

<a> Social innovation and Social Sciences: reflections on a difficult relationship

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 Introduction

This paper scrutinises how deeply academic research, institutionalised by higher education institutions as organisations and by social-scientific disciplines as institutions of thought, is connected to emerging social innovations and social innovation research. We hypothesize that one reason for the alleged academic reluctance towards social innovation, in particular within the field of social sciences, is the partial lack of a robust epistemological foundation of social innovation research. We thus distil the essence of one of the more substantial definitions of social innovation and discuss potential difficulties that might prevent a more comprehensive ownership of social innovation in social scientific research.

Then we discuss two more aspects relating to the said difficult relationship postulated in the title of this paper. On one hand, we will argue that a specific approach, which is usually strongly connected to the social innovation discourse, namely social entrepreneurship, has – at least in a formalised way - more successfully entered the higher education sector than a structured academic approach about the essence of social innovation. We discuss that the strong notion of social entrepreneurship in higher education can, however, contribute to a hermeneutical contraction as regards a more comprehensive understanding of social innovation. We will argue that one can easily find evidence that supports this assumption but also evidence that contradicts it.

In section three, we discuss the lack of institutional and organisational support for social innovation research in the field of higher education as a reason that negatively affects a stronger academic relationship to the practice field of social innovation and, as a consequence, to transformative research approaches.

Based on our findings we will conclude with the overall assessment that the relationship between social innovation research and social sciences could probably still be considered as challenging, but has clearly left the status of a niche existence and broadly entered the stage of productive academic debate.

 State of discussion

The assumption that academic research and the practice field of social innovation are only loosely connected is not new (Roessler and Brinkman 2020; Howaldt 2019; Schuch 2019a; Brundenius 2017). Renault et al. (2017) identify a gap in the literature regarding the role that universities play in promoting social innovation and inclusion in development processes. The global mapping of social innovation initiatives during the SI-DRIVE project¹ also empirically confirmed that social innovation processes and the underlying resources, capabilities and constraints are related to different actors of the social innovation ecosystem, but that academia is only marginally involved (Howaldt 2019). In other words, the quadruple helix of the social innovation ecosystem is partially incomplete. Howaldt (2019, p. 40) asserts that *'the marginal engagement of research and education facilities is in strong contrast to their essential role as knowledge providers in classical innovation processes (Mowery and Sampat 2005) and as one actor of the triple helix model'*.

We suspect that the allegedly difficult relationship between social innovation and the academic sector also has to do with the constitution of the social sciences on the one hand and the epistemological weaknesses of the construct 'social innovation' on the other. Nicholls (2012) postulated that social entrepreneurship it is not yet conceptualised as a field that achieved paradigmatic consensus and that lacks a 'normal science' or clear epistemology. We would even argue as a working hypothesis that this is also true for social innovation, because it is the larger and even less tangible phenomenon. Moreover, the term 'social innovation' is often oversimplistically used as a buzzword (Moulaert et al. 2013), which blurs its conceptual extension.

The term 'social innovation', however, is not new, and can be traced back to the early twentieth century (Godin 2012). References are made to eminent scholars such as Gabriel Tarde (Howaldt, Kopp and Schwarz 2015), Karl Polanyi or Joseph

Schumpeter (Moulaert et al. 2013; Howaldt and Schwarz 2010), but until today there is no commonly shared understanding of social innovation. Likewise, there are only first attempts of integrating social innovation in a comprehensive innovation policy theorem (Howaldt et al. 2014). Also the conditions under which social innovations develop, flourish and finally increase their social impact are still far from being crystal-clear (Howaldt 2019). Lizuka (2013) argues that the scope of social innovation also suffers from a number of conceptual overlaps. Pol and Ville (2009) mentioned that some analysts consider social innovation not more than a buzz word, which would be too vague to be usefully applied to academic scholarship. It needs to be added, however, that Pol and Ville were opposing this dismissive attitude by providing several inspiring counter-arguments.

The imputed epistemological shortcoming of social innovation is deeply amalgamated with its presumable essence expressed by several attempts of definition (see Pol and Ville 2008 and Cunha and Benneworth 2013). To provide a basis for our argumentation, which is to show that the building blocks of a social innovation theorem are already in place, we use the definition that was developed in the SI-DRIVE project. It defines social innovation

as a new combination or figuration of practices in areas of social action, prompted by certain actors or constellations of actors with the goal of better coping with needs and problems than is possible by using existing practices. An innovation is therefore social to the extent that it varies social action and is socially accepted and diffused in society.²

We admit that we like this definition best so far because, unlike many others, it may sound excessive but it does have a few important properties that provide some epistemological and analytical orientations. In the words of Pol and Ville (2009) a satisfactory definition is useful to guide research and provides a scope large enough to accommodate a significant number of relevant empirical cases.

First of all, the SI-DRIVE definition aims at changing *social practices* and not using a new technology. Thus the 'object' of innovation is made clear, although many changed social practices are doubtlessly influenced by new technologies.

Secondly, a social innovation must be more than just a brilliant idea; it must have been put into practice, needs to be accepted and diffused in society or parts of it.

This means, a social innovation has to be used! The scale of social acceptability and use may vary from case to case. Some social innovations target only local groups of a few people, while others potentially address thousands.

In our understanding the expression 'new practices in areas of social action' sounds presumably problematic for a definition that struggles for exhaustion, because 'social action' refers probably to all sorts of human action and interactions (also with the environment and artefacts; see Degelsegger and Kesselring 2012) and seem thus of limited analytical and operational value. On the other hand, this is exactly the arena of social sciences per se. So why bother with this term being a social scientist? It clearly indicates its belonging to the broad field of social sciences and humanities. Third, however, the definition does not include all social practices, but is limiting them to *new* social practices without, however, offering a measurement indication, how 'new' a novelty can be in order to be labelled a 'social innovation'.³ But like in 'classical' innovation research, most innovations are only relatively new to a specific context or actors and not uniquely new; what is new in a certain context could be a 'normal' practice in another. Absolutely new (social) innovations might be more exciting than those diffused to new contexts (e.g. new to the firm or new to a specific part of a society), but it is the diffusion which contributes mostly to the changes in economy respectively society.

Fourth, the definition postulates that social innovations have foremost a '*social purpose*' or in the words of Pol and Ville (2009) should explicitly refer to some sort of human welfare enhancement. The term 'social purpose', especially in combination with the *goal of better coping with needs and problems than is possible by using existing practices*, might sound irritating or even daunting to many social scientists, because of its normative stance. What a social purpose is and what is good or even better depends on many aspects, not at least of interests, power and ideology. As social scientists we are reflexively alerted when we are confronted with normative statements. Critical questioning is what sets us apart. In defence of the chosen definition, it must be said, however, that in contrast to some other definitions of social innovation, which postulate the 'good' (i.e. the just cause) almost as a teleological goal, this definition does not prescribe a normative postulate. The way we read the definition, it only points to *improved solutions or social practices*, and not to an absolute normative goal. Of course, improved solutions can also have their downsides because different groups of people may have conflicting interests. What

fits nicely to one social group, might be seen as cutback or deterioration by another. In addition, also rebound effects of social innovations can occur.

Another problem with the term 'social purpose' is that also business innovations rightfully claim to meet a social need or – perhaps more likely - 'a social want'.⁴ The often used argument that the underlying intention (on the one hand an interest in profit generation and on the other hand an interest in satisfying a sometimes difficult to define social need that overall contributes to human welfare enhancement) is the decisive differentiating factor, falls quite short in our opinion. This argument is also often used to differentiate social entrepreneurship from 'normal' entrepreneurship. It seems to us more decisive that some social innovations simply do not require any market logic and can do well without business and that some businesses are too distant from even the pretence of human welfare enhancement. In practice, however, there are overlapping and numerous intersections between the sets of social and business innovation (see also Pol and Ville 2009), which we would consider an epistemological shortcoming.

It also seems to us that many of the naive normative and salvific definitions of social innovation alienate serious social scientists. However, we also believe that social innovation cannot be grasped without any normative property. Without a normative stance, the concept of social innovation would become even vaguer. Pol and Ville (2009) were already discussing the problem of the normative stance of social innovation around 10 years ago and have introduced the attribute 'desirable' to social innovation, fully recognising that value judgements are underlying the notion of desirable social innovation. What is desirable cannot be determined absolutely.

We would also argue that many social scientists have become suspicious vis-à-vis social innovation, because of another important property of our definition, namely the strong focus on providing solutions to improve social practice (which can sometimes be perceived as a display of social actionism). Judgments on the value of social scientific research for society vary even among social scientists (Reale et al. 2018). While social sciences and humanities scholarship is often committed to do research for the good of society, the interest of researchers is often not oriented towards producing usable results, let alone actual solutions, but rather to raise awareness and influence society to create capabilities of self-understanding in different contexts (Reale et al. 2018; Benneworth 2015; Nussbaum 2010). Elliot (2013) argues in

another direction by claiming that the harder to quantify aspects of social and cultural development is less evident, with the result that the importance of these contributions is consistently underplayed.

The intentional *solution-orientation* referring to the definition of social innovation, however, is the fifth aspect that helps to isolate the object and the essence of social innovation and to distinguish it from 'normal' social practice and social change. As outlined before, the provision of a solution to a certain problem needs to be new in a specific context, otherwise it would not be an innovation. We have to be aware that most innovations are small in the beginning. Many remain small and many are just incremental. Social innovation is not social change. Social innovations can contribute to social change, but social change does not necessarily need social innovation. We try to give an example: Greta Thunberg is an agent (another important property within the used definition of social innovation) and 'Fridays for Future' became in a very short time a powerful social movement with a clear intention and purpose (again two properties of the used definition of social innovation). But we argue that 'Fridays for Future' is not a social innovation, because neither Ms. Thunberg nor 'Fridays for Future' provided solutions (at least not at the beginning of the movement), because their task is advocacy and not social innovation, and being children they also have had only limited capacities for solutions.⁵ Instead, they are rightly appealing to politicians, business-makers, consumers and the civil society – so to say to more powerful agents - to change course. Although there is still a lot to be done, the movement have had already an impact and initiated social change without a tangible solution, which means, in our understanding of definition, without a social innovation.

As mentioned above, our preferred definition of social innovation also calls for *an agent or actor*, who kicks-off and promotes a social innovation and thus contributes to some sort of social change (be it limited or extensive). The presence of an agent is the sixth characteristic of social innovation, which helps us not to lump every social phenomenon together. Said definition of social innovation postulates clearly that a social innovation has to be *intentional* and *prompted by certain actors or constellations of actors*. Contrarily, we would talk about social change if the observed changes in society are not directly intentional or at least cannot be traced back to certain agents or if the agent's landscape becomes blurred and unclear, or when the phenomenon already became a dynamic of its own.

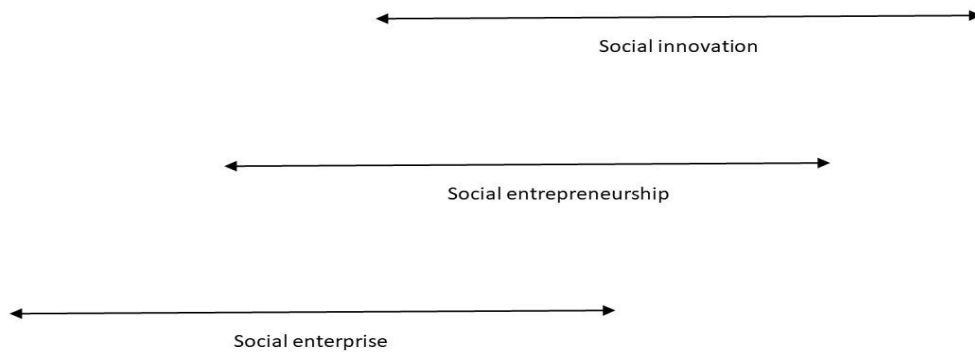
The problematic epistemological issue with the important reference to an *actor* or a *constellation of actors* is, that in theory this can be everybody. While the measurement of technological/economical innovation is usually confined to the sectors of science (Frascati Manual of the OECD) and business (Oslo Manual of the OECD), there is no restrictive per se indication, who potentially could be an actor for social innovation. This is due to the nature of social innovation, which can be prompted by NGOs, companies, social entrepreneurs, social groups, policy-makers or even researchers. That does not make the operationalisation and measurement of social innovation any easier. Moreover, the widespread focus in the social innovation discourse on heroic individuals and especially on social entrepreneurs⁶ might have meant that many social scientists did not feel addressed by such a perspective, especially if they operate more in structuralist and institutionalist schools of thought.

This leads us to our second hypothesis, why we assume that the relation between social innovation and social scientists is a difficult one. The hypothesis is that social entrepreneurship has become so prominent and so often equated with social innovation over the past 15 years (see also Davies 2014) that, as a result, the actual epistemological added value of social innovation has lost visibility to the more prominent concept of social entrepreneurship. As a result, the academic field has been largely left to business schools, while it continues to enjoy rather a niche existence in the social sciences.

Social entrepreneurship, however, is not the same as social innovation, although it is closely connected to it. There are overlaps, but also differences. While it is assumed that social innovation transcends sectors and aims for changes at various levels (from micro-level- to macro or even system's level), social entrepreneurship is regarded as limited to market-orientation, business and centred on individual entrepreneurs (Nicholls and Huybrechts 2012; Westley and Antadze 2010; Phills et al. 2008). Doubtlessly, the economy and its actors are a potential and also important subfield of social innovation. Davies (2014), however, argues that social entrepreneurship and social enterprises are not necessarily socially innovative and that, as a consequence, social entrepreneurship is not an element which is entirely positioned within the social innovation framework, but rather a phenomenon that partly overlaps with social innovation, but does not entirely fall under it (see Figure 1). We share this understanding. In 2015, a student's project under our supervision

scrutinised case studies on a dozen of social enterprises and studied their social innovation characteristics. The results were far from being distinct.⁷

Figure 1: Relationship between social innovation, social entrepreneurship and social enterprise



Source: Taken from Davies (2014).

The ambiguities with regard to the definitions of both terms ‘social innovation’ and ‘social entrepreneurship’ also prevent a clear demarcation (Alegre 2013; Young 2009). Moreover, definitions originate from different schools of thought and one can identify also different hermeneutical trajectories that emerged in European and US contexts (Davies 2014; Defourny and Nyssens 2010).

Perrini (2006) for instance distinguishes between a limited view on social entrepreneurship, which focuses on theories of non-profits and on their commercial activities (i.e. close to the US trajectory), and an extended view, in which social entrepreneurship is not limited to the study of non-profits, but to social innovators (also beyond business) in general. Alvord, Brown and Letts (2004) as well as Mair (2010) support also a broader view of social entrepreneurship by connecting it to social change. Moreover, Nicholls and Huybrechts (2012) argue that market activities are not sufficient to bring about enduring social change, but that political action at various level is required too. While the limited view dealing often with issues of operational efficiency and effectiveness of non-profit actors is easily compatible and connectable to management studies⁸, the wider view, which explicitly establishes a

broader connection to social change, is more challenging because it transcends the disciplinary and scholarly boundaries of business schools.

Nicholls (2012) further argues that the typical social entrepreneurship narratives, which are either based on 'hero entrepreneur' success stories or on organisational models reflecting ideal types of commercial businesses, are so dominant, that alternative conceptions of social entrepreneurship based around social justice and communitarianism discourses tend to be marginalised. The publicly often heard very optimistic understanding of social entrepreneurship and social change (Dey and Steyaert 2010), which is often connected to stories of 'heroic' individual social entrepreneurs, also over-simplifies inherently complex issues in relation to social change which can lead to an ideology free (or post-ideology) understanding of social innovation (see also Cho 2006).

The question remains if the discussion about the 'narrow' or the 'broader' concept of social entrepreneurship and their associated characteristics is conducted only in theory or if it materialises empirically in educational offers of higher education institutions. The answer is ambiguous, at least with a view on Austria (Schuch and Salamon 2021). We assume that this ambiguous Austrian situation is not an exception within the European Higher Education Area and that almost every higher educational niche is occupied by remarkable variations that differentiate the educational offers and unique selling propositions of the various higher education institutions. Our conclusion is, thus, to confirm the hypothesis that the construct of social entrepreneurship has probably contributed most to anchoring the notion of social innovation in the higher education sector through the establishment of varied curricula and courses. Some of them are more confined to traditional business school topics, but some transcend the business focus towards sociological and political approaches. Despite some inspiring examples of academic 'social innovation' curricula around the globe, the number of social entrepreneurship courses seems to outweigh the number of social innovation courses. Although the latter have the larger scope, they have apparently been less often included in social science teaching than social entrepreneurship courses at business universities. However, it is precisely this broad scope that could have led to social innovation being perceived less as a clearly defined course content and more as being spread across various social science courses with different focuses.

To conclude, we would argue that the building blocks for a social innovation theorem are in place. There are still epistemological shortcomings and especially problems related to operationalisation and measurement, but in general, we would not see an insurmountable epistemological barrier that stands in the way of a fruitful academic debate between the social sciences and social innovation. The simpler conceptual definition of social entrepreneurship and its sometimes imprudent equation with the term social innovation, however, has led to a more widespread adoption of the former over the latter in the higher education system.

 Reflections upon its current and future importance

The emerging transformative science paradigm (Schot and Steinmüller 2018; Larrue 2019; Geels and Schot 2007) could provide a push for a stronger integration of social innovation into the practice of social science (Schuch, 2019b), because transformative science (according to König et al. 2019) must be transformative in a double sense: wanting to exert influence in society but also open to be influenced by society and its needs. Against the background of this statement, social innovation could become a much more important anchor point for social sciences at least if we assume that transformative research will actually acquire a high level of attraction and integration in the future. The social-scientific engagement with innovation as a phenomenon that not only changes economic practices, but social practices has to change from a pure analytical role to an active co-shaping role (see also Howaldt 2019). Correspondingly, Moulaert et al. (2013) argue, that social innovation is a driver of inter- and transdisciplinarity in scientific research and a lever for 'post' disciplinary research.

During the last 10 years participatory approaches and support programmes that promote participation and empowerment of civil-society in research (Schäfer and Kieslinger 2016; Shirk et al. 2012; Howaldt and Schwarz 2010), have strongly contributed to a more active role of researchers that goes beyond the transfer of expert knowledge into social practice. Participatory research approaches should rather lead to mutual learning and skill development of all involved actors to enhance their ability to determine and reflect (Howaldt 2019). But Howaldt (2019, p. 45) also argues that *'there is a large gap between the traditional understanding of social research and science and the new mode of generating socially robust knowledge ...'*.

The difficult academic embedding of social innovation in social sciences, however, is not just caused by epistemological difficulties or turf wars between social innovation and social entrepreneurship as discussed above, but also by structural ones, which have to do with how universities function.

Unfortunately, these structural problems make it difficult to deal with social innovation at university level and at the same time, they hinder the work of social scientists with regard to transformation research. Our hypothesis is that the existing support structures for co-developing social innovation solutions (e.g. in contrast to technical innovation solutions), if they exist at all, do not go far enough in the university structure

From an organisational theory point of view, a university's involvement with social innovation would be part of its so-called third mission. The broader view of a university's third mission encompasses the relation of universities and society at large, while the limited view of the third mission focuses on the interaction between universities and the business sector (Renault et al. 2017). Especially the concept of the entrepreneurial university (Clark 1998; Etzkowitz 2004) stressed the business focus, but it also provided development space for the field of social entrepreneurship. While there is abundance of literature on the limited view of the third mission, much less is known about the role of universities in social development and in particular in social innovation (Brudenius 2017; Renault et al. 2017). Community engagement, for instance, has remained a relatively peripheral and piecemeal activity within universities, which was not able to drive wider institutional change (Cunha and Benneworth 2013). Moreover, while financial and organisational measures are in place all over the world to support technology transfer through diverse science-business links, support measures for social innovation to foster the science-society nexus are the exception and not the rule.

As already argued in another paper (Schuch 2019a), several structural shortcomings exist why universities do not play a significant role for the co-creation of social innovations in an ideal quadruple helix composition:

1. Social innovations are often bottom-up and straightforward in scope and scale. They are mostly initiated by practitioners in their own field of work and expertise. Financing needs and relational capital needs are usually more pressing, or at least seem so, than knowledge needs. The most often raised

knowledge needs relate to a rather narrow segment of business-related aspects, namely to issues of taxation, marketing and financing. This reduces the demand for support from academic knowledge providers.

2. The financial precariousness of most social innovations is another demand-side problem. Social innovations often operate in low-cost segments, while the cost structures of universities hardly fit to the tight budgets of social innovators. While 'normal' technology transfer enjoys a high reputation at universities (and also of funding agencies and R&I policy-makers), knowledge transfer for social purposes is often perceived as an altruistic free of charge exercise. This reduces the attraction for higher education institutions to deal with it. It also means that the social sciences do not have a lucrative field of activity that would be comparable to that of technical sciences and engineering.
3. While technological (commercial) innovation is recognised as a potential income source for universities, and thus facilitated by institutionalised support structures such as technology transfer centres, there are only exceptionally material and immaterial professional university structures in place for supporting social innovations. Examples are the '6I research model' at the University of Deusto (Caro-Gonzalez 2019), the 'Tellus Innovation Arena' and the 'Oulu Think Tank of Science and Society' at the University of Oulu (Tuunainen et al. 2019) or the Knowledge Transfer Centre for SSH in Austria (Russegger 2019).
4. Social innovations do not count for the performance accountability of universities and their faculty. Thus, they lack promotional quality and significance. Neither social innovations initiated by higher education institutions, nor practices and systems how to monitor, measure and promote their way from universities to society are regularly documented and in the focus of attention of university management (and performance monitoring systems).
5. Universities lack the appropriate infrastructure and resources for innovation, although – together with their students - they could have a large mobilisation potential. Places designed to meet, to exchange, to co-design and prototype social innovations with practitioners are still scarce within the academic

infrastructure. The lack of interfaces also means that little is known about specific needs from the practice.

6. Despite the fact that SSH scholarship (and also other fields of science) is often committed to do research for the good of society, the interest of researchers is often not oriented towards producing usable results such as social innovations.

Two recent studies seem to confirm that structural shortcomings at university-level to support social innovation exist (Schuch and Salamon 2021; Roessler and Brinkmann 2020). Schuch and Salamon (2021) identified, that only a quarter of the senior social scientists from selected Austrian universities who were engaged in developing social innovation with practitioners during the last 12 months, confirmed that some sort of specific support measures to facilitate the cooperation with practitioners for the development of social innovations exist at their universities or faculties. The most frequently mentioned 'support measure' is that students can work in courses on the development of social innovations together with practice partners. 38% of the already small number of respondents who were able to report on specific support measures from their university or faculty said that they were encouraged by the university or faculty to work together with practice partners to develop social innovations. 31% confirmed that the university or faculty management actively forwards requests from practice partners to them. And 31% also confirmed that their work on developing social innovations with practice partners is used by the university or faculty for PR purposes. The other respondents denied this.

All other inquired potential support measures were only very sporadically mentioned. These include in particular

1. the absence of a university or faculty fund to finance participation of the university's faculty in the development of social innovations
2. the lack of inclusion of social innovation development projects in the performance reporting of universities
3. the lack of a cooperation platform where practice partners can regularly report their needs to support social innovations
4. The lack of possibility to participate in the development of social innovations through university-funded research projects⁹.

 Conclusions and specific research desiderata

We have drawn up the following three specific hypotheses to test the assumed difficult relationship between social sciences and social innovation:

First, we have hypothesized that there is a lack of epistemological precision and guidance of the concept of social innovation, which may lead to the fact that social innovation is poorly represented in academic discourse. We have shown that this is not necessarily the case by analysing a well-grounded definition of social innovation. On the basis of an analytical reflection of this definition, we rather conclude that the chosen definition allows for a conceptual understanding as well as containment of social innovation and provides epistemological guidance. We have, however, also identified weaknesses as regards the operationalization and measurement of social innovation.

Second, we hypothetically assumed that the study of social entrepreneurship has led to the popularization of the concept of social innovation. We assumed that it was primarily social entrepreneurship that found its way into the formal academic field at universities, especially into teaching. At the same time, however, we have also reflected on the dominance of social entrepreneurship as a potentially dangerous thematic and epistemological limitation for the social innovation discourse. Our empirical findings in this regard are inconclusive. Although social entrepreneurship dominates academic courses, it has not necessarily reduced social innovation to its economic dimension. We would rather argue that social entrepreneurship has become a door opener for social innovation in the academic world. Thus, we can consider the second hypothesis as largely confirmed, more in an enabling than in a distorting sense as far as the essence of social innovation is concerned.

Thirdly and finally, we put forward the hypothesis that structural and organizational reasons also stand in the way of a further academic breakthrough of social innovation, in particular with regards to the emerging transformative science paradigm. These include demand-side problems related to the very bottom-up and practical nature of social innovation, but also to a lack of market potential. Nor can the willingness of social scientists to engage in the development of social innovations with practitioners be taken for granted. Incentive systems and support systems are both lacking.

Our final appeal is therefore directed at science, research and innovation policy as well as the strategic management of universities. A broadly understood third mission of universities often exists only in Sunday speeches, but is little structurally operationalized in reality. Schuch and Salamon (2021) have shown that social scientists, at least in Austria, although of course not all of them, are interested in both the theoretical reflection on social innovation and its practical development. The birth pangs of developing a robust concept of social innovation are largely a thing of the past. However, further necessary theoretical but also practical steps to further develop, operationalize, and measure the concept of social innovation are still pending and call for additional research. Moreover, the bridge between universities and social practice must be strengthened in the sense of a third university mission that is not reduced to economic and technical issues.

Not only university management is responsible for this, but also science, research and innovation policy, whose task is to design and support organizational and structural measures to improve cooperation between science and society. However, little support has so far been given to science-society fields of action for social innovations. The potential and added value for fruitful cooperation in the field of developing social innovations undoubtedly appears to exist. But it must also be empowered and harnessed.

** Notes**

¹ SI-Drive abbr. Social Innovation Driving Force of Social Change, <http://www.si-drive.eu/>; accessed 12 November 2020.

² <http://www.si-drive.eu/>; accessed 12 November 2020.

³ The European Innovation Survey, for example, which scrutinises different forms of innovation in businesses (e.g. product innovations, process innovations etc.), always asks about innovations in the last three years.

⁴ Businesses also create the 'social wants' themselves through clever marketing and advertising strategies.

⁵ It is not our intention to accuse Ms. Thunberg or 'Fridays for Future' of not being social innovators. On the contrary, we sincerely appreciate and admire their work.

⁶ The definition of Dees (1998) on the role, which a social entrepreneur plays as change agent in the social sector, is a good example for this individual-centred approach. In the agency work of Ashoka such commendable individuals are often in the centre of promotion too.

⁷ This ambiguity was not only based on our assessment as external assessors but also on the self-assessment of the social entrepreneurs.

⁸ The 'limited' view also potentially offers connectivity to other innovation management topics such as 'dynamic capabilities' (Cohen and Levinthal 1990) or 'open innovation' (Chesbrough 2003).

⁹ If research projects make this possible at all, then they are usually externally funded projects.

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