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Can Corporations Have (Moral) Responsibility Regarding Climate Change Mitigation?

Säde Hormio 

Social and Moral Philosophy, Department of Political and Economic Studies, University of Helsinki, Helsinki, Finland

ABSTRACT

Does it make sense to talk about corporate (moral) responsibility for climate change mitigation? Through utilizing systems thinking, I will argue that mitigation should be incorporated into corporate policies for present and future activities within the existing political framework. However, not much retrospective responsibility exists for past emissions. Exception to this are corporations who have engaged in climate change lobbying activities, voluntarily expanding their sphere of influence in the system. They could be responsible for the damage caused by misinformation campaigns and subject to compensation claims.

Introduction

This paper will discuss whether it makes sense to talk about corporate (moral) responsibility in a climate change mitigation context. Richard Heede (2014) has recently argued that by shifting perspective to corporations from nation states, new opportunities are opened for corporations to become part of the solution rather than the problem. His analysis traces 63% of worldwide industrial CO₂ and methane emissions from 1751 to 2010 to just 90 entities. Chevron, ExxonMobil, Saudi Aramco, BP and Gazprom top the list. Granted that these corporations are huge emitters, are we talking only about *opportunities* for them to become involved in mitigation efforts, or can we also state that they have *responsibility* to do so?

While it is obvious that these big corporations will have to participate if global mitigation efforts are to be successful, it is less obvious that they should have further obligations in addition to being made to cooperate through legislation. Legislation, combined with appropriate enforcement measures, is usually the most effective way when it comes to any environmental large-scale policy change, but the focus of this paper is not on this.¹ Rather, I am concerned with the content of corporate obligation. What, in general, can corporations be responsible for and what are the limits to corporate responsibility? Can corporate entities bear moral responsibility in relation to climate change?

The paper will proceed as follows. Section two attempts to clear terminology around corporate responsibility. The scope of corporate responsibility is discussed in section three,

followed by Patricia H. Werhane's (2008) systems thinking approach in section four. Section five is concerned with whether corporate responsibility can be said to extend to climate change. In section six, I will make some preliminary sketches about past corporate responsibility for mitigation and agnotology's role in it, that is, the role of culturally induced doubt.

Terminology of Corporate Responsibility

Corporations are large organized collective agents that are subject to legislation, have stated aims, codes of conduct and differentiated roles (along with usually clear chains of command).² What separates them from other institutional collective agents is that they sell goods in a competitive market to fund themselves and thus have profit-making as one of their collective ends. Talking about the responsibility of a company to clean up after an oil spill or mining accident, for example, is common, but what is corporate responsibility and does it have a moral aspect?

In business ethics literature, the general idea is to acknowledge that there is some responsibility that the corporation has in addition to simply following the existing rule of law in relation to its actions. As there exist both very narrow and quite expansive definitions of corporate responsibility, this responsibility can include many or very few things, depending on the account given. These range from uncontroversial duties like making business decisions with shareholders in mind (not taking unnecessary business risks), to treating employees with enough care (e.g. dealing with bullying at the workplace), to more debated ones like making sure that the supply chain is environmentally clean, or even donating a portion of profits to good causes. On the other hand, some deny that corporations have any responsibilities to the society at large. Milton Friedman (1970) memorably stated that:

there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.

According to him, corporations have responsibility towards their shareholders only.³

Corporate social responsibility (CSR) has traditionally been about the relationship of business to society, while corporate moral responsibility (CMR) focuses on closer stakeholder relationships, especially those to do with the business' own shareholders. When Friedman was very critical of CSR, he at the same time underlined the corporation's fiduciary responsibilities towards its shareholders, a very narrow interpretation of CMR known as the shareholder theory. More often CMR is seen to encompass things like taking care of employees and customers, or not harming the environment the corporation operates in, over and above just value-addition to the shareholders. It is perhaps worth noting that even though CMR includes the words 'moral responsibility', the authors who employ the term do not necessarily mean that the responsibility is moral in any deep sense, just that it encompasses things that have to be taken into account when planning business activities. What unifies all accounts of CMR is that it is linked to the core activities and non-negotiable obligations of a corporation; it is about what *has to be done*. On the other hand, CSR has traditionally been seen to be about what *could be done* and its scope expands along with the interests of those making the decisions. However, there is no clear agreement over terminology in the business ethics literature, so it is unhelpful to get too drawn into this distinction.⁴ Werhane (2008, pp. 270–271) observes that in the current discussions, the meaning of CSR is often expanded to encompass both the discretionary activities and CMR, and now include things like corporate

governance, environmental concerns and social perspectives. CSR has thus become an umbrella term that covers almost everything that a corporation might be responsible for, concerned about, or what it has obligations towards.

I subscribe to the view that it is meaningful to discuss CMR as real moral responsibility and I am interested in the scope of this responsibility. My position either falls in line with a somewhat expansive reading of CMR, or a quite modest reading of CSR that already encompasses CMR. For the rest of this paper, I will refer to obligations of corporations as CMR, and use CSR only to refer to discretionary activities, supererogatory undertakings that will always be at the discretion of individual people within the corporation.⁵ When it comes to accounts by other authors, I have attempted to use the terminology that they use.

The Scope of Corporate Responsibility

The scope of responsibility depends on the roots of that responsibility. Corporations are collective agents, but to what groups are they accountable: employees, customers, shareholders, suppliers, other groups? In business schools, stakeholder theories are often juxtaposed with shareholder theories inspired by Friedman. While in shareholder theories the corporation's core mission is to bring more money to shareholders, stakeholder theories take into account multiple actors affected by the actions of the corporation, at least those groups that are critical to the success of the corporation.

A prominent strategy in exploring the extent of these responsibilities is to look at the role that corporations play in a society. For example, Seumas Miller (2010) argues that social institutions exist to provide certain collective goods: security, provision of food and consumables, acquisition and dissemination of knowledge and so on and so forth. All social institutions have a 'constitutive collective end' and a 'collective good' that it produces (p. 279). A constitutive collective end partly defines the constitutive joint activity of an institution, while a collective good is jointly produced and something that is desirable to the community.⁶ In some cases, these two institutional ends are identical: with universities, the constitutive collective end (the acquisition, transmission and dissemination of information) is also a collective good. In other cases, the relation between the two institutional ends is that of a means to an end: the constitutive collective end of a car manufacturer (the production and distribution of cars) is a means to the collective good of enabling transportation (p. 279).

Miller (p. 281) suggests that corporations should be viewed as institutional instruments to securing a wide range of ends. In contrast to publicly funded institutions, corporations 'rely for their funding on selling good in a competitive market' (p. 278). This is why they differ from institutions that do not operate within competitive markets: corporations need to make a profit. Hence, market-placed organizations also have a third kind of collective end: profit maximization, or at least the making of a profit (p. 280). This third type of a collective end is desired by the owners of the business, thereby the constitutive collective end is a means to the profit-making collective end (cars are produced and sold for profit). However, it can be potentially in competition with the collective end of securing a collective good, so it is only a proximate end, the realization of collective goods being an ultimate end (p. 281). For example, the proximate end of a private school is to make profit for its owners, but the ultimate end is provision of education. Imagine a badly run private school (or a hospital, or a water company), where the idea is to just milk as much profits out of the operation as

possible, with little or no regard for the wider outcome. Such a corporation would no longer be providing a collective good, but in my view could rather be described as abusing the system that created it. This is why the profit-making must be a proximate end only: otherwise the wider society might have no use for corporations as institutions.

Corporations operate within a system with many other collective actors. Norman E. Bowie (2013a) argues that the responsibility of businesses with respect to mitigating any environmental crisis is no greater than that of other collectives, and indeed it may even be less, apart from a scenario where the business possesses greater expertise or knowledge than other constituent groups in society with respect to that problem.⁷ Furthermore, he notes that society accepts certain risks of avoidable harms in order to pursue advantageous goals. Therefore, we ride cars, ride in planes and build bridges as the benefits we receive from these activities justify the avoidable harms that they result in (people dying in accidents, etc.). Businesses are not obliged to manufacture as safe cars as possible: they are obliged to build them up to a standard of safety that still leaves the product's costs within consumers' price range: it lies beyond the capability of the company to build maximally safe cars if the costs of doing so push the costs of their products so high that they are at a competitive disadvantage and their survival as a business is threatened. I will return to this in section five.

We must therefore be realistic about what we can demand from corporations. In any case, we do not want a world where corporate responsibility is without limits. Extending responsibilities of corporations to encompass everything corporations might influence or be involved in would extend 'their power base and influence far beyond the reasons they were chartered in the first place', cautions Werhane (2008, p. 287). She offers the East India Company as a historical precautionary example. David Henderson (2001) would agree, as he quotes Friedman's *Capitalism and Freedom* in saying that if corporate officials accept responsibility over anything other than to make profit for the stockholders, how would they know what the social interests are, should these individuals decide them themselves? Hence, businesses should not set goals other than for profitability, as they have no right to define social goals (2001, pp. 20–21). While there is some truth in this (it is not a simple question how society's values and goals are defined, and through which power struggles), the mistake Henderson and Friedman make is limiting CMR to fiduciary matters only. After all, taking social interests into account is very different from deciding what they are. The process will be ongoing as social interests are constantly being renegotiated by different players in the social sphere: policy-makers, NGOs, activists, media and so on. Corporations might have to take sides on some contested issues, but they are not required to be trailblazers in social causes, they are seldom even best placed to do so. However, they need to be responsive to their environment. In any case, to concentrate solely on fiduciary matters and to do business with blinders on with anything regarding human rights or social oppression, for example, often already amounts to taking sides: that of the oppressor. As corporations do not exist in bubbles outside societies or operate in a vacuum, to try to argue that their responsibilities extend to only their shareholders is simplistic fiction. We thus need a realistic account of what type of responsibilities corporations have.

Werhane's system approach does not set an arbitrary end point for corporate responsibility at shareholders and employees, an argument that is out of touch with the actual corporate sphere of influence, but it does acknowledge the limited goals and means of a corporation. In her account, corporations do not need to take the cloak of the global do-gooder that Henderson abhors. Corporations are neither the sinners nor the potential

saviours of the globalized world they sometimes are portrayed as. I will turn to her account next.

Systems Thinking and Corporate Moral Responsibility

The greatest challenge that companies today face, according to Werhane (2008), is 'the moral responsibility to create economic, environmental, social and moral value-addition in an age of distrust and disillusionment about business' (p. 269). She is not naïve about the nature of business and her claim about morality is not an argument for altruistic corporations spreading charity and good will around the world. Quite the opposite: Werhane brands excessive corporate philanthropy as corporate social *irresponsibility*. This is especially true when it is done at the expense of company's core moral responsibilities, which are towards 'their employees, customers, suppliers and shareholders and to the communities in which they operate' (p. 270). Werhane argues there is nothing wrong with the more expansive definitions of CSR—the ones that include CMR too—just as long as we are aware of the distinctions between the two concepts. Namely, CMR is about corporation's core obligations (what it categorically normatively *should* do) and discretionary CSR what it *could* optionally do in terms of promoting further well-being, be it economic, environmental or social. If this distinction is not kept in mind, we can either expect too much of corporations, or too little (p. 271).⁸

A company's primary obligations are to its primary stakeholders: shareholders, employees, managers, customers and suppliers (p. 271). They are at the centre of Werhane's gradually widening concentric circles of responsibility as these are the stakeholders whom the company affects and who also make a difference in the company. Furthermore, these responsibilities are not just moral, but also legal and fiduciary: 'to shareholders for a return on their investment, to employees and suppliers for fair treatment and adequate remuneration, and to customers to deliver what they paid for' (pp. 271–272). Therefore, who goes into which level of the widening circle depends not just on how much they affect each other, but also by legal and fiduciary considerations.⁹

Secondarily, companies also have obligations to communities in which they operate in, although not in the same degree as towards their core stakeholders (p. 271). Werhane's is thereby a much wider conception of CMR than what narrow shareholder theories would allow. She links the corporate responsibility towards the communities mainly to the impact that corporate activity has on them, and writes that '[t]heir primary responsibilities to the latter have to do with how they affect and are affected by those communities' (p. 270). To use her examples, a company engaged in coal mining is responsible for the effects the mining has on the environment around where they mine, such as on the landscape and water supplies, presumably also on the inhabitants. The company is responsible for environmental damage brought about by the mining and this comes under CMR. On the other hand, when a corporation makes a sizeable donation to some charitable cause, it engages in a discretionary activity that comes under CSR. This could even be labelled socially irresponsible if the corporation in question is short on funds. Werhane discusses a real-life case where United Airlines was one of the largest corporate donors to Chicago's Lyric Opera at the same time as its parent company was in bankruptcy. The pension fund of the company was declared bankrupt too, affecting many retired pilots and managers. This obviously had a big impact on the company's former employees, while 'United Airlines and the Lyric Opera have little

impact on each other' (p. 270). In other words, United Airlines engaged in supererogatory activities benefiting those not included in its stakeholders (the opera) at the expense of some of its core stakeholders (retired pilots and managers). Taking this further, we could argue that not all discretionary acts that could benefit a stakeholder are responsibilities, so CSR activities never translate as obligations. This is what separates discretionary CSR and the non-discretionary CMR obligations, whether they are owed to primary or secondary stakeholders (see also endnote 8).

In systems approach to stakeholder alliances, corporations should take multiple perspectives into account when planning new ventures or products. Each new enterprise should be thought of as a programme that includes multiple stakeholder views within many configurations. When there are problems like poor working conditions in a corporation's supply chain, the corporation in question should not view this as its problem only, but instead look at how its responsibilities extend to the system in which its products are made. The scope of the CMR responsibility is like gradually widening circles, with the corporation's employees and shareholders in the middle, extending to supply chain and the wider social environment in which the corporation operates. A corporation cannot be held responsible for the poor labour law and human rights record of a country it manufactures in, but it can sometimes use its influence to promote better practices. At a minimum, Werhane argues it should think hard about what kind of a regime it wants to be associated with in the first place (pp. 279–285).¹⁰

It might seem that this allows for a very broad understanding of what responsibilities corporations have. In particular, one could argue that the basic idea that corporations are responsible for the stakeholders that they affect or harm overlooks the fact that corporations are themselves part of a market system; unlike individuals, corporations are actors in a special system, and the system may allow for a division of moral labour between different actors.¹¹ For example, Joseph Heath (2014) argues that corporations don't have far-reaching responsibilities to stakeholders because they have duties related to profit-seeking and many of those expanded responsibilities to broader stakeholders are better served by public actors within a market economy.¹² I do not think that the kind of stakeholder theory that systems thinking represents falls foul of ignoring efficiency concerns and division of labour as the idea is to look at the responsibilities *within* the system. Werhane (2008, p. 286) is explicit about that even multinational corporations, arguably the most powerful economic engines within global political economies, are '*economic engines with limited goals and means*'. Systems thinking looks at how obligations of corporations are interrelated and interconnected with obligations of other actors such as states, civic societies, other companies, non-governmental organizations, local villages and so on and so forth. Therefore, what secondary CMR obligations corporations hold towards the communities in which they operate in are always limited by these other actors within the system. In what follows, I will take the systems thinking model and apply it to climate change mitigation, where some of these constraints show.

Corporate Responsibility for Climate Change Mitigation?

This section will discuss how systems thinking could be applied to corporate responsibility for climate change mitigation. Anthropogenic climate change is a global problem, caused by the accumulation of innumerable carbon-emitting activities and actions. It is accepted

as a very serious threat, certainly at the scientific and the UN levels, but among the general public there remain some lingering doubts around the science. For example, recent nationwide data (Howe, Mildenerger, Marlon, & Leiserowitz, 2015) show that while a growing majority of Americans (63%) now believe that climate change is real, only 47% believe that it is anthropogenic (i.e. caused by humans).¹³ However, one should not confuse opinion polls with scientific reality. Psychologically, it is easier to grasp onto any news that refutes the reality of climate change, as we would all want the problem to just go away. Sadly, the science is close to unanimous at this point: anthropogenic climate change is happening and it is a real threat to us (Cook et al., 2016; Intergovernmental Panel on Climate Change, 2014).

In the previous section, I described how the content of CMR depends on the obligations a corporation has towards its stakeholders: its employees, customers, suppliers, shareholders and the communities it operates in. Recall how the latter is about what impact the company and the community have on each other, so a company engaged in mining 'is responsible for the effects of mining on that landscape, water, and air' (Werhane, 2008, p. 270). This seems pretty clear cut and not very controversial. The effects that, say, a coal mine has on the landscape, local water supplies and air quality can be assessed with a reasonably high accuracy. However, the impact of mining coal is much trickier to assess in relation to climate change. While burning coal is one of the major drivers behind anthropogenic climate change, the effect of any particular additional amount of carbon in the atmosphere is near impossible to assess accurately, as so many factors come into play. These include the inherently global nature of any changes to the atmosphere, the delayed impacts of carbon, different tipping points and so on. Secondly, the effects on climate change will never be local. While the changing precipitation patterns, for example, affect some areas more harshly than others, resulting in severe droughts, we are always talking about global patterns. The scale or scope of any climate-warming trends is always big, much bigger than the environmental impact of even the biggest mines. Thirdly, the effects of any particular mine would have to be assessed regarding both on-site and off-site carbon emissions. On-site emissions are produced during the excavation process, while off-site depends partly on what use the coal is put into (for example, if it is burned in an efficient coal power station or not). This gets us to the fourth difficulty, the question of how broadly the effects on local community are to be understood, both in terms of the scope of 'local community' for a multinational corporation, and also how the dispersed effects of climate change can be taken into account locally. While the above points make no claim to be an exhaustive list of all the challenges involved in trying to assess the climate impacts of corporate action, they hopefully illustrate some of the ways climate change is a more complicated issue for CMR than other environmental pollution. One way to try to include the full costs of emitting greenhouse gases is to try to internalize the currently external costs. This is essentially the central idea behind carbon trading schemes. Another option would be to tax carbon and other greenhouse gases at their source.

A further (and very difficult) question is what emissions are corporations responsible for, what should be included in their sphere of influence: just the emissions in their own factories/production sites, or also the ones made by their contractors and other actors in the supply chain? How about the ethical implications of the kind of products they market to the consumers; how do they affect the general consumption patterns, should the product or service exist in the first place?¹⁴ To answer these questions satisfactorily lies outside the scope of this paper, but in my view, a corporation is responsible for its products, which includes not

only things that happen in the supply chain, but also the wider context their products are contributing to, within reasonable limits. The way products and services are designed, manufactured and marketed climate-wise can and does vary a lot between corporations and this falls mostly under CMR as consumers and suppliers are included in the corporation's sphere of influence.

An important point is that any corporate responsibility for mitigation is always within the framework of the wider society. Just as a corporation cannot be held responsible for the poor labour laws of a country it manufactures in, it cannot be held responsible for the slow progress of a binding international emissions treaty. In the absence of an effective global scheme, individual corporations can only do so much: the responsibility for creating a mitigation-friendly framework for businesses to operate in falls on the states. Emission treaties and effective legislation change the business environment, making it more feasible for corporations to invest in clean technology and other mitigation techniques that carry additional costs compared to the traditional carbon-intensive options. Within a market system, there are competitive realities that don't allow corporations to unilaterally invest heavily into mitigation actions. In a well-governed market system, the costs of emissions would be internalized, but this is not the case currently: fossil fuel is still a highly profitable sector. In addition, there is no legislation to try to keep the unused fossil fuels in the ground, as research and development into new techniques including fracking is very much ongoing. The existing framework is thus not particularly pro-carbon-neutral. Recall from section three how it lies beyond the capability of the company to build maximally safe cars if the costs of doing so push the costs of their products so high that they are at a competitive disadvantage and their survival as a business is threatened. In the same way, it lies beyond the capability of companies to manufacture or offer maximally climate-friendly products if this puts them at a significant competitive disadvantage.

With that caveat in mind, based on the scale of the threat that climate change poses, I think it is difficult to argue why corporate responsibility should not encompass climate change mitigation to some degree. It would be very reckless not to do so. With the overwhelming scientific consensus and the severity of the threat, the precautionary principle alone should suffice for climate change mitigation to be incorporated into corporate strategies. If we talk about responsibility for ensuring that the current and future activities of a corporation are as carbon-neutral or climate-friendly as possible, CMR that includes some mitigation efforts does not seem too controversial an idea. When thinking about the interconnected and interrelated systems involved in any undertaking of a corporation, the responsibility for taking climate change mitigation into consideration could enter at various stages, for example by looking at the issue through the eyes of the corporations' customers (from the demand for climate-friendly products to the public image of the business) or shareholders (cleaner energy is predicted to be in the financial interest of corporations in long-term), just to give two easy examples.

In general, the direction is arguably towards carbon-neutrality, with private sector leading the way in many efforts. The market for climate-friendly products is expanding rapidly and many companies also forge ahead in research and development to promising and ambitious new technologies, such as high altitude wind energy (Cherubini, Papini, Vertechy, & Fontana, 2015). The reaction by many prominent business leaders to the recent decision by the US administration to pull out of the Paris Agreement also showed that in some countries the policy framework and political will can lag behind corporate interests and public opinion

(Crooks, 2017; Marlon, Fine, & Leiserowitz, 2017).¹⁵ In many ways, climate-friendly operating environment makes a lot of sense to businesses, as an unstable climate and the effects it would have on societies would affect their profits, so it makes also business-sense to call for tougher legislation and binding treaties. What an individual business can do, though, must always be balanced with its capacities and the realities of the market.

My arguments here might seem unsatisfying to some, as I have not offered any simple formula to distinguish the level and degree of activities that are required by the systems approach to CMR. In general, the primary CMR obligations will be determined for the large part by existing regulation and legal and fiduciary framework in relation to shareholders, employees, suppliers and customers, although all of these stakeholders can also argue for obligations that go above and beyond existing minimum standards. Naturally, there are big differences between companies and corporations in terms of the resources and capacities they have to go beyond the minimum, and in this way their abilities will to some degree affect their obligations. For example, if we have a successful large corporation that awards its shareholders and managers handsomely, while paying minimum wages to the rest of its workers, the workers would be right to question such an unequal division of benefits. Obligations should be something that there is a corresponding capability to fulfil and arguably a successful business can afford to compensate their employees more than a business that is just getting by. In the same way, if we have a corporation that has the financial ability to go carbon-neutral and such a move would not be detrimental to its competitiveness, then arguably it should do so, especially if its core stakeholders support such a move. Still, we should always keep in mind that corporations operate within the confines of the system (although the bigger and more multinational the corporation, the more it could have leeway to pick and choose, which can also be problematic).

When it comes to the secondary CMR obligations, which are owed to the communities companies operate in, there is more room for interpretation, but these obligations also need to be looked as part of the system. There exists local legal framework and customs, for example, and other relevant actors in the system should be taken into account. Some general guidelines can be given, though, centring around the idea of the impact that the corporate activity has on that stakeholder, on how the corporation affects and are affected by the communities in question. Thus, even if a corporation operates in a community that faces environmental degradation, it cannot have CMR obligations to mitigate that degradation if it has not contributed to it (and is not in the process of contributing to it). Its obligations should be connected to how it has affected that community. In the same way, we should not hold a corporation that operates in a community that suffers from increased droughts to have obligations towards reducing the ensuing food instability in the community. The twist with climate change is that it is very hard to assess what actual harm any given corporate activity causes, as I argued earlier in this section. The globally dispersed causes and effects, cumulative emissions, tipping points and the very long time carbon molecules stay in the atmosphere, all make it impossible (at least with our current technology) to say what impact any corporation actually has on a community in terms of climate change harms. It is safe to speculate that in cases of small businesses this is not much, especially if they operate in non-greenhouse gas intensive sectors, but with larger corporations, especially in certain sectors, even the global impacts could be significant. The secondary CMR obligations of a corporation towards stakeholders should be thus assessed both in terms of the direct impact its actions have on the community (e.g. the impact of decisions such as opening up or closing

down a factory has on local workers) and the more indirect impacts its products and services are estimated to have (e.g. in terms of greenhouse gas emissions). We have a more stringent duty to avoid doing harm to others than to benefit or even help others. Climate change is harmful in many ways to both present and future people, and potentially catastrophic if average global temperatures rise even by the four degrees currently projected (World Bank, 2012). Therefore, precautionary principle alone would necessitate corporations to take their emissions seriously, although once again this has to be done within the larger framework.

There is an interesting factor in the market that I think often goes without enough attention. It is not only that the operating environment is changed through legislation; sometimes, it is changed through civil society and/or consumer action. Take the plight of small-scale farmers and workers living in poverty in the Global South as an example. The issue arguably came to prominence during the turn of the century as non-governmental organizations such as Oxfam International began to campaign on fairer trade.¹⁶ Around the same time, national organizations came together to form Fairtrade International, offering consumers a chance to buy products where the producers got a fair price for their goods.¹⁷ Developments like these helped raise public awareness of wider issues to do with working conditions and exploitation in the global markets, along with campaigns such as the Clean Clothes Campaign that concentrate on improving conditions in the global garment and sportswear industries. As a result of civil society action and consumer pressure, some big corporations such as Nike and Mars have made changes to their business practices.¹⁸ This has not come through changes in legislation; it has come through consumer demand and civil society pressure. Therefore, what makes sense for businesses to do depends on the whole system they operate in, not just on the legal and policy framework. Once the demand and pressure for carbon-neutral products and services increase, this will also impact what some corporations do. Again, legislation is the most efficient way to achieve permanent and large-scale changes, but it is not the only way to get changes off the ground. This suggests that consumers can also bear duties to consider the impact of their choices.

Returning to corporations, an additional potential source of corporate responsibility for climate change harms suggests itself. Recall from section three how Bowie (2013a, p. 134) argued that if a business has greater expertise than other constituent groups in a society, then it could have somewhat greater responsibilities to mitigate environmental harms (other things being equal). While he does not discuss climate change, we could argue that companies that possess expertise in energy production have somewhat greater responsibilities to try to mitigate climate change through developing and promoting carbon-neutral alternatives. This is what many actors in the sector are already doing, although the investments are still heavily in favour of traditional fossil fuels. However, I will not develop this idea here.

One could also argue that just as a corporation can choose to use its influence to promote better practices in the country it operates in, in a similar fashion large multinational corporations could use their influence to show their support for stricter international and national legislation on emissions. While some business leaders have already done this, it would in most cases fall under discretionary activities.¹⁹ In some cases, though, it could be included in CMR. This would depend on the size of the corporation to a degree, but the most important factor is the field that they operate in. Thus, a medium-sized food corporation manufacturing meat substitutes made from oats would be much less likely to have any such positive lobbying responsibility than a multinational corporation engaged in car manufacturing. After all, it is not too hard for the food manufacturer to take mitigation into account to a sufficient

degree in its day-to-day activities as its core product is already quite carbon-neutral, whereas a car manufacturer would greatly benefit from incentives to make their business environment friendlier to investments into cleaner technology. I will not argue for the existence of this responsibility though, I am merely suggesting that it is a possibility.²⁰ In any case, it would be wrong to claim that a corporation has a right (let alone a responsibility) to do the opposite, that is, to try to lobby for *less stringent* mitigation targets. I will turn to this issue next.

Sowing the Seeds of Responsibility: Agnotology and Mitigation

I will end the paper by sketching a few ways systems thinking could be applied to past actions of the corporation. The conversation so far has concentrated on what corporations should do from now on, on prospective responsibility to do with obligation to do something, rather than retrospective responsibility attached to past wrongdoing. Can corporations said to be morally blameworthy for their past activities and decisions that have contributed to anthropogenic climate change?

I believe the answer is in most cases No. In addition to questions about when climate change became general knowledge and the scientific consensus emerged, they were operating in an environment where effectively engaging in climate change mitigation would, for the most part, have been outside their sphere of influence (although there are naturally big differences between corporations over what steps they have taken in the past few decades towards greener business practices). The technology might not have been there yet, or the necessary knowledge. Maybe the corporation could not have responded to the newly building scientific consensus quickly enough or costs would have been prohibitive. I would argue that for corporations the responsibility to contribute to mitigation efforts based on historical emissions from before 1970s would either fall within the discretionary CSR or at least be limited to a high degree. What to say about the time period between 1970s and 2000 is trickier, as the scientific consensus was building up and the threat of climate change was discussed by politicians. Still, the political drive was lacking in most countries and business environment had few, if any, incentives to go carbon-neutral. What is clear is that the political and cultural landscapes have changed a lot in the past decade or so in relation to climate change, making recent inactivity arguably impermissible, so there should be a sliding scale of responsibility of some sort of from the 1970s to the current day.

Even if we had a suitable sliding scale in place, the full responsibility for contributing to emissions does not fall simply on the corporations who have done the emitting, as the issue is more complicated than that. This is due to the wider social patterns these emissions are part of: available infrastructure and technology, consumer culture, political inactivity, international power issues and so forth. Thereby, while completely ignoring the effects your products and services have on the climate has not been acceptable for a few decades, some limitations always apply to corporate responsibility regarding past emissions (as they do regarding current and prospective responsibilities as CMR exists within a system). Just as a corporation cannot be held responsible on its own for failures in the system it operates in, even the 90 entities to whom 63% of worldwide industrial CO₂ and methane emissions from 1751 to 2010 can be traced back to cannot be held in isolation accountable for them. Due to the combined failures of nearly all of the actors in the system to act together once climate science emerged, the moral blameworthiness for these past emissions cannot fall on the corporations alone. The failure to take sufficient action to curb greenhouse gas emissions

has been embedded in the system, so individual corporations cannot carry the burden alone.²¹

There is an exception to this narrative, however. Corporations such as ExxonMobil were actively engaged in lobbying against the Kyoto protocol (as part of the Global Climate Coalition (GCC) and independently after it disbanded) and were influential in USA not getting onboard the treaty. GCC spread misleading information about climate change and generally set out to discredit the science and foster public scepticism about it. This was done to postpone the inevitable (legislation for emission cuts) to protect corporate profits, setting the international treaty back by 10 years at the least (Union of Concerned Scientists, 2007). These 'skeptical' views still have a big impact today, contributing to the recent withdrawal of the US from the Paris Agreement (although this time around ExxonMobil was for the treaty). Delays like these have a very detrimental impact on future scenarios, as climate change impacts are already being felt and mitigation costs rise the longer action is postponed. Furthermore, the growing public understanding of the climate change problem has been met with ever more aggressive agnotology efforts. Far from giving up, climate denial organizations such as the Heartland Institute are very active (Boussalis & Coan, 2016).

Corporations and other businesses have an obligation to act within existing legal frameworks of the countries they operate in and obey the laws. Bowie (2013a) has argued that while there need be no special obligation of business to protect the environment on top of the requirements of the obeying the law, they 'are prohibited from lobbying against environmental legislation and regulations that would give those firms an unfair advantage in the market place' (p. 142). Corporations are obligated to avoid negligent behaviour with regard to the legal framework, so when they engage in activities such as dumping toxins into the environment, they do not violate any special obligations to the environment, but rather the obligation to obey the law and to avoid negligent behaviour. However, creating this framework is perilous activity that often goes against the short-term interests of politicians to get re-elected and to produce immediate benefits, giving environmental legislation a distinctive disadvantage in the political arena. Bowie (pp. 138–139) argues that businesses should not interfere with environmental legislation as consumers cannot express their environmental preferences in the market due to externalities and public good considerations; they thus need to express their preferences in the political arena, but business intervention interferes with this. Lack of business intervention thus seems a necessary condition for adequate environmental legislation.²² Furthermore, if a corporation or industry imposes a negative cost on the environment when the market does not have a way to compensate for this cost, it gives them an unfair advantage in the market place (p. 145). If the social and environmental costs cannot be fully captured in the market, regulation amounts to correcting a market failure, and businesses have no right to try to protect an advantage they do not deserve through lobbying (p. 142). What Bowie argues could easily be translated into the climate change case: the social and environmental costs of greenhouse gases are currently externalized, which arguably gives industries such as the fossil fuel industry an unfair advantage in the markets.²³ To actively lobby against regulation therefore contributes to a market failure, gives an unfair advantage to certain businesses or industries and interferes with the rights of the consumers to express their true preferences when it comes to the environment.

There is an additional level of misconduct when it comes to climate change, though: not only have certain corporations lobbied against environmental regulation, they have done

so based on misleading arguments and unfounded scientific claims. Therefore, they have also engaged in deception.²⁴ Due to the efficient public relations campaigns funded by ExxonMobil and others, media began reporting on climate change as if it were a case of giving equal weight to both sides, when in fact only a handful of largely industry-funded scientists raised concerns against an overwhelming majority of evidence gathered by everyone else. Tobacco industry tactics were employed to spread misinformation about climate change and to give public the impression that a scientific debate was still ongoing. These tactics included funding climate science sceptics and organizing media campaigns, along with direct attacks on notable individual climate scientists. When public opinion is sceptical about the scientific basis of anthropogenic climate change, fewer politicians are willing to push for legislation. Just as importantly, if politicians themselves feel unsure about the issue, they obviously do not give it enough weight. The fossil fuel industry plan was to fuel controversy where none existed and mainstream media was utilized to create a feeling of uncertainty and non-urgency around the need to take action on climate. It worked: while the scientific evidence and consensus drew stronger and stronger, the political momentum on global warming in the USA was lost even before the Kyoto Protocol was finalized in 1997. Manufacturing doubt and buying time was the goal, and the lobbyists succeeded. (Oreskes & Conway, 2010, pp. 169–215; see also endnote 13).²⁵

By engaging in these lobbying activities and misinformation campaigns, corporations such as ExxonMobil have stepped outside their normal sphere of influence, wielding its power where it should not, i.e. in public policy and international treaties trying to avert a climate catastrophe. With power comes responsibility. I therefore argue that the corporations involved in GCC and similar lobbying efforts have by their actions generated additional moral responsibility for themselves (to varying degrees) to take action to mitigate anthropogenic climate change. In other words, they have expanded their sphere of stakeholders and CMR through their own voluntary actions. This is why it would be justified to demand that these corporations compensate for their past actions. It is a well-established fact that mitigation becomes more and more costly as years go by and climate change effects add up. These corporations benefited financially (and still do) for supporting misinformation campaigns, echoes of which still affect the public opinion today, putting their profits over all other concerns. They could be argued to be appropriate subjects for compensation claims and to owe money towards mitigation efforts.²⁶

Concluding Remarks

This paper has discussed whether it makes sense to talk about corporate moral responsibility in climate mitigation context. The answer I have given is that it does, although the responsibility is limited by many factors. I have based my concept of corporate moral responsibility on Werhane's systems thinking model. When it comes to responsibility for current and future activities, corporate responsibility is a clearer issue than with responsibility for past emissions. However, corporations actively engaged in misinformation campaigns about climate change in order to protect their profits have by doing so accrued additional mitigation responsibilities. Their actions offer a perfect cautionary example of what damage corporations can cause if the scope of corporate responsibility is artificially limited to fiduciary matters only.

Notes

1. Though it might be effective, regulation is often reactive as it tends to respond to corporate moral failures.
2. It is good to note that while the law in some countries assigns corporations legal personhood, this is not the same as to treat the corporate entity as a moral agent. In fact, a lot of ink has been spilt over whether the corporate agent itself can be the bearer of moral responsibility, or does that responsibility always boil down to individuals. Peter French's (1984) account of moral personhood has been very influential. A classic argument on the individualistic side has been given by Manuel G. Velasquez (1983). For more recent accounts, see for example David Copp (2007) and Tuomela and Mäkelä (2016). That rich debate falls outside the scope of this paper, but according to Dubbink and Smith, it can also be sidestepped (2011, pp. 230–237).
3. Friedman's ideas about maximizing shareholder value represent a very influential way of thinking, not just in the recent past, but even today, especially in business schools (Denning, 2013). Prominent business ethics scholar Norman E. Bowie has described the challenges of teaching business ethics when many management students fail to even see a problem with the marketing practices of fast food chains, for example. Bowie recounts how most of his students think that obesity is not a concern of fast food companies and that they have no responsibility regarding obesity epidemic. He struggled similarly with finance students when trying to make them see Goldman Sachs's conflicts of interest during the recent financial crisis. (Bowie, 2013b, pp. 217).
4. In an overview of academic literature on corporate responsibility, Sandra Waddock (2004) defines CSR as discretionary philanthropic activities, voluntary add-ons to wider corporate responsibilities. She discusses the overlap between CSR, corporate citizenship and other business ethics jargon, noting that consensus about the underlying meaning is often missing and terms are used interchangeably. I agree: the lack of consensus over terminology also poses some challenges when comparing different authors' views.
5. While these activities are supererogatory for the corporation, they arguably might not be for certain individuals within these collectives. In other words, some members of a corporation might have duties to push for a certain course of action, but this argument falls outside the scope of this paper.
6. Miller also argues that collective good is something to which members of the community have a joint right, see chapter two, section two in Miller (2010).
7. His argument in 2013a is a revised version of an often-quoted 1990 book chapter 'Morality, money, and motor cars' in W.M. Hoffman, R. Frederick, and E. Petry Jr. (Eds.), *Business, Ethics, and the Environment: The Public Policy Debate* (pp. 89–97). New York: Quorum Books.
8. Responsibility thus seems to be, at least philosophically, perhaps a somewhat problematic term to describe what comes under CSR as the concept is not based on duties and obligations, although a corporation that engages in CSR that it can afford is arguably praiseworthy.
9. This is the picture where the corporation is placed at the centre, but part of systems approach is to consider how things are interconnected and interrelated. Therefore, multiple perspectives need to be taken into account, which in part means adopting a multiple stakeholder approach, with many configurations and accountability lines (Werhane, 2008, pp. 278–283).
10. An anonymous referee suggested that this gives rise to a perverse incentive, namely that a corporation can avoid having responsibilities to someone simply by not interacting with that entity, e.g. by not operating in poor countries it can avoid responsibilities to those people but by operating in those countries it gains obligations to those people. While it might seem like a perverse incentive, on a closer inspection I do not think it is. Imagine a medium-sized clothing manufacturer with retail branches in several countries. Let's call them Viva Fashion Clothing Company, or Viva for short. They design their clothes but have mostly outsourced their manufacturing to be more competitive. Viva is concerned about improving the working conditions in its supply chain, but it values sourcing cheap goods above this. They are looking to find a new supplier in order to expand their accessories selection, and have narrowed their options to two possible suppliers: one is a Bulgarian factory they are already manufacturing

some of their clothes in, the other would be a brand new supplier in Sri Lanka. To simplify the example, Viva's buying office does not use intermediaries (like agents or traders or external buying houses), but instead communicates with their suppliers directly and sources their own manufacturers. Both Bulgaria and Sri Lanka are known for poverty wages and poor working conditions in the garment industry, which explains why companies that are looking to cut costs are interested in them, rather than a country with minimum wages set above poverty lines and strong labour unions representing the workers. Viva arguably already holds obligations towards the (mostly female) workers in Bulgaria that are forced to work overtime at wages that are below subsistence levels. They could be obligated to promote social and economic well-being to some degree in Bulgaria; the extent and strength of the obligation would depend on the actual details. However, for the time being they have no obligations towards Sri Lankan workers enduring similar harsh conditions (they have not held discussions with the factory owners, nothing has been negotiated yet, etc.). Of course, it could be argued that Viva is complicit to some degree in the global exploitative garment industry, but this argument falls outside the scope of this paper. What is important is that in the systems thinking as long as the Sri Lankan workers have not been affected by Viva's actions (and cannot make a difference to Viva), improving working conditions in Sri Lanka would be supererogatory for Viva (perhaps even irresponsible in light of its other obligations). As Viva should look at how its responsibilities extend to the system in which its products are made, it could either choose to expand its outsourcing to Sri Lanka, thus gaining new stakeholders, or it could expand its production in Bulgaria. What incentives would the systems approach give to Viva? I do not think that it is obvious that it should choose to keep away from Sri Lanka. This is because it will either strengthen its obligations to workers in Bulgaria or create new ones in Sri Lanka. If they choose the former, Bulgarian workers become more affected by Viva's actions and therefore the obligations Viva has towards arguably become stronger (perhaps 45% of their work time would be spent in making Viva's products, compared to the previous 5%, increasing Viva's influence in the factory). Increasing production in a labour-intensive industry such as the one Viva is involved in arguably increases the obligations of the company (i.e. increased production cannot be achieved only through more efficient production methods, but more workforce is required), so Viva should look at where it could make most positive difference and balance this with other considerations.

11. Thank you to an anonymous referee for pushing me on this point.
12. Heath (2014) advocates a 'market failures' approach to business ethics, where business ethics are to be derived from the pursuit of market efficiency, based on the idea of Pareto optimality: a state of allocation of resources where you could not reallocate to make any person or preference criterion better off without making at least one person or preference criterion worse off. The central idea is that the market will work most efficiently when the externalities, imperfections and information asymmetries that lead to market failures are prevented.
13. The same study shows that only 42% of Americans believe that the majority of scientists think that global warming is happening. In reality, 97% or more of actively publishing climate scientists agree that global warming over the past century is extremely likely due to human activities. The greater the climate expertise among those surveyed, the higher the consensus on human-caused global warming, going up as far as 100%, see Cook et al. (2016).
14. Thank you to Arto Laitinen for pushing me on this point.
15. That does not mean that individual states act in a similar manner: California and many others are taking climate change seriously. In any case, the public opinion in the US now seems to be in favour of legislation. According to recent research by Marlon et al. (2017), 69% of registered voters in the US say the US should participate in the COP21 agreement, while only 13% say the US should not. Majorities of Democrats (86%) and Independents (61%), and half of Republicans (51%) say the US should participate (including 73% of moderate/liberal Republicans). Only conservative Republicans are split, with 40% saying the US should participate compared to 34% saying that it should not.
16. Oxfam International ran Make Trade Fair campaign to promote trade justice and to eliminate harmful trading practices such as dumping and unfair tariffs. The campaign also concentrated

on the poor labour rights of women and patent issues that prevented, for example, certain medicines or software from being accessible to people in the Global South.

17. Fairtrade International (formerly Fairtrade Labelling Organizations International) is part of the larger movement of Fair Trade that has roots in alternative trade buying organizations dating back to at least the 1970s. World Fair Trade Organization and Fairtrade International put together the Charter of Fair Trade Principles in 2009, outlining their common vision and core principles for Fair Trade.
18. After being an early target for campaigns on the poor labour practices in its supply chain, Nike has embraced what it calls 'sustainable innovation', which includes being open about the working conditions and pay in its factories and promoting low-carbon growth economy (about.nike.com/pages/sustainable-innovation). Mars works with three certification organizations (UTZ, the Rainforest Alliance and Fairtrade International) and aims to have 100% of the cocoa they buy be certified by 2020 (www.mars.com/global/sustainability/raw-materials/cocoa).
19. Some business leaders have called for stricter mitigation targets to make their operating environment friendlier for moving towards non-fossil fuel future. One prominent example of this is The B Team (bteam.org), comprising of Richard Branson and Ratan Tata among others.
20. One example, suggested by an anonymous reviewer, is that in an imperfect market system where proper regulation on climate change is lacking, corporations may have an obligation to voluntarily restraint their conduct as if public actors had already imposed constraints on their activities. Arguably, emissions would be regulated in a well-governed market system to help internalize the costs of carbon pollution into production. However, as our system is not there yet, especially globally, one could argue that it is a moral responsibility of corporations, as actors within a market system, to shoulder this kind of limitation on their own. I think this is an interesting idea, but it would need to be supplemented with a reason for why the actors within the market system should care about the system being well-governed or not: Is it because of concerns of fairness, efficiency or something else?
21. Corporations can also take advantage of systematic failures, like a multinational clothes manufacturer who closes down factories every time the work legislation improves in a country it manufactures in, only to open up new sites in countries with more scope for exploitation. This is the equivalent of actively looking for ethical loopholes in corporate law and is not what I mean by failures in the system outside the corporation's sphere of influence.
22. Bowie (2013a, pp. 139–141) also endorses two Kantian arguments (made by Mark A. Cohen and John C. Dienhart) for an obligation to businesses to avoid lobbying against environmental legislation; one is about a positive duty to permit citizens to protect or repair the environment, the other is about an economic system with externalities violating the system of property rights.
23. Another industry that arguably also has such an unfair advantage based on market externalities is the livestock sector. It is estimated to emit 14.5% of all human-induced greenhouse gas emissions each year (Food and Agriculture Organization, 2013). Beef and milk account for the majority of emissions, with beef production accounting for 41% of the sector's emissions, and milk production for 19%. The emissions linked to meat industry comprise mainly of feed production and processing (45%), enteric fermentation, i.e. outputs of methane during the digestion (39%), and manure decomposition (10%). The remainder is attributable to the processing and transportation of animal products. Importantly, a large part of the sector's emissions are methane, the strongest greenhouse gas, as cattle and other ruminant animals produce methane as part of their digestive process. In fact, the livestock sector emits 44% of anthropogenic methane emissions.
24. This has prompted an anonymous reviewer to suggest that Friedman might agree with some of my arguments. I agree with the reviewer that agnotology might come under deception or fraud in Friedman's model, but if it did, his account might need to be expanded as a fiduciary duty is owed to the shareholders only. Therefore, while they clearly should not be defrauded or deceived, one could argue that agnotology has worked out in favour of ExxonMobil's shareholders, for example. In addition, it is unclear what engaging in 'open and free competition without deception of fraud' would entail when it comes to lobbying where the end result benefits your competitors also, i.e. the whole fossil fuel industry benefited from the delay.

25. On the normative assumptions made by Oreskes and Conway about good science, see Fernández Pinto (2015).
26. This is indeed the route that jurisdiction is currently exploring. After submitting the first draft of this paper in April 2015, there have been many interesting developments to this direction. US Senator Sheldon Whitehouse (2015) wrote an opinion piece about the lobbying activities of the fossil fuel industry in *The Washington Post* in May 2015, drawing parallels to the tobacco industry, and raised the question if the actions violated the Racketeer Influenced and Corrupt Organizations Act (RICO) statute by knowingly misleading the public about climate change science. In September the same year, a group of 20 climate scientists sent a letter to President Obama, US Attorney General, and White House Office of Science and Technology Policy Director calling for a RICO investigation into climate change misinformation campaigns by corporations (Robbins, 2015). In November 2015, it was revealed that New York State Attorney General Eric Schneiderman is investigating ExxonMobil over the possibility of misleading the public over the impacts of climate change (Gillis & Krauss, 2015). In March 2016, a coalition of 17 attorney generals in the USA, led by Schneiderman, launched an investigation into claims that oil and gas companies had misled the public with regard to climate change. The investigation promises to pursue any company that had broken the law. ExxonMobil (and others) are denying the allegations, and arguments about freedom of speech are raised in their defence. (Schwartz, 2016). ExxonMobil has also been trying to overturn the probes through a lawsuit in federal court in Texas (backed by House Republicans), which was transferred to federal court in New York in March 2017 (Hurtado, 2017). It will be interesting to see where these developments go.

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ORCID

Säde Hormio  <http://orcid.org/0000-0003-2457-9013>

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