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Social innovation: Buzz word or enduring term?☆

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ABSTRACT

The term 'social innovation' has come into common parlance in recent years. Some analysts consider social innovation no more than a buzz word or passing fad that is too vague to be usefully applied to academic scholarship. Some social scientists, however, see significant value in the concept of social innovation because it identifies a critical type of innovation. In this paper, we suggest one possible definition of social innovation and show that when its empirical meaning is distilled, the term is of great importance. We distinguish social innovation from business innovation, and identify a subset of social innovations that requires government support.

1. Introduction

One of the striking features of our society is the incessant urge for the creation, adoption and diffusion of innovations. There are many sorts of innovation: business, social, artistic, for example. Although business innovation is a pervasive generator of human well-being, there are other innovations that have significant impact on social performance. For example, there are many innovations in teaching and learning emerging from universities and other centres of learning that are in the nature of a public good. This suggests that to explain fully the improvement in the living conditions of human kind one has to introduce a new class of innovations that cannot be identified with the set of business innovations. We refer here to the class of *social innovations*.

The term 'social innovation' has entered the discourse of social scientists with particular speed, but there is no consensus regarding its relevance or specific meaning in the social sciences and humanities. Some analysts consider social innovation no more than a buzz word or passing fad that is too imprecise to be usefully applied to academic scholarship. Some social scientists, however, see significant value in the concept of social innovation because it identifies a critical type of innovation.

In this brief, conceptual paper we suggest one possible definition of social innovation that captures the common denominator of the existing definitions of the term. We show that when its empirical meaning is distilled, the term is of great importance. We distinguish social innovation from business innovation, and identify a subset of social innovations that requires government support. A subsidiary message of the paper – obvious, but often forgotten – is that interdisciplinary communication may be more fruitful if we realize that terminological precision is a necessary condition in the search for improved knowledge.

The paper is organized as follows. In Section 2 we discuss some of the existing definitions of social innovation. Section 3 provides a new definition of social innovation and discusses the connection between social innovation and business innovation. Section 4 introduces a micro/macro-quality of life dichotomy and lists empirically relevant factors associated with the macro-quality of life. Section 5 discusses the notion of 'desirable' social innovation. Section 6 derives a specific policy conclusion. The final section offers a summary and some concluding remarks.

2. A sample of definitions of social innovation

Use of loose terms leads to a lack of clarity in disposition. A generally accepted terminology saves time and avoids misunder-

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standings. A century ago, Henry Moore (a pioneer in quantitative economics) was concerned about the need for greater care in the use of terms in the scientific discourse and spoke out against the linguistic muddle prevailing around the word 'competition.' It is interesting to note that he started his article as follows:

> Economic terms seem to pass in their historical development through a series of stages which, without pretension of rigidness, may be described as follows: first, no definition is given, but it is assumed that everyone has a sufficiently clear idea of the subject to make a formal definition unnecessary; second, a definition is attempted and a number of exceptional forms are noted; third, with the further increase of data, the relative importance of the various forms changes, confusion in the discussion is introduced, logomachy takes the place of constructive investigation; fourth, a complete classification of the forms embraced under the original term is made, and problems are investigated with reference to this classes. (. . .)
>
> (Moore, 1906, p. 211)

Quite naturally, social scientists specialize in the disciplines in which they have a comparative advantage. However, the process of specialization may entail a cost of making scientific language ambiguous or contradictory due to the existence of discipline boundaries. To enhance interdisciplinary communication terminological consistency between disciplines is essential.

It is an open secret that the term 'social innovation' is used in various and overlapping ways in different disciplines. We list below a few examples of characteristic definitions chosen to illustrate this point.

2.1. Conception 1. Social innovation and institutional change

Some social scientists see social innovation as the prime mover of institutional change. This view underlies the paper by Brian Martin who makes the point that "social testing is beneficial to social innovation" and discusses the ethical and legal dimensions of social testing. He emphasizes in the abstract of his paper that "The biggest obstacle to social innovation is resistance by vested interests."[1]

The book *Social Innovations, Institutional Change and Economic Performance*, (Hamalainen and Heiscala, 2007) contains both an *oblique* definition and an *explicit* definition of social innovation. Both definitions emerge from the perspective of structuration theory and accept John Maynard Keynes' deep insight that ideas are more powerful vehicles of institutional change than vested interests.[2] The oblique definition appears in the Prefatory Chapter:

> The editors and authors of this volume direct primary attention to the difficult and fundamental question of what role institutions play in the production of new ideas and new kinds of social structures–*social innovation*.
>
> (Scott, 2007, p. xiii) [*Italics in original*]

We call this definition of social innovation 'oblique' because it is unclear whether social innovation includes all types of new ideas or it is circumscribed to 'new kinds of social structures.'

The 'explicit' definition revolves around 'ideal types' and can be found in the chapter *Social Innovations: Structural and Power Perspectives* of the book in question. The author of this chapter, Risto Heiscala, uses five 'ideal types' of innovations: technological, economic, regulative, normative and cultural innovations. The definitions of these 'ideal types' are as follows:

> (. . .) Technological innovations are new and more efficient ways to transform the material reality, and economic innovations put the technological innovations to the service of the production of surplus value. Taken together these two classes form the sphere of *techno-economic innovations* (. . .) Regulative innovations transform explicit regulations and/or the ways they are sanctioned. Normative innovations challenge established value commitments and/or the way the values are specified into legitimate social norms. Finally, cultural innovations challenge the established ways to interpret reality by transforming mental paradigms, cognitive frames and habits of interpretation. Taken together these three classes form the sphere of *social innovations*.
>
> (Heiscala, 2007, p. 59) [*Italics in original*]

The following points can be made in relation to this quotation: (1) it should be noticed that in the immense literature on business innovation it is *not* customary to distinguish technological innovation from economic innovation (the term 'economic innovation' is surpassingly rare); (2) the generally accepted definition of technological innovation in the business literature is less restrictive than the one mentioned above (for example, a lipstick with new shades is a technological innovation in the business innovation literature but it could hardly be considered a more efficient way 'to transform material reality'); (3) regrettably, the class of techno-economic innovations does not include the set of organizational innovations as defined in the business innovation area; finally, (4) this definition of social innovation is potentially ambiguous because it is unclear what the 'three classes' that constitute the sphere of social innovations are. Fortunately, Heiscala himself clarifies this point at the end of his chapter:

> Social innovations are changes in the *cultural, normative or regulative structures* [or classes] of the society which enhance its collective power resources and improve its economic and social performance. (. . .)
>
> (Heiscala, 2007, p. 59) [*Italics added*]

All in all, for Heiscala, 'Social innovation' means 'change in at least one of the following three social structures: cultural, normative and regulative.' This definition is too broad from one viewpoint and much too narrow from another. In fact, it is very general because the three structures involved are too diverse and it is very demanding because for an innovation to be considered 'social' it must improve *both* the economic and social performance of the society under consideration. Having said this, the definition is consistent with the notion of improving either the quality or the quantity of life.

2.2. Conception 2. Social innovation and social purposes

The Young Foundation has recently published a report that examines the relevance of social innovation (Young Foundation, 2007). This report contains a section devoted to the definition of the term 'social innovation' where the reader can find two definitions that, according to these authors, provide a satisfactory point of departure.[3] They start with an omni-comprehensive definition

[1] (Martin, 2006) does not provide an explicit definition of social innovation but one can form an approximate idea on the basis of a list of possibilities for social testing which includes 'Testing levels of creativity and innovation with and without intellectual property' and 'Using gross national happiness as an alternative to gross national product.' (Martin, 2006, p. 39).

[2] This insight can be found in the last paragraph of the *General Theory*.

[3] The authors of the report appear to recognize that their two definitions of social innovation are imprecise when they claim that 'overly precise definitions tend to limit understanding rather than helping it.' However, they do not explain when a definition is said to be 'overly precise' (Young Foundation, 2007, p. 8).

of social innovation but they immediately recognize that their definition is too general and needs to be more specific:

> (. . .) Social innovation refers to new ideas that work in meeting social goals. Defined this way the term has, potentially, very wide boundaries—from gay partnerships to new ways of using mobile phone texting, and from new lifestyles to new products and services. We have also suggested a somewhat narrower definition:
>
> 'innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organizations whose primary purposes are social.'
>
> (Young Foundation, 2007, p. 8)

Few people would deny that the primary purpose of a firm is social, including profit-seeking firms (otherwise, the firm could not legally operate because anti-social activities such as posting child pornography on the Internet are forbidden by law). Consequently, any new idea meeting a social need developed by a profit-seeking firm (which generally speaking is an organization 'whose primary purposes are social') turns out to be a social innovation, and thereby, *every* business innovation is a social innovation.[4] This point does not appear to have been noticed by the authors of the report:

> This differentiates social innovation from business innovations which are generally motivated by profit maximization and diffused through organizations that are primarily motivated by profit maximization. There are of course many borderline cases, for example models of distant learning that were pioneered in social organizations but then adopted by businesses, or for profit businesses innovating new approaches to helping disabled people into work. (. . .)
>
> (Young Foundation, 2007, p. 8)

Apart from the preceding definitional problems, it is safe to say that the definitions offered by (Young Foundation, 2007) are consistent with the notion of improving either the quality or the quantity of life.

2.3. Conception 3. Social innovation and the 'public good'

By forcing ambiguities and sloppy reasoning out into the open, Fritz Machlup alerted social scientists to the tyranny of words: "A term which has so many meanings that we never know what its users are talking about should be either dropped from the vocabulary of the scholar or 'purified' of confusing notations." (Machlup, 1963, p. 43). The Centre for Social Innovation has tried to purify the term in question as follows:

> Definitions of social innovation abound and a casual observer can quickly become entangled in a debate over meaning and nuance. We are not too hung up about it so we have adopted a simple working definition: Social innovation refers to new ideas that resolve existing social, cultural, economic and environmental challenges for the benefit of people and planet. A true social innovation is system-changing—it permanently alters the perceptions, behaviours and structures that previously gave rise to these challenges.
>
> Even more simply, a social innovation is an idea that works for the public good.
>
> (Centre for Social Innovation, 2008)

This definition is fuzzy, to say the least (for example, does the term 'public good' mean 'for the benefit of people and planet'?). Moreover, according to this definition the so-called 'Putin System' is a social innovation simply because it has resolved social problems in Russia and it is a true social innovation as well because it is system-changing.[5] However, it is unclear whether the Putin System works for the 'public good.'

2.4. Conception 4. Social innovation and needs not taking on by the market

The OECD LEED *Forum on Social Innovations* was created in April 2000 to facilitate the dissemination and transfer of best policies and practices in social innovation. This forum adopted a working definition, namely:

> that it [social innovation] "can concern conceptual, process or product change organizational change and changes in financing, and can deal with new relationships with stakeholders and territories." 'Social innovation' seeks new answers to social problems by: identifying and delivering new services that improve the quality of life of individuals and communities; identifying and implementing new labour market integration processes, new competencies, new jobs, and new forms of participation, as diverse elements that each contribute to improving the position of individuals in the workforce.
>
> Forum on Social Innovation, 2000

This definition highlights a central feature of social innovation: improvement in the quality of life. The Forum also claims that social innovation is necessarily distinct from business innovation:

> because it is not about introducing new types of production or exploiting new markets for the sake of exploiting them, but is about satisfying new needs not provided by the market (even if markets intervene later) or creating new, more satisfactory ways of insertion in terms of giving people a place and a role in production.
>
> Social innovation deals with improving the welfare of individuals and community through employment, consumption or participation, its expressed purpose being therefore to provide solutions for individual and community problems. It seems therefore that social innovation and local development can be considered as intertwined.
>
> Forum on Social Innovation, 2000

This attempt at separation between social innovation and business innovation is plagued by difficulties. The Forum claims that social innovation addresses needs ignored by the market, and therefore, draws a sharp line of separation: social innovation and business innovation do *not* overlap. It appears that 'if markets intervene later' the innovation is not social any longer. Strictly speaking, this means that the intersection between the set of social innovations and business innovation is empty. Thus, this definition of social innovation appears to be unnecessarily restrictive.

3. Business innovation and social innovation

An innovation is a new idea. Innovations may have effects on one or more social dimensions. For example, the Internet has provided new business opportunities to many people and has changed the way we communicate with our friends and family.

[4] In the language of sets, this means that the set of all business innovation is included in the set of all social innovations.

[5] We refer here to the contemporary democratic system in the Russian Federation.

It is generally agreed that business innovation is profit-seeking innovation, that is, the creation of new ideas with the intention of making money. It is also generally agreed that business innovation consists of either technological innovations (new or improved products or processes) or organizational innovations (changes to the firm's strategies, structures or routines).[6] Business innovation aims to improve the performance of the firm and is normally protected by intellectual property rights.

Typically, business innovation generates benefits not only to the innovator but also to other parties such as consumers and competitors. The beneficial repercussions enjoyed by other parties are called *innovation spillovers*. Some of the benefits that flow from business innovation cannot be fully appropriated by the innovating firm and spill over to other firms and the wider community for free. These special kinds of collateral effects of business innovation are known as 'knowledge spillovers' and have permeated governmental economic thinking about innovation.[7]

'Social innovation' is a term that almost everyone likes, but nobody is quite sure of what it means. Some academics would like to abandon the notion of social innovation altogether, arguing that it adds nothing to what we know about innovation and is too vague ever to be useful.

Quite obviously, human beings are indefatigable seekers of newness. Typically, the search for newness involves a mental process that happens in society, so that we can say that *all* innovations are *social* innovations.[8] Strictly speaking, the term 'social innovation' is redundant. An immediate implication derived from this assertion is that the study of innovation is the study of social innovation, and therefore, there would be no value in analyzing social innovation per se.

We disagree with this sort of 'intellectual cleansing.' The power of the notion of social innovation is that it both reflects and evokes a shift in our perception of how innovation benefits human beings. As will become apparent in a moment, the distinction between the group of 'social innovations' (in short, set SI′) and the group of 'business innovation' (in short, set BI) makes sense because we can study the characteristics of the set SI′ most effectively if they are not merged with the characteristics of the set BI. In other words, it is methodologically *improper* to mix the two sets indiscriminately.

Economists have not paid much attention to the social impact of business innovation. There is, however, at least one important exception. Kuznets (1974) discusses the multiple effects of innovations in the chapter entitled "Innovations and Adjustments in Economic Growth." Kuznets separates economic and non-economic consequences of technological innovations, particularly the major ones. The economic consequences revolve around their contribution to greater productivity and greater consumption. Within the non-economic consequences of major innovations, he considered three groups of adjustments: institutional changes, dislocative effects, and depletion of natural environment.

Social innovation is mentioned in the context of the first group of adjustments. Somewhat roughly, institutional changes are required because the old institutional channels are not suitable for the new technologies, and this involves a series of legal and social innovations. Thus, Kuznets saw social innovations as *induced* by business innovations.

To quote Kuznets extensively:

> An enormously wide variety of such complementary adjustments in social and legal institutions, in the distribution and equipment of participants, and in the very governing notions of society have been made in continuous response to the stream of technological innovations. Each new institution, view, or pattern of living and work of the participants, once introduced, assumed a life and effect of its own. There has been, among these adjustments, a series of legal and social innovations, new ways of organizing economic units and establishing the relations within them of the cooperating parts; while the increase in the production power of man, based on and coupled with a revolutionary extension of man's knowledge of the universe in which he lives, has changed his outlook on nature and society. Thus, in addition to the purely economic responses, there has been a number of responses in the institutional and social framework within which economic processes took place, and in the structure and scale of values by which men were guided.
>
> (Kuznets, 1974, p. 197)

Unfortunately, Kuznets did not give an explicit definition of social innovation, maybe because the meaning of the term was obvious to him, perhaps because he realized that the definition of the term was plagued by difficulties. We will never know.[9]

Generally speaking, no agreed definition of 'social innovation' exists. As we have seen in Section 2, the term has developed several overlapping meanings invoking concepts such as institutional change, social purposes and public good. By and large, the existing definitions revolve around new ideas conducive to human welfare enhancement. We use this defining characteristic to suggest the following definition: an innovation is termed a *social innovation* if the implied new idea has the potential to improve either the quality or the quantity of life. Examples of innovations that fit nicely with this definition abound: innovations conducive to better education, better environmental quality and longer life expectancy are a few.

The addition (or union) of the sets of social and business innovations does not cover the entire set of conceivable innovations.[10] For example, there are intellectual innovations such as the idea of 'non-rivalry' or the concept of 'superconductivity' that are neither social nor business innovations.

Now comes the critical observation. Social innovations are not necessarily driven by the profit motive and business innovations need not be social innovations. In fact, there are new ideas (such as Clean Up the World[11]) that have pervasive social effects and they are not business innovations. Likewise, there are business innovations that are not social innovations. For example, profit-seeking innovations with a large negative impact on the environment cannot be considered social innovations. Consequently, we cannot identify the set of social innovations with the set of business innovations.

In practice, the overlapping (or intersection) between the sets of social and business innovations is substantial (ranging from the Internet to racial integration in sports leagues). However, no blanket vindication of business innovation emerges from this statement. Some business innovations that happened in clandestine fashion have had profound detrimental effects on society. The case of ille-

[6] We will occasionally use the language of sets because it is a useful framework for organizing thinking about relationships between concepts. The set of all business innovations will be denoted by BI.

[7] In general, *knowledge spillovers* are defined as flows of private ideas captured by other individuals without full compensation to the innovator.

[8] Note, however, that any new idea created by Robinson Crusoe while living adventurously for years on an inhabited island is a counter-example to this statement.

[9] Surprisingly, Kuznets did not provide any *concrete* example of social innovation.

[10] In the language of sets, SI′ ∪ BI is the set consisting of innovations in either SI′ or BI. Furthermore, SI′ ∪ BI is a proper subset of I, where I denotes the set of all conceivable innovations. In symbols, SI′ ∪ BI ⊂ I This symbolism means that any social or business innovation is in I, but there are innovations located 'outside' I.

[11] *Clean Up the World* is a community-based environmental program that mobilizes over 35 million volunteers from more than 120 countries annually to clean up, fix up and protect our planet from environmental degradation. This program was created in 1993. Clean Up the World is associated with the *United Nations Environmental Programme* (UNEP).

gal drugs (such as cannabis, cocaine, ecstasy and ice) is an obvious illustration.

As will become apparent in Section 5 the word 'potential' in our definition deserves special attention. As a general rule, there is a widespread inability to anticipate the future impact of social innovations; predictability (that is, forming acceptably firm expectations of direction and impact) is not possible.

4. Micro- and macro-quality of life

The notion of 'quality of life' is an integral part of our definition of social innovation, and regrettably, no agreed definition of 'quality of life' exists.[12] For reasons that will become apparent in a moment, it is convenient to distinguish 'micro'-quality of life—the quality of life in regards to a particular individual from 'macro'-quality of life—quality of life in relation to a group of individuals.

At the micro-level, the concept of quality of life (like happiness) is notoriously difficult to define, let alone to compare. A change from a given situation may contribute to or detract from the quality of life depending on the individual in question. For example, is there an improvement in the quality of life if people work shorter hours and commute shorter distances? One is inclined to believe that the answer is yes. However, workaholics tend to believe that working long hours does not affect the quality of their lives and may take advantage of travelling long distances every day to relax, switch off, and perhaps, avoid the pain of loneliness at home.

The quality of life a person experiences today is determined by the valuable options she has had the opportunity to choose from and what she has been able to achieve. There is no universal list of the standard features of the quality of life at the individual level. However, few people would deny that real income, wealth, and variables not strictly linked to economic prosperity such as the opportunity to enjoy worthwhile employment or to live in peaceful communities, are relevant items on that list.

There are two types of determinants of the micro-quality of life: personal characteristics and the set of valuable options. Personal characteristics include, but are not limited to, inborn talents, the level of human capital (for example, education, learning and skill formation for productive purposes) and other benefits of education such as being able to choose in a more informed way or being taken more seriously by others. The second type of determinants of the quality of life immediately raises the question: 'valuable options' for whom (the individual or the society)? In the context of the *micro*-quality of life, 'valuable options' means things that the person can do or be generally accepted by the civilized society. For example, a healthy combination of exercise and low-fat diet is a valuable option, but child pornography on the Internet is not.

The macro-quality of life can be characterized as the set of valuable options that a group of people has the opportunity to select. By and large, the determinants of the quality of life at the aggregate level include the following elements, not necessarily in order of importance: material well-being, education opportunities (including quality of teaching and learning practices), health domain, job security, family life, community life, environment (climate and geography), political freedom, political stability and security, and gender equality.[13]

It should be clear that the notion of macro-quality of life focuses on the set of valuable options, not on specific individual choices. Many people attach importance to having opportunities that (for whatever reason) may not be taken up. It should also be clear that we distinguish micro-quality of life from macro-quality of life because the latter does not require that *each* member of the group benefits with the enhancement of valuable options.

In our definition of social innovation, quality of life refers to macro-quality of life and by 'improvement' in the quality of life is meant increase in the number of valuable options that people can choose from, so that when the size of the opportunity set grows there is *actual* improvement of the macro-quality of life, but not necessarily well-being improvement for each resident. To sum up, 'social innovation' can be slightly redefined as any new ideas with the potential to improve either the macro-quality of life or the quantity of life.

5. Desirable social innovations

We want now to answer the following question: are all social innovations desirable? As will become apparent in a moment, the history of innovation suggests that sometimes the answer should be in the negative (for example, cigarettes), and at other times, is ambiguous (for example, automobiles).

Business innovations that generate consumer products often bring improvements to human welfare by widening the range of goods and services available to us. Some may bring quite distinctive benefits, for example the introduction of many health-enhancing commercial drugs. Others have had the power to transform our societies, such as the invention of the automobile at the end of the nineteenth century. Road accidents and pollution, however, remind us that such social innovations are not unexceptionally beneficial (Barker, 1987).

The social impact of business innovation can be quite disproportionately distributed. Britain's emergence as the first industrial nation from the end of the eighteenth century was closely associated with a series of transforming innovations in the cotton industry that automated the spinning and weaving processes (Bruland, 2004). The consequent cheap and wide availability of cotton clothing, that was easy to clean and design into fashionable products, constituted a major social innovation. However, for the hand-loom weavers who were displaced by power loom machinery, the social consequences were unambiguously disastrous. Their response, to attack and destroy machines, coined the term *Luddites* which has entered common parlance as opposition to innovation.

The cigarette became a mass consumer product as a result of the invention and diffusion of the Bonsack cigarette machine. This 1880 business innovation replaced hand manufacture with automated technology capable of generating several hundred cigarettes a minute rather than only a handful (Durden, 1987, ch.3). The cost-reducing and, for initial patent holder James Duke, profit-enhancing impact was enormous. Initially, opinion was in favour of a new consumer product, which in its wake generated new social opportunities and infrastructures. Retrospectively, as we now know, the cigarette has been one of the greatest health disasters of the twentieth century contributing to many major causes of illness and death including heart disease and lung cancer.

In the light of the preceding examples, a *desirable* social innovation is one that in fact ('in fact' meaning 'there is convincing evidence') improves the macro-quality of life or extends life expectancy. This definition of desirable social innovation is not ethically neutral for two reasons. First, the concept of macro-quality of life is difficult or perhaps impossible to define in a way that it

[12] The book entitled The Quality of Life by Nussbaum and Sen (1993) contains many insights conducive to a better understanding of this somewhat elusive notion. However, readers seeking a working definition of the quality of life in this volume are bound to be disappointed, for they will find none.

[13] It is customary to include what we call in this paper 'quantity of life' (life expectancy at birth) as a quality of life component. See, for example, "The Economist Intelligence Unit's Quality-of-Life Index" http://www.economist.com/media/pdf/QUALITY_OF_LIFE.pdf.

is acceptable for everyone.[14] Second, under certain circumstances many people might not be willing to increase their longevity. We recognize that there are value judgements underlying the notion of desirable social innovation.

From now on, we confine attention to desirable social innovations.[15]

6. Developing policy implications

In this section we show that we can get quite considerable insight just by using the conceptual relationships between social innovation and business innovation. In essence, we show that there is a particular subset of social innovations that are subject to market failure.

Even though the vast majority of social innovations are business innovations as well, it would be a blunder for governments (particularly, those of rich countries) not to encourage innovation *without* a profit motive. In the language of sets, these social innovations are the difference between the set of all social innovations and the set of all business innovations, that is, the set of social innovations that are not business innovations.[16] These social innovations address needs that are not satisfied through the market mechanism (because they do not exhibit potential profits) may be called *pure* social innovations.

In a free-market society, there will be *under-investment* in pure social innovations because social innovators will not have material incentives to devote their energies to the creation of pure social innovations. These innovations have both of the central features of a public good: it is virtually impossible to exclude others from the benefits of the new idea, and the marginal cost of an additional person making use of the new idea is zero.

As with all public goods, private markets are likely to provide an undersupply of pure social innovations. Unless governments step in to assist social innovators, the number of innovations included in SI–BI would be relatively small when compared with the number of elements in the set of *bifocal innovations*, defined by SI ∩ BI and meaning every innovation in both SI and BI.

To show the existence of market failure is not the same as showing that government intervention will do better than actual free markets. The danger of government failure should not be overlooked. However, in the case of pure social innovations there are weighty reasons to justify government support because they improve social performance, entail information spillovers and may engender future business innovations that otherwise would never happen.

Governments and private interest groups can play a decisive role in institutionalizing social innovation through incentives to social innovators. For example, *prizes* awarded by learned societies would play an important role in stimulating social innovation. By 'prize' we mean a payment funded by taxpayers that is made to an individual or through an organization conditional on delivering a specified social innovation. For example, an innovator able to mitigate the level of infant mortality in remote areas might receive $1 million and the corresponding (new) knowledge will become a public good. Taxpayers might rightfully revolt if they are asked to finance incentives to create new computer games, but might accept the allocation of prizes if the social innovation goes public.

We are aware that the allocation of prizes as an incentive to innovation is not free of difficulties. Despite their evident attraction, prizes suffer from major drawbacks: first, any board entrusted with the job is likely to make mistakes and perpetuate inequities; second, munificence is a rare board attribute; and third, the high risk of failure may discourage participation.

The archetypal example is John Harrison's longitude prize for inventing a seaworthy chronometer, the award of which was delayed for decades while the prize committee (Board of Longitude) attempted to prove that the astronomical solutions were superior. [17] J. Harrison (1693–1776) sought redress in Parliament, and was partially rewarded (after a 40 year struggle!). The problem here was particularly one of public policy failure in that innovation was delayed by the powerful influences of astronomers with sub-optimal technology.

7. Summary and concluding remarks

It is time now to summarize the thread of the argument of this paper and make a few remarks. The four conceptions of the term social innovation condensed in Section 2 have served as an introduction to our fifth alternative. Conception 1 is too general and somewhat unconventional. Conceptions 2 and 3 are not free of difficulties. For example, Conception 2 implies that the set of all business innovations is included in the set of all social innovations (that is, BI ⊂ SI); Conception 3 is essentialist because introduces the notion of 'true' social innovation. Finally, Conception 4 sees clearly that if there is a neat definition to be given to social innovation it must (a) explicitly incorporate the condition of 'improvement in the quality of life', and (b) be different from the meaning of business innovation; but then it goes astray in trying to make social innovations and business innovations completely exclusive to each other.[18]

Semantic clarification is necessary for both interdisciplinary communication and scientific progress. The above conceptions are but a small sample of definitions of social innovation. When its empirical meaning is distilled, it turns out that the target area or common denominator is the improvement in the quality of life or the quantity of life. Our insistence on this aspect associated with many – but by no means all – innovations is due not on any wish to quarrel about definitions but merely to avoid confusion.

The be-all and end-all of nation states is to improve the living conditions for its residents. Living conditions have to do with both the *quality* of life, as represented by, for example, the availability of clean air and water or possessing an attractive house or attaining postgraduate education, and the *quantity* of life, as represented by longevity. Few people would deny that the creation of new ideas is at the centre of the improvement of living conditions. Without innovation we would be still living in caves and our life expectancy would be substantially lower than it is.

The history of innovation shows that the majority of business innovations tend to have beneficial effects not only for the innovators but also for the community as a whole. However, this is not the same as showing that the set of business innovations and the set of social innovations are identical. It is useful to distinguish between business innovation and social innovation because this separation highlights the production of many new ideas that (at least initially) are not created with the purpose of making money.

We firmly believe that if we wish to establish social innovation as a respectable field of enquiry, a satisfactory and comprehensive def-

[14] In the previous section we gave a list of factors affecting the macro-quality of life, but strictly speaking we did not define the term 'macro'-quality of life.'

[15] In the language of sets, this means that we 'purify' the set SI′ which contains both desirable and deleterious social innovations. The set of all *desirable* social innovations is denoted by SI.

[16] In symbols, the *difference* between SI and BI (written as SI–BI when there is no possible confusion with subtraction in an algebraic sense) is the set of all elements of SI that are *not* in BI.

[17] The problem (considered the greatest scientific problem of that time) was the calculation of longitude at sea. Sir Isaac Newton was the chief scientist to the Board of Longitude.

[18] In the language of sets, Conception 4 claims that SI ∩ BI = ∅, where ∅ denotes the empty set which has no elements at all, that is, SI and BI are *disjoint*.

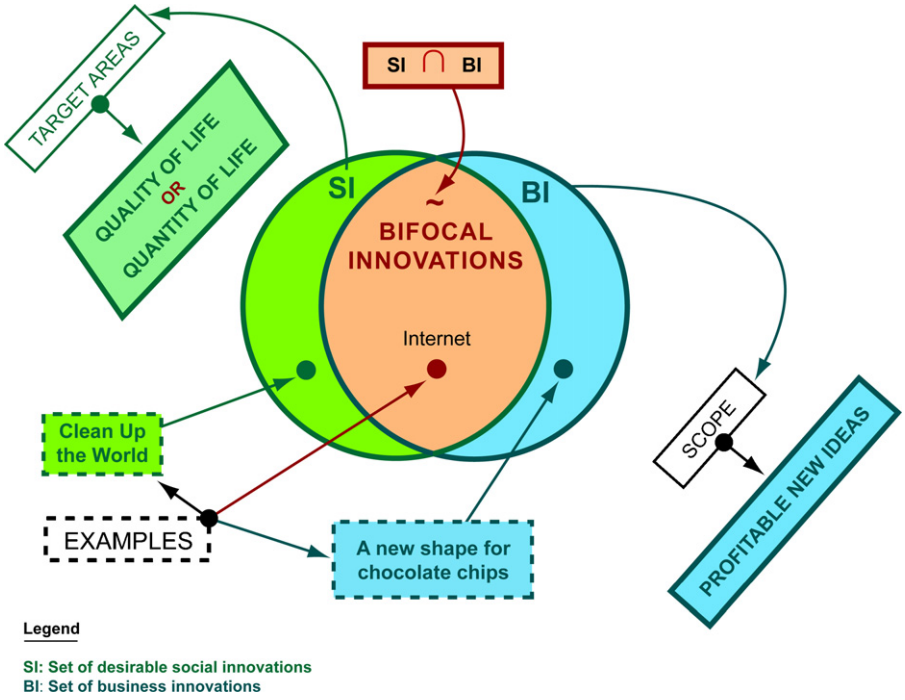

Fig. 1. The relationship between social innovation and business innovation.

inition of the term is of absolutely fundamental importance. In the scientific context 'satisfactory' means 'useful to guide research'[19] and 'comprehensive' means 'of a scope large enough to accommodate a significant number of relevant empirical cases.'

We have proposed a new definition of 'desirable social innovation' based on the creation of new ideas displaying a positive impact on the quality and/or quantity of life. We are not declaring what social innovation "*is*." We simply believe that the suggested definition may be useful to guide research and facilitate interdisciplinary communication.

The formulation of our new definition of social innovation is consistent with three basic rules that should be made explicit. First, our view of definitions is pragmatic, not essentialist. Or, to put it differently, we do not judge definitions as correct or incorrect, but only as being helpful or unhelpful in guiding research and deriving sound policy implications. Second, generality is not an end in itself. A definition may be so general as to be useless to bring relevant factors into sharp focus. For example, suppose that we define 'social innovation' as any innovation that provides a solution to the problems faced by humankind. There is nothing 'wrong' with this definition. However, the obstacle lies in the fact that research on social innovation would include almost everything, such as the answer to the following problem: what is the optimal number of legs for an insect? The third rule is more subtle: the conditions necessary for the development of the characteristics that define some object are not part of the object's definition. For example, an adequate food intake is a necessary condition for a baby to grow into a toddler but not an integral part of the definition of a toddler.

The last rule is particularly relevant to avoid methodological pitfalls. It goes without saying that innovations do not happen in a vacuum. Many contemporary scholars stress that to understand the sources of innovation we need to understand the *milieu* in which creativity takes place. There must be an 'environment' conducive to the creation of new ideas and a 'context' in which a new idea is socially innovative. We exclude these aspects from the definition not because we believe they are of secondary importance. On the contrary, they are important conditions for the development and existence of social innovations. The reason why we do not include any reference to these elements in our definition is a direct application of the third rule, namely the 'environment' and the 'context' constitute necessary conditions for the development and existence of a social innovation, and therefore, they should not be an integral part of the definition of social innovation.

We have emphasized that social innovation and business innovation are different, yet overlapping concepts. A social innovation is not necessarily a business innovation (for example, a new pedagogical method to teach mathematics to toddlers available for free would not be a business innovation) and a business innovation is not necessarily a social innovation (for example, the Rubik's cube does not appear to have any noticeable positive effect on the defining characteristics of a social innovation). However, business innovations have transformed millions of people's lives for the better.[20] This suggests – correctly – that the intersection of the two sets of innovations, namely the set of bifocal innovations, is immense.

The ultimate end of social innovation is to help create better futures. Society as a whole would like to enjoy the benefits emerging from pure social innovations (new ideas improving quality or quantity of life not showing potential profits), but no individual has a sufficient incentive to pursue them. Consequently, the free-market economy will not produce the socially optimal amount of pure social innovations. Government has a role to play in correcting this market failure.

In conclusion, a summary formulation of the content of this paper is presented in Fig. 1. We conceptually separate (desirable) social innovations SI from business innovations BI. The target areas of social innovations are either the quality of life or the quantity of life or both. Business innovation deals with profitable new ideas. The overlapping of these two sets is the set of bifocal innovations

[19] If you cannot satisfactorily define what is that you wish to study, research is likely to be erratic and misguided.

[20] Think of the things we cannot imagine living without in our modern society—from the low fat frozen food to the mobile phone.

(SI ∩ BI). Finally, we claim that to encourage the creation of pure social innovations, that is, innovations located in the set SI–BI, government intervention is necessary.

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