'Shaken, but not stirred': sixty years of defining social innovation

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Abstract

This paper examines the evolution in the conceptualization of Social Innovation (SI) with a view to elucidating the multiplication of uses of the term over the last half century. We performed a comprehensive and systematic literature review extracting 252 definitions of SI through a search of 2,339 documents comprising academic papers, books and book chapters, together research and policy reports. To guide the inductive analysis of pluri-vocal discourses we assume innovation to be a learning-based process involving actors' interactions and social practices. We apply mixed qualitative methodologies, combining content analysis based on an interpretivist ontology with cognitive mapping techniques. Our findings show that SI was introduced as an analytical concept by incipient academic communities and has spread in the last decades as a normative concept fuelled by development and innovation policies. SI is defined by a set of common core elements underpinning three different and interrelated discursive 'areas': processes of social change, sustainable development and the services sector. We point to some policy implications and a number of promising avenues for research towards the advancement of a broader socio-technical theory of innovation.

Keywords: Social Innovation; innovation process; collective learning; social practice; social change; technological innovation

JEL Codes: O35, O17, O30

1. Introduction

We are living under the Social Innovation (SI) imperative (Harris & Albury, 2009). As a kind of 'global discursive obsession'[1] SI has become a ubiquitous term in a variety of policy reports and practice-oriented as well as academic contributions (Taylor, 1970; Mumford, 2002; Mulgan et al., 2007; Howaldt & Schwarz, 2010; EC, 2013). The impressive growth of SI as a concept is found in a number of institutions, networks and agencies created after pioneer initiatives in the US, Canada and Europe[2]. Simultaneously SI labels an increasing diversity of maker movements and societal organizational experiments across the world involving actors from government, business and civil society (Edwards-Schachter et al., 2012; Hassan, 2013; Battisti, 2014). In the last decade, SI has been fueled by a plethora of non-profit incubators, social accelerators and hybrid platforms (Peters et al., 2004; Mulgan et al., 2007; BENISI, 2013). One recent example is the hub/platform *Social Innovation Europe* created in 2011 to scale-up SI around European countries (EC, 2015a) followed by a recent project to establish a wider *Social Innovation Community* of researchers, social innovators, end users (citizens) and policy-makers[3].

Despite the pervasive narratives developed, it is not easy to answer the question of what SI is. Described as a 'buzzword' or 'quasi-concept' (Pol & Ville, 2009; Godin, 2012a; Jenson & Harrisson, 2013), the term has become 'overdetermined' or, in most cases, its definition is avoided or ignored. Even the numerous interpretations of SI have 'caused some scholars to drop it as a scientific concept' (Moulaert et al., 2013, p.13) or questioning its usefulness (Pel & Bauler, 2015).

Obstacles are usually justified by a widespread assumption about its origin being rooted in practice instead of scholarship and dominance of grey and policy-oriented literature, being for long time a marginalized topic in both economic and sociological theories of innovation (Hillier et al., 2004; Benneworth et al., 2015). Moreover, SI is associated with a 'babelizing' phenomenon where the meaning of innovation moves between restrictive definitions based on technology to a vast range of 'adjectives' identifying other innovation types (Edwards-Schachter, 2016). A discursive fluidity in the meaning of 'social' and 'societal' is present not only in SI but also in the notions of grassroots

innovations (Gupta et al., 2003; Seyfang & Smith, 2007), frugal innovation (Prahalad, 2005), Base of Pyramid innovations (Prahalad, 2005; 2012); Jugaad innovation (Radjou et al., 2012), among others. The addition of the adjective 'social' to innovation also brings to the fore the discussion drawing on concepts like 'social' learning, 'social' capital, 'social' 'sector' and 'social' interactions in knowledge exchange (Kanter, 1999; Nicholls & Murdock, 2012).

Why and to what extent is SI 'new' and 'different'? This paper attempts to answer to this 'desperate quest for a definition' (Djellal & Gallouj, 2012: p. 121) identifying definitions distributed among a diversity of 'tribes and territories' (Becher & Trowler, 2001). Recognizing the existence of multiple discourses, we analyzed the 'woven fabric of texts' across time spanning a variety of areas involving disciplinary and trans-disciplinary approaches (Klein, 2004). Texts act as intermediaries in the process of meaning construction connecting 'discourse communities' (Callon, 1990; Keller, 2005) where definitions essentially arrive at by social disputes and consensus, even some voices gain legitimacy while others could be silenced or marginalized across time (Becher & Trowler, 2001; Segercrantz & Seeck, 2013). Under this scope, this study aims to answer the following research questions:

- How has the conceptualization of SI evolved over time?
- Is it possible to identify some common 'core' meaning/s in the pluri-vocal discourses and definitions of SI constructed by scholars, practitioners and policy-makers?
- Which are the 'conceptual specificities' (if any) of the SI concept?

In what follows, Section 2 summarizes the state-of-the art on the topic. Section 3 introduces our analytical approach, Section 4 lays out our methodology, Section 5 presents the principal findings and, finally, Section 6 concludes and argues for a new self-consistent interpretation of SI that reflects its conceptual roots, its practical uses and its most promising avenues of scholarship.

2. Defining Social Innovation: state-of-the-art

The fast development experienced during the last decade in the academic field might erroneously lead one to consider SI as a recent phenomenon. However, various

researchers agree that SI predates technological innovation. Moulaert et al. (2013) highlights the existence of a 'proto-disciplinary age' devoted to the analysis of SI considering the structural transformations of society and its social relations. Drucker (1957, p. 23) affirms that *'social innovation goes back almost two hundred years'* and Godin (2012a) maintains that SI reappears in the twenty-first century acquiring *'an autonomous (conceptual) status'* (p. 35). Other authors ascribes the SI 're-emergence' to the Francophone intellectual community in both Europe and Canada from the 1970s onwards, being one reference the French journal *Revue Autrement* (Chambon et al., 1982; Moulaert, 2000; Rana et al., 2014).

Efforts to characterize SI as a disciplinary field were realized by Moulaert et al. (2005a, b), who identified guiding narratives on SI in management science, arts and creativity, territorial development and political science and public administration. More recently Van der Have and Rubalcaba (2016) associated the concept with four research communities (psychology, creativity, social and societal challenges and local development) through a bibliometric analysis of 172 academic papers from 1986 to 2013.

In our systematic review we identified sporadic mentions in academic publications dating back to the 1920s and following years from various disciplinary fields. Thus, Wolfe (1921, p. 281) refers to radicalism as *'the desire for and advocacy of thorough-going social innovation'* arising from the individuals' motivation to change the environment. Swift (1930) associates SI to changes in social religious practices and McVoy (1940) discusses patterns of diffusion in SI as a measure of 'progressivism' in the US produced by the introduction of laws and regulations. Redlich (1949), in a paper published by the *American Journal of Economics and Sociology,* mentions the term referring to the role of business leaders *'who created a new social type'* and *'like every other social innovation resulted in all sorts of difficulties'*. Despite these older traces from the scholarly world, efforts to formally review the concept have primarily arisen since the year 2000, usually in form of reports and working papers (Cloutier, 2003; Nilsson, 2003; Sharra & Nyssens, 2010; Caulier-Grice et al., 2012; Loogma et al., 2013; Howaldt et al., 2014).

Godin (2012a, 2015) documents the origins and development of SI covering 'hundreds of titles on innovation' (2012, p. 7) from England, France and the United States. Phillips et al. (2015) perform a systematic review of 122 papers to explore links between SI and social entrepreneurship and Rana et al. (2014) analyze 105 papers restricted to SI in the public sector. However, most contributions lack a systematic methodology or contain one

which is either not properly explained or presents serious weaknesses (selection bias, inclusion criteria not reported, small sample size, etc.). Furthermore, the analyses are confined to critically discussing some characteristics of SI and the prevailing confusion around it. Some authors proposed analytical approaches to overcome the fuzziness in analyzing 'innovation' in SI and group a common set of elements or dimensions based on the purposes and outcomes of SI, who can 'do' it (actors and society sectors) and how and where it is 'done' (Dedijer, 1984; Cloutier, 2003; Edwards-Schachter et al., 2012; Godin, 2012a). This is precisely the principal argument that guided our work: the study of SI as an innovation *process.*

3. Analytical approach: A learning-based process perspective of innovation

Given that knowledge—both codified and tacit—is *'the outcome of a social process'* (Borrás & Edler, 2015, p. 26), innovation is increasingly understood as a complex socio-cultural process of learning involving a diversity of actors and knowledge sources (Garud et al., 2013). Our study foregrounds the exploration of this *multiplicity* of innovation actors and processes that feed a knowledge-based learning society. As we sketch out in Figure 1, our analytical approach considers innovation as a learning-based process highlighting the following aspects:

a) an emphasis on social interactions as forms of relationality between a variety of actors and *social practices* involving perceptions, meanings, experience and bodily competences, purposes and values, 'materialities' and 'acts' (Reckwitz, 2002; Shove et al., 2012). Innovation process is determined by purposive and deliberative social action (Hellström, 2004) involving interactive learning and a permanent capacity change.

b) innovation process involves potential institutionalization of social practices situating actors' ability to change rules, relational ties, or distribution of resources (Scott, 2008), being communication between agents and cultural identity inherent to institutionalization dynamics (Moulaert & Hamdouch, 2006).

c) social practices span the different stages of any innovation, from the origins or sources of invention to its diffusion, their effects or impacts, intended and unintended consequences in the market, society and culture.

Figure 1. Elements to guide the analysis of SI as innovation process
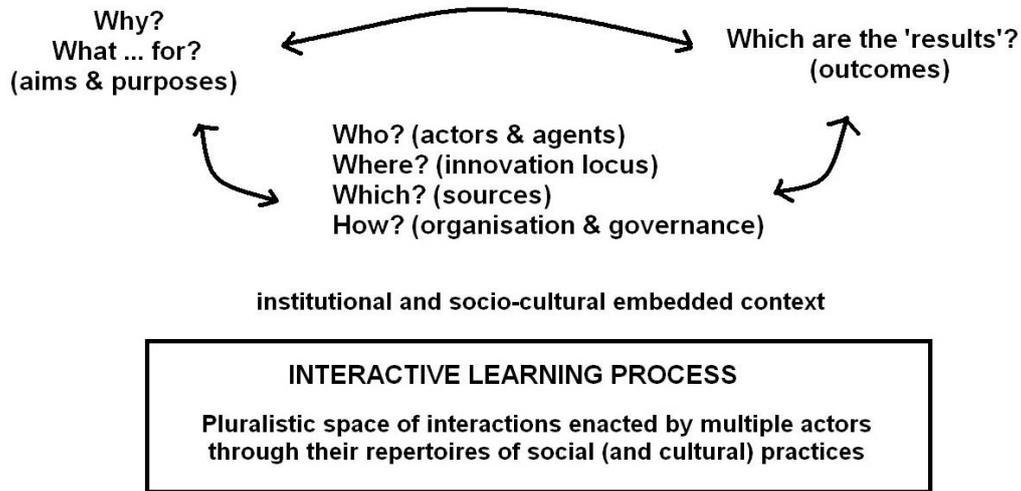
We use this broad perspective as a heuristic to explore constituent elements in attempt to better draw the frontier lines between SI and 'classical' technological innovation and other innovation types.

4. Methodology

4.1 Database and compilation process of SI definitions

A systematic review was used to generate a database including definitions (extraction of literal texts) from grey and academic literatures (economics, innovation, sociology, social psychology, etc.). The search was performed in December 2013 to October 2014 using the key words 'social innovation' and other keyword combinations[4]. Our search covered 634 documents extracted from Web of Science and 705 documents from SCOPUS containing the term 'social innovation' and 'soci* innovation' in the title, abstract, keyword and content. We compared this information with one thousand registers retrieved from Google Scholar and also used the *snowball* technique, which is appropriate when the elements of a population (e.g., policy reports) are difficult to locate or not

indexed (Greenhalgh & Peacock, 2005). We manually select only documents with explicit definitions of SI (the criterion for selection) and classified them as papers, book and book chapters, research reports and policy reports, taking special notice of academic contributions having received the most attention (in terms of citations) from peers, as a proxy for their influence in terms of defining SI. In the Annex 1 we expand on the procedure, detailing a list of the first 15 highly-cited publications retrieved from WoS and SCOPUS where only the highlighted papers contain explicit definitions of SI. We followed the same procedure with other relevant SI communities, such as e.g. the ample literature developed in Canada from the Centre de Recherche sur les Innovations Sociales (CRISES) around 1986 to date and the practitioner-oriented journal *Social Innovation Stanford Review*, appeared in US in 2003.

The final database comprises N= 252 definitions (Table 1) published between 1955 and May 2014. Figure 2 presents the distribution in intervals of 10 years according to the type of document, showing that some academic 'tribes' predates the grey literature as well as the well-documented rapid growth of SI literature from 2000 to date (Cajaiba-Santana, 2013).

Table 1. Sample distribution containing explicit definitions of SI according to the source type

Type of document	N (%)
WoS & SCOPUS paper	83 (32.9)
Academic paper (non WoS & SCOPUS)	20 (7.9)
Book & Book Chapter	75 (29.8)
Research report & WP	38 (15.1)
Policy Report	36 (14.3)
Total	252

Figure 2. Temporal distribution of definitions (unit of analysis) from 1955 to 2014 (N= 252) according to the type of document analyzed.
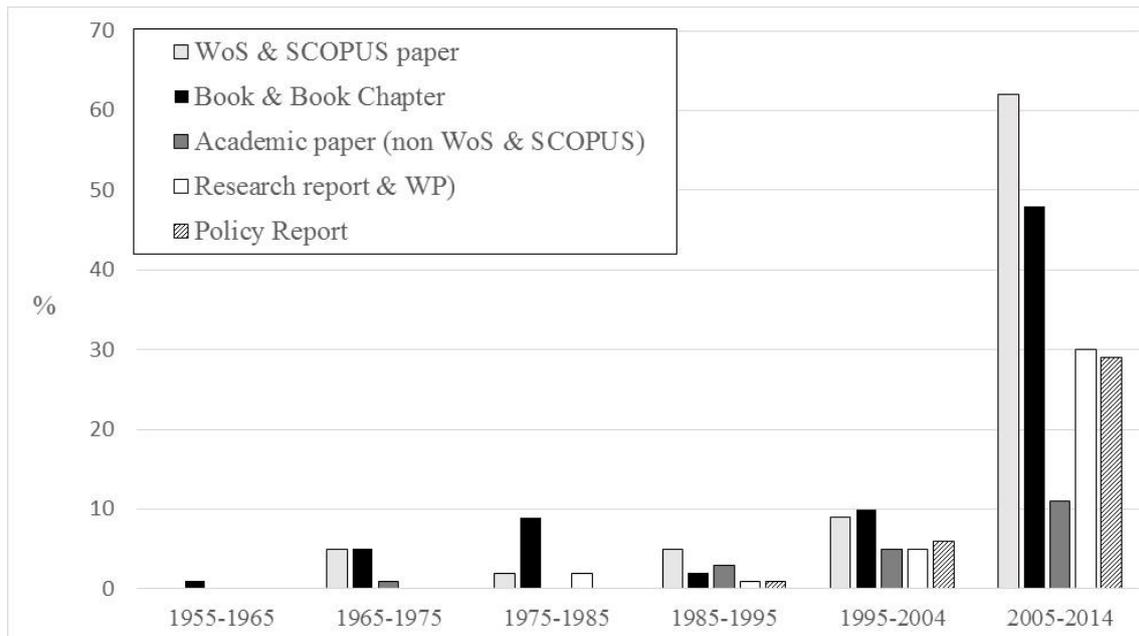
4.2 Content analysis strategies and procedures

In our analysis, we follow mixed qualitative methodologies with an approach oriented towards an interpretivist ontology. Our complementary analysis comprises:

a) A g*lobal content analysis*: we applied a mapping and clustering algorithm using the VoSViewer software (Van Eck & Waltman, 2010). This program allows us to extract terms rather than words (based on a grammar algorithm applied to English texts) and construct a two-dimensional map based on their co-occurrence, where smaller distances refer to greater number of co-occurrences (Leyderdorff & Welbers, 2011). Term co-occurrence comes from linguistics and semantic network analysis and is based on the idea that a term provides clues to specific concepts (Ryan & Bernard, 2003). We used this method as a heuristic to provide some visual clues on the existence of different 'clusters'/'strands' within the 'global content map' that represents the overall 'dialectic' of pluri-vocal discourses on SI.

b) *Interpretive content analysis*: Defining 'words' as basic semantic units of texts to be classified, we identify words of potential interest, using a constant comparison method involving analysis for similarities and differences. Data analysis was conducted in an iterative process: identifying, fixing, naming, labeling, classifying and relating (Charmaz, 2008, 2014; Segercrantz & Seeck, 2013). Given that a category is *'a group of words with*
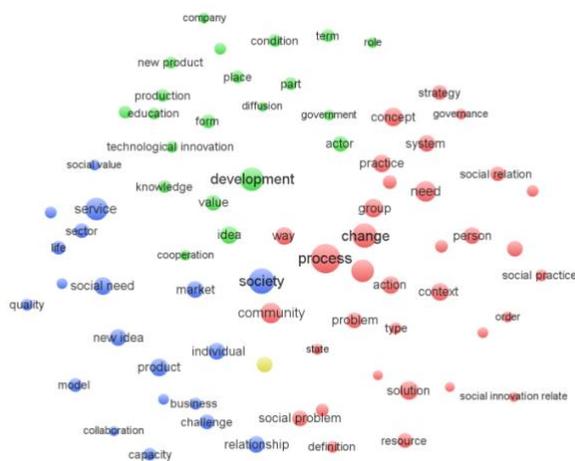
similar meaning or connotations' (Weber, 1990, p. 37), we grouped phrases closely together in an open process of continuous readjustment. Long and complex sentences were broken down into shorter thematic units and compared to identify convergent discourses, establishing a set of 'meta-categories': (1) the aims/ends and generation of values in SI processes; (2) the organization of SI processes as sources, actors and interrelationships; (3) the 'outputs/outcomes' of SI processes; (4) institutional change and power in SI processes; and (5) SI processes in evolving complex macro-systems. More details are found in the following section and in the Annex 2.

5. Findings

5.1 Mapping pluri-vocal discourses defining SI

Figure 3 shows the results of mapping and clustering the terms found in the 252 definitions of SI that were isolated, based on the co-occurrence of terms in the definitions themselves.

Figure 3. Mapping co-occurrence of main terms found in definitions of SI (N=252). Left: cluster distribution; Right: density map

(right)

The most commonly-occurring term, 'social innovation', is removed, and a minimal threshold of 10 for the occurrence of terms is applied (for clarity), which yields the maps shown in Figure 3. Different thresholds and exclusions of common terms are explored to ensure that the representation is relatively robust and consistent. We can view this map as a set of clusters derived from a measure of dissimilarity based on the distance (Fig. 3, left), or simply as a density of terms which occur (Fig. 3, right), capturing the 'big picture' in discourses 'accumulated' from the first definition we analyzed (Drucker, 1957) to 2014. The bulk of definitions across six decades are grouped in three clusters suggesting three main strands or areas (which should not be viewed as 'rigid'), tightly related to:

- **Processes of social change** (Red cluster, right-hand side): 'society', 'process', 'change', 'community', 'action', 'social practice', 'problem', 'need', and 'social relation' are examples of terms that point out to processes, change and social practices that underpin SI.

- **(Sustainable) Development** (Green cluster, top left), which highlights the centrality of 'Development' together with 'value', 'knowledge', 'idea'; also linked to 'technological innovation', 'new product', 'actor', and 'government'

- **Services sector** (Blue cluster, bottom left), which shows links between 'society', 'market', 'social need', 'new idea', 'product', 'business', `challenge'. Also 'social need' tightly links with 'service', 'sector' and 'quality' and 'life'. This cluster suggests a perspective referred to innovation addressing to social needs particularly related to service provision linking with both 'market' and 'society'.

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Naturally, the distinction between clusters is not neat and some terms overlap, e.g. the words 'community' and 'practice' are comprised in red cluster while 'product' is present in both blue and green clusters. Definitions retrieved from highly cited academic papers of Mumford (2002) and Marcy & Mumford (2007) in Psychology (Creativity) field from US link with the red cluster (processes of social change). Central to both red and green clusters is an European academic community from the area of Environmental Sciences, Ecology and Urban Studies, in particular Moulaert et al. (2005a, 2007); Moulaert & Nussbaumer (2005); Gerometta et al. (2005); Novy & Leubolt (2005). Other relevant definitions (see Annex 1) that speak most to green and red clusters are Maruyama et al. (2007), who analyzed the rise of SI communities related to wind energy in Japan and Biggs et al. (2010) regarding societal transformations and management in ecosystems.

We highlight the fact that this global 'map' includes grey literature representations of SI as a field of practice without which we would lose much of the history central to the complex nature of SI (Mulgan, 2012). For example, in the report *Local Development Strategies in Economically disintegrated Areas: a Pro-Active Strategy against Poverty in the European Community* written by Moulaert & Leontidou (1992) for the European Commission, SI is defined as *'a structuring concept in a new approach to neighbourhood development as a strategy against poverty'*. This document proposes a new territorial development model named Integrated Area Development, representative of the shift experienced in Europe on territorial development policies in the 1980s.[5]

5.2 Evolution in the discourses and narratives defining SI

Our rigorous analysis of discourse serves to confirm the validity of the above clusters, while providing greater insight into the processes associated with SI, as per our conceptual framework. Table 2 summarizes the principal categories emerged across time ordered in decades according to our second methodological approach. A few salient trends immediately apparent are the continuity across time of some terms and the appearance of new terms (e.g. 'Corporate Social Responsibility' and 'design thinking' in the period 1995-2004) together the emergence of distinctive characteristics -grouped from A to E categories (Table 2 and Fig.4). Most frequent terms are 'process', 'change in social practices', 'social change and socio-technological change', 'generation of social values'

(like 'well-being', 'social justice', 'inclusiveness', 'gender equity', 'quality of life', etc.). We also observe the centrality of 'social needs', the identification of societal and wicked problems as drivers of SI, together with the distinctive participation of 'non-traditional' actors such as NGOs, social movements, social entrepreneurs and activists, as well as references to particular outcomes under the label 'social invention' and 'cross-sector partnerships', 'empowerment', etc.

'Process' is described in different ways, as product and process 'outcomes' (Phills et al., 2008; Moore & Westley, 2011), and as the 'place' involving social practices and social interactions at micro, meso and macro levels of society. For Crozier & Friedberg (1993, p. 19) SI is '*a process of collective creation in which the members of a certain collective unit learn, invent and lay out new rules for the social game of collaboration and of conflict or, in a word, a new social practice*'. Cloutier (2003, p. 42) defines it as '*the process resulting from cooperation between a variety of actors*' that '*can be seen as a process of collective learning and knowledge creation*' which '*requires the participation of users*'. Cajaiba-Santana (2013, p. 8) argues for a '*processual perspective on social innovation*' integrating the micro, meso and macro levels of social systems where '*the social innovation process can be seen as an organic process that unfolds from the dyadic relationship between actor and structure*'. Table 2 and Fig. 4 show the principal categories (aspects) in defining SI across time.

Table 2. Summary of principal categories containing common terms/phrases and their frequency distribution (N=252 definitions), N= number of definitions, f=frequency, R, G & B indicates relation with the clusters red (Processes of social change), green (Sustainable Development) and blue (Services sector)

Coded categories	Total N=252	1955-1964 (N=1)	1965-1974 (N=11)	1975-1984 (N=13)	1985-1994 (N=12)	1995-2004 (N=35)	2005-2014 (N=180)
				f (%)			
A. Aims/ends and generation of values in SI processes							
A1 'oriented to social aims/social values' (R, G, B)	106 (42.1)	1	4 (36.4)	5 (38.5)	7 (58.3)	15 (42.9)	74 (41.1)
A2 'addressed to unmet social needs'/'complex social problems' (R, G, B)	105 (41.7)	1	5 (45.5)	4 (30.8)	3(25.0)	16 (45.7)	76 (42.2)
A3 'improvement of economic growth' (G)	13 (5.2)	0	1 (9.1)	1 (7.7)	0	2 (5.7)	9 (5.0)
A4 'Corporate Social Responsibility'/'Corporate Social Innovation' (G, R)	8 (3.2)	0	0	0	0	1 (2.9)	8 (4.4)
B. The organization of SI processes: Sources, actors and interrelationships							
B1 'process'/'learning dynamics'(process) & 'collective creativity' (R, G, B)	174 (69.0)	0	4 (36.4)	5 (38.5)	10 (75.0)	20 (57.1)	135 (75.0)
B2 'civil society'/'third sector'/'NGO'/'social and grass-root movements' (R, G)	157 (62.3)	0	4 (36.4)	4 (30.8)	3 (25.0)	16 (45.7)	130 (72.2)
B3 'change in territorial development models' (R, G)	52 (20.6)	0	2 (18.2)	1 (7.7)	1 (8.3)	3 (8.6)	45 (25.0)
B4 'cross-sector between government, business and civil society' (R, B)	50 (19.8)	0	1 (9.1)	3 (23.1)	3 (25.0)	5 (14.3)	38 (21.1)
B5 'social entrepreneurship and social economy'/'entrepreneurship' (R, B, G)	39 (15.5)	0	0	2 (15.4)	1 (8.3)	4 (11.4)	32 (17.8)
B6 'user participation'/'co-creation'/(user) 'community participation' (B, R)	17 (6.7)	0	2 (18.2)	1 (7.7)	1 (8.3)	3 (8.6)	10 (5.6)
B7 'firm'/'business'/'corporation'/SME/'companies' (B, G)	16 (6.3)	0	0	0	0	1 (2.9)	15 (8.3)
B8 'design & design thinking' (R, B, G)	10 (4.0)	0	0	0	0	3 (8.6)	7 (3.9)
B9 'resources and costs' (B, G)	8 (3.2)	0	0	0	0	1 (2.9)	7 (3.9)
C. The 'outputs/outcomes' of SI processes							
C1 'new combination or configuration of social practices' (R, B, G)	97 (38.5)	1	5 (45.5)	4 (30.8)	3 (25.0)	13 (37.1)	71 (39.4)
C2 'social invention'/'new law, norm and/or rule' (R, B)	62 (24.6)	1	5 (45.5)	5 (38.5)	6 (50.0)	8 (22.9)	37 (20.6)
C3 'new or improved products' (B, G)	62 (24.6)	0	1 (9.1)	0	4 (33.3)	10 (28.6)	47 (26.1)
C4 'new services' (B)	56 (22.2)	0	1 (9.1)	2 (15.4)	2 (16.7)	6 (17.1)	45 (25.0)
C5 'new organization method'/'model' (B)	55 (21.8)	1	4 (36.4)	2 (15.4)	3 (25.0)	8 (22.9)	37 (20.6)
C6 'new technology/ICT development' (B)	16 (6.3)	0	3 (27.3)	0	3 (25.0)	4 (11.4)	6 (3.3)
C7 (innovation in) 'marketing' (B)	5 (2.0)	1	0	0	1 (8.3)	1 (2.9)	2 (1.1)
C8 'social technology' (B, R)	4 (1.6)	0	2 (18.2)	1 (7.7)	1 (8.3)	0	0
D. Institutional change and power in SI processes							
D1 'innovative governance with civil involvement'/'collective agency' (R)	52 (20.6)	0	4 (36.4)	2 (15.4)	3 (25.0)	4 (11.4)	39 (21.7)
D2 'institutional change' (R)	38 (15.1)	1	1 (9.1)	3 (23.1)	1 (8.3)	5 (14.3)	27 (15.0)

D3 'empowerment'/'(formation of) 'social capital' (R)	25 (9.9)		1 (9.1)	3 (23.1)	1 (8.3)	3 (8.9)	17 (9.4)
D4 'cultural change' (R, G)	19 (7.5)	1	0	0	1 (8.3)	3 (8.9)	14 (7.8)
E. SI processes in evolving complex macro-systems							
E1 'social change'/'change in social systems'/'socio-technical change' (R, G)	110 (43.7)	1	6 (54.5)	3 (23.1)	5 (41.7)	9 (25.7)	86 (47.8)
E2 (social) 'market failures'/'social demand' (B)	74 (29.4)	0	1 (9.1)	1 (7.7)	4 (33.3)	9 (25.7)	59 (32.8)
E3 (oriented to) 'sustainability'/'change in patterns of production and consumerism' (G, R)	49 (19.4)	0	0	2 (15.4)	2 (16.7)	7 (20.0)	38 (21.1)
E4 'reorganization of work' (R)	19 (7.5)	0	1 (9.1)	1 (9.1)	2 (16.7)	3 (8.9)	12 (6.7)
E5 'radical innovation'/'radical change' (R, G)	7 (2.8)	0	1 (9.1)	1 (7.7)	0	1 (2.9)	4 (2.2)

Figure 4. Evolution in the most common terms/phrases present in SI definitions from 1965 to 2014; R (red cluster, Social change process); G (green cluster, Sustainable Development) and B (blue cluster, Services sector)
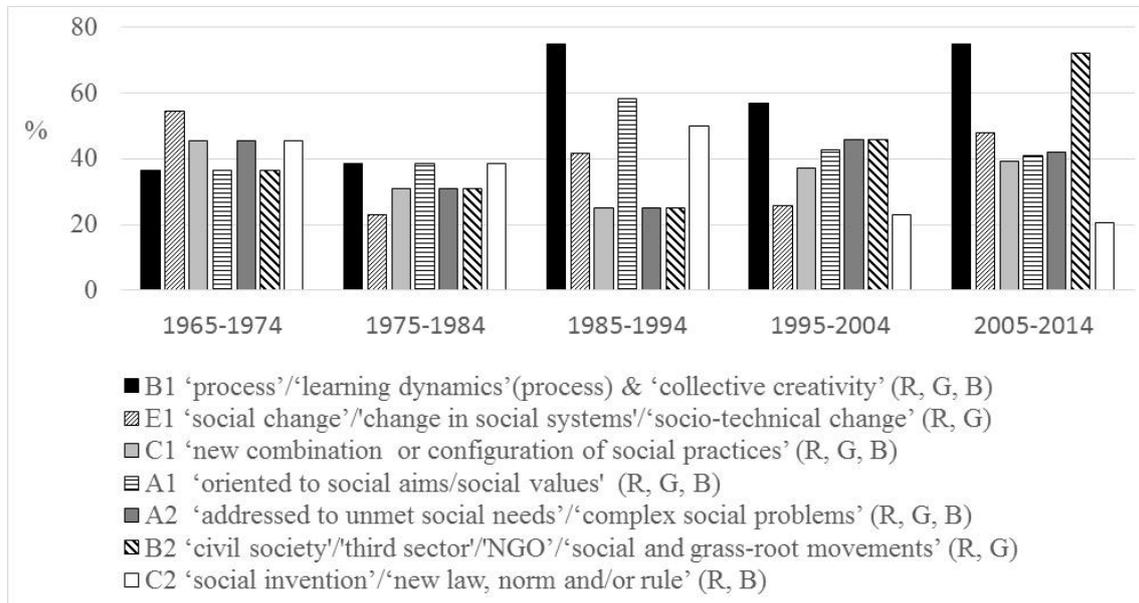
5.3 Tracing salient voices and shifts in SI across time

For clarity, we limit ourselves to tracing the most salient voices and 'shifts' across time and some contextual information explaining how different 'discourses' can be considered in light of the three main clusters: (Sustainable) 'Development', 'Process of social change' and 'Services sector' have been rooted.

5.3.1 Peter Drucker's management perspective on SI: societal change driven by mass organizational changes

In the first period we identified the contribution of Drucker (1957), who defines SI from a managerial perspective that links with both blue (Service sector) and red clusters ('Processes of social change'). Being focused on the search of organizational efficiency through the introduction of methods as potential source of mass social change, he

maintains that SI 'i*s non-technological research growing as educational methods into hospital administration, theories of organization or marketing practices'* (Drucker, 1957, p. 20). 'Methods' are 'artifacts' that deliberately seek to produce social change, including the introduction of regulations (*'cartels as well as antitrust laws are social innovation'*, p. 40). SI involves *'the diagnosis of social needs and opportunities and the development of concepts and institutions to satisfy them'* (p. 32). Three decades later he deepens this notion of SI highlighting the relation between organizational change and agency, referring to the role of SI produced by 'mass and mass movement' (Drucker, 1987, p. 32) 'taken over by the private, non-governmental sector' and the 'introduction of novel organizational configurations' (p. 34). Notably in his book *Management Challenges for the 21st Century* (which not defines SI) he points out that '*the first practical application of management theory not take place in a business but in non-profits and government agencies'* (Drucker, 1999, p. 3) and the inherent difficulties in managing them. This scope on the search of the organizational effectiveness involving different actors will be present in next decades (Holt, 1971; Pot & Vaas, 2008; Dagnino, 2010). For example, Dees & Anderson (2006, p. 40), who introduced SI from the social entrepreneurship field, define SI focusing in the search of '*blend methods from the world of business and philanthropy to create social value that is sustainable and has the potential for large scale impact'*.

5.3.2 The emergence of SI discourses on social change, relating to environmental challenges and the survival of humankind

In the second interval (1965-1975) we found eleven definitions, many of which are closely linked to the community psychology field from US. Fairweather (1967) led this nascent community introducing SI in a context of increasing criticism to the US social policies and bureaucratic structures in the health sector. He was part of a social movement of scientists in the 1960s called 'social engineering' focused on the design and evaluation of new solutions to major social problems. In his view, SI aimed to empower the elderly, the poor, the unemployed through *'social innovative experiments'* […] '*as in the physical sciences using models, measurements and evaluation techniques'* (p. v). He proposed a model named Experimental Social Innovation and Dissemination (ESID), which was extensively applied in US, consisting in *'an action-oriented, multistep process for systematically introducing change in social systems'* (Fairweather, 1967, p. 11). One

decade later, Fairweather & Tornatzky (1977, p. 384) expanded the notion of 'experimental' SI in public services, proposing the generation of ESI Centers (Experimental Social Innovation Units) involving the university, private industry, government, and/or 'a location between all three' that constitute a precedent of contemporary living labs (Edwards-Schachter et al., 2012; Battisti, 2014).

Linking to both red and blue clusters this academic 'tribe' focused on communities' social practices leading with the central question of *'how can change be introduced and maintained'* (Taylor, 1970, p. 69, also Fairweather, 1967, p. 17). SI was understood as a collaborative process involving the introduction of social engineering models, 'social technologies'[6] and *'new patterns of service'* with government agencies and consultants, being a requisite the participation of target deprived groups and *'low-income clients'* (Taylor, 1970, p. 72; also Garvey & Griffith, 1966). Community psychology was the first in introducing an academic program oriented to a professional profile labeled as *'experimental social innovators'* (Tornatzky & Fairweather, 1972, p. 2).

Another specificity of SI lays in the concept of social invention[7], defined as *'a new law, organization or procedure that changes the ways in which people relate to themselves or to each other, either individually or collectively'* (Conger, 1974, p. 1). Conger (1974) refers to 'social service inventions' (p. 93) as the basis of SI to alleviate social problems in Canada. This approach, connected to the blue cluster, is present in Taylor (1970, p. 70) who maintained that *'social inventions should be tested for their utility and then marketed'*, existing *'an analogy between the marketing of new social inventions and the marketing of any other new product'*. In the article *Social innovation in organizations*, that was presented at the Tenth Congress of European Federation of Productivity Services in Netherlands, Holt (1971, p. 235) differentiated technological innovation *'concerned with application of new technology'* from SI that *'deals with application of new social patterns of human interaction'*. He maintained that both are part of innovation and *'concerns with change in a broad sense covering the use of knowledge for creation and introduction of something new'*.

Mesthene (1969, iii), as director of the project *'Social Innovation in the City; New Enterprises for Community Development',* defined SI as the introduction and implementation of 'social technologies' to improve people's quality of life in urban contexts (green cluster). Nevertheless one relevant finding is the idea of SI linked with the awareness on the global problems of our planet resulting in the later introduction of

the concept of sustainable development (e.g., in definitions of Wolfe, 2009; Bock, 2012; Seyfang & Haxeltine, 2012). In the book *Social change: The challenge to survival* Fairweather (1972, pp. 6-8) defined SI as the necessary change of social practices considering *'survival problems like environmental degradation, racism, and population regulation'*. Also Gabor (1970), a member of the Club of Rome, in his book *Innovations: scientific, technological, and social* reflected on the contribution of both social and technological innovation to development. However, most of declarations and policy reports generated in that time only casually mention SI, assigning a vague position related to change or accompanying technological innovation. The *Limits to Growth* report (LTG, Meadows et al., 1972) explicitly named SI in parallel to technical change and, three decades later in the updated LTG, Meadows et al. (2004, p. x, see also p. 260) insisted on the need of a *'profound, proactive, societal innovation through technological, cultural, and institutional change in order to avoid an increase in the ecological footprint of humanity beyond the carrying capacity of planet Earth'*.

This approach to SI has been invoked—in particular from early 2000s onwards—under the 'reframed' term 'grand challenges'. It was primarily introduced as rationale of policies as part of the Europe 2020 strategy (Hubert, 2010; EC, 2010), representing a shift of the technology innovation paradigm to include the social dimension on large-scale societal sustainability (Howaldt & Schwartz, 2010; Vienna Declaration, 2011; OECD, 2012; Osberg & Schmidpeter, 2013). Notwithstanding the rise in the praxis during the 1960s and 1970s of SI created by *'vigorous social movements around ecology, feminism and civil rights'* (Mulgan et al., 2007, p. 10), innovation *'came to be restricted to technology and commercialization'* of technological inventions *'which became hegemonic in the following decades'* (Godin, 2012b, p. 399).

5.3.3. The advancement of the knowledge society, the rise of the third sector and a neglected period for SI

During the following two decades, SI does not appear to have become much more visible within the academy, amidst the rise of innovation studies, under the expansion of globalization, the birth of 'knowledge society' (a notion attributed to the publication in 1976 of *The post-capitalist society* by P. Drucker) and continued environmental concerns.

Thirteen definitions from the US (8), Europe (4) and Australia (1) between 1975 and 1985, and twelve definitions in the next decade from the US (3), Canada (2) and Europe (7) exhibit discourse linked to the three clusters, with some emphasis on the services sector in the last period.

The scant mentions of SI contrast with the proliferation and international expansion of non-profit organizations, third sector initiatives and social movements as providers of SIs in various sectors (healthcare, employment, education, etc.) feeding the social (informal) economy sector. Examples are the Bangladesh Rural Advancement Committee established in 1972, the Grameen Bank by Muhammed Yunus in 1976, the Green Belt Movement (GBM) in 1977 in Nairobi, the Ashoka organization in the US in the 1980s, the 'grass-roots innovation' movement of Honey Bee Network in India in 1989, etc. The role of social movements to the power dynamics and social transformation (red cluster) is analyzed by the French sociologist and philosopher Lapierre (1977, p. 310), who defines SI as *'the process of transformation of social relations through groups' collective action that mobilize resources for certain categories, layers or social classes, and that eventually impose both new production relationships, new needs, a new discourse, new codes, a new political regime, a new organization of the social space'*. Other influential contributions from the Francophone community is Chambon et al. (1982), who define SI as 'change in *'practices more or least directly allow to an individual —or a group— of taking in charge of a social need —or a set of social needs— which are not satisfied'* (p. 8) comprising *'traditional sectors of civil society: health, education, urban planning, cultural activities, social work, economics, management of leisure time arrangements, etc.'* (p. 39).

Henderson (1993, p. 325), a development policy analyst, highlighted the ability of citizens' movements to change consumption and production patterns. She points in particular to how they can become more broadly institutionalized (e.g., how *'many of the policies and social innovations proposed by NGOs at the Stockholm Environmental Forum-from environmental auditing of corporations, socially responsible investing, and 'green' taxes to subsidize R&D in renewable resource and energy-efficiency technologies-are now government policies in scores of countries'* (red and green clusters). Other definitions related to green cluster come from *Social innovations for development* (Heden & King, 1984) -presented at the UN conference on Science and Technology for Development in 1979- focusing on socio-political action and institutional change.

Against the backdrop of rapidly advancing ICTs, SI was associated to the re-organization of work with the rise of white-collar workers and changes in household life-styles (e.g., Gershuny, 1982, 1983, 1987; D'Iribarne, 1987; Swyngedouw, 1987). The 'uncomfortable' relationship between SI and technology became more intense (and diffuse) under the prevalence of technological innovation (the journal *Research Policy* leading the mainstream was created in 1971). Social practices as instrument of social change, with a few notable exceptions from sociology (Chambon et al., 1982; Zapf, 1989; Crozier & Friedberg, 1993), were increasingly relegated to a 'subsidiary' role, a 'complement' or an 'inductor' of technological innovation. One of the most influential authors is Gershuny (1983, 1987), who focused on how changes in social practices complement (or favour) technological innovation configuring the emergence of what might be called the 'communal', 'household' and 'underground' production at small scale, i.e. the informal economy including voluntary and religious organizations and cooperatives[8].

Many SIs emerged around the Earth Summit in 1992 through practitioners seeking *'cultural change'* (Dedijer (1984, p. 60) oriented to solving the *'basic problem of poverty, hunger, illness, ignorance and extreme social injustice'*, particularly in developing countries. But the notion was masked by the use of change in social practices allied to technological developments in other innovation types like 'green', 'environmental', 'eco-innovations' (Fussler & James, 1996; Rennings, 2000) and 'grass-root innovations' (Gupta et al., 2003). SI remained hidden or appeared as a 'contested' concept, particularly in the definition of SI in terms of restorative justice and social inclusion provided by Moulaert & Lentidou (1992), who raised their critical voices against the growth of disintegrated areas of exclusion, social polarization and poverty originated by liberal economic policies and technology.

5.3.4 The spreading of SI as a policy and normative concept

In the following decade (1995 to 2004) we found 35 definitions from a variety of fields from Europe (13), Canada (12), US (9) and one from Brazil. Most frequent labels reinforce the 'core' meanings of SI related to B1 ('process') and B2 ('civil society'/'third sector'), both included in the red cluster in connection to A2 ('unmet social needs') and A1 ('orientation to social values'), green and blue clusters.

Many relevant academic texts arose from the already mentioned definitions of Mumford[9] (2002) in the field of creativity, who defines SI as *'the generation and implementation of new ideas about how people should organize interpersonal activities, or social interactions, to meet one or more common goals'*. He states that, similarly *'to other forms of innovation, the products resulting from social innovation may vary with regard to their breadth and impact'* and *'might involve the creation of new kinds of social institutions, the formation of new ideas about government, or the development of new social movements'* (p. 253). Around 2000 SI evolved to *'a kind of federating concept to label 'practices' of charities, social enterprises, CSR initiatives, etc.'* (Mumford, 2002, p. 256) with a mutual rapprochement between third sector and business and the rise of links between SI and social entrepreneurship (Hillier et al., 2004; Moulaert & Nussbaumer, 2004).

SI ceased to be seen exclusively as non-technological or not R&D-based and 'products' were less associated to 'social inventions', as previously described, e.g. by Taylor (1970), Holt (1971) and Conger (1974, 1984). Bouchard (1997, p. 2) defined SI as *'any new approach, practice, or procedure, or any new product developed to improve a situation or solve a social problem'*. Cloutier (2003, p. 41) affirmed that *'it can be procedural and concern the practices, processes and services. It can be organizational and refer to the social organization of activities'...'On the institutional, social innovation refers primarily to laws, policies, standards and rules'* and *'can be tangible (technology, product)'*.

Ambiguity regarding the 'nature' of SI outcomes is also observed in definitions extracted from policy reports around 2000 in Canada (Bouchard, 1999; Goldenberg et al., 2004) and Europe, which played a role in the OECD efforts to establish a common meaning and typology of innovation. In the report *Social Sciences and Innovation* (2001) the OECD recognized the role of SI, together with technological innovation, as powerful vehicles for social change and in 2004, the OECD LEED Forum was created specifically addressed to SI. But remarkably there is no explicit reference to SI in the successive editions of the Oslo Manual, which articulates the dominant paradigm in innovation studies (Echeverría, 2008). It was centred on manufacturing in 1992, expanding coverage to service sectors in the second edition (1997) and incorporating organizational and marketing innovations covering 'non-technological innovations' in 2005, *'in the business enterprise sector only'* and *'at the level of the firm'* (p. 16).

Definitions of SI related to red and green clusters make explicit references to sustainability and change in socio-technical systems. For example, Manzini & Jégou (2003, p. 3) maintained that *'social innovation for sustainability'* constitutes *'a large and complex social learning process'* involving *'grass-roots behavioral changes* [that] *are able to re-orientate the socio-technical system'*. Normative assumptions surrounding SI (i.e., the view of SI as something inherently 'good') became more pervasive and the overuse of SI as a label also grew significantly from 2000 onwards, e.g. in 2002 Kok et al. published the book *Global Warming and Social Innovation: the Challenge of a Climate Neutral Society*, in which SI is only mentioned once (in the preface).

5.3.5 The diversification of SI discourses and the emergence of hybrid forms of SI

In the last decade, the field of SI experienced an impressive and fragmented growth in conjunction to several deep-seated technological, economic, political, and socio-cultural changes (e.g., the financial crisis produced since 2007/2008, the Web 3.0 and the digitalization of economy, social networks like Facebook in 2005, unemployment and migration movements, etc.). SI literature has become more abundant in Europe, where we identified 117 definitions in collaborations with other countries, principally Canada (29) and US (20), also definitions from Latin-America (9), Australia (7) and Japan (2), etc. The concept was institutionalized in several settings, through the creation of numerous research institutes and organizations, policy think tanks, networks, scientific meetings like the Vienna Conference, the publication of various handbooks on the topic, etc.

Despite the diversification, our findings show the unequivocal continuity in 'core' characteristics defining SI (see Table 2 and Fig. 4): a 'process' (B1, 75.0%), involving the distinctive participation of the 'civil society/third sector' (B2, 72.2%), the production of 'social change' (E1, 47.8%) through 'change in social practices' (C1, 39.4%); the orientation to solve 'unmet social needs and complex problems' (A2, 42.2%) and the generation of 'social values' (A1, 41.1%). 'Territorial development models' (B3, 25.0%) and 'sustainability' (E3, 21.0%) continued to grow with a slight rise on 'cross-sector between government, business and civil society' (B4, 21.1%) and 'social entrepreneurship and social economy' (B5, 17.8%). The low percentage of B5 can be explained by the divergences observed in the conceptual roots of social economy—and their often confusing or contradictory interpretations—in different countries, principally

between US and Europe (Kerlin, 2006; OECD, 2010). Abundant academic literature in US in this field (as well as related to non-profit organizations and cross-sectoral partnerships) does not refer to 'innovation', with SI as more a 'practice' field integrated within social economy field.

On other hand, whereas in the US social enterprises tend to be fully self-financed and relying more on market, in most European countries social economy is strongly dependent on policies and usually supported by grants and subsidies from the public sector (EC, 2011, 2015b; Bouchard, 2013). This is observed in what constitutes a distinctive feature in the last decade, particularly in Europe: the normative status that SI acquires in discourses by governments and policy advisory groups (much formed by social science researchers)[10], framing strategies and interventions for countering the effects of economic crisis, climate change, and wicked social problems (already commented in 4.2.2). SI is simultaneously an instrument *'to solving the crisis of the welfare state'* and to cope with complex global issues under the new label of *'grand challenges'* (Moulaert et al., 2013, p. 17*)*. The general spirit of this period is described by Dobrescu (2009, p. 6): *'the crisis has reinforced the meaning of innovation as social innovation'* and *'seeks to set framework conditions for development and to create new paths for growth'.* SI is considered crucial to fight against poverty and social exclusion calling for the participation of civil society (Gerometta et al., 2005; De Muro et al., 2007) and central to the Europe2020 innovation strategy (EC, 2013) for a *'smart, sustainable and inclusive Europe by 2020'* (BEPA, 2011, p. 117). The notion of SI is popularized by broad definitions like *'new ideas that work in meeting social goals'* (Mulgan et al., 2007, p. 7) and *'new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations' [...] 'innovations that are not only good for society but also enhance society's capacity to act'* (Hubert, 2010, p. 24).

Various definitions once again link SI to the survival of humankind and to sustainability (green and red clusters), focusing on social polarization or 'social sustainability' as a dynamic pillar of sustainable development (Moulaert et al., 2005, 2007, 2013; Osberg & Schmidpeter, 2013). There is an emphasis on the participation of citizens and communities to build a participatory and 'good' governance for a sustainable future and to cope with the social crisis favouring inclusiveness, social cohesion and *'the (re)introduction of social justice into production and allocation systems'* (Moulaert &

Ailenei, 2005, p. 2037). Terms like 'institutional change', 'legitimization', 'resistance' and 'empowerment' are present in definitions from systemic approaches and macro perspectives on development and labeling a paradigm shift of innovation (Moulaert et al., 2005; Hochgerner, 2009; Moore & Westley, 2011; Manzini, 2012; Vienna Declaration, 2011; Haxeltine et al., 2013).

Another salient characteristic is the fast expansion of SI as a collective process involving heterogeneous informal and formal networks, and 'cross-partnerships'. The participation of the third sector evolved to '*new modes of social organization by the grass-roots movements*' (Moulaert, 2000, p. 7) together with the emergence of hybrid organizations between State, Market and Civil society (MacCallum et al., 2009; Ruiz & Parra, 2013). Terms representing an active role of users and communities in developing products and services like 'user and community-driven', 'user-led' and in particular 'co-creation' or 'co-production' yield policy discourses and literature connecting business with SI, in particular in the public services sector (EC, 2009, 2011; Kinder, 2010; Voorberg et al., 2013). Voorberg et al. (2013, p. 4) maintain that SI '*can be considered as a process of co-creation*' where citizens can act as co-implementers of public policy, co-designers and co-initiators '*in the design and development of new goods and services*'.

Debates on several aspects of SI continue, for example regarding the 'immaterial intangible structure' to differentiate SI from technological innovation (Howaldt & Schwartz (2010, p. 16; also Cajaiba-Santana, 2013) and SI defined as an unconscious and unforeseen/emergent process (social experimentation, 'bottom-up', community-driven) versus 'intentional' planned activities performed by administrators, government agencies and firms (Harrison et al., 2009; Manzini, 2014). One debate that intensified during this period is on the generation of 'pure' social values or '*blended*' values blurring boundaries between profit and non-profit sectors (Mulgan et al., 2007; Echeverría, 2008; Harrison et al., 2009; Pol & Ville, 2009; Borzaga & Bodini, 2014). Hubert (2010) highlights the delivering of '*value that is less concerned with profit and more with issues such as quality of life, solidarity and well-being*' (p. 25). Phills et al. (2008, p. 5) focus on the efficiency managerial approach referring to '*a novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions*'.

Some definitions illustrate the diversification of SI according to sectoral characteristics: in the public sector, in public policies, from the perspectives of design, etc. (Morelli, 2007; Morales, 2009; Hubert et al., 2010; Lévesque, 2012; Manzini, 2014; Voorberg et

al., 2013; Rana et al., 2014). We noticed the emergence of hybrid forms of SI (whose definitions were not considered in our sample), such as the case of 'ICT-enabled SI' and 'Digital Social Innovation' (Bria et al., 2014) and 'open' social innovation[11] (Chesbrough & Di Minin, 2014).

6. Conclusion, limitation of the study and some research& policy implications

The study of the pluri-vocal discourses constructed in definitions across several decades reveals a long history of SI framed broadly as innovations taking part of social and technological change processes. Definitions bring to the fore distinctive characteristics regarding the 'traditional' innovation process (Fig. 1), the aims, the actors involved, the type of values and outcomes generated, the relationship between social and technological (even cultural) systems. The principal limitation in our study has been the impossibility to access to some documents, in particular in the case of developing countries. Notwithstanding, our sample and selection criteria are wide enough to capture the continuity of a set of core terms defining SI in the 'woven fabric' of texts.

The conceptual evolution of SI

Regarding our first research question *on the conceptual evolution of the SI,* our results confirm its introduction as an analytical concept by incipient academic tribes preceding technological innovation (mainly sociology, management and community psychology) and a slow advance towards a major visibility involving other tribes (creativity, territorial development, environmental and political studies, etc.) where analytical and normative scopes co-exist. Whatever the theoretical approach to explain the micro, meso or macro 'realm' of SI, it can be understood as part of three big and interrelated evolving 'areas': SI involving big societal transformation ('Processes of social change') in close dialogue with the aspiration of (sustainable) 'Development' and a progressive delimitation of the 'Services sector'. Globally, this result agree with the characterization of SI as *'transformative'* in relation to systemic change (red and green clusters) versus a more *'instrumental'* approach, present in most policy and practitioner narratives, related to the social services provision addressing to societal needs and social market failures (Haxeltine et al., 2013).

During the first decades SI was conceived as a process developed by and oriented to the third sector, not based on technological knowledge or R&D, and differentiated from

institutionalized social practices and social inventions (a program, a model, a standard, a norm, a procedure) arising from technology-based innovations. But progressively (and particularly due the impact of the knowledge society) SI was used to name the development of products, processes and services mediated by technologies or closely linked to technological innovations *with social purposes* (i.e., with the explicit objective to produce benefits in terms of social impact). Other characteristic is the growth observed in SI as hybrid collaborative innovation between the third sector, the public sector and/or business actors. Following this trend, the division between profit and non-profit orientations in the informal and social economy sectors is increasingly blurred. In our view this is linked to: a) the marketization of the third sector and the advance of multi-stakeholder collaborative innovation, and b) innovation in the business sector focused on social needs and the 'social' market and the spreading of Corporate Social Responsibility (CSR) and Corporate Social Innovation (CSI) practices. These hybrid forms of SI are fuelled by policy discourses as the panacea of successful innovation facing current grand challenges.

Why is SI different?

In terms of our second question we identified some distinctive elements (as the more 'established' terms) across pluri-vocal discourses that enables us to affirm that SI is a collective process of learning involving the distinctive participation of civil society actors aimed to solve a societal need through change in social practices that produce change in social relationships, systems and structures, contributing to large socio-technical change. A less restrictive view of SI contemplates the role of social practices embedded in the simultaneous generation of traditional innovation outcomes (particularly engaged with blue and green clusters).

Overall, our findings show the existence of ideological 'shaken but not stirred' narratives where pluri-vocal discourses remain distinct scattering a variety of sectors. SI may differ in two senses: a) according to the type of actors involved, *being a requisite the participation of civil society actors (as initiators, users or co-creators)*, but also including cross-sector partnerships and within the public and business sectors) and, b) as the place attributed to change in social practices and their interaction with technology/technological developments among the three red, green and blue clusters: *Processes of social change, (Sustainable) Development and the Services sector.*

One principal argument from 1970s to date lies in the purposes of SI specifically oriented to unmet social needs encompassing the long history of narratives about our survival (the current 'grand challenges') and the construction of a more sustainable world. In this respect, SI highlights the 'social' dimension of sustainable development and the search of solutions to interrelated social and technological challenges. For example, 'grass-roots' social innovations (Seyfang & Smith, 2012) focus in 'green' (pro-environmental) innovations which in most cases comprises specific institutionalization processes (change in consumption patterns, environmental regulations, different types of incentives and 'rules of the game', local institutional context, etc.) where the 'place' of social practices and change in social systems appear intertwined with technological inventions and technological innovations (Seyfang & Haxeltine, 2012). Similar ambiguity can be observed when SI is associated to frugal innovation and Jugaad innovation (Prahalad, 2005; Radjou et al., 2012) where the focus is to do 'more with less resources'; the Base of Pyramid innovations in business with social impact involving the market of poors (Prahalad, 2005; 2012) and open social innovation (Chesbrough & Di Minin, 2014) attending to firms' strategies in front of the social demand[12]. Thus, in view of curbing the so-called 'babelization', there is a need for SI scholars to consider whether their use of term is fundamentally linked with processes that underpin these social practices, and to make explicit the sectoral or outcome-oriented applications of SI. The multiplication of 'peripheral' uses of SI risks exacerbating the already precarious position of the term in its main contexts (sustainable development, the services sector and processes of social change).

Some implications for research and policy

The services sector involves social services of general interest (education and childcare, youth unemployment, care for the elderly and disabled people, social housing, medical services, etc.) together a wide diversity of services like transportation, maintenance of public spaces, civil rights and digital participation, etc. and considerable 'underground' innovations. Research could contribute to both the differentiation of SI and the visibility of hidden innovations. A more explicit orientation to different sectors could contribute to better designed policies, e.g., in estimating social investment funds and establishing indicators and models to evaluate the ROI of specific sectoral SI.

To date little attention has paid to the role of 'time', e.g., the required time for the institutionalization of new social practices which clearly is different when we try to understand long waves of change from the development of SI in the services sector. This is usually considered by sociology community from a theoretical perspective and should be complemented by further studies, taking into account the wider databases and the huge number of available case studies. This aspect is crucial to policy-makers in determining initiatives in short, medium and long-term and decisions about the establishment of indicators and measurement of social impact.

Research could contribute to deepen the understanding in the generation of social values and delimitate SI in terms of real social impact, against the hitherto prevalent normative view of SI. SI in not always 'good' and sometimes involve controversial values, contesting to what is 'socially desirable' in an extensive and normative sense' (Howaldt & Schwartz, 2010, p.26). Overall, this study shows that most discussion today on how catalyze collective creativity and SI to cope with grand challenges and go 'from vision to action' has been present for decades. Given that SI is at the centre of the persistent paradoxes between sustainable aspirations, production and consumption models and of discourses on economic development, efficiency and competitiveness, it is crucial to study SI from the perspective of the governance of change in innovation as systems and how SI systems interrelate with other innovation systems (Borrás & Edler, 2015). How learning occurs 'from the beginning', involving both generation and implementation of ideas that underpin further invention and nourish agency in different sectors? How do social groups as learning actors construct different networks and innovation 'communities of practice'? How do such innovation communities and innovation networks from different sectors (civil sector, public and private) interact and enable 'scalability'? Which is their contribution in building different innovation systems or ecosystems (social, technological, cultural)?

One important consequence of our study is that neither SI nor the social dimension of technological innovations, should be neglected. After decades of marginalization, SI is starting to be recognized as part of the 'black box' of innovation to inquire which is the 'place' of social practices in innovation processes and how they take part of different activities and the building of social, technological even cultural innovation systems and their contribution to socio-technical change. Debates on these aspects are not only

intrinsic to conceptualizing SI, but simultaneously relevant to ideological and theoretical questioning about the nature, types and role of innovation in society.

References

Battisti, S. (2014). Social innovation in living labs: the micro–level process model of public–private partnerships. *Int. J. of Innovation and Regional Development*, *5*(4), 328-348.

Becher, T., & Trowler, P. (2001). *Academic tribes and territories: Intellectual enquiry and the culture of disciplines*. Buckingham, UK & Philadelphia, USA:SRHE & Open University Press.

BENISI (2013). Building a European Network of Incubators for Social Innovation. Accessible at: http://www.benisi.eu/sites/default/files/ppt_benisi_2.pdf (10/07/2015).

Benneworth, P.; Amanatidou, E.; Edwards-Schachter, M. & Guldbransen, M. (2015*). Social innovation futures: beyond policy panacea and conceptual ambiguity.* WP TIK.

Biggs, R., Westley, F. R., & Carpenter, S. R. (2010). Navigating the back loop: fostering social innovation and transformation in ecosystem management. *Ecology and Society*, *15*(2), 9.

Bock, B. B. (2012). Social innovation and sustainability; how to disentangle the buzzword and its application in the field of agriculture and rural development. *Studies in Agricultural Economics, 114*(2), 57-63.

Borrás, S. & Edler, J. (2015). The governance of change in socio-technical and innovation systems: three pillars for a conceptual framework. In Borrás, S. & Edler, J. (Eds.). *The governance of socio-technical systems*. Edward Elgar Pub., Cheltenham, UK. Pp. 23-48.

Borzaga, C., & Bodini, R. (2014). What to make of social innovation? Towards a framework for policy development. *Social Policy and Society*, *13*(3), 411-421.

Bouchard, C. (1997). L'innovation sociale existe-t-elle*? Interface*, *18*(6), 41-43.

Bouchard, C. (1999). *Contribution à une politique de l'immatériel. Recherche en sciences humaines et sociales et innovations sociales*. Conseil québécois de la recherche sociale, Groupe de travail sur l'innovation sociale, Quebec.

Bouchard, M. J. (2013). *Innovation and the Social Economy: The Quebec Experience.* University of Toronto Press. Canada

Bria, F., Almirall, E., Baeck, P., Halpin, H., Kingsbury, J., Kresin, F., & Reynolds, S. (2014*). Digital Social Innovation*. Interim report. London, UK: Nesta.

Cajaiba-Santana, G. (2013). Social innovation: Moving the field forward. A conceptual framework. *Technological Forecasting and Social Change*, *82*, 42-51.

Callon, M. (1990). Techno-economic networks and irreversibility. *The Sociological Review*, *38*(S1), 132-161.

Caulier-Grice, J. Davies, A. Patrick, R. Norman, W. (2012). Defining Social Innovation. The theoretical, empirical and policy foundations for building social innovation in Europe (TEPSIE), 7th FP. Brussels: EC, DG Research.

Chambon, J. L.; David, A. & Devevey, J. M. (1982). *Les innovations sociales*. Paris : Presses Universitaires de France.

Charmaz, K. (2008). Constructionism and the grounded theory method. In Holstein, J. A. & Gubrium, J. F. (Eds.).*Handbook of constructionist research*, 397-412. New York: The Guilford Press.

Charmaz, K. (2014). *Constructing grounded theory*. London, UK: Sage Pub.

Chataway, J., Hanlin, R., Mugwagwa, J., & Muraguri, L. (2010). Global health social technologies: Reflections on evolving theories and landscapes. *Research Policy*, 39(10), 1277-1288.

Chesbrough, H., & Di Minin, A. (2014). Open social innovation. In Chesbrough, H.; Vanhaverbeke, W. & West, J. (Eds.). *New frontiers in open innovation.* (pp. 169-188). Oxford University Press, United Kingdom.

Cloutier, J. (2003). *Qu'est-ce que l'innovation sociale?* Montreal: Collection Études théoriques No ET0314, CRISES. Canada.

Conger, S. D. (1974). *Social inventions*. Prince Albert, Canada: Saskatchewan Newstart.

Conger, S. (1984). Social, Scientific and Technical Inventions. In Heden, C. G. & King, A. (Eds.). *Social Innovations for Development*, (pp. 33-52). Oxford, UK:Pergamon Press.

Crozier, M. & Friedberg, E, (1993). *Die Zwänge kollektiven hanelns - Über macht und organisation*. Main, Frankfurt, Germany: Hain.

Dagnino, R. (Org.). (2010). Tecnologia social: ferramenta para construir outra sociedade. *Rev. e ampl. Campinas*, SP: Komedi

Dedijer, S. (1984): Science- and Technology-related Social innovations in UNCSTD National Papers. In Hedén, C. D. & King, A. (Eds.). *Social innovations for development*. (pp. 57–92). Oxford, UK; New York, USA: Pergamon Press.

Dees, J. G., & Anderson, B. B. (2006). Framing a theory of social entrepreneurship: Building on two schools of practice and thought. *Research on social entrepreneurship: Understanding and contributing to an emerging field*, *1*(3), 39-66.

De Muro, P., Hamdouch, A., Cameron, S., & Moulaert, F. et al. (2007). Organisations de la société civile, innovation sociale et gouvernance de la lutte contre la pauvreté dans le Tiers-Monde. *Mondes en Développement*, *3*(139), 25–42.

D'Iribarne, A. (1987). Innovation technique et innovation sociale: les enjeux de la compétitivité économique. *Économie et Humanisme*, 294 (mars-avril), 66-79.

Djellal, F. & Gallouj, F. (2012). Social innovation and service innovation. In Franz, H.W., Hochgerner, J. & Howaldt, J. (Eds.). *Challenge social innovation*. (pp. 119-137). Berlin, Germany: Springer Verlag.

Dobrescu, P. (2009). Wealth of Nations is the Wealth of Ideas. The Social Innovation Imperative. *Revista Romana de Comunicare si Relatii Publice*, *11*(3), 7-15.

Drucker, P. F. (1957). *Landmarks of Tomorrow: A Report on the New Post-Modern World.* Harper & Row Publisher.

Drucker, P. F. (1987). Social innovation, management, new dimension. *Long Range Planning*, *20*(6), 29-34.

Drucker, P. F. (1999). *Management Challenges for the 21st Century*. New York, USA: Harper Collins Pub.

Echeverría, J. (2008). El manual de Oslo y la innovación social. *Arbor: Revista de Ciencia, Pensamiento y Cultura*, *732*, 609-618.

Edquist, C. (1997). *Systems of innovation: Technologies, organizations and institutions.* London, UK: Pinter.

Edwards-Schachter, M. (2016). Challenges to firms' collaborative innovation facing the Innovation Babel Tower. (pp. 204-227). In Al-Hakim, L.; Wu, X.; Koronios, A. & Shou, Y. (Eds.). *Handbook of Research on Driving Competitive Advantage through Lean and Disruptive Innovation*. USA: IGI Global.

Edwards-Schachter, M. E., Matti, C. E., & Alcántara, E. (2012). Fostering Quality of Life through Social Innovation: A Living Lab Methodology Study Case. *Review of Policy Research*, *29*(6), 672-692.

European Commission (EC). (2010). *Europe2020 Flagship Initiative Innovation Union*. COM (2010) 546 final. Brussels. Belgium.

European Commission (EC). (2011). *Social Business Initiative: Creating a favourable climate for social enterprises, key stakeholders in the social economy and innovation*. COM (2011) 682 final.

European Commission (EC) (2013). *Guide to social innovation*. Brussels. Belgium.

European Commission (EC) (2015). *A map of social enterprises and their eco-systems in Europe.* Synthesis Report. Directorate-General for Employment, Social Affairs and Inclusion. Luxembourg.

Fairweather, G. W. (1967). *Methods for experimental social innovation*. New York, USA: John Wiley.

Fairweather, G.W. (1972). *Social change: The challenge to survival.* Morristown, NJ: General Learning Press.

Fairweather, G. W., Sanders, D. H., Maynard, H., & Cressler, D. L. (1969). *Community life for the mentally ill: An alternative to institutional care.* New Brunswick, USA & London, UK: Aldine Transaction.

Fairweather, G. & Tornatzky, L. (1977). *Experimental Methods for Social Policy Research.* Pergamon Press, Inc, & USA.

Fussler, C. & James, P. (1996). *Eco-innovation: A Breakthrough Discipline for Innovation and Sustainability.* Pitman Publishing, London.

Gabor, D. (1970). *Innovations: scientific, technological, and social*. London, UK: Oxford University Press.

Garud, R., Tuertscher, P., & Van de Ven, A. H. (2013). Perspectives on Innovation Processes. *The Academy of Management Annals*, *7*(1), 775-819.

Garvey, W. D., & Griffith, B. C. (1966). Studies of social innovations in scientific communication in psychology. *American Psychologist*, *21*(11), 1019-36.

Gerometta, J.; Häussermann, H. & Longo, G. (2005). Social Innovation and Civil Society in Urban Governance: Strategies for an Inclusive City. *Urban Studies*, *42*(11), 2007–2021

Gershuny, J. I. (1979). *The informal economy: its role in post-industrial society. Futures 11*(1), 3-15.

Gershuny, J. I. (1982). Social innovation: Change in the mode of provision of services. *Futures*, *14*(6), 496-516.

Gershuny, J. (1983). *Social Innovation and Division of Labour.* London, Oxford University Press.

Gershuny, J. (1987). Technology, social innovation, and the informal economy. *Annals of the American Academy of Political and Social Science,* 493, 47-63.

Glaser, B. & Strauss (1967): *The Discovery of Grounded Theory: Strategies for Qualitative Research.* London: Wiedenfeld and Nicholson.

Godin, B. (2008). *Innovation: The History of a Category*. Project on the Intellectual History of Innovation Working Paper Nº 1. Canada

Godin, B. (2012a). *Social Innovation: Utopias of Innovation from circa-1830 to the Present*. WP.

Godin, B. (2012b). 'Innovation Studies': The Invention of a Specialty. *Minerva, 50*, 397–421.

Godin, B. (2015). *Innovation contested. The idea of innovation over the centuries*. New York, USA: Routledge.

Goldenberg, M. (2004). Social Innovation in Canada: How the non-profit sector serves Canadian … and how it can serve them better. Canadian Policy Research Networks: Ottawa.

Goldenberg, M.; Kamoji, W.; Orton, L. & Williamson, M. (2009). *SI in Canada: An Update*. Canadian Policy Research Networks (CPRN) Research Report.

Greenhalgh, T. & Peacock, R. (2005). Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources. *BMJ 331*(7524), 1064-5.

Gupta, A. K., Sinha, R., Koradia, D., Patel, R., Parmar, M., Rohit, P., Patel, M.; Patel, K.; Chand, V. S.; James, T. J.; Chandan, A.; Prakash, T. N. & Vivekanandan, P. (2003). Mobilizing grassroots' technological innovations and traditional knowledge, values and institutions: articulating social and ethical capital. *Futures*, *35*(9), 975-987.

Hämäläinen, T. J. & Heiscala, R. (Eds.). (2007). *Social Innovations, Institutional Change and Economic Performance*. Cheltenham, UK: Edward Elgar.

Harris, M. & Albury, D. (2009). *The innovation imperative*. NESTA (National Endowment for Science, Technology and the Arts). Discussion paper.

Harrisson, D.; Széll, G. & Bourque, R. (Eds.). (2009). *Social Innovation, the Social Economy and World Economic Development*. Labour, Education and Society. Frankfurt am Main, Berlin, Bern, Bruxelles, New York, Oxford, Wien: Peter Lang.

Hassan, Z. (2013). The Social Labs Revolution: A New Approach to Solving our Most Complex Challenges. San Francisco, USA: Berrett Koehler Publishing.

Heden, C. G. & King, A. (Eds.). (1984). *Social Innovations for Development*, Oxford, UK: Pergamon Press.

Hellström, T. (2004). Innovation as social action. *Organization*, *11*(5), 631-649.

Henderson, H. (1993). Social innovation and citizen movements. *Futures*, *25*(3), 322-338.

Hillier, J., Moulaert, F., & Nussbaumer, J. (2004). Trois essais sur le rôle de l'innovation sociale dans le développement territorial. *Géographie, Économie, Société*, *2*(6), 129–152.

Hochgerner, J. (2009). Innovation processes in the dynamics of social change. (pp. 17–45). In Loudin, J. & Schuch, K. (Eds.). *Innovation cultures. Challenge and learning strategy* Prague: Filosofia.

Holt, K. (1971). Social Innovations in Organizations. *International Studies of Management & Organization*, *1*(3), 235–252.

Howaldt, J. & Schwarz, M. (2010). *Social Innovation: Concepts, Research Fields and International Trends,* International Monitoring (IMO). Dortmund, Germany: Sozialforschungsstelle, Dortmund.

Howaldt, J., Butzin, A., Domanski, D., & Kaletka, C. (2014). Theoretical Approaches to Social Innovation - A Critical Literature Review. A deliverable of the project: 'Social Innovation: Driving Force of Social Change' (SI-DRIVE).Dortmund: Sozialforschungsstelle.

Hubert, A. (2010). *Empowering people, driving change: SI in the European Union*. BEPA.

Jenson, J. & Harrisson, D. (2013). *Social innovation research in the European Union. Approaches, findings and future directions.* Policy Review, WILCO Project Working Paper.

Jessop, B., Moulaert, F., Hulgård, L., & Hamdouch, A. (2013). Social innovation (SI) research: a new stage in innovation analysis? In Moulaert, F. (Ed.). (2013). *The International Handbook on Social Innovation: Collective Action, Social Learning and Transdisciplinary* Research. Edward Elgar Publishing. Pp. 110-30.

Kanter, R. M. (1999). Change is everyone's job: Managing the extended enterprise in a globally connected world. *Organizational Dynamics*, *28*(1), 7-23.

Keller, R. (2005). Analysing Discourse. An Approach from the Sociology of Knowledge. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, *6*(3), Art. 32. http://nbn-resolving.de/urn:nbn:de:0114-fqs0503327.

Kerlin, J. A. (2006). Social enterprise in the United States and Europe: Understanding and learning from the differences. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, *17*(3), 246-262.

Kinder, T. (2010). Social innovation in services: technologically assisted new care models for people with dementia and their usability. *International Journal of Technology management, 51*(1), 106-120.

Klein (2004). Prospects for transdisciplinarity. *Futures, 36*, 515-526.

Kok, M., Vermeulen, W.; Faaij, A. & De Jager, D. (Eds.). (2002). *Global warming and social innovation: the challenge of a climate neutral society*. Routledge.

Lapierre, J. W. (1977). *Vivre sans État? Essai sur le puvoir politique et l'innovation sociale.* Paris, France: Seuil.

Leydesdorff, L & Welbers, K. (2011). The semantic mapping of words and co-words in contexts, *Journal of Informetrics*, *5*, 469-475.

Loogma, K.; Tafel-Viia, K. & Ümarik, M. (2012). *Social Innovation: Three Approaches*. Working paper. DP24 Zentrum für Soziale Innovation.

MacCallum, D.; Moulaert, F.; Hillier, J. & Vicari, S. (Ed.). (2009). *Social innovation and Territorial Development.* Farnham: Ashgate.

Manzini, E. (2014). Making Things Happen: Social Innovation and Design. *Design Issues*, *30*(1), 57-66.

Manzini, E. & Jégou, F. (2003). *Sustainable everyday, scenarios of urban life*. Edizioni Ambiente, Milano.

Marcy, R. T., & Mumford, M. D. (2007). Social innovation: Enhancing creative performance through causal analysis. *Creativity Research Journal*, *19*(2-3), 123-140.

McVoy, E. C. (1940). Patterns of diffusion in the United States. *American Sociological Review*, 5(2), 219-227.

Meadows, D. H., Goldsmith, E. I., & Meadows, P. (1972). *The limits to growth.* London, UK: Earth Island Limited.

Meadows, D., Randers, J., & Meadows, D. (2004). *Limits to growth: The 30-year update.* Chelsea Green Publishing.

Mesthene, E.G. (1969). Foreword. In Rosenbloom, R. S. & Marris, R. (eds.). Rosenbloom, R. S., & Marris, R. (1969). *Social Innovation in the City; New Enterprises for Community Development.* A Collection of Working Papers. Harvard University Program on Technology and Society. Cambridge (Mass.): Harvard University Press.

Moore, M. L., & Westley, F. (2011). Surmountable Chasms: Networks and Social Innovation for Resilient Systems. *Ecology & Society*, *16*(1).

Morelli, N. (2007). Social Innovation and New Industrial Contexts: Can Designers Industrialize Socially Responsible Solutions? *Design Issues*, *23*(4), 3-21.

Moulaert, F. (2000). *Globalization and integrated area development in European cities*. New York, USA:Oxford University Press.

Moulaert, F., & Ailenei, O. (2005). Social economy, third sector and solidarity relations: a conceptual synthesis from history to present. *Urban Studies*, *42*(11), 2037-2053.

Moulaert, F. & Hamdouch, A. (2006). New views of innovation systems. Agents, rationales, networks and spatial scales in the knowledge infrastructure. *Innovation*, *19*(1), 11-24.

Moulaert, F. & Leontidou, L. (1992). *Local Development Strategies in Economically Disintegrated Areas: a Pro-Active Strategy against Poverty in the European Community*. Lille-Athens, intermediate report for the European Commission, DG V.

Moulaert, F. MacCallum, D. Mehmood, A. & Hamdouch, A. (Eds.) (2013). *The International Handbook on Social Innovation: Collective Action, Social Learning and Transdisciplinary Research,* Edward Elgar Pub.

Moulaert, F., Martinelli, F., González, S., & Swyngedouw, E. (2007). Introduction: Social innovation and governance in european cities urban development between path dependency and radical innovation. *European Urban and Regional Studies*, *14*(3), 195-209.

Moulaert, F.; Martinelli, F.; Swyngedouw, E. & Gonzalez, S. (2005a). Towards Alternative Model(s) of Local Innovation, *Urban Studies, 42*(11), 1969-1990.

Moulaert, F. & Nussbaumer, J. (2005). The social region. Beyond the territorial dynamics of the learning economy. *European Urban and Regional Studies, 12*(1), 81-100.

Moulaert, F.; Swyngedouw, E.; Häussermann, H.; Healey, P.; Vicari, S.; Cavola, L. ; Novy, A. & Morgan, K. (2005b). Social innovation, governance and community building (SINGOCOM). Report. http://ec.europa.eu/research/social-sciences/pdf/singocom-final-report_en.pdf

Mulgan, G. (2006). The Process of Social Innovation. *Innovations*, 145-162.

Mulgan, G. (2012). Social Innovation Theories: Can Theory Catch Up with Practice? In Franz, H. W., Hochgerner, J., & Howaldt, J. (Eds.). *Challenge Social Innovation: Potentials for Business, Social Entrepreneurship, Welfare and Civil Society*. Springer Berlin Heidelberg, (pp. 19-42).

Mulgan, G.; Tucker, S.; Ali, R. & Sanders, B. (2007). Social innovation: What it is, why it matters, and how it can be accelerated. WP. Skoll Centre for Social Entrepreneurship, SAID Business.

Mumford, M. D. (2002). Social innovation: ten cases from Benjamin Franklin. *Creativity Research Journal*, *14*(2), 253-266.

Murray, R., Caulier-Grice, J., & Mulgan, G. (2010). *The open book of social innovation.* National Endowment for Science, Technology and the Art. UK.

Nicholls, A. & Murdock, A. (2012). *Social innovation: blurring boundaries to reconfigure markets*. London, UK: MacMillan.

Nilsson, W. O. (2003). *Social innovation. An exploration of the literature*. McGill-Dupont Social Innovation Initiative. McGill University.

Novy, A., & Leubolt, B. (2005). Participatory budgeting in Porto Alegre: social innovation and the dialectical relationship of state and civil society. *Urban Studies*, *42*(11), 2023-2036.

OECD (2001). *Social Sciences and Innovation. Information Society*, Paris, OCDE, p. 141-155.

OECD (2005): Oslo Manual. 3rd edition. Guidelines for Collecting and Interpreting Innovation Data. Paris, OECD, and the Statistical Office of the European Communities, Eurostat.

OECD (2010). Social entrepreneurship and social innovation. In SMEs, Entrepreneurship and Innovation, Pp. 185-217. http://www.oecd-ilibrary.org/industry-and-services/smes-entrepreneurship-and-innovation/annex-2-a1-notes-on-the-country-data_9789264080355-47-en

OECD (2012). Fostering innovation to address social challenges https://www.oecd.org/sti/inno/47861327.pdf

Ogburn, W. F. (1922). *Social change*. B. V. Huebsch. New York, USA.

Osberg, T. & Schmidpeter, R. (Eds.). (2013). *Social Innovation. Solutions for a Sustainable Future.* Berlin, Germany: Springer.

Pel, B., & Bauler, T. (2015). *Charting novelty or inventing realities? Framing aporias of social innovation research.* TRANSIT project. WP.

Peters, L., Rice, M., & Sundararajan, M. (2004). The role of incubators in the entrepreneurial process. *The Journal of Technology Transfer*, *29*(1), 83-91.

Phillips, W., Lee, H., James, P., Ghobadian, A. & O'Regan, N. (2015) Social innovation and social entrepreneurship: A systematic review. *Group & Organization Management*, *40*(3). pp. 428-461.

Phills Jr., J. A., Deiglmeier, K. & Miller, D. T. (2008). Rediscovering SI. *Stanford SI Review*, *6*(4), 34-44.

Pol, E. & Ville, S. (2009). Social innovation: Buzz word or enduring term? *The Journal of Socio-Economics*, *38*, 878–885

Pot, F., & Vaas, F. (2008). Social innovation, the new challenge for Europe. *International Journal of Productivity and Performance Management*, *57*(6), 468-473. Prahalad, C. K. (2005). *The fortune at the bottom of the pyramid: Eradicating poverty through profits*. Philadelphia, USA: Wharton Business Publishing.

Prahalad, C. K. (2005). *The fortune at the bottom of the pyramid: Eradicating poverty through profits.* Philadelphia, USA: Wharton Business Publishing.

Prahalad, C. K. (2012). Bottom of the Pyramid as a Source of Breakthrough Innovations. *Journal of Product Innovation Management*, *29*(1), 6-12.

Radjou, N., Prabhu, J., & Ahuja, S. (2012). *Jugaad innovation: Think frugal, be flexible, generate breakthrough growth*. John Wiley & Sons.

Rana, N. P.; Weerakkody, V.; Dwivedi, Y. K. & Piercy, N. C. (2014). Profiling Existing Research on Social Innovation in the Public Sector. *Information Systems Management, 31*(3), 259-273.

Reckwitz, A. (2002). Toward a Theory of Social Practices A development in culturalist theorizing. *European Journal of Social Theory*, *5*(2), 243-263.

Redlich, F. (1949). The business leader in theory and reality. *American Journal of Economics and Sociology*, *8*(3), 223-237.

Reinstaller, A. (2013). An evolutionary view on social innovation and the process of economic change. WP Nº43. WIFO. 7th FP7/2007-2013.

Rennings, K. (2000). Redefining innovation—eco-innovation research and the contribution from ecological economics. *Ecological economics*, *32*(2), 319-332.

Rodríguez Herrera, A. & Alvarado Ugarte, H. (2008). *Claves de la innovación social en América Latina y el Caribe.* CEPAL: Santiago de Chile.

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field methods*, *15*(1), 85-109.

Scott, W. R. (2008). *Institutions and organizations. Ideas and interests*. UK:Sage Pub.

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.

Seyfang, G., & Smith, A. (2007). Grassroots innovations for sustainable development: Towards a new research and policy agenda. *Environmental politics*, *16*(4), 584-603.

Seyfang, G., & Haxeltine, A. (2012). Growing grassroots innovations: exploring the role of community-based initiatives in governing sustainable energy transitions. *Environment and Planning C: Government and Policy*, *30*(3), 381-400.

Sharra, R., & Nyssens, M. (2010). Social innovation: an interdisciplinary and critical review of the concept. *Université Catholique de Louvain Belgium*.

Shove, E.; Pantzar, M. & Watson, M. (2012). *The Dynamics of Social Practice: Everyday Life and How it Changes.* Los Angeles, London, New Delhi, Singapore, Washington: Sage Pub.

Swift Jr, A. L. (1930). Changing Customs and Their Relation to Religious Life: Changes Within the Protestant Church in America. *Religious Education*, *25*(1), 18-25

Swyngedouw, E. A. (1987). Social innovation, production organization and spatial development: The case of Japanise-style manufacturing. *Revue d'Économie Régionale et Urbaine*, *3*, 487-509.

Taylor, J. B. (1970). Introducing social innovation. *Journal of Applied Behavioral Science*, *6*(1), 69-77.

Tornatzky, L. G. & Fairweather, G. W. (1972). Design and implementation skills for social innovation. Retrieved from http://eric.ed.gov/?id=ED073027 [October 2016]

Van der Have, R. P. & Rubalcaba, L. (2016). Social innovation research: An emerging area of innovation studies? *Research Policy*, *45*(9), 1923-1935.

Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(2), 523–538.

Vienna Declaration. (2011). Conference challenge social innovation. Retrieved from http://www.socialinnovation2011.eu/wp-content/uploads/2011/09/Vienna-Declaration_final_10Nov2011.pdf

Ward, L. F. (1903). *Pure Sociology: A Treatise on the Origin and Spontaneous Development of Society*, New York, USA: MacMillan.

Weber, R. P. (1990). *Basic content analysis.* London, UK:Sage Pub.

Weeks, A. D. (1932), Will There Be an Age of Social Invention? *The Scientific Monthly*, *35* (4), 366-70.

Wolfe, A. B. (1921). The Motivation of Radicalism. *Psychological Review*, *28*(4), 280-300.

Zapf, W. (1989). Über soziale innovationen. *Soziale Welt*, *40*(H. 1/2), 170-183.

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[1] Roberts, Y. (2008). New ways of doing. Social innovation is a new global obsession. It might be a nebulous idea but it has huge potential. *The Guardian*, 11/08/2008.

[2] Ashoka (1980), Skoll Foundation (1999) and the Center for Social Innovation at Stanford University (2000) in US, the Centre Canadien de Recherche sur les Innovations Sociales (1986) in Canada, the Institute for Social Inventions (1985) and The Young Foundation (2005) in UK, the Vienna Zentrum für Soziale Innovation (1990), the Foundation of Soziale Innovation GmbH in Dortmund in Germany (1994), the Centre for Social Innovation, Graduate School of Business, Stanford University (2000), the McGill-DuPont Social Innovation Think Tank, McGill University (2002), the New Zealand Centre for Social Innovation in 2006, among others.

[3] ec.europa.eu/bepa/pdf/publications_pdf/social_innovation.pdf

[4] We also used key terms in other languages (French, German, Spanish, Italian, Portuguese) and translated the selected documents to English. A final version of this database ended in June 2016. First sparse references to SI -e.g. Ward, 1903; Wolfe, 1921; Ogburn, 1922; Weeks, 1932- were not included due the lack of explicit definitions.

[5] Similar reports not included in the sample are Moulaert, F.; Aller, A. A.; Cooke, P.; Courlet, C.; Häusserman, H. & da Rosa Pires, A. (1990*). Integrated Area Development and Efficacy of Local Action*. Feasibility study for the European Commission, Brussels, DG V and Moulaert, F.; Leointidou, L. et al. (1993). *Local Economic Development: a pro-Active Strategy against Poverty in the European Community*.

Second Intermediate Report for the European Commission, DG V. A list of the ample literature developed by this community can be consulted in http://frankmoulaert.net/fmn/index.php/reports-archive-2002-1975.html

[6] The term 'social technology' was first used at the University of Chicago by Albion Woodbury Small and Charles Richmond Henderson around the end of the 19th century. In 1901 Henderson published 'The Scope of Social Technology' describing it as 'a system of conscious and purposeful organization of persons in which every actual, natural social organization finds its true place, and all factors in harmony cooperate to realize an increasing aggregate and better proportions of the 'health, wealth, beauty, knowledge, sociability, and rightness' desires'. For a discussion of the term see also Bennett, W. L., & Segerberg, A. (2011). Digital media and the personalization of collective action: Social technology and the organization of protests against the global economic crisis. *Information, Communication & Society*, 14(6), 770-799.

[7] Literature refers to previous definitions of social invention (see for example Weeks (1932, p. 367-68): social invention is 'superseding older practices, introducing refinements of design, or of projecting the larger engines and leverages of social reconstitution'. Also Ward (1903) and Ogburn (1922). For Ward (1903, p. 569) 'social invention consists in making adjustments as will induce men to act in the manner most advantageous to society'. Cooperatives are described by Whyte (1977) as social inventions. He describes the organization of Mondragon system of worker production cooperatives started by five men in 1956 in Spain [see Whyte, W. F. (1982). Social inventions for solving human problems. *American Sociological Review*, 1-13].

[8] In his article *The informal economy: its role in post-industrial society* (1979) which not mention SI, he maintains that *'Government taxation and welfare policies, changes in lifestyles, and the self-service economy combine to make the informal economy a sector of growing importance'* and *'Governments have three options: they can ignore the informal economy, suppress it, or exploit it'* (p. 3)*... 'Given the range of activities to be found in the various sectors of the informal economy, and given the economic, technological, and cultural forces encouraging them, any view of the formal economy which does not take account of these developments, will be a distorted one'* (p. 14). It also refers to the growing research literature on the underground or hidden economy in the UK.

[9] The same definition is provided in another article: Mumford, M. D., & Moertl, P. (2003). Cases of social innovation: Lessons from two innovations in the 20th century. *Creativity Research Journal*, *15*(2-3), 261-266.

[10] Examples in Europe are given by the Bureau of European Policy Advisers (BEPA), created in 2004 and rebranded as European Political Strategy Centre in 2014, and the Young Foundation, established in UK in 2005, whose advice influenced the foundation of the Australian Centre for Social Innovation in 2009.

[11] Open Social Innovation (OSI) is representative of business' orientation to social demands and 'social' market –from large firms, multinationals to SMEs-, and practices like CSR, being defined as *'the application of either inbound or outbound open innovation strategies, along with innovations in the associated business model of the organization, to social challenges'* … *'and to the social sector'* (p. 170).

[12] Chataway et al. (2010) revive narratives about social technology and innovation in terms of social appropriation of technology in the 'global health sector'.

Example of the selection procedure of academic papers with explicit SI definitions, being the first Mumford (2002) (C= number of cites retrieved in 2014, the not repeated papers present in SCOPUS are higlighted)

Country (date)	WoS (Author/s, title and journal name)	C	Knowledge field	SCOPUS (Author/s)	C
Belgium, France (2003)	Moulaert, F. & Sekia, F. Territorial innovation models: A critical survey. *Regional Studies*	225	Business & Economics; Environmental Sciences & Ecology; Geography	Swyngedouw (2005)	289
England (2005)	Swyngedouw, E. Governance innovation and the citizen: The Janus face of governance-beyond-the-state. *Urban Studies*	220	Environmental Sciences & Ecology; Urban Studies	Moulaert & Sekia (2003)	275
USA (1999)	Kanter, R. M. The social sector as beta site for business innovation. *Harvard Business Review*	70	Business & Economics	**Ramírez, R. (1999)**	215
England (2005)	Gonzalez, S. & Healey, P. A sociological institutionalist approach to the study of innovation in governance capacity. *Urban Studies*	62	Environmental Sciences & Ecology; Urban Studies	**Gray, R. D.; Drummond, A. J. & Greenhill, S. J. (2009)**	171
USA (2002)	Mumford, M. D. Social innovation: Ten cases from Benjamin Franklin. *Creativity Research Journal*	53	Psychology (Creativity)	Kanter (1999)	114
USA (2003)	Tsemberis, S. J.; Moran, L.; Shinn, M.; Asmussen, S. M. & Shern, D. L. Consumer preference programs for individuals who are homeless and have psychiatric disabilities: A drop-in center and a supported housing program. *American Journal of Community Psychology*	50	Public, Environmental & Occupational Health; Psychology; Social Work	Gonzalez & Healey (2005)	68
Belgium, France, England, Italy (2005)	Moulaert, F.; Martinelli, F.; Swyngedouw, E. & Gonzalez, S. Towards alternative model(s) of local innovation. *Urban Studies*	46	Environmental Sciences & Ecology; Urban Studies	Moulaert, Martinelli, Swyngedouw & Gonzalez (2005)	66
USA (2005)	Scott, G. A.; Lonergan, D. C. & Mumford, M. D. Conceptual combination: Alternative knowledge structures, alternative heuristics. *Creativity Research Journal*	46	Psychology (Creativity)	Tsemberis, Moran, Shinn, Asmussen, & Shern (2003)	65
Germany, England, Netherlands (2009)	Voß, J.; Smith, A.; Grin, J. Designing long-term policy: rethinking transition management. *Policy Science*	41	Public Administration; Social Sciences - Other Topics	**Milton, K. & Demment, M. W.**	65
Belgium, France, England, Italy (2007)	Moulaert, F., Martinelli, F., González, S., & Swyngedouw, E. Introduction: Social innovation and governance in European cities - Urban development between path dependencyand radical innovation. *European Urban and Regional Studies*	38	Environmental Sciences & Ecology; Urban Studies	**Lyyra, T. M. & Heikkinen, R. L. (2006)**	61
USA (1986)	Sterman, J. The economic long wave: theory and evidence *System Dynamics Review*	29	Business & Economics; Mathematical Methods In Social Sciences	Voß, Smith & Grin (2009)	58
Japan (2007)	Maruyama, Y.; Nishikido, M. & Iida, T. The rise of community wind power in Japan: Enhanced acceptance through social innovation *Energy Policy*	28	Energy & Fuels; Environmental Sciences & Ecology	Mumford (2002)	57
Belgium, England (2005)	Moulaert, F. & Nussbaumer, J. The social region - Beyond the territorial dynamics of the learning economy. *European Urban and Regional Studies*	28	Environmental Sciences & Ecology; Urban Studies	**McCorriston, J. & Hole, F. (1991)**	57
Germany, Italy (2005)	Gerometta, J.; Hausermann, H. H. & Longo, G. Social innovation and civil society in urban governance: Strategies for an inclusive city. *Urban Studies*	27	Environmental Sciences & Ecology; Urban Studies	**Kallinikos, J. (2004)**	56
Austria (2005)	Novy, A. & Leubolt, B. Participatory budgeting in Porto Alegre: Social innovation and the dialectical relationship of state and civil society. *Urban Studies*	26	Environmental Sciences & Ecology; Urban Studies	Green, K. & Vergragt, P. (2002)	51

Annex 2. Examples of coding

Coded categories	
A1 'oriented to social aims/social values'	A1.1 'oriented to social values'/'generation of social values'/'humanitarian values'/'public good'/'harmonize with the social good' A1.2 'improving well-being'/'improving living conditions of people'/'raising overall welfare levels'/'social justice'/'right to human dignity'/'restorative justice'/'social inclusion'/'social cohesion'/'integration of vulnerable people'
A2 'addressed to unmet social needs'/'complex social problems'	A1.1 'social needs'/'answer to human needs'/'satisfaction of basic needs'/'unmet needs'/'needs of deprived groups'/'satisfaction of alienated human needs'/) and A1.2 (societal problem'/'social problems'/'major problems'/'intractable problems'/'pressing challenges'/'problems that threaten the human species'/'complex social problems'
B1 'process'	B 1.1. 'social innovation process'/'social process'/'the process of social innovation' B 1.2 'collective learning'/'socio-spaces of learning'/'social learning'/'social appropriation of knowledge/'learning dynamics'/'creativity'/'new ideas'/'production of new ideas'/'collective creativity'/'creative strategies'/'social creativity'/'search of alternative solutions'/'problem-solving'/'social experimentation coming with new ideas'
B2 'civil society'/'third sector'/'NGO'	'philanthropy'/'charities'/'voluntary organizations'/'civil society'/'third sector'/'NGO'
B3 'social and grass-root movements'	'social movements'/'social groups'/'grass-root movements'/ 'articulation of collective projects'/'cooperativism'
B4 'change in territorial development models'	'change in development models'/'local development'/'regional development'/'territorial development'/'development at local level'/'rural development'/'urban development'/'cities and urban neighbourhoods'
B5 'cross-sector between government, business and civil society'	'cross-sector partnerships'/'public-private organizations'/'market, academia and state'/'cooperation between multiple actors'/'hybrid space between government, business, charities and non-profit organizations'
C1 'new combination or configuration of social practices'	'change in social practices'/'change beliefs and habits'/'change in consumer behaviour'/'superseding older practices'/'new combination and/or new configuration of social practices'
C2 'social invention'/'new law, norm and/or rule'	'Social invention'/'law'/'regulation'/'new rules'/'social arrangement'/'new ways of doing things' /'new concepts'
D1 'innovative governance with civil involvement'/'collective agency'	'socially innovative governance'/'improvement of governance'/'innovation governance'/'public participation'/'mechanism for reclaiming democratic social life'/'socio-political action'/'civil participation'/'democratization and civic involvement'/'enhance collective action'/'collective agency'/'society capacity to act'/'intelligent collective action'
E1 'social change'/'change in social systems'/'socio-technical change'	E 1.1. 'social change'/'change in social systems'/'transforming the organization of social systems'/'change in the social order'/'social transformation'/'transformation of society' E 1.2 'socio-technical change'/'large-scale change' (society and technology)
E2 (social) 'market failures'/'social demand'	'create new market'/'social market'/'cover market failures'/'social demand'/'unresolved services organised by the state'
E4 'reorganization of work'	'change in employment'/'change in working conditions'/'reorganization of work'/'new forms of work organization'/'efficiency of work organization'

Annex 3. List of authors corresponding to selected definitions

Period	Authors	
1955-1964 (N=1)	Drucker, P. F. (1957)	
1965-1974 (N=11)	Garvey, W. D. & Griffith, B. C. (1966) Fairweather, G. W. (1967) Lapierre, J. W. (1968) Mesthene, E.G. (1969) Coleman, J. S. (1970) Gabor, D. (1970)	Taylor, J. B. (1970) Holt, K. (1971) Fairweather, G.W. (1972) Kuznets, S. (1973) Conger, S. (1974)
1975-1984 (N=13)	Lapierre, J. W. (1977) Neuloh, O. (1977) Fairweather, G. & Tornatzky, L. (1977) Graycar, A. & Davis, J. (1978) Tornatzky, L. G., Avellar, J. W., & Fergus, E. O. (1980) Brooks, H. (1982) Chambon, J-L.; David, A. & Devevey, J-M. (1982)	Gershuny, J. I. (1982) Gershuny, J. I. (1983) Conger, S. (1984) Dedijer, S. (1984) King, A. (1984) Neuloh, O. (1984)
1985-1994 (N=12)	Auclair, R. & Lampron, C. (1987) D'Iribarne, A. (1987) Drucker, P. F. (1987) Gershuny, J. I. (1987) Maelicke, B. (1987) Swyngedouw, E. A. (1987)	Zapf, W. (1989) Zapf, W. (1991) Moulaert, F. & Leontidou, L. (1992) Cova, B. & Svanfeldt, C. (1993) Crozier, M. & Friedberg, E. (1993) Henderson, H. (1993)
1995-2004 (N=35)	Rosenbrock, R. (1995) Bouchard, C. (1997) Mahdjoubi, D. (1997) Scherhorn, G., Reisch, L. & Schroedl, S. (1997) Aichholzer, G. (1998) Dadoy, M. (1998) Fontan, J-M. (1998) Bouchard, C. (1999) Conseil de la science et de la technologie. Québec. (2000) Dagnino, R. & Gomes, E. (2000) Gillwald, K. (2000) Moulaert, F. (2000) Ashford, N. (2001) Auriat, N. (2001) Lallemand, D. (2001) Ornetzeder, M. (2001) Amin, A., Cameron, A. & Hudson, R. (2002) Green, K. & Vergragt, P. (2002)	McElroy, M. (2002) Mumford, M. D. (2002) Bornstein, D. (2003) Cloutier, J. (2003) Hazel, K. L. & Onaga, E. (2003) Manzini, E. & Jégou, F. (2003) Petitclerc, M. (2003) Phills Jr., J. A., Deiglmeier, K. & Miller, D. T. (2003). Bellemare, G. & Briand, L. (2004) Goldenberg, M. (2004a) Goldenberg, M. (2004b) Hämäläinen, T. & Heiskala, R. (2004) Hillier,J.; Moulaert, F. & Nussbaumer, J. (2004) Huber, J. (2004) Michaelowa, A. (2004) Moulaert, F. & Nussbaummer, J. (2004) OECD Leed Forum (2004)
2005-2014 (N=180)	Fontan, J.-M., J.-L. Klein & Tremblay, D. G. (2005) Gerometta, J.; Häussermann, H. & Longo, G. (2005) Lévesque, B. (2005) Martens, B. & Keul, G. (2005) Moulaert, F., & Ailenei, O. (2005) Moulaert, F.; Martinelli, F.; Swyngedouw, E. & Gonzalez, S (2005) Neamtan, N. & Downing, R. (2005) Novy, A. & Leubolt, B. (2005) Tardif, C. (2005) Richer, M. (2005) André, I. & Abreu, A. (2006) Bouchard, M. J. (2006) Dees, J. G., & Anderson, B. B. (2006)	OECD (2010) Scott Cato, R. & Hillier, J. (2010) Vieta, M. (2010) Westley, F., & Antadze, N. (2010) Alonso, L. E. & Fernández Rodríguez, C. J. (2011) Ayestarán, I. (2011) Baglioni, S. & Combe, C. (2011) Bignetti, L. P. (2011), p. 4 Bitencourt da Silva, S. (2011) Biggs, R.; Westley, F. R.; Carpenter, S. R. (2010) Brown, T. & Wyatt, J. (2010) Cahill, G. (2010) Dagnino, R. (Org.) (2010) Dawson, P. & Daniel, L. (2010)

Gerber, P. (2006)

Klein, J. L. & Harrisson, D. (2006)

Mulgan, G. (2006)

Pallejà, R. P. (2006)

Regalia, I. (2006)

Simms, J. R (2006)

Wheatley, M. & Frieze, D. (2006)

Dawson, P., & Daniel, L. (2007)

De Muro, P., Hamdouch, A., Cameron, S., Moulaert, F. (2007)

Hämäläinen, T. (2007)

Heiskala, R. (2007)

Landry, R.; Becheikh, N.; Amara, N.; Halilem, N.; Jbilou, J.; Mosconi, E. & Hammami, H. (2007)

Leadbeater, C. (2007)

Marcy T. & Mumford M. D. (2007)

Maruyama, Y., Nishikido, M., & Iida, T. (2007)

Morelli, N. (2007)

Moulaert, F. et al. (2007)

Moulaert, F., Martinelli, F., González, S., & Swyngedouw, E. (2007)

Mulgan, G (2007)

Mulgan, G.; Rushanara, A.; Halkett, R. & Sanders, B. (2007)

Tanimoto, K., & Doi, M. (2007)

Vedin, B. A. (2007)

Astorga, E. (2008). Cited by Rodríguez Herrera, A. & Alvarado Ugarte, H. (2008)

Australian Social Innovation Exchange (ASIX, 2008)

DIUS (2008)

Drewe, P.; Klein, J.L. & Hulsbergen, E. (2008)

Echeverría Ezponda, J. (2008)

Etmanski, A. (2008)

Flew, T., Cunningham, S.D., Bruns, A. & Wilson, J. A. (2008)

Hetherington, D. (2008)

Jouen, M. (2008)

Kesselring, A. & Leitner, M. (2008)

Light, P. C. (2008)

Lindhult, E. (2008)

Manzini, E. (2008)

Pavel, S., Valentin, H. C., & Carmen, N. (2008)

Phills Jr., J. A., Deiglmeier, K. & Miller, D. T. (2008)

Pot, F., & Vaas, F. (2008)

Stanciu, P.; Hapenciuc, V. C. & Nastase, C. (2008)

Westley, F. (2008)

ZSI (2008)

BEPA (2009).

Chand, V. (2009)

Dobrescu, P. (2009)

European Commission (2009) Business Panel

Goldenberg, M.; Kamoji, W.; Orton, L. & Williamson, M. (2009)

Harris, M. & Albury, D. (2009)

Harrisson, D.; Bourque, R. & Széll, G.(2009)

Harrisson, D.; Széll, G. & Bourque, R. (2009)

Hochgerner, J. (2009)

Kimberlee, R., Purdue, D. & Orme, J. (2008)

Maccallum, D.; Moulaert, F.; Hillier, J. & Vicari Haddock, S. (2009)

Morales Gutiérrez, A. C. (2009)

Moulaert, F. & Hillier, J. (2009)

Moulaert, F., Vicari, S.; Cassinari, D. & d'Ovidio, M. (2009)

Ellis, T. (2010)

EU/THE YOUNG FOUNDATION (2010)

EUROPEAN COMMISSION (2010)

Lettice, F. & Parekh, M. (2010)

Ziegler (2010)

Echeverria Ezponda, J. & Merino Malillos, L. (2011)

European Commission (2011)

Galarraga Ezponda, A.; Luna García, Á.; González Durán, S. & Massa Carrasquello, M. (2011)

Goldsmith, S. (2011)

Hillgren, P. A.; Seravalli, A. & Emilson, A. (2011)

Hochgerner, J. (2011)

Laschewski, L. (2011)

Lévesque, B. (2012)

Moore, M. L., & Westley, F. (2011)

Neumeier, S. (2011)

OECD (2011)

Saul, J. (2011)

Vienna Declaration (2011)

Williams, A. & SiG@MaRS (2011)

Young, P. H. (2011)

Bates, S. M. (2012)

Bock, B. B. (2012)

Bouchard, M. J. (2012)

Degelsegger, A. & Kesselring, A. (2012)

Edwards-Schachter, M. E., Matti, C. E., & Alcántara, E. (2012)

Godin, B. (2012)

Harrisson, D., Chaari, N., & Comeau-vallée, M. (2012)

Huddart, S. (2012)

Ilie, E. & During, R. (2012)

Loogma, K.; Tafel-Viia, K. & Ümarik, M. (2012)

Lubelcová, G. (2012)

Manzini, E. (2012)

Michelini, L. (2012)

Moore, M. L., Westley, F. R., & Nicholls, A. (2012)

Nicholls, A. & Murdock, A. (2012a)

Nichols, A. & Murdock, A. (2012b)

OECD (2012)

Reeder, N & O' Sullivan, C. with Tucker, S.; Ramsden, P. & Mulgan, G. (2012)

Rodima-Taylor, D. (2012)

SELUSI project (2012)

Seyfang, G., & Haxeltine, A. (2012)

SPREAD project (2012)

TEPSIE project (2012)

Volkmann, C. K., Tokarski, K. O., & Ernst, K. (2012)

Bouchard, M. J. (2013)

Bulut, C.; Eren, H.; Seckin Halac, D. (2013)

Cajaiba-Santana, G. (2013)

Cunha, J. & Benneworth, P. (2013)

d'Ovidio, M., & Pradel, M. (2013)

Dax, T., Strahl, W., Kirwan, J., & Maye, D. (2013)

European Commission (2013)

Haxeltine, A., Avelino, F., Wittmayer, J., Kemp, R., Weaver, P., Backhaus, J., & O'riordan, T. (2013)

Ishigaki, K. & Sashida, N. (2013)

Jenson, J. & Harrisson, D. (2013)

Pol, E. & Ville, S. (2009)	Jenson, J. (2013)
Shapson, S. (2009)	Lopez Cerezo, Jose A.; Gonzalez, Marta I. (2013)
Tidd, J. & Bessant, J. (2009)	
Westley, F., Zimmerman, B. & Patton, M. (2009)	Lorca, J. (2013)
Wolfe, S. E. (2009)	Maclean, M.; Harvey, C. & Gordon, J. (2013)
Adams, D., & Hess, M. (2010)	
Andrew, C. & Klein, J. L. (2010)	"Moulaert, F. MacCallum, D. Mehmood, A. & Hamdouch, A. (2013)
Azua, M. (2010)	
Basset, J. (2010)	Osberg, T. & Schmidpeter, R. (2013)
Bergman, N., Markusson, N., Connor, P., Middlemiss, L., & Ricci, M. (2010)	Reinstaller, A. (WIFO, WP) (2013)
	Ruiz Viñals, C. (2013)
Froud, J., Johal, S., Montgomerie, J., & Williams, K. (2010)	Shaw, E. & de Bruin, A. (2013)
	Sinnergiak WP (2013)
Gianfaldoni, P. (2010)	Tafel-Viia, K. & Lassur, S. (2013)
Goldstein, J., Hazy, J.K., Silberstang, J. (2010)	Voorberg, W.; Bekkers, V. & Tummers, L. (2013)
Gurrutxaga, A. & Echeverría, J. (2010)	
Harrisson, D.; Klein, J. L. & Leduc Browne, P. (2010).	WILCO project (2013)
	Evers, A.; Ewert, B. & Brandsen, T. (2014)
Howaldt, J. & Schwartz, M. (2010)	Fachinelli, A. C., D'arisbo, A., & Maciel, E. D. M. (2014)
Hubert, A. (2010)	
Huddart, S. (2010)	Lee, P. (2014)
Klein, J. L.; Tremblay, D. G. & Bussiéres, D. R. (2010)	Manizin, E. (2014)
	Mont, O., Neuvonen, A., & Lähteenoja, S. (2014)
Kinder, T. (2010)	
Lessem, R., & Schieffer, A. (2010)	Moulaert, F., Parra, C., & Swyngedouw, E. (2014)
Moulaert, F. & Mehmood, A. (2010)	
Murray, R., Caulier-Grice, J. & Mulgan, G. (2010)	Borzaga C., Bodini R. (2014)