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Responsible innovation in business: a critical reflection on deliberative engagement as a central governance mechanism

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ABSTRACT

One of the main contentions of the framework for Responsible Innovation (RI) is that social and ethical aspects have to be addressed by deliberative engagement with stakeholders and the wider public throughout the innovation process. The aim of this article is to reflect on the question to what extent is deliberative engagement suitable for conducting RI in business. We discuss several tensions that arise when this framework is applied in the business context. Further, we analyse the place of deliberative engagement in several theories of business ethics. We conclude that there remains a tension between the ideal of RI and the way in which the competitive market operates. Hence, RI scholars should reflect more critically on changes that are required in the market in order to make RI possible, modify the ideal of deliberative engagement for RI in business, or attempt to strike a balance between these two responses.

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Introduction

One salient characteristic of modern-day societies is their rapid change through market-driven innovation. Moreover, in our days, the word innovation carries a positive connotation along with it, exemplified by our exclusively laudable use of the adjective 'innovative'.[1] In the literature on the economics of innovation, innovation is – whether implicit or explicit – assumed to be an unqualified good that should be fostered (Godin 2015). A simple counter-example may challenge this assumption; for instance, consider the destructive effects of many 'innovative' financial products that were developed before the financial crisis of 2007-2008. Such, and many other examples, make clear the importance of reflecting on the meaning of responsible innovation.

Research on 'Responsible Innovation' (RI) is centred around the question of whether and how it is possible to direct technology and innovation towards socially desirable ends (e.g. Owen, Bessant, and Heintz 2013).[2] One of the central tenets of RI is a commitment to the democratization of innovation, and consequently to deliberative forms of

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governance such as stakeholder and public engagement (Stilgoe, Owen, and Macnaghten 2013; Wong 2016). In this article, we examine to what extent deliberative engagement with stakeholders and the wider public is suitable as an approach to responsible innovation in business. First, we show that deliberative engagement is a central characteristic of RI, including approaches to RI in business. We then discuss several tensions that arise when the ideal of inclusive and deliberative governance is applied to innovation processes within companies. Next, we discuss the place of deliberative engagement in theories of business ethics, namely in the market failures approach, stakeholder theory, and political corporate social responsibility (CSR). The question is to what extent these theories address and are able to overcome the tensions we have identified. In the discussion section, we outline possible directions that scholars could take with regard to the place of deliberative engagement within a framework for RI in business. This comes down to a choice between maintaining or modifying the ideal of deliberative engagement with stakeholders and the wider public. The implications of this choice for a framework for RI in business are briefly examined.

Deliberative engagement as a central governance mechanism in RI

The shift in the division of moral labour and deliberative engagement

The emerging field of research under the heading 'Responsible Innovation' (RI) addresses the question of how innovation is to be governed responsibly (Koops et al. 2015; Owen, Bessant, and Heintz 2013). RI scholars contend that the social and ethical – hence non-economic – aspects of innovation should receive more attention *within* the innovation process. The social and ethical aspects of innovation refers to the ways in which innovations affect safety, health, privacy, the environment, and related values. RI is broadly defined as 'a collective commitment of care for the future through responsive stewardship of science and innovation in the present' (Owen et al. 2013, 36). Although RI as a concept is quite new, it connects several existing approaches to the governance of science, technology, and public policy (Rip 2014; Stilgoe, Owen, and Macnaghten 2013). The overall aim of RI is to shift the attention in the governance of innovation from the output side to the input side (Hartley, Pearce, and Taylor 2017). The approach that focuses on the output side can be considered as reactive: the social and ethical aspects of new technologies are discussed only after their development. RI is meant to be proactive, by developing mechanisms to govern responsibly from the very start of the innovation process (Ribeiro, Smith, and Millar 2016).

The application of the framework of RI involves a shift in the division of moral labour in society (Rip 2014). In the 'traditional' division of moral labour, judgments about the desirability of innovations are left to consumers, or broadly to 'the market'. The government has a responsibility to intervene in the case that innovations have an impact on a societal level (when there are excessive risks or unwanted effects), for example through regulation or precautionary measures. Proponents of RI argue that a shift is needed in the responsibility for the impacts of innovations (whether environmental, social, or ethical) from governments to the innovators themselves, or to the innovators together with other societal actors. RI implies that innovators should anticipate moral concerns and integrate them into the design of products (van den Hoven 2013). According to Ribeiro, Smith, and Millar (2016, 4), RI reflects 'an existing yet growing plea for a much more explicit acknowledgement of the inherently value-laden nature of science and technology'.

The call for a shift in the division of moral labour in RI raises the question *how* to determine the socially and ethically desirable direction of innovation. Although many different approaches to RI can be identified, they tend to view this question as one that has to be answered through some form of stakeholder and/or public engagement throughout the innovation process. For example, in their recent review of definitions and conceptual dimension of Responsible Research and Innovation (RRI), Burget, Bardone, and Pedaste (2017, 15) conclude that 'RRI is essentially an attempt to govern research and innovation in order to include all the stakeholders and the public in the early stages of research and development'. Underlying the call for participatory governance mechanisms is a commitment to the *democratization* of innovation processes. Owen, Macnaghten, and Stilgoe argue that RI 'has a primary purpose to democratically open up and realise new areas of public value for science and innovation', and thus 'suggests a need for substantive processes of inclusive reflection and deliberative democracy' (Owen, Macnaghten, and Stilgoe 2012, 754, 755).

The RI literature makes a close connection between deliberation and inclusion (e.g. Wickson and Carew 2014; see also Lubberink et al. 2017b). Owen et al. (2013) describe the commitment to be deliberative as 'inclusively *opening up* visions, purposes, questions, and dilemmas to broad, collective deliberation through processes of dialogue, engagement, and debate, inviting and listening to wider perspectives from publics and diverse stakeholders' (Owen et al. 2013, 38). One of the important elements of this commitment is that not only those actors who have a direct stake or interest in the innovation process should have a voice, but also members from the wider public, whose stake might be much more indirect. It is held that when diverse stakeholders and lay people are involved in the innovation process, innovators can learn about the social desirability of an innovation and become responsive to societal values and needs.

With the term 'deliberative engagement', we refer to the general commitment within RI to organize innovation processes inclusively and democratically. We call it deliberative *engagement* because the aim of RI is not merely to consult stakeholders and the public, but to engage and involve them within and throughout innovation processes. We call it *deliberative* engagement because deliberation is the proposed means of engagement. There is a reflective element in deliberation, which means that 'deliberators are amenable to changing their judgements, preferences, and views during the course of their interactions' (Dryzek 2002, 1). This reflective element distinguishes deliberation from other kinds of communication. Thus, deliberative engagement in RI can be defined as the reflective communication of innovators and researchers with stakeholders and the wider public about the social and ethical aspects of innovation (processes).[3] We contend that deliberative engagement is a central governance mechanism of RI, meaning that it is presented as one of, if not the most important way in which social and ethical aspects should be addressed in innovation processes.

RI and the business context

RI started as an approach to the governance of research and innovation in the context of science. However, there is a growing emphasis on RI in business. Most publications about RI in business apply existing approaches to RI – including the centrality of stakeholder engagement and deliberation – to the business context. Several authors have made the connection between RI and CSR. Iatridis and Schroeder (2016) show how corporate responsibility tools can be used to achieve the goals of responsible innovation in the context of business. Stakeholder engagement is one of these tools. A similar strategy is employed by Van de Poel et al. (2017), who develop a conceptual model of for RI in industry based on the dimensions of anticipation, inclusiveness, reflexivity, and responsiveness developed by Stilgoe, Owen, and Macnaghten (2013). Van de Poel et al. (2017) mention stakeholder engagement strategies, stakeholder dialogues and public dialogues as tools related to the dimension of inclusion. Voegtlin and Scherer (2015) argue that political CSR can function as a governance framework for RI in the context of international business. This currently highly debated stream within CSR emphasizes the importance of deliberation of multinational corporations with stakeholders and society, because of the growing political role of these corporations. Other articles about RI in business have investigated the motivations of companies to innovate responsibly (Garst et al. 2017), the differences and similarities of RI with theories about social and sustainable entrepreneurship (Lubberink et al. 2017b), the relation of RI to open innovation (Long and Blok 2017), and the drivers and barriers of implementing RI in small and medium-sized enterprises (Auer and Jarmai 2017).

Although these articles assume the centrality of deliberative engagement with stakeholders and society in their approach to RI in the business context, the question whether deliberative engagement is suitable for application in this context is never systematically addressed. Yet, as the next section shows, some authors have touched more explicitly on the tensions that deliberative engagement might create when applied within companies (Noorman, Swierstra, and Zandbergen 2017; Lubberink et al. 2017a; Blok, Hoffmans, and Wubben 2015; Blok and Lemmens 2015).

Critical issues around deliberative engagement in the context of business

We discuss three tensions that arise when the ideal of deliberative engagement is applied to innovation in business. In identifying tensions between different pairs of elements, we do not mean to say that these elements are necessary mutually exclusive, only that they do not go smoothly together. In other words, trying to realize each of the different pairs of elements together will result in conflicts and dilemmas. We identify tensions between deliberative engagement and innovative capacity, knowledge sharing and competitive advantage, and inclusive governance and current corporate governance structures. The first two tensions are already to some extent discussed in the RI literature, while (to the best of our knowledge) the third tension has not received attention until now.

Tension between deliberative engagement and innovative capacity

We have shown that the framework for RI prescribes democratization of the innovation process. This means, ideally, that innovation processes are organized in an inclusive and deliberative way, so that social and ethical values can be taken into account from the outset. Practically, it means that companies would have to engage in dialogue with a variety of actors, such as consumers, suppliers, and nongovernmental organizations (NGOs), in order to receive feedback on their innovation processes and to shape it accordingly. Doing this can have both positive and negative effects on the innovative capacity of companies. On the positive side, it could be that companies learn from stakeholders and become more sensitive to what they deem desirable. However, requirements for deliberative stakeholder and public engagement can also have negative effects on innovative capacity, depending on how strict the requirements are. For example, it is argued that RI requires not only involvement of direct stakeholders, but also with the wider public. It is not hard to imagine that setting up mechanisms for such forms of engagement about the innovation strategy will require significant time and resources, while there might not be direct benefits for a company. Evidence for this can be found in a case-study of a small scale technological project in which Noorman, Swierstra, and Zandbergen (2017) did not succeed to introduce methods of upstream stakeholder deliberation. According to the authors, the organization they studied had 'reasonable reasons' to reject their proposals. These reasons were related to the fluidity of the relations between the organization and its stakeholders, time pressure and resource constraints. This indicates that the central characteristic of RI – inclusive and deliberative engagement with stakeholders and society – can be tension with the ability of companies to exploit their innovations commercially within a competitive market. Competition incentivizes companies to constantly innovate their product portfolio in order to stay ahead of competitors. It is widely accepted that – at least up to a certain level – a competitive market fosters innovation (Aghion et al. 2005). Extensive forms of deliberative engagement may slow down the competitive process, in turn potentially reducing the innovative capacity of companies. It is thus possible that companies that do not comply with the RI requirements of deliberative engagement are more able to reap the financial benefits from their innovations compared to those that do comply. Whether the overall effect of deliberative engagement on innovative capacity is positive or negative is an empirical question, however, which we cannot answer in this article. We can at least expect a certain tension between the two. Furthermore, it also depends on the requirements put upon companies: the more demanding these requirements are, the more likely they may be to have a negative effect.

The fact, or at least perception, that this tension exists does not as such constitute a normative argument against the imposition of requirements for deliberative engagement on companies. One could argue that RI is morally preferable, because it is meant to direct innovation towards socially and ethically desirable ends, while the commercial exploitation of innovation is focused mainly on profit-making and on the mere satisfaction of individual consumer wants. Even if that is true, however, it remains the case that companies operating in competitive markets are under intense pressure to exploit their innovations in a profitable way in order to maintain their existence. One can hardly expect companies to voluntarily comply with requirements that significantly reduce their ability to profit from the commercial exploitation of innovation. Therefore, companies seem to have a reasonable excuse when they do not voluntarily comply with requirements that significantly reduce their innovative capacity.

Tension between knowledge sharing and competitive advantage

The framework of RI emphasizes the importance of transparency towards stakeholders and societal actors throughout the innovation process. Yet transparency can be in tension with the requirement of information asymmetries in commercial innovation (Blok and Lemmens 2015). In the literature on entrepreneurship and innovation, information asymmetries are regarded as one of the most important sources of market opportunities (Kirzner 1973; Shane and Venkataraman 2000; Davis 2001; Dean and McMullen 2007; Barbaroux 2014). In a perfectly competitive market where every participant has complete information, there are no opportunities for entrepreneurial profits. The very fact that information is in reality unequally distributed among market actors, makes the profitable exploitation of information possible. The innovative capabilities of companies often rest on their ability to acquire new knowledge and put it to use (Cohen and Levinthal 1990). Knowledge leakage to other companies can lead to a loss of competitive advantage. Hence, asking companies to be transparent about their innovation (process) puts pressure on their ability to achieve competitive advantage from their innovations (Blok, Hoffmans, and Wubben 2015).

The various regulations of intellectual property embody the tension between knowledge sharing and knowledge protection. For example, patents are meant to protect knowledge while at the same time contributing to knowledge sharing. Before a patent is granted, a company must protect its knowledge to make sure that nobody will 'steal' the idea. During that process, the company will be less willing to be transparent as compared to when a patent is already granted. Another example of the tension between knowledge sharing and protection can be found in the process of attracting investors. On the one hand, it is necessary to disclose information to a certain degree in order to attract investors, but on the other hand '[i]nventors may be reluctant to fully disclose private information to potential investors because they fear opportunistic behaviours and imitation' (Barbaroux 2014, 12). These examples indicate a tension between the ideal of transparency in RI and the practice of knowledge protection in commercial innovation. In pointing to this tension, we do not claim that transparency necessarily has a negative effect on companies' competitive advantage. Similar to the first tension, whether transparency has an overall positive or negative effect competitive advantage is an empirical question, and depends for a large degree on what exactly transparency requires. In the current literature on RI, it is not yet clear how much and for which elements of the innovation process transparency is required.

The strategic benefits of knowledge sharing are emphasized within the 'open innovation' paradigm. Open innovation entails the idea that firms also use external knowledge and ideas to develop their innovations, for example by entering into collaborative Research and Development (R&D) agreements with other organizations (Chesbrough 2003). There are several linkages between open innovation and RI (Long and Blok 2017). However, it has been argued that also within the open innovation paradigm, there is a tension between knowledge sharing and competitive advantage. This has been called the open innovation paradox (Bogers 2011; see also Davis 2001). According to this paradox, despite any strategic benefits that knowledge sharing can have, companies often remain reluctant to share information due to the risk that competitors may use such information in a way that stifles their own innovation process. Moreover, Long and Blok (2017, 8) note that, 'whilst OI [open innovation] involves a degree of transparency, this may not be to the degree necessary to satisfy RI requirements'. In their view, the requirements of transparency in RI are higher compared to the requirements in the open innovation paradigm. So, if there is already a tension between knowledge sharing and competitive advantage within open innovation, this tension is likely to be stronger in relation to RI. For this reason, Lubberink et al. (2017a, 200) raise the question of whether the ideal of democratic governance is realistic for companies, because 'it will jeopardize the information asymmetries on which their market opportunities depend'.

Tension between inclusive governance and current corporate governance structures

RI requires innovators to take responsibility for their products beyond their narrowly defined role responsibilities. The aim of RI is that innovators also take responsibility for the impact of their products on society as a whole. Grinbaum and Groves refer to this as a political responsibility:

> The innovator, as bearer of a political responsibility specific to his or her social role, has to ask herself about the wider social and political significance of what she intends to accomplish, and what her actions may accomplish despite her intentions. (Grinbaum and Groves 2013, 133)

This broader political responsibility, however, should not be used to blame individuals for the unintended consequences of innovation. Since innovation is a complex and uncertain process in which many different actors participate, '[t]here is a *collective responsibility* both for the right impacts and negative consequences, whether these impacts are intentional or not' (von Schomberg 2013, 60, emphasis added). The responsibility for the wider impact of innovation is thus shared with a multiplicity of actors. That is why RI also stresses the importance of inclusive governance mechanisms for innovation processes, in which the responsibility for innovation is distributed across and shared among different actors.

The ideal of inclusive governance conflicts with contemporary corporate governance structures in many countries. Currently, the final decision-making authority about the (innovation) strategy within a company lies with the board or the investors (cf. Blok, Hoffmans, and Wubben 2015). In most corporations, the board of directors has the highest authority, although it is accountable to the shareholders. Shareholders have certain voting rights, but these rights are only related to major strategic decisions such as the appointment of new directors (Heath 2011). In general, those with decision-making authority will only give permission for investments if a positive financial return is expected. Furthermore, innovation programmes always involve financial risk. One of the most important reasons to restrict the final decision-making authority to the board, the owners, or the investors, is that they are responsible for the return on investment (the board), or bear the financial risks of investment (owners and investors). It is for this reason that shareholders are called 'residual claimants' or the bearers of 'residual risk': a company should meet its contractual obligations towards other stakeholders before the shareholders receive their gain (Maitland 1994; Heath 2006; Boatright 2006). Since the claims of shareholders on the company cannot be specified by contract, many have argued that managers have an exclusive fiduciary duty towards shareholders, that is, a duty to act on behalf of the shareholders and to serve their interests. Whether or not one agrees with this view, the primacy of shareholders is currently embedded in corporate law of many countries (Heath 2011).

In current corporate governance structures, commercial considerations are likely to dominate decision-making processes, which simply has to do with the fact that those with decision-making authority are those with financial interests. This stands in contrast to the very aim of RI, which is to move the governance of innovation beyond mere economic considerations. The goal of RI is to incorporate social and ethical aspects into decision-making processes by opening up the governance of innovation to a wide range of actors. We suggest that significant changes in corporate governance are required if this goal is to be achieved in a structural way. One may object by arguing that boards and investors have a social responsibility to take social and ethical aspects into account, and hence that it is not necessary to change corporate governance structures in order to achieve the goals of RI in the current context. However, as Moriarty (2014) has argued, individuals often display a self-serving bias and tend to uphold beliefs that are biased towards their own interests. Consequently, he argues that if one supports the objective that companies should take multiple stakeholder interests into account, one should also support more democratic forms of corporate governance. Translating this to RI: proponents of RI who believe that companies should take broader social and ethical aspects into account in their innovation processes should probably also support corporate governance structures that give a voice to a wider set of stakeholders.

Deliberative engagement in theories of business ethics

If the introduction or the enhancement of deliberative engagement in the business context creates tensions, we can expect this topic to be discussed within business ethics. This section discusses the place of deliberative engagement within several theories of business ethics. Three prominent, although very different theories will be used for this purpose: the market failures approach to business ethics (which can be seen as an elaborate version of the shareholder approach), stakeholder theory, and political CSR. We have chosen these theories, because they are highly discussed within business ethics, and because they represent three distinct perspectives on the social and ethical responsibility of business.[4] If an effective framework for RI in business is to be developed, it would be prudent to integrate it with one of these theories. As we will see, these theories vary considerably in their ability to accommodate the RI framework. We first discuss the market failures approach, which has the least similarities with RI. We close with political CSR, which has the most similarities with RI. In discussing the place of deliberative engagement in these theories, we focus on to what extent they (are able to) address the tensions identified in the previous section.

Deliberative engagement and the market failures approach

The market failures approach to business ethics, developed by Heath (2006, 2007, 2014), can be seen as an elaborate version of the shareholder approach. Heath asks what legitimizes the centrality of the profit motive in business. He asserts that profit is by no means an end in itself, but a means that ‘generates the competition necessary to push prices toward the levels at which markets clear’ (Heath 2006, 541) with the end of producing efficient outcomes. Put differently, the mechanism of the competitive market creates an efficient allocation of goods and services and thus enhances general welfare. However, numerous ‘market failures’ result from the fact that the conditions of perfect competition do not hold in practice. Most economic policies and regulations can be interpreted as aiming to correct market failures. For example, pollution taxes can be seen as means to ‘internalize’ the costs arising from the absence of a market for a clean environment. Likewise, forms of consumer protection try to mitigate the adverse effects of asymmetric information. After arguing that the rationale of most government regulation is to correct market failures – and to thereby enhance the efficiency of markets, Heath next argues that the government is limited in correcting market failures: regulation is costly and ensuring compliance might require undesirable forms of force. Market failures can never be entirely corrected by means of regulation. Following this assertion, Heath argues that companies have a moral obligation to refrain from exploiting market failures, which means that they should 'behave as though market conditions were perfectly competitive, even though they may in fact not be' (Heath 2014, 37). 'Efficiency imperatives' that follow from this approach include: minimizing negative externalities, competing only through price and quality, reducing information asymmetries between firm and consumers, not opposing regulation aimed at correcting market imperfections, and not engaging in opportunistic behaviour toward customers or other firms (Heath 2014, 37). Heath further states that the imperatives derived from the ideal of efficient markets provide 'a framework for thinking about all of the issues that are traditionally classified under the heading of "corporate social responsibility"' (Heath 2014, 174).

Although the main purpose of the market in this approach is to promote efficiency, efficiency considerations do not trump considerations of justice on a societal level. According to Heath, there is a division of moral labour in our institutions: markets are designed to promote efficiency, while matters of justice are left to the welfare state (Heath 2014, 10, 203–204). The 'limited' morality of the market with its focus on efficiency is therefore justified against the background of a state that takes care for justice. Here we see a strong difference between the market failures approach and RI. As we have shown, proponents of RI problematize a strict division of moral labour in which markets take only economic considerations into account and governments address social and ethical considerations. The aim of RI is to justify innovation *beyond* macro-economic benefits (von Schomberg 2013).

How does the market failures approach address the different tensions identified above? We discuss the first two tensions and their relation to the different theories of business ethics together, because – despite their differences – they both relate to the fact that deliberation and transparency about innovation processes can be detrimental for a company's innovation strategy. Heath does not explicitly discuss the role of stakeholder and public engagement, but he clearly does not see them as morally required. Of course, engagement can be used by companies for strategic reasons, for example in order to obtain knowledge from stakeholders. However, from the perspective of this approach, to oblige companies to engage in deliberation with stakeholders and society would be at odds with how innovation in a competitive market works. Markets are efficient and companies are innovative because companies *compete* for the favour of customers, and not because they deliberate with them. In Heath's approach, the proper place of deliberation is in politics, not in the market. With regard to transparency, it is interesting that one of the imperatives of the market failures approach is for companies to reduce information asymmetries between themselves and their customers. This seems to be in tension with the requirement of information asymmetries for innovation (e.g. Barbaroux 2014). However, Heath prescribes this imperative in the context of the general obligation not to exploit market failures. That implies that companies should reduce information asymmetries in the case that these asymmetries misinform customers and thus lead to choices that customers would regret if they had more knowledge. The imperative does not imply that firms should be transparent towards stakeholders about their innovation process as such, provided that they operate within the limits of the law and that they do not aim to use the information asymmetries at the expense of customers.

With regard to the tension between inclusive governance and current corporate governance structures, Heath clearly opts for a model in which only the owners (shareholders) exercise control over the firm (Heath 2011). Although non-owner stakeholders do not exercise control over the firm, Heath holds that the shareholder model of corporate governance in the aggregate serves the interests of all stakeholders the best. He argues that managers have an exclusive fiduciary duty towards shareholders, that is, a duty to act on behalf of them and to serve their interests.[5] The reason for this is that shareholders are bearers of residual risk, contrary to stakeholders whose claims are specified by contract (Maitland 1994; Heath 2006; Boatright 2006). Since the residual risk will even be greater with regard to innovation, from the perspective of the market failures approach innovation does not present a special case for corporate governance.

Deliberative engagement and stakeholder theory

In a very general sense, stakeholder theory holds that organizations are responsible to their stakeholders, that is, to 'those groups and individuals who can affect or be affected by their actions' (Freeman et al. 2010, 9). Given the variety of existing approaches to stakeholder theory, it can be questioned whether it can really be considered as one coherent theory (Freeman 2002; Norman 2013). However, it is possible to derive some general normative guidelines from it (Hasnas 2013). In the first place, stakeholder theory requires that the fruits of organizational success should be distributed among all legitimate stakeholders, and not only among shareholders. Secondly, all relevant stakeholders should have the opportunity to give input in the organizational decision-making process (Hasnas 2013; Boatright 2006; cf. Phillips, Freeman, and Wicks 2003). To be able to apply these guidelines in practice, it is necessary to define who counts as a legitimate stakeholder. Phillips (2003a) makes the distinction between normative and derivative stakeholders. Normative stakeholders are those stakeholders to whom the company owes a moral obligation to take their interests into account. Standard examples of normative stakeholders are employees, shareholders, and customers. He argues that an organization has a moral obligation to give its normative stakeholders a voice about how the organization is run (Phillips 2003b). Derivative stakeholders are those stakeholders whose interests should be taken into account in managerial decision making, but only because they can affect the interests of normative stakeholders. Examples of a derivative stakeholder are competitors and the media.

In general, stakeholder theory places much emphasis on stakeholder engagement and dialogue (Crane and Livesey 2003; Johnson-Cramer, Berman, and Post 2003). This links up with the emphasis on inclusive deliberation in RI. However, there are two noticeable differences. First, stakeholder theorists often emphasize balancing stakeholder interests, for which communication is required. Yet balancing interests seems to have more similarities with negotiation than with deliberation. Negotiation is about finding a balance or compromise among different private interests. Deliberation (at least in the classic sense) is meant to go beyond private interests, towards arriving at a shared understanding about public issues, and making argumentatively agreed-on decisions about the common good (Mansbridge et al. 2010). Second, while stakeholder theorists focus mainly on taking the interests of direct stakeholders into account, RI aims to open up innovation processes to an even broader set of actors, including members of the public.

To what extent is stakeholder theory able to address the tensions identified above? With regard to the first two tensions, it seems that stakeholder theorists recognize that strong requirements of deliberation and transparency can be difficult to achieve for commercial organizations. For example, Noland and Phillips criticize theories that call for a radical democratization of the firm, which would overburden it and reduce its capability to realize value for all stakeholders (Noland and Phillips 2010). Although stakeholder theory stresses the importance of embedding stakeholder engagement in the overall strategy of a company, it does not prescribe the specific form of stakeholder engagement. Hence, it leaves room for companies to shape stakeholder engagement in such a way that it does not significantly harm their competitive strategy. For example, a firm can engage with stakeholders in order to gain knowledge about their values, interests, and preferences as input to the innovation process, without involving them throughout the entire process and without sharing confidential information that could be used by competitors. Yet this flexibility does not completely eliminate the tension. It remains a challenge – also for stakeholder theory – to find a balance between stakeholder engagement and transparency about innovation on the one hand, and protecting the competitive position of the company on the other.

At first sight, stakeholder theory seems well-equipped to address the third tension, namely, that between inclusive governance and current corporate governance structures. After all, stakeholder theory is often described as an alternative to shareholder theory, with the aim of giving all stakeholders a say about how a company is run – and not merely shareholders (Freeman 2002). Moriarty (2014) notes that in earlier writings, stakeholder theorists supported giving stakeholders formal and binding control over a corporation, by involving them in the board of directors. However, more recently, stakeholder theorists have abandoned this idea, noting that stakeholder theory 'does not mean that representatives of these groups [the key stakeholders, TB] must sit on governing boards of the firm' (Freeman et al. 2010, 9). According to Moriarty this is a mistake. He argues that 'stakeholder theory's distributive goal of balancing stakeholders' interests is more likely to be achieved in a stakeholder democracy than under current corporate governance arrangement' (Moriarty 2014, 832). Stakeholder democracy means that the boards of directors consists of representatives of different stakeholder groups, who elect their own candidates. Stakeholder theorists may find this implication of their theory too radical; however, in many current corporate governance structures, shareholder interests will have more influence in decision-making processes than the interests of other stakeholders. In that case, the tension between inclusive stakeholder governance and shareholder governance is likely to persist.

Deliberative engagement and political CSR

Within political CSR, it has been argued in that corporations have a political role, that is, they have to take responsibility for public goods, especially when nation states are failing to provide those goods (Palazzo and Scherer 2006; Scherer and Palazzo 2007; Matten and Crane 2005). When corporations assume a political role, their political activities require some form of (democratic) legitimation. Scherer and Palazzo argue that the theory of deliberative democracy provides a model to legitimize corporate activities that address public issues. Deliberative democracy assumes that 'the legitimacy of a political decision rests on the discursive quality of the decision-making process' (Scherer and Palazzo 2007, 1107). This means that corporate political activities can be legitimized if corporations engage in discursive processes of public will-formation, in a way that places the public interest at the centre. By emphasizing the public impact of corporate activities, political CSR also aims to go beyond merely taking the interests of direct stakeholders into account. For that reason, Scherer and Palazzo emphasize that corporations have to cooperate with and build consensus among civil society actors such as NGOs about certain public issues in which they are involved.

There are many connections between political CSR and the emphasis on deliberation within RI. Since innovations shape our societies to a great degree, they can be regarded as relevant objects of public concern and deliberation. Therefore, from the perspective of political CSR, innovation processes themselves should in a sense be politicized and subjected to democratic control. This comes down to the application of deliberative democratic principles to innovation processes, in which outcomes are legitimate 'to the extent they receive reflective assent through participation in authentic deliberation by all those subject to the decision in question' (Dryzek 2001, 651; see also Wong 2016). Like RI, political CSR provides a framework that stresses the need for public engagement, inclusive deliberation, transparency, and accountability (Voegtlin and Scherer 2015). In such a view, RI in the business context depends on the quality of deliberative engagement with stakeholders and the wider public about the purposes, values, and impacts that a company should pursue or try to avoid with its innovations.

To what extent does political CSR address the identified tensions? Again, we discuss the first two tensions together. The response to these tensions from the perspective of political CSR is quite comparable with that of stakeholder theory: the demands of deliberation for companies should not be too high. Although deliberation is crucial in gaining legitimacy, Scherer and Palazzo note that '[i]t is not necessary to solve every single coordination problem through an unlimited democratic discourse' (Scherer and Palazzo 2007, 1111). As economic actors, businesses have a 'license to operate'. Only as political actors should they be subjected to democratic control. In relation to RI, the question is to what extent innovation counts as economic or political activity. Does the fact that innovations shape our societies make innovation political? And if this is the case, should the introduction of innovations with a high potential impact be subjected to requirements of democratic deliberation and transparency? Several authors see RI as a way to politicize research and innovation (Hartley, Pearce, and Taylor 2017; Grinbaum and Groves 2013). Politicization is understood as

> a means to recognise and open up political questions to a broader range of voices and ensure that the role of values is visible. (…) [I]t opens up decisions about the public good to public scrutiny through deliberation and accountability. (Hartley, Pearce, and Taylor 2017, 362)

The question is to what extent the idea that innovation is a political activity holds for every kind of innovation, whether human enhancement technologies or a new type of solar panels. Furthermore, the question is also whether politicization is desirable for every kind of innovation process. And more important for this article, whether it holds for every context, whether science or business. Until now, these questions have not been explicitly addressed in the RI literature. Nor do we claim to answer them here. Yet, the similarities between RI and political CSR on the issue of politicization are noticeable.

Within political CSR, there is little attention for the implications of a politicized role of companies for corporate governance (Whelan 2012). The focus lies on the role of multi-stakeholder initiatives (Mena and Palazzo 2012). In a notable exception, Scherer, Baumann-Pauly, and Schneider (2013) hold that the democratic deficit that is created when corporations engage in political activities can be compensated for by democratic governance mechanisms within organizations. The aim of such mechanisms is to integrate stakeholders into organizational decision making. What does this mean concretely? The authors provide the case of multinational corporation Lafarge, which formed stakeholder panels entrusted with the task to discuss issues of sustainability and biodiversity and to provide policy recommendations to the board. The question is whether the appointment of stakeholder panels goes far enough for achieving substantial democratization. It has been argued that 'if these "Political" CSR writings are to be meaningfully associated with "deliberative democracy" (…) then they need to go beyond indirect and/or "board external" forms of accountability' (Whelan 2012, 719). Without formal governance structures, participatory equality will be difficult to achieve. Therefore, Whelan (2012) proposes a 'political' model of corporate governance, which extends the voting rights over the board of directors to core stakeholders (employees, customers, suppliers, and shareholders) and civil society representatives. Until now, this proposal has not been taken up by political CSR scholars. The appointment of stakeholder panels assigned the task of reflecting on and giving advice about the social and ethical aspects of innovation seems to be an easier way to achieve inclusive governance. However, the question remains whether this will be enough for realizing inclusive governance.

Discussion: the place of deliberative engagement in a framework for RI in business

We have identified three tensions that attend the application of the framework of RI to business. We have also scrutinized three theories of business ethics, and the extent to which these theories incorporate deliberative engagement. Two of these, stakeholder theory and especially political CSR, share with RI the commitment to deliberative stakeholder engagement. However, also within these theories, the problematic relation between transparent, inclusive and deliberative governance on the one hand, and innovative capacity, competitive advantage and current corporate governance structures on the other hand, persists. This gives rise to the question how RI should proceed with a framework for the business context. We discuss this question by first pointing to the underlying tension between the ideal of deliberative engagement and the way in which the market works: the tension between voice and exit. After that, we discuss two directions in which RI scholars can proceed: proposing more radical changes in the business context in order to realize the ideal of inclusive and deliberative governance and modifying the ideal. Our focus is primarily on the second direction, in which the ideal is critically reconsidered. It should be noted that our description is not meant to be exhaustive, and that there are also in-between positions possible.

The underlying tension between voice and exit

The three tensions we discuss above relate, in our view, to the more basic tension between voice and exit. In his seminal *Exit, Voice, and Loyalty*, Hirschman (1970) worked out these mechanisms as different responses to decline in the quality of goods or other provisions. Exit is the mechanism that characterizes the economic sphere. When the quality of a product declines, the usual response of a consumer will be to stop buying the product and shift to a different one. Voice is the mechanism that characterizes the political sphere. When the quality of policy declines, the proper response for citizens is to raise their voice and express their concern, and not (in the first place) to move to another polity. Of course, exit plays a role in the political sphere as does voice in the market. People can express their dissatisfaction with the vision of a political party by voting for a different party, which is a form of exit. Likewise, consumers can write a letter to a company instead of simply buying another product. Yet one can say that exit is what qualifies the market mechanism. To put it more strongly: markets are efficient precisely because they are built on exit. If companies had to deliberate extensively with a wide set of stakeholders, and to build consensus or negotiate compromises among them about what kind of product to bring on the market (like governments have to do in policymaking), conventional wisdom implies that markets would be neither efficient nor innovative.

RI tries to make innovation processes more responsive to voice, by engaging stakeholders and publics in innovation processes. When this governance approach is applied to innovation within companies, however, it is applied in a context that is designed to be mainly responsive to exit. For this reason, the introduction of mechanisms of voice creates tensions. Since the market operates mainly on the basis of exit, a certain tension between voice and exit is likely to be persistent.

A related concern is that the responsiveness of companies to exit (e.g. declining sales) is largely based on strategic considerations. This could be in conflict with the ideal of responsiveness to social and ethical considerations. For example, when companies use voice as a mechanism, one can expect that instrumental motives (to improve their business case) will always be present (Garst et al. 2017). The dominance of strategic considerations could undermine taking social and ethical aspects seriously. Furthermore, it is even possible that organizations institutionalize voice in order to make it ineffective (Hirschman 1970, 124). An example of this would be that companies give stakeholders and members of the wider public a limited voice, with the intention of silencing criticism instead of being genuinely responsive to societal concerns (cf. Burchell and Cook 2013). A more significant conflict regarding the ideal of responsiveness in RI is hardly conceivable.

By pointing to the underlying tension between voice and exit, we do not mean to argue that RI in the business context is impossible, but that an RI framework designed for this context should take this tension seriously. For that reason, we discuss two directions in which this tension is taken more seriously.

Maintaining the ideal of deliberative engagement

The first direction that we consider is maintaining the ideal of deliberative engagement with stakeholders and society when attempting to bring RI into the context of innovation in business. RI scholars opting for this approach might study best practices that live up to this ideal and how such practices mitigate the tensions identified above. It is our impression that most of the research about RI in the business context follows more or less this direction: several tools and methods are developed to enhance the ideal of inclusive and deliberative innovation processes within companies. However, the risk of focussing only on best practices, tools, and methods is that the ideal will only be implemented within firms that already have a disposition towards innovating in a responsible way and thus are willing to adopt those measures. Therefore, we think that if one wants to maintain the ideal of deliberative and inclusive governance, it should be complemented with reflection on its implications for innovation on a broader governance level. We have indicated that there is a tension between the ideal of RI and the way in which a competitive market operates. The question then is what kind of socio-economic model fits better with RI. On a more concrete level, the question is what RI implies for the structure of innovation processes and for corporate governance. For example, regulations for intellectual property might have to be changed in a way that makes innovations more transparent and open to different users. Furthermore, in order to include a broad set of stakeholders in the innovation process, the dominance of shareholder interests or generally financial interests in corporate decision-making processes has to be broken. How exactly this can be achieved is open to discussion. Yet if RI is to be meaningfully applied as a general governance mechanism of innovation in a commercial context, these issues have to be addressed.

Modifying the ideal of deliberative engagement

Another possible direction for RI in business is not to take the ideal of inclusive and deliberative governance for granted, but to think about what market actors can achieve given the context in which they operate. A possible way to do this is to re-conceptualize deliberative engagement in a way that is more suitable to a commercial context. Noorman, Swierstra, and Zandbergen (2017) examine this direction. In their case-study, they find a lack of commitment and accountability to stakeholders other than shareholders, and a limited inclusion of these other stakeholders in decision-making processes. They acknowledge that the company they studied had good reasons for not applying the ideal of RI, reasons which very much relate to the tension between inclusive deliberation and innovative capacity. Accordingly, they argue that the deliberative ideals of RI need to be adapted in order to make it applicable in the business context. One way of proceeding in this direction is to apply different (i.e. less strict) standards for transparency and inclusion in the case of innovation in a commercial context. Another element to account for is the conflict that could exist between the commercial interests of companies and public goods such as health and sustainability. This possible conflict could easily be translated into a conflict among stakeholders, for example between companies and NGOs. Since companies need a business case for their innovations, and stakeholders such as NGOs have the societal role to address public issues, this conflict is likely to be persistent. What does this imply for deliberation among these actors? It seems that we cannot expect these actors to always aim at consensus, nor to set considerations of self-interest (i.e. profit, reputation) completely aside. In order to be able to manage the tensions we identify, an account of deliberation is needed that explicitly takes conflict and self-interest into account (cf. Mansbridge et al. 2010; Blok 2014). Such accounts of deliberation are currently scarce within RI (van Oudheusden 2014).

What would modifying the ideal of deliberative engagement imply for a general governance framework for RI in business? The currently dominant approach to RI in the literature can be characterized as *procedural*, because RI is defined by process requirements, of which deliberative engagement with stakeholders and society is the key (Pellé 2016). One could argue that a purely procedural approach is not suitable for business, and hence that the business context requires an approach that is more focused on *outcomes* (Pellé 2016). A framework for RI with a focus on outcomes will focus on assessing to what extent innovations match with particular societal values and norms. In this respect, an approach to RI for business can benefit from the literature on sustainable entrepreneurship (Lubberink et al. 2017a). Several authors have argued that sustainable entrepreneurship can be interpreted as an entrepreneurial activity that aims to solve market failures that lead to environmental degradation (Cohen and Winn 2007; Dean and McMullen 2007). An approach to RI inspired by the idea of sustainable entrepreneurship would focus on assessing the outcomes of corporate innovation activities (namely, to what extent they solve market failures), and not on the deliberative process in the first place. Such an approach would not first and foremost require companies to deliberate with stakeholders and society about their innovation process, nor to be completely transparent about it. Of course, for companies that want to innovate responsibly, there can nevertheless be good reasons to engage with stakeholders about their innovation programme. Companies may do so if they lack knowledge, or in order to gain support from stakeholders. An outcome-oriented approach does in no way prohibit companies from doing so. In fact, processes of stakeholder engagement can be very important. However, in an outcome-oriented approach to RI, such processes are seen as instrumental to the substantive goal of RI (to take social and ethical values into account, or to solve market failures), instead of being identified as such with RI.

Further research and debate will have to address the question of whether an approach that gives up the centrality of certain process requirements such as inclusion and deliberation can still be called RI. However, the choice between an outcome-oriented or procedural approach will not be a matter of either-or. It is more likely that a balance has to be found between process and outcome requirements. Currently, the balance in the RI literature clearly tilts to the side of process requirements. Reconsidering the ideal for a view of RI in business might lead to a stronger focus on outcomes.

Conclusion

The main aim of this article was to critically reflect on the question of whether deliberative engagement is a suitable governance mechanism for RI in business. Our conclusion is that there remain tensions between the ideal of opening-up innovation processes to deliberative engagement and the way in which competitive markets currently operate. These tensions also appear (albeit in different ways) in theories of business ethics. We have identified two directions (proposing more radical changes in the business context in order to realize the ideal of inclusive and deliberative governance and modifying the ideal itself) that scholars working on RI in business can take in a way that explicitly recognizes these tensions. In this description, we have refrained from taking a position on which direction is preferable. Our aim is to urge scholars in the field of RI to take into account the tensions that come with applying RI to business. The different directions can be worked out in a consistent way. The former can be seen as a more idealistic, long term approach, and the latter as pragmatic and focused on realizing RI on the short term.

Notes

1. We understand innovation in a broad way, including innovations in process and in products, and including innovations that are incremental and more radical. Since we discuss RI in the business context, the focus lies on commercial innovation (which is what we refer to with 'market-driven' innovation).
2. Throughout this article, we only use the term RI, except when we refer to or quote article that use the term RRI (Responsible Research and Innovation). We use RI because research plays no significant role in this article.
3. We recognize that our definition of deliberation is very broad. When studying specific forms of deliberation, specification and operationalization of the concept is needed. A good overview of different types of deliberation can be found in Fung (2003). A very interesting operationalization of deliberation is developed by Steenbergen et al. (2003).
4. Hasnas (1998) distinguishes three normative theories of business ethics: shareholder theory, stakeholder theory, and social contracts theory. The market failures approach can be seen as an elaborate version of shareholder theory. This approach is recently much more discussed, also in relation to corporate political activities and corporate governance (Norman 2011; Singer 2016; Norman 2015; Néron 2016). We have chosen political CSR instead of the social contracts approach because the prominence of the former in current debates, and because of the similarities with RI.
5. That does not mean that, from this view, managers do not have any duties towards other stakeholders. They do, but these duties do not have the fiduciary form.

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