

Article

Social Innovation for a Just Sustainable Development: Integrating the Wellbeing of Future People

Rita Vasconcellos Oliveira 

Department of Industrial Economics and Technology Management, Norwegian University of Science and Technology, 7491 Trondheim, Norway; rita.bouman@ntnu.no

Abstract: Social innovation has gained increased attention as a mechanism for sustainable development. As the Brundtland Commission highlights, the improvement of present conditions should not compromise future generations' needs. So far, (social) sustainable development has mostly focused on the amelioration of contemporary people's wellbeing, relegating its duties towards future generations to second place. Given this, I consider it necessary to (re-)direct social innovation towards the promotion of the wellbeing of future people. I propose the concept of irreplaceable goods, a notion deriving from a strong sustainability perspective, which could then be integrated into social innovation practices related to sustainable development. Focusing on guaranteeing, at least, sufficient fruition of certain goods and resources, I devise this concept as a governance tool for steering development actions towards intergenerational justice, driven by social innovation action. In this article, we firstly delineate the relations between sustainable development and social innovation, while focusing on 'value-driven' social innovation. Afterward, I shortly introduce strong sustainability as support for future generations' wellbeing. Furthermore, I develop the concept of irreplaceable goods as a governance tool in social innovation practices and finalize with a discussion on the application of irreplaceable goods in the assessment of sustainable development strategies.

Keywords: social innovation; sustainable development; irreplaceable goods; intergenerational justice; strong sustainability; planetary boundaries



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1. Introduction

In the last years, social innovation (SI) has become an increasingly employed concept in research, policymaking and the media [1]. This is mainly due to the emergence of a plethora of policy reports, initiatives, platforms and incubators dedicated to the development and application of new social practices. This attests to the growing recognition of the potential of SI in creating social value by both institutions and individuals. As Edwards-Schachter and Wallace [2] write, we are currently living under SI strong influence, and yet, researchers and society at large are still grasping for a (more) concrete notion of what it actually entails.

In general terms, SI can be defined as new and functional ideas that address unmet social needs [3]. Usually, SI refers to the design and implementation of innovative solutions that presuppose conceptual, process, product or organizational change, ultimately aiming at improving the welfare and wellbeing of individuals and communities [4].

More specifically, SI can focus on social processes or outputs and outcomes. When the emphasis is on changes in social interactions and processes, SI usually aims at rebalancing societal disparities concerning power, economic or other factors [5]. Participatory budgeting is representative of a SI process. When SI concerns outcomes, it is mostly related to the introduction of new products or programs that effectively change social routines or resource and authority flows. Microcredit and the national health services can be viewed as outcomes of SI [6].

There is an additional dimension to SI related to systems of beliefs or values which can be altered or newly adopted by societal groups or individuals. One such example is perma-

culture, where sustainability principles and values replaced the traditional ‘productivist regime’ in agricultural production [7].

This article is situated exactly in the valuative dimension of SI. It follows the work on the normative (and political) aspects of the SI [8–12] but does not commit to a single ethical theory (e.g., capability approach and moral pluralism) as explained below.

So far, this scope has received far less recognition than SI associated with processes and outcomes. Most likely, one of the reasons for this is the increased difficulty in evaluating the change of social systems of beliefs and values due to inherent theoretical and empirical challenges.

Throughout history, (social) innovation has helped societies to overcome challenges locally and globally. I reason that once again, SI is crucial to ensuring that we overcome the environmental problems we are facing, at the necessary quick pace.

Since the late 1980s, there have been calls to tackle critical environmental problems, and none have been more emblematic than the United Nations (UN) report ‘Our Common Future’. The Brundtland Commission advised the countries to change their actions towards a sustainable socioeconomic development [13]. The plea was such that it urged the nations to improve the present conditions of their population without compromising the ability of future generations to meet their own needs. This appeal singles out the central role of granting justice to future generations (FG) as one of the moral compasses of sustainable development (SD). The knowledge about SD has greatly evolved since then in all the facets of the concept [14,15]. However, FG wellbeing still plays a central role in the moral reasoning about SD since the pioneering work of the Brundtland report [16]. This influence is visible in the several normative approaches to intergenerational justice developed after. The new(er) perspectives focus mainly on the needs [17,18], flourishing [19,20] and rights of future people [21,22]. The problem then and now is how to accomplish this task [23]. I suggest in this article that SI is one of the necessary approaches to guaranteeing that the moral responsibility for achieving intergenerational justice is not lost to short term SD solutions.

Normatively, the article is positioned in (the renewed) tradition of the Brundtland report and follows a sufficientarian approach to intergenerational distribution of goods and burdens. In this article, the currency of justice is wellbeing, which can be conceived, for example, in terms of capabilities, rights or welfare of the future people [24]. This ‘flexibility’ allows the proposed ethical arguments to be integrated with much of the work already developed under the abovementioned ethical theories.

In general, the article aims to establish the role of SI in promoting the wellbeing of FG as a fundamental part of achieving SD. Alternatively put, I want to address here the following questions: Can SI support FG’s claim to, at least, decent living conditions? Furthermore, if so, how can we ensure that the development we are implementing now guarantees this claim?

If we accept that FG interests are at the core of SD, it becomes necessary to make sure that the present socioeconomic development does not jeopardize their access to resources and goods necessary; therefore, they have, at least, a decent living standard. In this sense, I argue similarly to Ott and Howarth [25,26] and reason that it is essential to consolidate strong sustainability in SD and that SI can have a relevant role in this undertaking. For that, I propose a conceptual tool—irreplaceable goods [27]—to uphold the systematic inclusion of FG wellbeing in SD governance processes. Among other functions, the characteristics of this concept serve as an evaluative framework (i.e., tool) for accessing SI strategies and actions related to SD, concerning their potential effects on the wellbeing of FG i.e., when analyzing SD plans, governing bodies and individuals can judge their merit by their impact on irreplaceable goods.

It is not a new claim that SI can facilitate SD and be a valid strategy to promote the transition of communities towards sustainable lifestyles. However, it still falls short on properly ensuring that such transition does not jeopardize FG’s wellbeing. In this sense, the novelty of this article is to address this issue by proposing a conceptual (and evaluative) tool

for the assessment of SD strategies, designed specifically to safeguard the wellbeing of FG. I believe the integration to be necessary for this notion/tool in SI discourses and practices as a steering mechanism of developmental strategies so they ensure, at least, sufficient levels of wellbeing of generations to come. By doing so, I hope to expand and increase the relevance of the topic of intergenerational justice to FG in the overall SI landscape. The article is organized as follows: first, I delineate the relations between SD and SI. Further on, I elaborate on the role of moral values in SI. After that, I shortly introduce the notion of strong sustainability as support for FG sufficient wellbeing. Finally, I develop the concept of irreplaceable goods as a governance tool aimed at the integration of FG wellbeing in SI practices. The article includes at the end, a discussion on how to generally apply the notion of the irreplaceable good in the assessment of SD strategies.

2. Social Innovation as an Instrument for a Fair Sustainable Development

For SI to facilitate SD, it would have to translate in an idea (e.g., 'new' value), process, action or outcome that promotes and/or facilitates the transitional developmental path towards, at least one of the SD dimensions (environmental, social or economic). Citizen reporting platforms (environment) or microfinancing (economics) illustrate the significant and lasting impact of SI in promoting SD, in these cases, in urban settings [28].

Several national and international institutions recognize the worth of SI for SD. For instance, the European Union (EU) established several initiatives to facilitate the inducement, uptake and scaling-up of SI solutions to reduce inequalities and poverty achieving positive results [29,30].

The UN also acknowledges that SI approaches are needed as mainstream tools for delivering SD. UN sustainable development goals made clear the vital role of SI in the strategies to accomplish their targets [31]. For this international institution, the role of SI is mainly associated with bottom-up phenomena related to designing and delivering public services to the worst-off, usually in developed countries. Still, this acknowledgement is missing out on the relevant ideas, processes and actions taking place, which address global matters such as climate change. Despite the growing number of initiatives [32–34] and institutional acknowledgement [35], it is widely recognized that SI for SD, as it is today, is still not enough. This is the case for both general [36] and concrete sustainability issues such as how to quickly reduce carbon emissions or how to create cities climate-resilient [37]. I sustain that a similar situation happens with guarantying the wellbeing of FG as an integrative part of SD.

If the starting point for any type of innovation is an idea or a societal need that is not being (adequately) met, I argue that this applies to the current SD, as it does not properly address the interests of people to be [38] leaving a door open for SI.

In the SD field, the consensus is the need to accelerate the process of socioeconomic transformation to meet sustainability targets [39,40]. In that sense, over the last few years, we have witnessed several examples of SI aiming at systems change [41]. Lately, there has been a resurgence of social movements and political actors, groups or networks targeting changes in power relations and/or social dynamics to grant justice to underprivileged individuals or groups. One of the most striking recent examples is the 'School Strike for Climate' movement, headed by, among others, Greta Thunberg.

This SI movement, which I classify as disruptive [42], is particularly significant in the overall context of SD because despite being a bottom-up phenomenon it has had an unexpectedly global impact. These movements tend to be relatively loose coalitions of individuals united by a particular issue (e.g., SD, climate change), making use of technology such as social media, that became increasingly organized participation wise and have gained (transnational) sociopolitical relevance. These types of disruptive SI can be understood, at least partly, as responses to societal development patterns that have negatively impacted human beings, more decisively particular groups (e.g., young people), creating additional social and environmental injustice. I regard them to also be reactions to

the understanding of individuals as essentially being passive consuming actors instead of active participants of both SD governance and collective decision-making processes.

The referred social movements equally show that considerations about future wellbeing are slowly but steadily being viewed as a relevant part of SI and by extent SD. As Natasha Abhayawickrama, from School Strike 4 Climate (Australia), mentions for energy, 'right now I need clean, renewable energy to be funded, for us to have a safe future' [43].

Since SI has open boundaries, it can (occur and) influence all sectors, public, non-profit and private, and I reason is exactly what is happening now with the initiatives previously mentioned. Usually, in SD, most creative and disruptive actions take place at the boundaries between sectors, as exemplified in projects such as DESIS [32] and NESTA in the United Kingdom [5,44], and I believe the same circumstances are occurring with the interest of safeguarding future wellbeing as social movements and different sectors are coming together to push this idea forward.

Nevertheless, I reason that adequate protection of the wellbeing of FG (not just the future wellbeing of contemporary people), by the mentioned social moments, and SI, in general, has to go beyond the current state of affairs to de facto influence the economic and social governance of nations, and industrial sectors and organizations.

This undertaking requires 'changes in the cultural, normative or regulative structures of society which enhance its collective power resources and improve its economic and social performance' [45] (p. 59). With this article, I intend to support this change by contributing to normative advancement of SD via a 'renewed' idea that originates from dissatisfaction with the current socioeconomic development and can lead to crucial changes in the way the system works, many times, through these grassroots movements. This 'new idea' is exactly the concern for FG wellbeing. Despite the existence of a general will to protect future wellbeing among the mentioned SD social movements (and other organizations), it is still missing a wider recognition of the FG as entities with concrete needs in the future. I reason that for that to happen, it is necessary the acknowledgement and integration of moral obligations towards (young and) future people in SD design and implementation, by means of SI.

3. Reclaiming Future People's Wellbeing in the Social Innovation Landscape

As mentioned before, the moral obligation of ensuring FG wellbeing is tightly woven into the concept of SD. Accordingly, SI should somehow steer SD towards the accomplishment of this obligation. I think that one possibility to do so is for SI, in this context, to integrate into its discourse and/or practices this very notion. Notwithstanding, it does not seem to be a common praxis [46].

In general terms, the relation between innovation and ethics has yet to be extensively analyzed, making it difficult to understand how SI can influence systems of beliefs or value frameworks. Despite this panorama, authors such as Fontrodona [47] recognize this connection especially by acknowledging how ethics inspires and encourages innovation. With ethics being, in simple terms, a reflection on how to act in a good and/or right way, it seems that this relation should be the object of far more attentiveness by innovation researchers. This is particularly the case because designing and implementing better or the right solutions for societal problems are commonly desired processes and outcomes of SI.

Typically, the ethical analysis of innovation is associated with technological innovation. Under such circumstances, the reflection tends to be about the moral acceptability of what is technically possible and desirable. It also includes mostly the normative scrutiny of the potential effects of innovation and how ethics can function as a kind of compass driving innovation for doing good [47]. However, the understanding of the role of ethics in innovation is slowly shifting, and the focus is now on how it could be a motivation for innovation. In this sense, the reflection on acting well or being good (ethics) transforms the conditions in which innovation is created and implemented.

In this article, I go further than the mentioned approaches and assert that the role of ethics in SI can and should be wider: apart from being a motivation for innovation,

(‘new’) moral values and obligations can be an integrative component of SI, prompting a shift in the moral or belief structure of society. Put differently, SI can be a vehicle for societal transformation that embodies the result of ethical reflection around a specific matter (e.g., distribution of goods), turning the ‘new values’ (e.g., sufficiency) into transformative societal tools.

As Ziegler [48] mentions, SI belongs to the family of progressive approaches to social change that regard that there is a valid place for intentional efforts and hope in such changes. Behind this consideration, there is an inherent normative assumption related to a change for the better or the right way towards a goal. The same author reminds us that SI should have at its core the values of justice and democracy while providing practical ideas to achieve them. However, the author correctly reminds us, the role of ethics in SI is undeveloped especially in closing the gap between the possibilities of (a just) participation and the real involvement of disadvantaged groups [49]. Occasionally, SI might even perpetuate and accentuate inequality [50], confirming that change and transformation are not inherently good (or bad). Still, and independently of specific views about what the role of ethics is in innovation at large and in social matters, in particular, it is undeniable that SI should promote a just socioeconomic development that prevents and mitigates (present and future) inequalities. This entails that SI ought to integrate the adequate conceptual tools to orient and drive change towards fair(er) societies, which, I argue is still not always the situation. I reason that one such example is the wellbeing of FG, which is yet to be consistently taken into account and protected by SD. Being this correct, there is an opportunity for SI to embody this value, in a case of ‘value-driven’ SI, and push for societal change.

A fair (and inclusive) development is surely in line with the essence of SD. In this article, I translate a just and fair development as one that promotes a democratic society where all citizens are free, hold basic rights and cooperate within an economic system that distributes the goods and burdens in a morally acceptable way. This definition is close to the Rawlsian perspective [51,52]. Nevertheless, on the contrary to Rawls, I do not directly advocate here for egalitarian (intra- or inter-generational) distributive perspective, as I will explore further ahead.

Presently, SD is mostly understood as a type of human development that ensures the balanced pursuit of (at least) three aims: an ecological dynamic equilibrium, social equity, and economic welfare, i.e., SD refers to the human strategies or the type of societal development that ensures sustainability [53]. In this sense, the dominant views on the social justice aspects of SD consider predominantly the wellbeing of contemporary people. Interestingly, this was not always like this. As referred before, when United Nations (UN) elaborated the Brundtland report, it centered SD’s *raison-d’être* on the interests of future people. In their view, the ultimate (moral) reason for SD is to ensure that generations to come could enjoy a certain level (i.e., sufficient level) of wellbeing [13]. The evolution of SD has somehow established the (ethical) commitment to the interests of future individuals to be of secondary importance (SDG’s) [54]. However, I reason that such attitude undermines the essence of sustainability as a state of equilibrium where nature and humans thrive throughout time.

Despite the trend of lessening FG’s wellbeing relevance in SD, its weight in the fields of environmental and climate justice is fairly high. The concern about FG has proven itself to be a significant driving force for reflection on current developmental practices and has served as a map for improved environmental and climate strategies [55–57].

As argued before, SI is one of the weapons to achieve (fair) SD. I further assert that concern for FG wellbeing is a case of (disruptive and ‘value-driven’) SI that can push forward an intergenerational fairer societal development. In spite of the small relevance of intergenerational fairness in the SI panorama, there are some examples of its potential relevance for achieving fair sustainability. Severo et al. [58] show how concerns towards FG are a driver for increased environmental awareness and consequently, sustainable consumption through different contemporary generations. Another example of the high potential of FG concerns as means of achieving social improvement is related to the decrease

in health inequality [59]. Both studies demonstrate that people are sensitive enough to FG wellbeing to change their patterns of behavior and adopt more sustainable ways. Nevertheless, SI practitioners seem not to have been able to fully harness the power of this notion for inducing a transformative human development.

In an effort to avert the small significance of FG wellbeing in SI, I conceptualize this notion, mainly at a macrolevel [60], and I propose a conceptual tool to be integrated into governance institutions associated with SD. The chosen level of application of this tool does not exclude its likely application at meso- and micro-levels as is discussed in the next sections.

4. Strong Sustainability: For an Inclusive Future

When examining social movements, the interest in including FG wellbeing in the current development strategies has not been as relevant in comparison to guaranteeing social and environmental justice for current people. However, the idealization and concretization of a future with less inequity is fundamental to almost all of these phenomena [61]. Many young participants of social movements for sustainability take into account the concern over future wellbeing [62].

Despite the increasing interest in this topic also by governance institutions and engaged agents, there are significant theoretical and practical hurdles to ensure that SD secures generations to be, at least, decent living conditions.

What I propose is the adoption of the strong sustainability concept in SI discourse and practices, as part of the necessary operationalization for the inclusion of FG wellbeing in the current SD strategies.

Strong sustainability states that due to the characteristics of the sustainability capitals it is not possible to replace some goods with others of a different kind [63], i.e., natural and manufactured capitals are not all intersubstitutable. If we accept this stance, we conclude that (present and future) human wellbeing cannot be reached by a complete substitution of particular capitals by others of different nature [64].

Regarding the natural capital, I argue, in line with Barbier and Burgess [65], that despite future technological evolution, it will not be possible to go beyond certain limits of the biosphere (planetary boundaries) [65]. Specific natural capital stocks and flows are not interchangeable with manufactured capital. Perhaps, it is feasible, with substantial financial investment and advanced technologies, to shortcut natural plant reproduction steps. However, (insect) pollination cannot be entirely replaced by technological strategies [66]. Scientific literature provides extensive scientific evidence advocating for strong sustainability concerning other capitals [67–69] still, its influence in innovation for SD is minor in comparison to weak sustainability [70].

There are also justice reasons for pushing for strong sustainability. As Ott [25] points out, people who want to live by the 'green virtues' should have the possibility (in the present and the future) to do so. Having a morally (and environmentally) virtuous life cannot be accomplished if natural capital is jeopardized. As an illustration, let us examine the possibility of replacing (totally or even extensively) landscapes or flora with economic or other environmental goods. It is reasonable to argue that it would not be a societal valid option to leave to people in the future alternatives, especially if I acknowledge the value of these capitals have for us today [71] and how their substitution could lead to (environmental and social) increased inequality.

Notwithstanding advocating for strong sustainability, I concede that to guarantee FG wellbeing, it is necessary to have some degree of substitution of goods. I also do not exclude the role of weak sustainability in innovation and innovation systems [70]. Still, I defend that the total interchangeability of capitals puts at risk FG wellbeing and that strong sustainability should take part in (social) innovation discourses and practices for these reasons. In simple terms, I deem SI as a means of reinforcing a fairer SD can (and should) integrate the notion that the full replacement of capitals is not adequate to concede justice to FG.

Our stance is independent of the concretization of what goods should be left for future people to ascertain that they enjoy a fairly good life. I reason that whatever type of capitals are being passed on, the transmission should occur under the paradigm of strong sustainability to guarantee the continuity of, at least, a certain degree (i.e., decent level) of future wellbeing.

I regard that the integration of strong sustainability in SD strategizing and implementation strengthens the 'original' understanding of SD (focus on decent conditions for FG). Moreover, it would stir SD away from the preponderance of the economic reasoning, to the social and environmental aspects of sustainability. Furthermore, I consider that SI is the right vehicle to favor the full acknowledgement of planetary boundaries and ensure that strong sustainability integrates SD in concrete and socially transformative ways.

5. Integrating Future Generations Wellbeing in SI Practices

The increase in the world's population, the greater production and consumption of products and energy have been causing impacts on the environment, which compromise a sustainable future. This situation must be addressed promptly and efficiently, and SI can back a transformation towards sustainability.

Since some of the planetary boundaries are already exceeded, it seems reasonable to commit SD to ensure, at least, decent living conditions for people in the future. What I think as decent translates into sufficient wellbeing, in direct connection to the understanding of the needs of FG by the Brundtland report. I argue they comprise (sufficientarian) levels above basic needs [72] and can be collectively deliberated using, for instance, the SDGs targets as Vasconcellos Oliveira [54] proposes.

As referred before, enforcing the strong sustainability paradigm in SI can support this task. However, it is necessary to make the notion functional so it can be implemented in SI discourses and practices aimed at SD. On this account, I propose a concept, deriving from strong sustainability, that encapsulates the consideration of FG interests as it upholds their future ability to reach sufficient wellbeing.

Human wellbeing is directly influenced by the quality and quantity of natural and human-made capitals. Still, some of them are more crucial than others. The criticality of some of these goods—irreplaceable goods—is such that I affirm they merit particular attention when considering FG interests [73]. They are fundamental to, at least, sufficient life conditions, and they are being significantly affected (quality and quantity) by present eco-socio-economic development.

Irreplaceable goods are crucial to human wellbeing independently of their generation and cannot be (fully) recovered to satisfactory levels if they fall below certain thresholds (or if planetary boundaries are overshoot) [27]. What makes them vital for FG are some of the characteristics they share with the 'critical natural capital' in the sense of being goods that perform key, not substitutional roles and are needed for human well-being [64,74,75]. This means that SD strategies should ensure the maintenance (at least a sufficient level) or even improve the current levels and quality of these goods (below sufficient level) to fulfil its moral obligation towards FG. Some examples of irreplaceable goods are freshwater or biodiversity.

The question is now how to ensure that SD strategies in particular and human development in general incorporate and apply this concept. Our answer resides in the transformative and impactful power that SI practices can notably have at the governance level (macrolevel).

In the past years, there have been governance experiments associated with the integration of FG in policymaking. These experiments hurdled the future people representation challenge by creating (contemporary) representatives assigned to ensure that FG voice is heard now.

With the creation of the role of ombudspersons [76,77] or the establishment of 'guardians for FG', in Wales and Hungary [78], the interests of future people can be systematically contemplated in the development and assessment of (SD) policies and strategies. Such

initiatives are proof that SI can have a great impact in this matter, as well as being examples of innovation themselves.

I argue that the (circumscribed) success of such initiatives can be further amplified if the FG representatives have available a conceptual toolkit that acknowledges the specificities of what FG wellbeing might entail. Having this in mind, I defend the inclusion of irreplaceable goods in their vocabulary, so as to steer the design and implementation of developmental actions towards the insurance of, at least, sufficient conditions for future people. The adoption of irreplaceable goods as a governance tool would have repercussions in the set of criteria used to elaborate policies, strategies and even technologies. Among FG representatives, they and the institutions with these responsibilities would have to evaluate actions and strategies over their impact on these goods, to not neglect their duties towards the assurance of wellbeing for future people. Such assessment would expand the time frame of examination, mitigating the potential negative effects of short-termism.

In circumstances where such goods would be affected, they have to examine if there would be a risk to their level of (future) sufficiency. If there would be the possibility of a decrease in the quality and/or quantity of irreplaceable goods below this threshold, the FG representatives would have to advocate for not spending these goods due to their low or impossible substitutability.

On the overall, FG representatives and related institutions would advocate or create initiatives and/or policies dedicated to saving and/or ameliorating the levels and quality of irreplaceable goods. When those capitals whose quality and/or quantity are presently above a sufficient threshold, it would still be morally valid for them to promote savings out of precaution, i.e., the precautionary principle [79] would be a valid reason for avoiding over expenditure.

There are two (moral) justifications for applying the precautionary principle to endorse the nonuse of irreplaceable goods that might be at (immediate or future perceived) risk: threat and uncertainty. The fact that sufficient levels of (future) human wellbeing are at risk if the quantity and/or quality of goods are jeopardized justifies the threat dimension of the precautionary principle. Additionally, when future eco-socio-economic scenarios are involved, there is always incertitude associated with projections and estimations, which might serve as a justification for supporting actions that promote savings of irreplaceable goods.

Another important implication of the inclusion of irreplaceable goods in SD governance is the necessary consideration of possible investments for the improvement of the present levels and quality of such goods. There might not be a (moral) obligation towards the implementation of such strategies, but at least, there is a (moral) desirability towards actions that could improve the actual levels and quality of irreplaceable goods.

The above suggestions and explanations refer to the macrolevel level of application of the notion of irreplaceable goods. However, I do not exclude the possibility of existing implications at lower levels. As FG representatives are part of (governance) structures that include other actors, there are common occasions and spaces where these actors can be influenced by the representatives and by their concrete application of the concept, i.e., the shared spaces of interaction may facilitate a change at mesolevel without an actual targeted strategy for this level. In any case, I believe it would be easier, as a starting point, to have FG representatives and associated institutions applying this notion to a concrete assessment of SD strategies and/or to the design.

The incorporation of irreplaceable goods in their discourses and processes can have a considerable impact on other SI practices. As mentioned in the introduction, social movements such as 'Fridays for Future' (or 'School Strike for Climate') would also benefit from having at their disposal a notion of essential goods that integrates sufficient and long-term perspectives as means of strengthening FG interests, specifically because FG interests might conflict with standard approaches to SD [80].

It might be argued that for the assessment of actions in relation to FG wellbeing or even for the application in the SD social movements, it is necessary to have a list of what

are or could be exactly irreplaceable goods. Since this article is not specifically dedicated to a full explanation of irreplaceable goods [73], I do not enter into theoretical characterization details. However, I offer here a practical approach to discern if a good should be integrated into this category. If a particular good (or capital) is absolutely necessary for sufficient levels of wellbeing and its levels and quality are currently under threat then it is deemed an irreplaceable good, i.e., it must comply with both premises. The fact that this proposed classification is open, offers the additional benefit of allowing stakeholder involvement in the operational classification of particular goods. Additionally, this definition is adaptable to evolving developmental circumstances (e.g., regional and temporal factors) and future eco-socio-economic conditions.

In sum, the concept of irreplaceable goods can materialize and uphold FG wellbeing because it engages strong sustainability in SD practices. However, the concern for future people still needs a voice in (concrete) strategizing, and SI has an essential role to play here. If environmental-oriented social movements, organizations and FG representatives include in their discourses and practices the notion of irreplaceable goods, they will be attempting concretely to ensure that people in the future will have, at least, sufficient living conditions.

6. Conclusions

The role of SI in the swift and successful implementation of SD is being more than ever recognized by individuals and organizations. Despite the relevant place of innovation in many SD strategies, it still lacks ensuring that the interests and wellbeing of FG are systematically taken into account. The fact that SI can have a moral dimension associated with a potential change in the societal framework of beliefs and values predisposes it to be an ideal instrument for ensuring that future people enjoy, at least, sufficient living conditions. To ascertain that SI will be an instrument towards the concretization of (one of the moral) essences of SD, it is essential to make the notion of FG wellbeing operational at the discourse and practice levels. To accomplish this undertaking, I affirm it is indispensable to routinely integrate the strong sustainability paradigm in SD, which I reason can be achieved when (innovative) SI practices are put in place. To do so, I propose the integration in SI discourses and practices associated with sustainability the notion of irreplaceable goods.

By including this concept in daily practices and/or as justification for actions and strategies, organizations, social movements (macrolevel) and individuals (meso- and micro-level) can legitimately endorse or create initiatives that ensure the levels and/or quality of irreplaceable goods do not fall below (present and future) sufficiency.

Moreover, the systematic integration of irreplaceable goods in the SI discourses and practices aimed at SD can have an actual impact on the restructuring of power relations and social dynamics. It would weaken the short-termism still considerably afflicting our current eco-socio-economic development, and by doing so, not only, would it tend to FG interests and wellbeing as well, it would deliver a fairer and more efficient SD.

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References

1. Krlev, G.; Lund, A.B. Social Innovation Ignored: Framing Nonprofit Activities in European News Media. *Volunt. Int. J. Volunt. Nonprofit Organ.* **2020**, *31*, 949–965. [CrossRef]
2. Edwards-Schachter, M.; Wallace, M.L. ‘Shaken, but not stirred’: Sixty years of defining social innovation. *Technol. Forecast. Soc. Change* **2017**, *119*, 64–79. [CrossRef]
3. Mulgan, G.; Tucker, S.; Ali, R.; Sanders, B. *Social Innovation: What It Is, Why It Matters, How It Can Be Accelerated*; University of Oxford, Young Foundation: London, UK, 2007.
4. Social Innovation. Available online: <https://www.oecd.org/regional/leed/social-innovation.htm> (accessed on 12 June 2021).

5. Nicholls, A.; Simon, J.; Gabriel, M. (Eds.) Introduction: Dimensions of social innovation. In *New Frontiers in Social Innovation Research*; Springer: Hampshire, UK, 2015; pp. 1–26.
6. Brackertz, N. Social innovation. *Aust. Pol. Online*. topic guide. 5 December 2011, pp. 1–4. Available online: <https://apo.org.au/node/27387> (accessed on 29 July 2021).
7. Maye, D. Examining Innovation for Sustainability from the Bottom Up: An Analysis of the Permaculture Community in England. *Sociol. Rural* **2016**, *58*, 331–350. [[CrossRef](#)]
8. Akama, Y.; Yee, J. Special Issue: Embracing Plurality in Designing Social Innovation Practices. *Des. Cult.* **2018**, *11*, 1–11. [[CrossRef](#)]
9. Ziegler, R. Citizen innovation as niche restoration—a type of social innovation and its relevance for political participation and sustainability. *Soc. Enterp. J.* **2017**, *8*, 338–353. [[CrossRef](#)]
10. Wittmayer, J.; Backhaus, J.; Avelino, F.; Pel, B.; Strasser, T.; Kunze, I.; Zuijderwijk, L. Narratives of change: How social innovation initiatives construct societal transformation. *Futures* **2019**, *112*, 102433. [[CrossRef](#)]
11. Nicholls, A.; Ziegler, R. The extended social grid model. In *Creating Economic Space for Social Innovation*; Oxford University Press: Oxford, UK, 2019.
12. Brundtland, G.H. *Report of the World Commission on Environment and Development: Our Common Future*; UN General Assembly Document A/42/427; Oxford University Press: Oxford, UK, 1987; pp. 1–374.
13. Shi, L.; Han, L.; Yang, F.; Gao, L. The Evolution of Sustainable Development Theory: Types, Goals, and Research Prospects. *Sustainability* **2019**, *11*, 7158. [[CrossRef](#)]
14. Springett, D.; Redclift, M. (Eds.) Sustainable development: History and evolution of the concept. In *Routledge International Handbook of Sustainable Development*; Routledge: London, UK; New York, NY, USA, 2015; pp. 25–60.
15. Hajian, M.; Kashani, S.J. Evolution of the concept of sustainability. From Brundtland Report to sustainable development goals. In *Sustainable Resource Management*; Hussain, C.M., Velasco-Muñoz, J., Eds.; Elsevier: Oxford, UK; Cambridge, UK, 2021; pp. 1–24.
16. Holden, E.; Linnerud, K.; Banister, D.; Schwanitz, V.J.; Wierling, A. *The Imperatives of Sustainable Development: Needs, Justice, Limits*; Routledge: London, UK; New York, NY, USA, 2017.
17. Holden, E.; Linnerud, K.; Banister, D. Sustainable development: Our Common Future revisited. *Glob. Environ. Chang.* **2014**, *26*, 130–139. [[CrossRef](#)]
18. Kreitzer, M.J. Human Wellbeing and Flourishing: If Not Now, When? *Glob. Adv. Health Med.* **2016**, *5*, 3. [[CrossRef](#)] [[PubMed](#)]
19. Sen, A. The Ends and Means of Sustainability. *J. Hum. Dev. Capab.* **2013**, *14*, 6–20. [[CrossRef](#)]
20. Choondassery, Y. Rights-based Approach: The Hub of Sustainable Development. *Discourse Commun. Sustain. Educ.* **2017**, *8*, 17–23. [[CrossRef](#)]
21. Redclift, M. Sustainable Development: Needs, Values, Rights. *Environ. Values* **1993**, *2*, 3–20. [[CrossRef](#)]
22. Düwell, M. Human dignity and future generations. In *Cambridge Handbook on Human Dignity*; Düwell, M., Braarvig, J., Brownsword, R., Mieth, D., Eds.; Cambridge University Press: Cambridge, UK, 2014; pp. 551–558.
23. Spangenberg, J.H. Sustainable development: From catchwords to benchmarks and operational concepts. In *Sustainable Solutions*; Chater, M., Tischner, U., Eds.; Routledge: London, UK; New York, NY, USA, 2017; pp. 24–47.
24. Gosseries, A.; Fourie, C.; Rid, A. *Intergenerational Justice, Sufficiency, and Health*; Oxford University Press (OUP): Oxford, UK, 2016; pp. 121–143.
25. Ott, K. The case for strong sustainability. In *Greifswald's Environmental Ethics*; Ott, K., Thapa, P.P., Eds.; Steinbecker Verlag Ulrich Rose: Greifswald, Germany, 2003; pp. 59–64.
26. Howarth, R.B. Future Generations. In *Routledge Handbook of Ecological Economics*; Spash, C.L., Ed.; Routledge: London, UK; New York, NY, USA, 2017; pp. 256–264.
27. Vasconcellos Oliveira, R. *An Ethical Approach to Sustainability Research: Contributions to Methods and Strategies*; Norwegian University of Science and Technology: Trondheim, Norway, 2021.
28. Angelidou, M.; Psaltoglou, A. An empirical investigation of social innovation initiatives for sustainable urban development. *Sustain. Cities Soc.* **2017**, *33*, 113–125. [[CrossRef](#)]
29. Ravazzoli, E.; Valero, D.E. Social Innovation: An Instrument to Achieve the Sustainable Development of Communities. In *Sustainable Cities and Communities. Encyclopedia of the UN Sustainable Development Goals*; Leal Filho, W., Azul, A., Brandli, L., Özuyar, P., Wall, T., Eds.; Springer: Cham, Switzerland, 2020; pp. 1–10.
30. Millard, J.; Weerakkody, V.; Missi, F.; Kapoor, K.; Fernando, G. Social innovation for poverty reduction and sustainable development: Some governance and policy perspectives. In *Proceedings of the 9th International Conference on Theory and Practice of Electronic Governance*, Montevideo, Uruguay, 1–3 March 2016; pp. 153–162.
31. Eichler, G.M.; Schwarz, E.J. What Sustainable Development Goals Do Social Innovations Address? A Systematic Review and Content Analysis of Social Innovation Literature. *Sustainability* **2019**, *11*, 522. [[CrossRef](#)]
32. Manzini, E.; Meroni, A. Catalysing social resources for sustainable changes: Social innovation and community-centred design. In *Product-Service System Design for Sustainability*; Vezzoli, C., Kohtala, C., Xin, L., Fusakul, M., Sateesh, D., Diehl, J.C., Eds.; Routledge: London, UK; New York, NY, USA, 2017; pp. 362–379.
33. Vasin, S.M.; Gamidullaeva, L.A.; Rostovskaya, T.K. *The challenge of Social Innovation: Approaches and Key Mechanisms of Development*; University of Piraeus: Piraeus, Greece, 2017.
34. Rogelja, T.; Ludvig, A.; Weiss, G.; Secco, L. Implications of policy framework conditions for the development of forestry-based social innovation initiatives in Slovenia. *For Policy Econ.* **2018**, *95*, 147–155. [[CrossRef](#)]

35. Matschoss, K.; Repo, P. Governance experiments in climate action: Empirical findings from the 28 European Union countries. *Environ. Polit.* **2018**, *27*, 598–620. [CrossRef]
36. Diepenmaat, H.; Kemp, R.; Velter, M. Why Sustainable Development Requires Societal Innovation and Cannot Be Achieved without This. *Sustainability* **2020**, *12*, 1270. [CrossRef]
37. Schartinger, D.; Wepner, B.; Andersson, T.; Abbas, Q.; Asenova, D.; Damianova, Z.; Dimova, A.; Ariton, V.; Hannum, C.; Eker, S. *Social Innovation in Environment and Climate Change: Summary Report*; SI-Driver EU Project Deliverable, Technische Universität Dortmund: Germany, 2017; Available online: https://si-drive.archiv.zsi.at/wp-content/uploads/2018/03/SI-DRIVE-D6_4-Final-Policy-Field-Report-Environment.pdf (accessed on 30 July 2021).
38. Wackernagel, M.; Hanscom, L.; Lin, D. Making the Sustainable Development Goals Consistent with Sustainability. *Front. Energy Res.* **2017**, *5*, 18. [CrossRef]
39. Elmqvist, T.; Andersson, E.; Frantzeskaki, N.; McPhearson, T.; Olsson, P.; Gaffney, O.; Takeuchi, K.; Folke, C. Sustainability and resilience for transformation in the urban century. *Nat. Sustain.* **2019**, *2*, 267–273. [CrossRef]
40. Butterfield, D. Impacts of water and export market restrictions on Palestinian agriculture. Toronto: McMaster University and Econometric Research Limited, Applied Research Institute of Jerusalem (ARIJ). Available online: <http://www.socserv.mcmaster.ca/kubursi/ebooks/water.htm> (accessed on 29 July 2021).
41. Gliedt, T.; Hoicka, C.; Jackson, N. Innovation intermediaries accelerating environmental sustainability transitions. *J. Clean. Prod.* **2018**, *174*, 1247–1261. [CrossRef]
42. Nicholls, A.; Murdock, A. The Nature of Social Innovation. In *Social Innovation*; Springer Science and Business Media LLC: Berlin/Heidelberg, Germany, 2012; pp. 1–30.
43. Rachwani, M. School Strike for Climate: Thousands Take to Streets around Australia. *Guardian* 21 May 2021. Available online: <https://www.theguardian.com/environment/2021/may/21/school-strike-for-climate-thousands-take-to-streets-around-australia> (accessed on 13 June 2021).
44. Murray, R.; Caulier-Grice, J.; Mulgan, G. *The Open Book of Social Innovation*; Nesta London: London, UK, 2010; Volume 24.
45. Hämläinen, T.J.; Risto, H. *Social Innovations, Institutional Change and Economic Performance: Making Sense of Structural Adjustment Processes in Industrial Sectors, Regions and Societies*; Edward Elgar Pub.: Cheltenham, UK, 2007.
46. Balogh, Á.; Bogdany, E.; Kiglics, K.; Németh, N. Social Innovation Versus Generations-New Forms of Cooperation between Generations on the Field of Social Innovation. *Management* **2018**, *16*, 18.
47. Fontrodona, J. The Relation Between Ethics and Innovation. In *Social Innovation: Solutions for a Sustainable Future*; Osburg, T., Schmidpeter, R., Eds.; Springer: Berlin/Heidelberg, Germany, 2013; pp. 23–33.
48. Ziegler, R. Social innovation and the capability approach. In *Atlas of Social Innovation: New Practices for a Better Future*; TU Dortmund University: Dortmund, Germany, 2018; pp. 37–40.
49. Ziegler, R. Social innovation as a collaborative concept. *Innov. Eur. J. Soc. Sci. Res.* **2017**, *30*, 388–405. [CrossRef]
50. Reynolds, K. Disparity despite diversity: Social injustice in New York City’s urban agriculture system. *Antipode* **2015**, *47*, 240–259. [CrossRef]
51. Rawls, J. *A Theory of Justice*; Belknap Press of Harvard University Press: Cambridge, UK, 1971; p. 607.
52. Metz, T.; Rawls, J.; Kelly, E. Justice as Fairness: A Restatement. *Philos. Rev.* **2002**, *111*, 618. [CrossRef]
53. Castro, C.J. Sustainable development mainstream and critical perspectives. *Organ Environ.* **2004**, *17*, 195–225. [CrossRef]
54. Oliveira, R.V. Back to the Future: The Potential of Intergenerational Justice for the Achievement of the Sustainable Development Goals. *Sustainability* **2018**, *10*, 427. [CrossRef]
55. Abate, R.S. *Climate Change and the Voiceless: Protecting Future Generations, Wildlife, and Natural Resources*; Cambridge University Press: Cambridge, UK, 2019.
56. Albers, J.H. Human Rights and Climate Change: Protecting the Right to Life of Individuals of Present and Future Generations. *Secur. Hum. Rights* **2018**, *28*, 113–144. [CrossRef]
57. Lewis, B. The Rights of Future Generations within the Post-Paris Climate Regime. *Transnatl. Environ. Law* **2017**, *7*, 69–87. [CrossRef]
58. Severo, E.A.; de Guimarães, J.C.F.; Dorion, E.C.H. Cleaner production, social responsibility and eco-innovation: Generations’ perception for a sustainable future. *J. Clean. Prod.* **2018**, *186*, 91–103. [CrossRef]
59. Walters, K.L.; Spencer, M.S.; Smukler, M.; Allen, H.L.; Andrews, C.; Browne, T.; Maramaldi, P.; Wheeler, D.P.; Zebrack, B.; Uehara, E. Eradicating Health Inequalities for Future Generations. 2016. Available online: <http://aaswsw.org> (accessed on 9 June 2021).
60. Van Wijk, J.; Zietsma, C.; Dorado-Banaclache, S.; de Bakker, F.; Martí, I. Social Innovation: Integrating Micro, Meso, and Macro Level Insights from Institutional Theory. *Bus. Soc.* **2019**, *58*, 887–918. [CrossRef]
61. Della Porta, D.; Portos, M. Social movements in times of inequalities: Struggling against austerity in Europe. *Struct. Chang. Econ. Dyn.* **2020**, *53*, 116–126. [CrossRef]
62. Taft, J.; Gordon, H. Intergenerational relationships in youth activist networks. In *Families, Intergenerationality, and Peer Group Relations*; Punch, S., Vanderbeck, R., Skelton, T., Eds.; Springer: Singapore, 2015.
63. Noël, J.-F.; O’Connor, M. Strong Sustainability and Critical Natural Capital. In *Valuation for Sustainable Development*; Faucheux, S., O’Connor, M., Eds.; Edward Elgar Publishing: Cheltenham, UK, 1998; pp. 75–97.

64. Ekins, P. Strong sustainability and critical natural capital. In *Handbook of Sustainable Development*, 2nd ed.; Atkinson, G., Dietz, S., Neumayer, E., Agarwala, M., Eds.; Edward Elgar Publishing: Cheltenham, UK, 2014.
65. Barbier, E.B.; Burgess, J.C. Natural Resource Economics, Planetary Boundaries and Strong Sustainability. *Sustainability* **2017**, *9*, 1858. [[CrossRef](#)]
66. Cooperrider, A.Y.; Kim, K.C.; Weaver, R.D. Biodiversity and Landscapes: A Paradox of Humanity. *J. Wildl. Manag.* **1996**, *60*, 689. [[CrossRef](#)]
67. Holland, A. Or, why strong sustainability is weak and absurdly strong sustainability is not absurd. In *Valuing Nature? Ethics, Economics and the Environment*; Foster, J., Ed.; Routledge: London, UK; New York, NY, USA, 1997.
68. Huesemann, M.H. The limits of technological solutions to sustainable development. *Clean Technol. Environ. Policy* **2003**, *5*, 21–34. [[CrossRef](#)]
69. Desroches, C.T. Some Truths Don't Matter: The Case of Strong Sustainability. *Ethic Policy Environ.* **2019**, *22*, 184–196. [[CrossRef](#)]
70. Chaminade, C. Innovation for What? Unpacking the Role of Innovation for Weak and Strong Sustainability. *J. Sustain. Res.* **2020**, *2*, 2. [[CrossRef](#)]
71. Yoshihara, H.; Inoue, N. The Sacred Landscape of Ainu Culture and its Cultural Landscapes: Case Study on the Conservation Strategy in Biratori City, Hokkaido. *Almatourism* **2018**, *9*, 107–128.
72. Meyer, L.H.; Roser, D. Enough for the Future. In *Intergenerational Justice*; Routledge: London, UK; New York, NY, USA, 2017; pp. 225–254.
73. Vasconcellos Oliveira, R. Justice with a future: Contributions from sustainability to Intergenerational Sufficiency. *Ethica* **2021**. under review.
74. Brand, F. Critical natural capital revisited: Ecological resilience and sustainable development. *Ecol. Econ.* **2009**, *68*, 605–612. [[CrossRef](#)]
75. Ekins, P. Identifying critical natural capital: Conclusions about critical natural capital. *Ecol. Econ.* **2003**, *44*, 277–292. [[CrossRef](#)]
76. Rutsche, I.G.; Gosseries, A. (Eds.) *Institutions for Future Generations*; Oxford University Press: Oxford, UK, 2017.
77. Future Generations Commissioner for Wales. The Well-being of Future Generations (Wales) Act. 2015. Available online: <https://www.futuregenerations.wales/about-us/future-generations-act/> (accessed on 21 June 2021).
78. Pearce, C. Guardians for future generations: Bringing intergenerational justice into the heart of policy-making. In *Intergenerational Equity*; Cottier, T., Lalani, S., Siziba, C., Eds.; Brill: Nijhoff, The Netherlands, 2019; pp. 52–63.
79. Sandin, P.; Peterson, M. Is the Precautionary Principle a Midlevel Principle? *Ethic Policy Environ.* **2019**, *22*, 34–48. [[CrossRef](#)]
80. Holden, E.; Linnerud, K. The sustainable development area: Satisfying basic needs and safeguarding ecological sustainability. *Sustain. Dev.* **2006**, *15*, 174–187. [[CrossRef](#)]