienced, imagined, evaluated, and contingently reconstructed by actors in ongoing dialogue with unfolding situations (Emirbayer & Mische, 1998, Scott, 2008). An ample research literature recognizes innovation studies as a empirically-rooted, policy-oriented field (Mytelka & Smith, 2002; Nill & Kemp, 2009; Cagnin, Amanatidou & Keenan, 2012; Godin, 2013). Godin (2012) claimed that social innovators contributed to the French revolution and maintained that social innovation is a political concept that has been rehabilitated recently in response to the dominant and hegemonic discourses on technological innovation (Edwards et al., 2012). Social innovation appears to be at the core of the deliberative learning processes for social change on the macro, meso and micro levels, identifying the struggles and contradictions to deliver social justice for moving onto more socially and contextualized sustainable paths (Hämäläinen, 2004; Stagl, 2007; Stirling, 2007). Social innovations can therefore be seen as dealing with the basic needs and welfare of society, individuals and communities (Fairweather, 1972; OECD, 2001, 2011; STEPS, 2010). Social innovations often require radical changes in accepted role behaviours or the social structure of existing social organizations and institutions and, in this sense,

'the greatest obstacle to creating needed change in technological societies are the very values and social organizations that man himself has created...' Fairweather (1972:1).

As a consequence of this, it is clear that the current social innovation paradigm covers a range of very different activities involving very different underpinning processes oriented towards very different kinds of societal change. Social innovation may refer variously to:

 A neo-Castellian urban movement (Pickvance, 2003) in which innovative forms of governance contribute to wider social goals (Moulaert et al., 2005; Gerometta et al., 2005).





- A change in the organisation of allocative processes which restructure the economy, and have attendant social consequences (Drucker, 1987),
- Experiments in delivering social services to hard-to-reach (socially excluded) groups (Phills et al., 2008)
- Innovation that takes place outside state or market organisational forms, in the social, charitable voluntary or community sector (Haugh & Kitson, 2007)
- Innovation that takes place in an organisational setting or with a logic that is not dominated by market and profit-seeking values (Munshi, 2010) (note: this may be a co-operative firm, cf. Novkovic, 2006)
- An innovation system that has strong systematic linkages between firms, industry, universities
 and society (sometimes referred to as the Quadruple Helix, cf. Leydesdorff, 2012)
- Innovation in the public sector around the improvement of public service delivery (Mulgan, 2006)
- Innovation in the institutional forms by which public services are delivered (e.g. public-private partnerships) or even the private sector (Gerometta *et al.*, 2005; Gallie *et al.*, 2012).

Although these are obviously refer to different things, these definitions are all clearly more or less overlapping, and can be considered to define a cognate conceptual field with a loosely defined scope (Howaldt & Schwarz, 2010). Starting from one single perspective, it is possible to understand how other elements fit into the underpinning process with which that perspective is concerned. Neo-Castellian urban movements are typically focused around innovative forms of deliberative governance and decision-making beyond the state, in public-private platforms, and which is characterised by a concern with more than pure profit, and addressing issues of bringing democracy back to the people (Moulaert et al., 2005). But at the same time, although conceptually cognate, these different perspectives are not necessarily easily resolvable into a single conceptual framework (lizuka, 2013). Because social movements are primarily concerned with social justice and view PPP accounts of social innovation as representing privatization of the public sphere that works against social justice, it is hard to bridge between these two separate concepts. Rather than all these perspectives forming the pieces of a jigsaw puzzle that can with sufficient ingenuity be slotted together to reveal the true definition of social innovation, they currently form a confused conceptual fog within which nothing more than a tantalising fleeting glimpse of social innovation can be caught (cf. Neumeier, 2012).

4. TOWARDS A 'SUBTLE CRITIQUE' OF THE SOCIAL INNOVATION CONCEPT

A key contention we make is that there is a problem with the concept of social innovation tied to its meteoric rise and enthusiastic promotion by policy-makers. Martin & Sunley (2003) identified a similar problem emerging when an innovation-base academic theory becomes an uncritical socio-economic development idea, in tracing how the idea of 'industrial clusters' had become a chaotic



concept. Likewise, Böhme & Gløersen (2011) demonstrated how the EU-mandated idea of 'territorial cohesion' travelled between very different policy concepts and evolved into six largely unrelated concepts that individually had a greater degree of internal consistency. Jenson & Harrisson (2013) argue that this situation applies to social innovation, and draw on Bøås & McNeill's (2004) idea of quasi-concepts:

"a concept which is more than simply a slogan or buzzword because it has some reputable intellectual basis but may nevertheless be found vulnerable on analytical and empirical grounds. What is special about such an idea is that it is able to operate in both academia and policy discussions" (McNeill, 2006 (*sic*), p. 336 quoted in Jenson & Harrisson, 2013, p. 15¹).

Indeed, Jenson suggests that this indeterminate quality at least partly accounts for the meaningfulness for social innovation as a concept, given that there are these strong political struggles; if different groups in, say, Barcelona cannot decide whether a public-private partnership in their community is good or bad, they can at least both agree that social innovation is a good idea. It therefore can act as a rallying point for a movement and provide a means of navigating complex and changing ideas (Jenson, 2010a,b). As Bøås & McNeill add, these concepts arise in an interaction between policy-makers and academic researchers, and that policy-makers have a strongly functionalist logic in separating out policy interventions from wider issues of politics. But social innovation research is intimately embedded in questions of social justice, questions which researchers such as Moulaert et al. (2005; 2009) have foregrounded in their own research. Likewise, social innovation embodies values and meanings that may be at odds with or even compatible with profit-motives embedded in technological innovation (cf. Murray et al., 2010). Following Benneworth & Cunha (2014, forthcoming) we therefore identify a first underlying tension in the social innovation concept between these narrow views of "social innovation as discrete improvements to social service provision" from wider views of "social innovation addressing problems with social service provisions by improving social justice".

Secondly, Moulaert (2009) makes a further distinction between four distinct disciplinary domains within which research into social innovation has taken place. He notes that scholarly communities with their own interests in social innovation have evolved within management science/ social sciences, arts & creativity, territorial development and political science/ public administration. His likewise argues that these different fields each have different areas of focus, from understanding social capital, to its role in social creation, through to social service provision in government (the concern of the latter two disciplinary fields). But arguably more critical in explaining why there is no cohesion in the social innovation concept is that each of their fields have their own ontological foundations and internally coherent logic. Especial caution is therefore demanded in transferring ideas, heuristics and concepts between these domains without regard for their ontological (in-)compatibility (Lagendijk, 2003; Jenson & Harrisson, 2013).

¹ The Jenson & Harrisson report claims that this quotation originates in McNeill, 2006, but consulting the original McNeill paper reveals that the quotation is entirely embedded in a quotation from that antecedent paper.





A third area of conceptual confusion relates to the situation of social innovation and its relationship to other concepts of solidarity and social justice (cf. Cunha & Benneworth, 2013). Maclean et al. (2013) situate it alongside discourses of social entrepreneurship, with entrepreneurship providing the mechanism by which the idea or innovation achieves the wider societal change. There is also an overlap with a concept of a social enterprise, an activity which provides social services without necessary subscribing completely to a market framework (Brackertz, 2011). Westley & Antadze (2010) argue that social innovation can be present (although not necessarily) in social enterprise and entrepreneurship. There is also a relation with the social economy (Amin et al., 2002) which refers to the non-economic circuits which can be understood as governing and shaping resource allocations in contemporary mixed economies. Although these are all cognate fields of study, in these fields innovation is not the primary concern or process, and in some cases it simply be a way to respond to changes in these domains.

In short, the portmanteau concept of social innovation in its current context embodies four tensions that ultimately undermine its conceptual clarity and that require addressing before theoretical progress and cohesion can be made. The first of these relates to fuzziness between normative-policy goals and objective-scholarly understanding: the phenomenon of 'policy-based evidence-making' (Torriti, 2010) or policy-led theorising (Lovering, 1999) is well-understood and some elements and framing of social innovation are of more relevance and utility to policy and practitioner communities; more explicitness is required in this regard. Secondly, there is a fuzziness in the actual ontological foundations of the way social innovation and its constituent concepts are used between different disciplinary communities. There is clearly a need to avoid 'thin concept borrowing' (Hassink, 2007), particularly in those fields such as public administration whose primary concern is not innovation per se. Thirdly, there is a fuzziness in the extent to which these concepts are concerned with innovation strictu sensu, and the degree to which the focus is on social change, and not on a co-ordinated and managed change process, indeed, the extent to which this is about social innovation. Finally, some fuzziness clearly originates from fuzzinesses inherent in different innovation studies traditions that themselves use the term 'social', drawing on concepts social capital, social learning and social knowledge exchange, where a discursive fluidity in the meaning of 'social' connives at conceptual ambiguities.

Our diagnosis of this underlying problem is that these conceptual tensions and fractures arise because of the speed of the concept's ascent has prevented the 'subtle critique' necessary (in the language of Lagendijk) to create ontologically rigorous concepts. To reclaim the policy concept for the academic domain, the Lagendijk diagnosis therefore suggests to 'sort out' this fractured jumble, reframe discussions to be explicit about normative, ideal type and desired outcomes, and restore some conceptual thickness to the way innovation is evoked. Although we have developed a conceptual critique of the problems afflicting the social innovation concept, we stress that this is not purely a scholarly problem. Indeed, growing dissatisfaction with the contradictions in the Living Laboratories concept as a means of stimulating social innovation demonstrate the extent to which the optimism inherent in thin, fuzzy guasi-concepts leads to real problems when they are rolled out as a means of solving societal challenges (Dutilleul, Birrer & Mensin, 2010; Edwards-Schachter & Tams, 2013). According to Jouen (2008) the imperative in a situation of resources scarcity is to advance in more effective actions for social innovation beyond a series

of chaotic social experiments. Therefore, it is necessary to generate a coherent, considered and critiqued understanding of the concept as the basis for more coherent policy responses that do not fall into obvious these obvious booby-traps.

5. WHERE ARE THE KEY INNOVATION IDEAS IN SOCIAL INNOVATION?

We have identified that there are four key fractures or tensions in the concept of social innovation, and this forms the basis for our prescription for determining a prospective research agenda for a more coherent conceptual field. As a first step there must be an immediate concern with re-placing the notion of "innovation" more centrally in this field. What is common to the field of innovation studies is understanding what affects innovation processes, and how that shapes the change trajectory (whatever it is that is changing). Different disciplines place different emphasis on connections, networks and systems (e.g. technological/ national/ regional corporate) innovation systems, access to scarce resources, the impact of policy, or even the impact of place. It is therefore firstly necessary to understand what is changing, and consequently which elements of innovation studies are salient to the architectures and contexts of social innovation processes. On the basis of this first step, it is then necessary to reintegrate these conceptual elements into a coherent – and innovation-centric – theory of social innovation.

It is beyond the scope of a 8,000 word critical literature review to do justice to this theme, and indeed we claim that a more comprehensive effort is needed within the science policy community as a whole to achieve this. Nevertheless, and drawing partly on our previous work (cf. Edwards-Schachter et al., 2012, Benneworth & Cunha, 2014) it is possible to preliminarily identify key areas of innovation studies within which social innovation needs re-embedding. Edwards-Schachter et al. (2012) argue that there is a need to develop a theory of 'sociotechnological innovation', without necessarily suggesting how that might emerge. Benneworth & Cunha (2014) contend that all flavours of social innovation involve combinations of four processes, namely a

- (1) mass change in how an activity is organised,
- (2) collectively co- ordinated,
- (3) involving novel societal institutions, and
- (4) changing societal power relations.

We propose a value in trying to base a theory of socio- technical innovation around these four processes, drawing on concepts in the extant technological innovation literatures. We are not of course here claiming that these are the only innovation literatures that might be relevant, but in a first attempt to understand social innovation as a coherent *innovation concept*, starting with four literatures will provide insights into the challenges and confusions that currently plague social innovation.





5.1 System change: social innovation as radical innovation

The first process is the mass change of how an activity is organised, what Markard & Truffer (2008) call "a classic research field in the innovation literature" (p. 596), exploring how new products emerge that are radically different from their predecessors and which have substantial effects on market and industry structure and composition (Watts, 2001). Baumol *et al.* (2007) argue that radical innovation is one of the main drivers of the dynamism of capitalist economies, representing the means by which economies emerge successfully from crises and stagnation (cited in Dodgson *et al.*, 2011). Keupp & Gassman (2013) maintain that resource constraints can act as a trigger to radical innovation in the manufacturing sector, highlighting the issues that need addressing if radical innovation is to succeed creating new organisational routines, knowledge bases and markets/ users. Constraints affecting knowledge, the most important to radical innovation, can be addressed through knowledge recombination strategies. However, structures and relationships between incumbents and challengers affect both the way radical innovation succeeds as well as the paths along which those innovations evolve (Ansari & Krop, 2012).

5.2 Collective co-ordination: social innovation as innovation system

The second process is in collective co-ordination between diverse actors, both deliberate and emergent, creating and securing access to the new knowledges necessary to stimulate innovations. There are a variety of innovation system literatures which provide interesting lenses through which to consider social innovation, and indeed, some social innovation research is starting to mobilise the notion of social innovation systems (inter alia Huddart (2012), Levesqué, (2012), Phillips et al. (2013)). At the same time, these preliminary readings fail to show the nuance in the understandings in systems relationships and the limits to systems conceptualisations that have emerged in innovation systems literatures. Different innovation system literatures are applicable to different 'flavours' of social innovation. Regional innovation systems literatures (cf. Cooke et al., 1997; 2000; 2005) and in particular the understanding of their placing within wider networks and processes provide a means to understand global-local interactions. Technological innovation systems literatures provide a parallel perspective for understanding how innovation is co-ordinated across these wider networks and the effects that this has on structuring local places (Markard & Truffer; 2008; Coenen et al. 2012; Binz et al. 2014). IS literatures can therefore help to understand one of the hidden issues in social innovation, how particular local place-specific innovations can achieve their wider desired social effects in terms of shifting power relationships.

5.3 Recurrent activities: social innovation as institutional innovation

The third key issue for social innovation studies is in having processes to explain recurrent action at a distance and path-dependency, in terms of the development of new social institutions which support that social innovation. Whether defined in terms of formal/ informal institutions (North, 1990) or Scott's distinction of regulative, normative and cultural cognitive (2011). Much work in innovation studies has problematized the notion of institutions for being fuzzy, residualised or normative, and these are clearly issues for social innovation (Van den Broek & Smulders, 2014). Whyte & Sexton (2011) argue that the key concern of institutional approaches to innovation studies

are institutions as an intermediary level between the organisational and the societal levels. They cite Vermeulen et al.'s (2007) distinction between regulatory structures, professional bodies and collaborating competitors in shaping the environment for innovation in the Dutch concrete sector. Key in Vermeulen et al. is highlighting the role of these intermediary-level institutions as providing spaces of resistance by established interests to these novel innovations, a key issue for social innovations in challenging social injustice where incumbents enjoyed privileged positions.

5.4 Changing power relationships: social innovation as socio-technical transitions

The final innovation literature is that of socio-technical transitions, which can provide additional insights into the issue of changing societal power relationships. The transitions literature emerged from a long-standing interest in innovation studies in the social shaping of technology and attempts to completely deconstruct implicit linear model heuristics unconsciously framing STI studies (cf. Sorensen & Williams, 2002). This was added an extra impetus by the realisation in the context of the grand challenges that there was a more interactive relationship between societal evolution and technology (Geels, 2010; Alkemade et al., 2011). Better understanding these intermediary stages was a vital precondition for conceptualising how small and promising experiments could drive this wider socio-technological transition (Markard et al., 2012). But at the same time, it was important to avoid allowing a simplistic neo-linear model of upscaling to emerge in multi-level models of transitions (cf. Geels, 2002) and to retain a sense of sensitivity for place-specificities in the diffusion of innovations (cf. Coenen et al., 2012). The 'upscaling' of social innovations and the achievement of socio-technical transition to more environmentally sustainable as well as socially-just societies is a key concern for social innovation, and therefore attention need be paid to the compatibility or contradictions in the values of actors driving change and the values that become embedded in the successfully-adopted social innovations.

6. TOWARDS A FUTURE RESEARCH AGENDA FOR SOCIAL INNOVATION

In some senses it is artificial to make a distinction between these four domains because the concepts also have overlapping concerns, for example in institutional studies in understanding how incumbents react to radical technologies (cf. for example Hill & Rothaermel, 2003). Nevertheless we contend that these four perspectives provide a sufficiently promising starting point for attempting to reinsert the notion of innovation as a serious, complex and contested academic notion to the emerging field of innovation studies. There are also other debates within the field of innovation studies which can benefit from this perspective, and in particular, we are struck by a need to develop a structured dialogue with the emerging field of Responsible Research and Innovation (cf. section 2). We argue there are five questions that deserve fuller reflection and consideration to achieve that goal, and develop a future research agenda for social innovation in the mainstream of studies of research and innovation.





6.1 How can we better understand and conceptualise the extent of the 'fuzzinesses' in the current policy concept of social innovation?

On the basis of our framework, we identify four main domain areas for conceptualisations of social innovation, and what would be most useful is to try to find a way to bring these elements together (system change, collective co-ordination, recurrent activities and changing power relationships). In saying that there is a fuzziness in the concept, we are not attempting to make the claim there is no value in attempting to better specify it. What has happened can be regarded as a 'babelisation' of the topic, with many communities simultaneously using the idea without regard for the different ways in which others are using it. Clearly, there are a number of notions of innovation embodied in these different versions of social innovation. But there is also a 'thin dialogue' between these areas, with cross-referencing taking place without the necessary careful eye for what can be transferred. The effect has been to create a 'portmanteau concept', with the result that these concepts have been juxtaposed without necessarily being connected. The idea has arisen in attempting to discuss social needs, social practices and collective action by which social routines become transferrable artefacts, becoming technology.

One way to think about the fuzzinesses is to also think about where dividing lines could usefully be drawn in the concept, and the tensions or challenges that arise here. One dividing line lies between social innovation and technological innovation (cf. Benneworth et al., 2015). There has been a tendency for innovation studies to internalise a view of what technology is that is narrowly focused around physical structures, thereby neglecting the longstanding understanding that innovation processes are inherently social and part of the challenge lies in innovation studies' own atetmpts to change their lenses and frames to be able to pay attention to these issues. There also a set of scalar fuzzinesses; there are micro-practical examples where particular groups are trying to do something new, and then at the macro-scale, there is a macro-normative reading of social innovation related to creating new social capacities to do 'good things' or a sixth long wave of innovation. There can be conflicts of values embedded within the changes involved in social innovation, and sometimes the language of innovation, stakeholders and consultation may hide the conflicts that are inevitably present there between incumbents (the 'regime') and (marginalperipheral) beneficiaries. There is a clear need for precision in what is being talked about, and to understand the interferences that exist within the portmanteau ways within which social innovation ideas are currently used.

6.2 What social innovations underlying innovation concepts?

Even the most practical and pragmatic readings of social innovation are talking about change phenomena which invoke or evoke mainstream innovation concepts, particularly around the processes as a means of linking the trajectory of change to context, agency and contingency. We here distinguish two kinds of process, the productive and the conflictual. Productive processes are those by which sets of actors build up new properties which can in turn explain the dynamics and causes of change. One important productive process linked to ideas of upscaling and social capital is that of 'structuration', in which occasional relationships develop characteristics akin to functioning as networks, and then acquire systematic, institutional properties. Structuration is generally understood as contributing to generalizability and transformation - the key element in using innovation systems thinking in understanding social innovation is in understanding the ways that regularities and tendencies can arise almost invisibly that guide evolutionary trajectories towards other (more socially just?) outcomes. Related to structuration are processes of institutionalisation, and in particular the way that intense interactions creates communities which acquire their own norms and routines (a kind of organisational culture again co-ordinating and guiding actions). In institutionalisation, these communities develop their own logics, and these logics may fit or interfere with the logics of other communities, again providing an insight into why ideas may travel or not between communities in this process of generalisation. A third element are homologising processes which allow ideas to travel and reproduce over distances and which subtly guide diverse processes towards similar ends; these may be considered as being 'rhizomatic' in the sense that the deep roots between the similar events are not visible. Understanding why these apparently different situations demonstrate such similarities requires uncovering the particular mechanisms the people, the communities, the forums – which provide this co-ordination at a distance.

There are also a range of processes at play where conflict, challenge and even destruction comes into change processes. A number of innovation theories reflect on the way that one dominant innovation paradigm experiences interference from, and is disrupted and eventually overtaken by another. What is important in these situations is understanding the situations in which a powerful paradigm, which has acquired its power in part by virtue of its self-reproducing powers (which reflect a position of strength), becomes open to challenges; we are thinking here of processes such as strategic niche management which seek to exploit moments of incumbent vulnerability to build more powerful structures by disruptive actors. A second process relates to the idea of the 'prepared mind' that conceives of a problem in a way in which a particular social innovation can become a solution. Incumbency brings with it the possibility to dominate framing processes, and so it is necessary to understand the processes in which potential social innovators break those frames and begin to search for a particular set of problems to which social innovation might be a solution. A final set of processes here are 'political' processes; theories of contentious innovation have long demonstrated how innovation success depends on "building popularity", coalitions bridging enthusiasts, mentors, critics and partners. Some innovation perspectives may frame these coalitions as being primarily technocratic in nature, but in social innovation, the problems are intimately connected with the lifeblood of Politics, questions of distribution, wealth, health, and consumption. Social innovation therefore is embedded within a double loop of political processes, the technocratic and the distributional. More reflection on these processes is required to better reembed social innovation within a mainstream of innovation theory.

6.3 What might a more coherent set of social innovation definitions and principles look like?

The key challenge as we see in bringing social innovation back to the mainstream of innovation studies is in ensuring that readings of SI emerge which acknowledge the fundamental characteristics of innovation and apply them to the normative contexts within which social innovation is being advanced. If one were to generate a set of stylised facts about innovation in general, then one might list some of its following characteristics in no particular order.



- Firstly, innovation is not special or exception, rather it is ubiquitous, and heterogeneous, taking many forms.
- Secondly, it is based on user needs and problems as well as basic knowledge.
- Thirdly, innovation processes are problematic and difficult to manage it follows the adage "5% inspiration, 95% perspiration".
- Fourthly, innovations are a threat, and so tend to be resisted; innovations emerge more
 easily when there is a shock or crisis making people less resistant to finding solutions.
- Fifthly, innovation is recursive (autopoetic) innovation creates changes, and these changes create new needs, and hence the pre-conditions for new innovations.
- Sixthly, innovation is not axiomatically good there are winners and losers and much of the struggle is around who bears the benefits and the losses of change.
- Finally, innovation takes a long time to drive change, the technological ingredients may be in place before the conditions are finally ripe for an innovation to create change.

We see in much of the SI literature that there is an almost breathless sense that social innovation is different, special, beneficial, smooth, and one-off, rather than acknowledging what is already known in the innovation literature regarding the pervasiveness of innovation. By taking into account the fact that innovation –including social innovation – has these characteristics, it should be possible to be clearer about what is distinctive about social innovation, and those areas which can be black boxed. Of course, mainstream innovation literature has come up with ways of talking about those innovations that are significant and special, whether in terms of representing *radical* innovations, *platform* or *antecedent* innovations, or those innovations with *transformative potential*. It is necessary therefore to consider how we define social innovations that are in some way significant, and those that form part of more incremental gradual change processes.

6.4 What might policy approaches or proposals based on these principles look like?

It is clear that there is already a great deal of activity that can be classified as social innovation, so it is not that SI policy involves trying to stimulate entirely new directions or avenues, it is rather about allowing grass-roots or bottom-up action to spread and drive wider processes of social change, in effect become a platform on which other societal innovations can build. The key policy challenge for social innovation is therefore in upscaling, and one dimension that clearly requires further thought is how to upscale social innovations from a single context, without losing the essence of what makes them 'tick', what Gugulev & Stern (2015) call the 'endgame'. Social innovations may rely as much on attitudinal as organisational changes; people are enthusiastic about the opportunity, and embrace the new organisational form to realise their excitement; it is not merely sufficient to try to translate best-practice models, but rather what has to be replicated are the contexts within which this enthusiasm can be built up. When the motivation relates to financial reward, then traditional market and regulatory policy mechanisms can ensure that those adopting social innovations also receive the appropriate benefits; one need only think of the community wind





farm trust model in Denmark that laid the basis for an explosion on distributed renewal wind power generation in Denmark.

It is worth also highlighting two additional areas where policy for social innovation might be informed. Part of these findings relate to the fact that a policy for social innovation is also necessarily a policy for innovation. Clearly social innovation policy is affected by technology and industrial policy, as well as those policies regulating the markets where particular social needs arise. Transition studies has demonstrated that technical and financial regulations in terms of access to grid systems can be critical in enabling or constraining the access and upscaling of individual technological and organisational innovations to the level of the system. Therefore a policy for social innovation ensures that there is a sensitivity within these regulatory environments to evolve and adapt was new opportunities arise, and in particular, to ensure that regulatory capture does not allow incumbents to game systems and prevent the emergence of competing modes of provision. The other element of a policy for social innovation is in facilitating the experiments in which new ways of addressing social need are articulated. There are many ways in which social actors will articulate needs and in some cases they will overcome inertia to take action to address them. Policy can both focus on lowering the barriers to action so that more articulated needs can become rallying calls for action. They can likewise also move to ensure that attempting to solve the problems is not penalised, as for example in Austria where Local Economic Trading Systems were made illegal, or in social security systems where social engagement reduces eligibility for out-of-work benefits.

6.5 What kinds of future research agendas are necessary to address the shortcomings in contemporary social innovation approaches?

We regard the *leitmotif* of a future research agenda for bring social innovation back to the mainstream of innovation studies as being what might be considered the 'renormalisation' of social innovation. We see many of the problems that emerge with its quasi-conceptualisation as being a consequence of a tendency to treat it as something special and exceptional, rather than reflecting what we see as being a ubiquitous process. It may be the case that social innovation is becoming increasingly important, or just that it is increasingly visible, and for this reason we see that it is vital that any future research agenda moves beyond this exceptionalism, and instead sees social innovation as a form of innovation, something ubiquitous, multifaceted and emergent. Although there has been talk of 'social innovation systems', this seems to our mind to be a rather artificial distinction, with exactly the same factors influencing social innovation as other kinds of innovation. Whilst it might make sense to consider social innovation in terms of some elements within an innovation system, there will be overlaps and connections with other more technological elements, and indeed systems elements that connect and bind together 'social innovation' and 'technological innovation'.

A further element of the exceptionalism has been a tendency to focus on what we might think of as being 'strong practices', purposive interventions seeking to create change, rather than the wider sets of practices and behaviours beyond the immediate community that are nevertheless critical to the way the innovation develops. Some analyses of social innovation have created a distinction





Social innovation futures: beyond policy panacea and conceptual ambiguity

with technological innovation in saying that it is heavily based on particular common social norms of trust and reciprocity. But conversely, it is well understood that culture, norms and trust are important in all innovation processes because of their inherent uncertainty. It may be that trust is especially important in social innovation because of the greater importance of incumbency effects and the difficulties of mobilising competing coalitions. Yet that would remain an emergent property and require empirical demonstration, and it is critical that any renormalisation of social innovation creates empirical as well as theoretical links and parallels between social and technological innovations. For this notion of cultural capital to have any real meaning beyond being a residual invoked ex post, clearly more thinking is required about culture and innovation in the context of reducing transaction costs in change processes.

7. ACKNOWLEDGEMENTS

We would like to acknowledge the financial support of the Eu-SPRI Forum for our exploratory project "Social innovation futures: beyond policy panacea and conceptual ambiguity" for developing the ideas in this paper. We would also like to thank those who contributed to our ideas at seminars in Oslo, Enschede and Valencia, as well as a number of individuals who gave us written and verbal feedback on our paper. Any errors or omissions remain the responsibility of the named authors.

8. BIBLIOGRAPHY AND FURTHER READING

- Alkemade, F., Hekkert, M. P. & Negro, S. O. (2011). Transition policy and innovation policy: friends or foes?. Environmental Innovation and Societal Transitions, 1(1), 125-129.
- Amanatidou, E.; Giesecke, S. & Warnke, P. (2013). The 'challenges' policy target: the need for novel solutions to old problems? Proceedings of the 2013 Eu-SPRI Forum Conference Madrid 10- 12 April 2013
- Amin, A., Cameron, A., & Hudson, R. (2002). Placing the social economy. Routledge.
- Ansari, S. S., & Krop, P. (2012). Incumbent performance in the face of a radical innovation: Towards a framework for incumbent challenger dynamics. Research Policy, 41(8), 1357-1374.
- Baumol, W., Litan, R. &Schramm, C. (2007). Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity. Yale University Press, New Haven, CT.
- Benneworth, P. (2009). "The challenges for 21st century science. A review of the evidence base surrounding the value of public engagement by scientists," Science for All working paper, London: Department for Business, Industry and Science/ Science for All
- Benneworth, P. & Cunha, J. (2013) "Universities' contributions to social innovation: reflections in theory & practice". Paper prepared for special issue of European Journal of Innovation Management on "Knowledge Exchange and Innovation in University City-Regions", accepted 02.10.2013.
- BEPA (2009). Social innovation as part of the Europe 2020 strategy. Executive Summary. Brussels. Berger, P. L. & Luckmann, T. (1966). The Social Construction of Reality. New York: Doubleday.
- Binz, C., Truffer, B., & Coenen, L. (2014). Why space matters in technological innovation systems— Mapping global knowledge dynamics of membrane bioreactor technology. Research Policy, 43(1), 138-155.
- Bøås, M. & McNeill, D.(2004). Ideas and Institutions: Who is Framing What? In M. Bøås & D. McNeill (eds.). Global Institutions and Development: Framing the World? London: Routledge, pp. 1-12.
- Bøås, M. & McNeill, D. (eds) (2004). Global Institutions and Development: Framing the World? New York: Routledge.
- Böhme, K. & Gløersen, E. (2011). Territorial cohesion storylines: Understanding a policy concept. Spatial Foresight Brief 2011:1.
- Boyle, D. & Harris, M. (2010). The challenge of coproduction. Discussion paper. London, UK:NESTA.
- Brackertz, N. (2011). Social innovation, Australian Policy Online, topic guide, 5. December. available online at: http://apo.org.au/node/27387 (accessed 27th March 2013)
- Cagnin, C., Amanatidou, E. & Keenan, M., (2012). Orienting European Innovation Systems towards Grand Challenges and the Roles that FTA Can Play. Science and Public Policy 39, 140–152.
- Chesbrough, H. (2003). 'Open innovation, the new imperative for creating and profiting from technology', Harvard Business School Press, Boston.
- Coenen, L., Benneworth, P., & Truffer, B. (2012). Toward a spatial perspective on sustainability transitions. Research Policy, 41(6), 968-979.
- Cooke, P. (2005). Regionally asymmetric knowledge capabilities and open innovation: exploring 'Globalisation 2' a new model of industry organisation, Research Policy, 34, 1128-1149.
- Cooke, P. Boekholt, , P. & Todtling F. (2000). The Governance of Innovation in Europe. Pinter, London
- Cooke, P., Gomez Uranga, M., & Etxebarria, G. (1997). Regional innovation systems: Institutional and organisational dimensions. Research policy, 26(4), 475-491.
- Corea, Stephen. "Promoting development through information technology innovation: The IT artifact, artfulness, and articulation." Information Technology for Development 13.1 (2007): 49-69.
- Cunha, J. & Benneworth, P. S. (2013). "Universities' contributions to social innovation: towards a theoretical framework" paper presented to "Cities as seedbeds for innovation, Annual Conference of the European Urban Research Association (EURA), Enschede, the Netherlands, 3rd-6th July,





- 2013. European Urban Research Association Conference 2013, 3-6 July, Enschede, The Netherlands.
- Cunha, J., Benneworth, P & Oliveira, P. (2015) "Social Entrepreneurship and Social Innovation: A Conceptual Distinction," Handbook of Research on Global Competitive Advantage through Innovation and Entrepreneurship, Hershey, PA: IGI Global (forthcoming).
- Depledge, M., Bartonova, A. & Cherp, A. (2010). Responsible and transformative innovation for sustainable societies. Fundamental and applied research. Report of the Environment Advisory Group, December 2010. Brussels: European Commission.
- Djellal, F. & Gallouj, F. (2012). "Social innovation and service innovation". In H. W. Franz, H.W., Hochgerner, J. & Howaldt, J. (eds). Challenge social innovation, Berlin: Springer Verlag.
- Dodgson, M., Hughes, A., Foster, J., & Metcalfe, S. (2011). Systems thinking, market failure, and the development of innovation policy: The case of Australia. Research Policy, 40(9), 1145-1156.
- Drucker, P. F. (1987). Social innovation—Management's new dimension. Long Range Planning, 20(6), 29-
- Dutilleul, B.; Birrer, A. J. F. & Mensink, W. (2010). Unpacking European Living Labs: Analysing Innovation's Social Dimensions. Central European Journal of Public Policy, 4,60-85.
- Edwards-Schachter, M. E.; Matti, C. & Alcántara, E. (2012). Fostering Quality of Life through Social Innovation: A Living Lab Methodology Study Case. Review of Policy Research 29 (6), 672-692.
- Edwards-Schachter, M. & Tams, S. (2013). How empowering is social innovation? Identifying Barriers to Participation in Community-driven Innovation. Conference Social Frontiers. The next edge of social innovation research. 13th-14th November, 2013. London (UK).
- Emirbayer, M. & Mische, A. (1998). What is agency? American Journal of Sociology 103, 962-1023.
- European Commission (EC). (2009). Living Labs for user-driven open innovation: An overview of the Living Labs methodology, activitites and achievements. Brussels. European Commission, Information Society & Media.
- European Commission (EC). (2013). Guide to social innovation. Brussels.
- Fairweather, G.W. (1972). Social change: The challenge to survival. Morristown, N.J.: General Learning Press.
- Fontan, J.-M., Harrisson, D. & Klein, J.-L. (2013). Partnership-based Research: Co-production of Knowledge and Contribution to Social Innovation. In Moulaert, F., McCallum, D., Mehmood, A.& Hamdouch, A. (eds), The International Handbook on Social Innovation. Collective Action, Social Learning and Transdisciplinary Research, Cheltenham, UK, Edward Elgar, Chapter 23.
- Foray, D. Goddard, J. Goenaga Beldarrain, X., Landabaso, M., McCann, P., Morgan, K., Nauwelaers, C. & Ortega-Argilés, R. (2012). "Guide to Research and Innovation Strategies for Smart Specialisation Strategies" Available on-line Sevilla: JRC. http://s3platform.jrc.ec.europa.eu/c/document_library/get_file?uuid=a39fd20b-9fbc-402b-be8cb51d03450946&groupId=10157 < Accessed 15th January 2014>
- Gallie, D., Zhou, Y., Felstead, A. & Green, F. (2012). Team Work, Skill Development and Employee Welfare. British Journal of Industrial Relations, 50(1), 23-46.
- Garvey, W.D. & Griffith, B.C., (1966) Studies of social innovations in scientific communication in psychology. The American psychologist 21 (11), pp. 1019-1036
- Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. Research Policy 31, 1257–1274.
- Geels, F. W. (2004). From sectoral systems of innovation to socio-technical systems: Insights about dynamics and change from sociology and institutional theory. Research Policy 33,897-920.
- W. (2010). Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. Research Policy 39(4), 495-510.





- Geoghegan-Quinn, M. <http://ec.europa.eu/ commission 2010-2014/geoghegan-(2012),quinn/headlines/speeches/ 2012/documents/20120423-dialogue-conference-speech en.pdf accessed 12 November 2012.
- Gerometta, J., Haussermann, H., & Longo, G. (2005). Social innovation and civil society in urban governance: strategies for an inclusive city. Urban Studies, 42(11), 2007-2021.
- Godin, B. (2012). "Social innovation: utopias of innovation from c 1830 to the present". Working Paper No. 11, Project on the Intellectual history of Internationalisation,, Montreal, Canada, CSIIC. Available online at: http://www.csiic.ca/PDF/SocialInnovation_2012.pdf < Accessed 14th February>
- Godin, B. (2013). The Unintended Consequences of Innovation Studies. Proceedings of the 2013 EU- SPRI Forum Conference. Madrid 10-12 April 2013
- Guguley, A. & Stern, A. (2015) "What's your endgame?", Stanford Social Innovation Review, Winter 2015, pp. 40-46.
- Hämäläinen, T. J. (2004). Towards a Theory of Social Innovation and Structural Change. In Gerd Schienstock (Ed.): Embracing the knowledge economy: The dynamic transformation of the Finnish innovation system: New Horizons in the Economics of Innovation; Cheltenham, U.K. and Northampton, Mass.; Elgar, pp. 28-44.
- Hassink, R. (2007), The learning region: A constructive critique, In: Rutten, R. and Boekema, F. (Eds), The learning region: Foundations, state of the art, future, Cheltenham: Edward Elgar, pp. 252-271.
- Haugh, H., & Kitson, M. (2007). The Third Way and the third sector: New Labour's economic policy and the social economy. Cambridge Journal of Economics, 31(6), 973-994.
- Heiskala, R., & Hämäläinen, T. J. (2007). Social innovation or hegemonic change? Rapid paradigm change in Finland in the 1980s and 1990s. Social innovations, institutional change and economic performance. Making sense of structural adjustment processes in industrial setors, regions and societies, 80-94.
- Helsinki Manifesto (HM) (2006). Retrieved from http://elivinglab.org/files/Helsinki Manifesto 201106.pdf
- Hill, C., & Rothaermel, F. (2003). The performance of incumbent firms in the face of radical technological innovation'. Academy of Management Review 28(2) pp. 257-274
- Hippel E. von (2006) Democratising innovation, Cambridge, MA: MIT Press.
- Howaldt, J. & Schwarz, M. (2010). SI: Concepts, research fields and international trends. Report of ESF, EU, University.Dortmund, May2010. and Aachen Available online http://www.internationalmonitoring.com/fileadmin/Downloads/Trendstudien/Trendstudie Howal dt englisch.pdf (accessed 2nd April 2013).
- Huddart, S. (2012). Renewing the Future: Social Innovation Systems, Sector Shift, and Innoweave. Technology Innovation Management Review, July 2012, 5-9.
- lizuka, M. (2013). Innovation systems framework: still useful in the new global context? UNU-MERIT Working Papers #2013-005, p. 22.
- Jenson, J. & Harrisson, D. (2013). "Social innovation research in the European Union. Approaches, findings and future directions". Policy Review, WILCO Project Working Paper, available on line at: http://ec.europa.eu/research/social-sciences/pdf/social innovation.pdf <Accessed 18th February 2014.
- Jenson, J. (2010a), 'Diffusing Ideas for After NeoLiberalism. The Social Investment Perspective for Europe and Latin America', Global Social Policy, vol. 10: 1, pp. 59-84.
- Jenson, J. (2010b), Defining and Measuring Social Cohesion, London: Commonwealth Secretariat and UNRISD.
- Jouen, M. (2008). Social Experimentation in Europe: Towards a More Complete and Effective Range of the EU Actions for Social Innovation. In Notre Europe, Studies and Research, No. 66
- Kallerud, E.; Amanatidou, E.; Upham, P.; Nieminen, M.; Klitkou, A.; Sutherland Olsen, D.; Lima Toivanen, M.; Oksanen, J. & Scordato, L. (2013). Dimensions of Research and Innovation Policies to Address





- Grand and Global Challenges. Working Paper 13/2013. Nordisk institutt for studier av innovasjon, forskning og utdanning. Eu-SPRI Forum for Studies of Policies for Research and Innovation.
- Keupp, M. M., & Gassmann, O. (2013). Resource constraints as triggers of radical innovation: Longitudinal evidence from the manufacturing sector. Research Policy, 42(8), 1457-1468.
- Lagendijk, A. (2003). Towards conceptual quality in regional studies: the need for subtle critique A response to Markusen. Regional Studies, 37 (6/7),719-727.
- Leadbeater, C. (2007). Social enterprise and social innovation: Strategies for the next ten years.
- London: Cabinet Office, Office of the Third Sector, UK, November. Available online at http://www.eura.org/pdf/leadbeater news.pdf (accessed 28th March 2013).
- Levesqué, B. (2012). Social Innovation and Governance in Public Management Systems: Limits of NPM and search for alternatives? Cahiers du Centre de recherche sur les innovations sociales (CRISES) Collection Études théoriques - no ET1116, Quebec, CRISES. Available online at: http://www.crises.ugam.ca/upload/files/publications/etudes-theoriques/ET1116.pdf 20th February 2014>
- Leydesdorff, L.. (2012). The triple helix, quadruple helix,..., and an n-tuple of helices: explanatory models for analyzing the knowledge-based economy? Journal of the Knowledge Economy 3(1), 25-35.
- Lovering, J. (1999). Theory led by policy: the inadequacies of the 'new regionalism' (illustrated from the case of Wales). International Journal of Urban and Regional Research, 23(2), 379 395.
- Maclean, M.; Harvey, C. & Gordon, J. (2013). Social innovation, social entrepreneurship and the practice of contemporary entrepreneurial philanthropy. International Small Business Journal, 31(7), 747-763.
- Markard, J. & Truffer ,B. (2008). Technological innovation systems and the multi-level perspective: towards an integrated framework. Research Policy 37,596-615.
- Markard, J., Raven, R., & Truffer, B. (2012). Sustainability transitions: An emerging field of research and its prospects. Research Policy, 41(6), 955-967.
- Markard, J. & Truffer, B. (2008). Technological innovation systems and the multi-level perspective: Towards an integrated framework. Research Policy 37(4), 596-615.
- Martin, R. &Sunley, P. (2003). Deconstructing clusters: chaotic concept or policy panacea? Journal of Economic Geography 3 (1) pp 5-35.
- McCann, P. & Ortega-Argilés, R. (2013). Modern regional innovation policy. Cambridge Journal of Regzons, Economy and Society 6(2), 187-216.
- McNeill, D. (2006). The Diffusion of Ideas in Development Theory and Policy. Global Social Policy, 6(3), 334-54.
- Moulaert, F. (2009). "5. Theories of social innovation from past to present (Frank Moulaert)" in André, I., Gibson-Graham, J. K., Hillier, J., Klein J.-L., Moulaert, F., Tornaghi, C., Vicari, Cassinari, C. & d'Ovidio M. (2009) eds. Katarsis Work Package 4 final report (dissemination version). Available online at: http://katarsis.ncl.ac.uk/wp/wp4/documents/D4DISSEM.pdf <Accessed 18th February 2014>
- Moulaert, F., Martinelli, F.; Swyngedouw, E.; Gonzales, S. (2005). Towards alternative model(s) of local innovation. Urban Studies 42 (11) pp. 1969-1990
- Moulaert, F., Swyngedouw, E., Martinelli, F., & Gonzalez, S. (Eds.). (2010). Can Neighbourhoods Save the City?:Community Development and Social Innovation. New York, USA:Taylor & Francis.
- Moulaert, F.; MacCallum, D.; Mehmood, A. & Hamdouch, A. (Eds.). (2013). The International Handbook on Social Innovation. Cheltenham, UK: Edward Elgar Publishing Ltd. Pp. 13-24.
- Mulgan, G. (2006). The process of social innovation. Innovations, 1(2):145–162.
- Mulgan, G. (2007). In and Out of Sync: The Challenge of Growing Social Innovations. (London: NESTA). available online at: http://www.socialinnovationexchange.org/node/238 (accessed 18th March 2013).





- Munshi, N.V. (2010). Value Creation, Social Innovation, and Entrepreneurship in Global Economies, Journal of Asia-Pacific Business, 11,3, 160-165
- Murray, R.; Caulier-Grice, J. & Mulgan, G. (2010). The Open Book of Social Innovation. NESTA and the Young Foundation.
- Mytelka, L. K., & Smith, K. (2002). Policy learning and innovation theory: an interactive and co-evolving process. Research policy, 31(8), 1467-1479.
- Neumeier, S. (2012). "Why do Social Innovations in Rural Development Matter and Should They be Considered More Seriously in Rural Development Research? - Proposal for a Stronger Focus on Social Innovations in Rural Development Research". Sociologia Ruralis, Vol 52, 48-69.
- Nill, J., & Kemp, R. (2009). Evolutionary approaches for sustainable innovation policies: From niche to paradigm?. Research policy, 38(4), 668-680.
- North, D. C. (1990). Institutions, institutional change and economic performance. Cambridge: Cambridge University Press.
- North, P., & Longhurst, N. (2013). Grassroots localisation? The scalar potential of and limits of the 'transition' approach to climate change and resource constraint. Urban Studies, 50(7), 1423-1438.
- Novkovic, S. (2008). Defining the co-operative difference. The Journal of Socio-Economics, 37(6), 2168-2177.
- OECD (2001). Social Sciences and Innovation. OECD report. Paris: France.
- OECD (2011). Fostering Innovation to Address Social Challenges.
- Owen, R., Macnaghten, P., & Stilgoe, J. (2012). Responsible research and innovation: From science in society to science for society, with society. Science and Public Policy, 39(6), 751-760.
- Phillips, W., Lee, H., James, P., Ghobadian, A., & O'Regan, N. (2013). Social innovation and social entrepreneurship: A systematic review. Group & Organization Management.
- Phills, J. A., Jr., Deiglmeier, K., & Miller, D. T. (2008). Rediscovering SI. Stanford Social Innovation Review, 6(4),34-44.
- Pickvance, C. (2003). From urban social movements to urban movements: a review and introduction to a symposium on urban movements. International Journal of Urban and Regional Research, 27(1), 102-109.
- Pol, E. & Ville, S. (2009). Social innovation: Buzz word or enduring term? Journal of Socio- Economics 38 (6), pp. 878-885.
- Reid, W. V., Chen, D., Goldfarb, L., Hackmann, H., Lee, Y. T., Mokhele, K., Ostrom, E.; Raivio, K.; Rockström, J.; Schellnhuber, H. J. & Whyte, A. (2010). Earth system science for global sustainability: grand challenges. Science(Washington), 330(6006), 916-917.
- W. R. (2001). Institutions and Organizations. SAGE Publications. Retrieved from http://books.google.nl/books?id=kpDUHoaNhqYC
- Scott, W. R. (2008). Institutions and Organizations. Ideas and interests. London, UK:Sage. Publications. 3° edition.
- Segercrantz, B. & Seeck, H. (2013). The construction of social innovation and undesirable consequences of innovation - a critical reading of the European Union's social innovation policy. Proceedings of the 2013 Eu-SPRI Forum Conference. Madrid 10-12 April 2013. ISBN 978-84-695-7408-9
- 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.
- Sorensen, K. & Williams, R. (2002). (eds.). Shaping technology, guiding policy: Concepts, spaces & tools. Edward Elgar, Cheltenham, UK.
- Sotarauta, M., & Srinivas, S. (2006). Co-evolutionary policy processes: Understanding innovative economies and future resilience. Futures, 38(3), 312-336.
- Stagl, S. (2007). Theoretical foundations of learning processes for sustainable development. The International Journal of Sustainable Development & World Ecology, 14(1), 52-62.





- STEPS (2010). Innovation, Sustainability, Development: A New Manifesto. Brighton, STEPS Centre.
- Stilgoe, J., Owen, R., & Macnaghten, P. (2013). Developing a framework for responsible innovation. Research Policy, 42(9), 1568-1580.
- Stirling, A. (2007). Deliberate futures: precaution and progress in social choice of sustainable technology. Sustainable Development 15, 286–295.
- Torriti, J. (2010). Impact Assessment and the Liberalization of the EU Energy Markets: Evidence- Based Policy-Making or Policy-Based Evidence-Making?. JCMS: Journal of Common Market Studies, 48(4), 1065-1081.
- Van den Hove, S., Mcglade, J., Mottet, P., & Depledge, M. H. (2012). The Innovation Union: A perfect means to confused ends? Environmental Science & Policy, 16, 73–80.
- Van den Broek, J. & Smulders, H. (2014).Institutional gaps in cross-border regional innovation systems: The horticultural industry in Venlo-Lower Rhine. In P. Benneworth; F. Boekema; D. Irawati & R. Rutten (2014). (eds). The social dynamics of innovation networks, London: Routledge (in press)
- Vermeulen, P., Büch, R., & Greenwood, R. (2007). The impact of governmental policies in institutional fields: The case of innovation in the Dutch concrete industry. Organization Studies, 28(4), 515-540.
- Vienna Declaration (2011). "The most relevant topics in social innovation research" Conference Declaration:
 Challenge Social Innovation Conference: Innovating by research: 100 years after Schumpeter Vienna, Austria, 19th-21st September 2011. Available Online at:
 http://www.socialinnovation2011.eu/wp-content/uploads/2011/09/Vienna-Declaration final 10Nov2011.pdf <Accessed 19 February 2014>
- Von Schomberg, Rene (2013). A vision of responsible innovation. In: R. Owen, M. Heintz & J Bessant (eds.). Responsible Innovation. London: John Wiley.
- Watts, R. M. (2001). Commercializing discontinuous innovations. Research-Technology Management, 44(6), 26-31.
- Weber, K. M. & Rohracher, H. (2012). Legitimizing research, technology and innovation policies for transformative change. Combining insights from innovation systems and multi-level perspective in a comprehensive "failures" framework, Research Policy, 41, 1037-1047.
- Westley, F. & Antadze, N. (2010). Making a difference: Strategies for scaling social innovation for greater impact. Innovation Journal 15(2), 1–19.
- Whyte, J., & Sexton, M. (2011). Motivations for innovation in the built environment: new directions for research. Building Research & Information, 39(5), 473-482.