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Sustainability Mindsets for Strategic Management: Lifting the Yoke of the Neo-Classical Economic Perspective

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Abstract: While sustainability has attracted the attention of managers and academicians for over two decades, the macro-level indicators of sustainability are not moving in the right direction. Climate change continues to be an existential threat for humanity and other indicators of sustainability do not fare much better. The logic of the business case and the associated framing of tension between financial outcomes and sustainability have generated a limited and inadequate response to the existential challenges before humanity today. In this essay, we analyze the evolution of sustainability in the business context and call for a recognition that social and environmental outcomes must supersede economic ones in corporate sustainability thinking. We call for a widening of the spatial, temporal, and moral lenses in the formulation and execution of business strategy to ensure that it is in alignment with the needs of current and future generations of humanity and proportionate to planetary conditions.

Keywords: sustainability strategy; strategic mindsets; tensions in sustainability; business in society; weak and strong sustainability

1. Introduction

The extreme challenges faced by society and the planet that sustains it, the health of which our business sector is entirely dependent upon, clearly compel significant and deep changes to our strategic management mindsets and practices. Yet, relatively little change is evident in the strategic mindsets that guide most companies. This disconnect between societal sustainability needs and current strategic-management thinking may be attributed to the historical underpinnings of growth-oriented neo-classical economics (e.g., [1–3]) and the business paradigms based on its foundations. Somewhat ironically, it has been exacerbated, we argue, by the somewhat misguided application of such mainstream sustainability notions as the “Triple Bottom Line (TBL)” [4], “shared value” [5,6], and the “business case” (e.g., [7,8]). Even the recent promising conversation regarding sustainability “tensions and paradoxes” [9–11] potentially risks taking us further from the type of “strong” sustainability (e.g., [12–15]) viewed as essential for creating a truly “flourishing” future [16–18]. Compounding this problem is that there has been very little change in the strategic-management frameworks and tools offered in mainstream texts and business-school curricula, and used by most management consultants, to train current and future managers to apply sustainability thinking in practice.

We note that decades of research and practice in the context of sustainability have yielded highly inadequate results, endangering the well-being of the planet and current and future generations of humanity. Although the language of “paradigmatic shifts” is often used in the context of sustainability, most efforts tend to maintain the status quo. Our essay adds value to the literature by synthesizing current thinking and articulating specific conditions that would be necessary to generate the paradigmatic change needed for sustainability.

Our essay is structured as follows. In Section 2, we briefly examine the purpose and power of business in the context of impending sustainability crises. In Section 3, we delve into what we view as fundamental shifts needed in current strategic sustainability management paradigms—most notably that they need to focus less at the corporate level and more at the societal and planetary levels of analysis. In Section 4, we show that the notion of tensions between the traditional financial perspective and sustainability are misplaced and limit the sustainability strategies and actions of firms. We argue that this is a result of an adherence to the neo-classical economic perspective. In Section 5, we focus on the way forward by discussing a set of sustainability enhancing prescriptions for businesses. This leads us to identify an urgent need to imbue our strategic management frameworks and analytic tools with a more holistic, systems-level perspective. We believe that such a shift in thinking and enhancements in tools may have important value to educators and practitioners, and ultimately for our ability to create a sustainable future. In Section 6, we discuss our conclusions, limitations, and directions for future research.

2. Business, Society, and Sustainability

The key points we want to make in this section are that (1) society faces existential risks, (2) “sustainability” is inherently a holistic, system-level concept, and (3) the business sector is a major part of both the problem and the solution.

The United Nations, with the Brundtland Commission in 1987 and several other fora over the years [19], has attempted to draw the world’s attention to a host of compelling current and future social, environmental, and economic issues that challenge humanity—climate disruption, ocean acidification, biodiversity decline, resource depletion, population explosion, food shortages, water crises, poverty, inequality, and geo-political tensions. Decades of attention and a continuous stream of published reports on the status of these issues document that the future of humanity and many other species on our planet remains at serious risk [20–25]. For instance, reports from the United Nations’s (UN’s) Intergovernmental Panel on Climate Change [23] raised the alarm that progress on climate action is much too slow, with catastrophic effects likely. The Stockholm Resilience Institute published a comprehensive assessment of progress on the UN’s Sustainable Development Goals (SDGs)—created to direct action on seventeen pressing socio-economic and ecological areas of urgent need—concluding that the path forward to avert calamity calls for drastic change in many dimensions [24]. Kiron et al. [26] indicated that, although their surveys over a five-year period showed increasing attention to sustainability by the world’s corporations, macro-level indicators show relatively little progress. In short, all our attempts to address society’s sustainability issues have so far been woefully inadequate.

Most articulations of the meaning and scope of sustainability follow from the Brundtland Commission’s definition of sustainable development emphasizing the importance of meeting the needs of current and future generations [14,15]. The Brundtland definition was developed in the broadest context to guide economic, social, and environmental policy for the United Nations and its members and focused on three factors that are very important in the context of this article [19]. Firstly, from a spatial perspective, it is global; it does not invoke any national or corporate boundaries and therefore focuses on the societal (humanity at large) and planetary levels of analysis. Secondly, from a temporal perspective, it focuses on current and future generations with no time limits. Thirdly, from a moral perspective, it focuses on fulfilling the needs of all humanity, current and future, suggesting a moral responsibility for equity and justice. We will return to these three factors in our later discussion of sustainability tensions and paradoxes.

Recognizing the interconnectedness and interdependence of life on the planet, Ehrenfeld [16–18] advocated an even wider and more aspirational perspective by defining sustainability as “flourishing”—which he essentially defines as a world in which all living beings flourish forever. Similarly, the notions of “weak versus strong sustainability” [12–15] provide a more nuanced understanding. The strong–weak distinction reflects ecologists’ concerns about the continued provision of ecosystem services that are critical to the quality of life [14]. A “weak” sustainability regime permits substitutability between natural and manufactured capital as long as it does not deplete the sum of capital. Daly [12] advocates strong sustainability using the argument that natural and manufactured capital complement each other. Manufactured capital can only have value and be meaningful when sufficient stocks of natural capital are available. Daly [12] argues that “strong” sustainability focuses on human needs even while maintaining the conditions on earth that are conducive for current and future generations. He warns us that adopting “weak” sustainability will weaken nature’s infrastructure, threaten the conditions that make life on earth possible, and jeopardize future generations [12].

The dilemma is clearly manifested with the UN SDGs calling for progress on a comprehensive menu of specific social, economic, and environmental goals. Making progress on all 17 of the UN’s SDGs at once has been and will continue to be very challenging; a recent forecasting model showed that conventional efforts to achieve the 14 socio-economic goals will raise pressure on planetary boundaries, moving the world away from achieving the three environmental SDGs [24]. The “Precautionary Principle” advises exercising extreme caution when the consequences of exploiting natural resources are unknown [27]. At the same time, Daly [12] also warns against “absurdly strong sustainability”, which would hold that natural capital must be maintained as intact without compromise. He notes that absurdly strong sustainability will limit the resources needed to advance socio-economic progress, subjecting the poor and hungry to continued poverty, hunger, and little hope.

There is increasing recognition that corporations have a critical responsibility to not only mitigate the potential environmental and human crises that appear to be less than a 100 years away [24,25], but also to enhance the human and planetary conditions for current and future generations. The business sector is arguably the most powerful institution on our planet. In their ranking of the world’s top 100 revenue generators, Babic et al. [28,29] indicate that 71 are corporations and only 29 are governments. Despite the limitations of such rankings, they are an indicator of the influence (for good or bad) that corporations can wield.

Businesses are viewed as both the villain and the potential savior in the context of sustainability. They have driven economic growth and played a large role in the alleviation of poverty and the enhancement of the economic well-being of millions of people the world over. They have tremendous resources, reach, and leverage to positively influence public policy, global supply chains, resource efficiency, and human-resource development. Yet, they also are viewed as directly and indirectly responsible for the enormous environmental problems we now face [30]. Over the decades, there have been many connections between corporations and environmental issues like pollution of the air, water, and soil, as demonstrated in the seminal work of Rachel Carson [31], and widely confirmed in subsequent research (e.g., [32]). Numerous laws and regulations have emerged attempting to limit this negative environmental impact, with varying degrees of success (e.g., [33]).

In addition, the economic system that has driven economic and business growth is also responsible for the unsustainable levels of wealth inequality we witness in the world today. For example, annual studies by Oxfam [34] indicate a trend towards greater concentrations of wealth in the hands of a few—their 2019 study estimates that 26 individuals own as much wealth as the bottom half of the world’s population. Further, corporations also have the resources to leverage governments and limit their tax liabilities by finding legal loopholes. Cerullo [35] reports that 60 of the largest American corporations paid no taxes in 2018 even while reporting record profits, indicating not only a lack of responsibility for negative externalities, but also a value transfer from society at large to these corporations and their shareholders. Corporations use their so-called fiduciary responsibility to

shareholders as a justification for taking advantage of tax loopholes that are often created because of their lobbying activities—a further demonstration of their power.

The purpose of the firm, particularly its role in society, has long been a source of contention [36], and currently appears to be in play. The current paradigm is dominated by the perspective that the firm exists primarily to maximize the wealth of its shareholders, driven by arguments made by Friedman [1], Jensen and Meckling [2], and Jensen [3]. Friedman [1] famously argued that managers only have a moral responsibility to focus on meeting shareholder needs by generating returns on their investments and not on corporate social responsibility. Jensen [3] provides a somewhat different perspective arguing that managers needed to operate under the guidance of a single objective function to bring clarity and focus to their work that lies in maximizing the market value of the firm, which in turn generates the highest levels of social welfare. Driven by the assumption of self-interest, this neoclassical economics paradigm presents a seductive logic: that corporate self-interest is in the interest of society. We should note, however, that important qualifying conditions or guardrails articulated by Friedman [1] and Jensen [3] typically are ignored in attempts to preserve the paradigm. Friedman [1] argued in favor of free enterprise and its pursuit of increased profits through open competition without deception or fraud. The corporate scandals of the last few years and the recession of 2008 make it clear that firms will engage in deception and fraud if they can get away with it. Volkswagen's manipulation of emissions testing for its diesel cars in 2015 is an example of a well-known company engaging in deception [37]. The recent opioid crisis orchestrated by Purdue Pharma and the involvement of the credo-driven company, Johnson & Johnson, provides anecdotal evidence that deception and fraud are not above even well-respected companies [38].

Jensen [3] asserted that social welfare is maximized *after* accounting for externalities (the broader societal costs of their activities). In the real world, however, we see little assumption of responsibility for externalities by corporations. Further, attempts to induce firms to internalize the costs of negative externalities often meet with stiff resistance, as evidenced by the response to a carbon tax. Accounting standards and practices generally do not require firms to report on negative externalities and very few firms do so responsibly. Further, many sustainability and corporate social responsibility (CSR) initiatives serve as a “smoke screen” and a reputational façade [39]. They are often manifestations of “corporate hypocrisy” as they attempt to respond to the expectations of multiple stakeholders [40]. When corporations cannot find ways to meet the expectations of all their stakeholders, they often resort to communications that are inconsistent with their actions. Some writers on corporate hypocrisy, like Brunsson [40], taking an “amoral view” of this behavior, justify it as a legitimate managerial strategy for responding to competing stakeholder expectations. This amoral view has its origins in the “separation thesis” that moral and economic issues are very distinct concerns (based on their interpretation of Adam Smith's articulation of self-interest) [41,42]. Freeman et al. [43] frame the separation thesis as a fallacy that must be rejected, because all business decisions naturally impact human beings positively or negatively. We agree. We do not see a moral justification for the causation of harm to some so that others might benefit. Furthermore, it is difficult to see how the invocation of the separation thesis and the associated advocacy of amorality is not in itself an immoral act.

There are indications that the dominance of shareholder primacy in corporate thinking might be weakening. The Business Roundtable recently published a declaration, signed by 180+ CEOs of many of the largest US companies, that they were replacing their 1997 statement of purpose affirming shareholder primacy, with a new one maintaining that a firm exists to serve all its stakeholders—including employees, customers, suppliers, and communities [44,45]. It is also important to note that some of the world's leading economists met in Adam Smith's restored home in summer 2019 and expressed sentiments similar to the recent Business Roundtable statement [46]. The practical manifestations of the Roundtable's declaration remain unclear. It could represent a genuine profound shift or merely a result of waning trust in corporations and an exercise in corporate hypocrisy lacking alignment between talk and action [40].

3. Strategic Sustainability Thinking Gone Awry?

It is clear that thousands of corporations worldwide are recognizing sustainability imperatives and adopting sustainability strategies, including hundreds of the largest and best-known ones (e.g., Unilever, Apple, Microsoft, Nike, Shell, Toyota). We also are seeing the proliferation of alternative organizational forms (such as benefit corporations, social enterprises, collaborative networks) that place purpose and sustainability at the center of their business models, designing value propositions able to provide benefit to society and the environment while being profitable for the organization [47]. On one hand, this certainly is a hopeful trend away from the “business as usual” approach that has dominated for so long. On the other hand, although the academic and popular business literature both have generally invoked the Brundlandt commission definition of sustainability, the business sector has largely adopted a diluted perspective resulting in a drive toward *weak* sustainability. A major reason may reside in the core ideas that have strongly influenced corporate sustainability thinking.

One such idea is Elkington’s [4] notion of the “Triple Bottom Line” (TBL)—people, planet, prosperity—as a means to balance the competing pulls between the three dimensions necessary for a flourishing future. Recently, Elkington [48] essentially retracted his TBL concept because he concluded the economic bottom-line dimension tended to dominate and TBL had been co-opted to produce weak sustainability. We return to this concern in our discussion of sustainability tensions below.

Another idea is Porter and Kramer’s [5,6] notions of strategic corporate social responsibility (CSR) and shared value. They first argued that CSR initiatives must be aligned with company strategy, and be material to a company’s value chain, to be capable of enhancing company performance [5]. Although a focus on social and environmental factors is welcome, coupling these actions with enhancing company performance and reputation suggests that such actions are simply a manifestation of the firm’s marketing strategy masquerading as CSR. Subsequently, in 2011, Porter and Kramer [6] argued that firms must align their strategies with society’s needs to create “shared value” (CSV) because “capitalism is under siege” and needs to be saved. While this evolution from strategic CSR to CSV suggests some progress in the right direction, it still dichotomizes business and society by implying that business as an economic entity is not a part of society. In our opinion, this can be viewed as an attempt to preserve the existing dominant business paradigm. Business is a subset of society and the sector must serve to enhance societal well-being.

Equally influential on corporate strategic sustainability thinking is the argument of sustainability advocates that there is a “business case” for adopting sustainability practices (e.g., [7,8]). In fact, many studies focusing on sustainability practices and financial performance generally do report a positive performance relationship [49], showing that it is possible for businesses to both, do good and do well. However, while the TBL ostensibly called for a *balance* between competing demands on the firm, the business-case logic continued to give the economic dimension *primacy* over the social and environmental dimensions. Resource efficiency measures help reduce material and energy use and thus seemingly serve both business and environmental interests (after all, efficiency and productivity were reasons for the creation of the management profession [50]). Managers would make these choices even if they did not care about sustainability. However, lower costs and prices would potentially increase production and consumption, manifesting “Jevon’s paradox” [51]—the reduced costs and prices associated with higher efficiency would further increase consumption and production resulting in higher levels of material and energy use at the aggregate level. This would be captured in the gross domestic product of the economy as a quantitative measure of economic growth which would be beneficial for business but not for society and the planet. It would also tend to favor efficiency of supply chains over building in redundancy for resilience—the consequences of which have become all too apparent during the COVID-19 pandemic.

Going beyond efficiency, the business case also invoked “opportunities for growth” manifested in the increasing demand for “green” or “sustainable” products. With increasing awareness of environmental issues, proponents point to the opportunity for growth that accompanies increasing demand. On the social front, Prahalad and his colleagues (e.g., [52,53]) advocated that multinationals

should develop business models that focus on the poor at the “bottom of the pyramid” (BoP) as a means of expanding their markets and developing new avenues for growth. They argued that this approach would also help alleviate poverty. Here again, Jevon’s paradox would be manifested as poverty alleviation and lower costs would likely drive demand up, wiping out sustainability gains from improved resource productivity.

4. The Tyranny of Sustainability Tensions?

An essential premise underlying many core sustainability management ideas, such as the TBL, shared value, and the business case, is that we need to find a balance between social, environmental, and economic outcome goals. One of the key theoretical streams emerging in the literature on corporate sustainability focuses on the tensions that managers face as they attempt to incorporate sustainability into their business strategies and practices [9–11]. These tensions arise from a perceived need to meet financial objectives even while meeting the so-called competing social and environmental objectives that sustainability entails. Hahn et al., [9,10] as well as Van der Byl and Slawinski [11] among others, have identified four approaches managers may adopt to address these tensions: (1) trade-off, (2) win–win, (3) integrated, and (4) paradox.

Addressing perceived tensions in terms of trade-offs suggests that firms might need to sacrifice some level of financial performance to adopt sustainability practices. Typically, the trade-off is based on the assumption that there are increased costs associated with new technologies, adopting higher standards for waste management and other actions that will reduce or eliminate the environmental and/or social harms associated with the business. The firm would thus need to sacrifice financial performance in favor of sustainability. However, this kind of trade-off is unlikely [54]. If a business chooses to not make the trade-off in favor of sustainability, it is actually trading off social and environmental outcomes in favor of financial performance. In doing so, the firm is choosing not to mitigate or eliminate social and/or environmental harms and externalizing negative outcomes for society to bear.

Addressing perceived tensions through a win–win approach argues for adopting strategies where environmental, social, and economic outcomes are *all* in the positive direction. Typically, a win–win is achieved through resource efficiencies via technology and process innovation. For organizations that focus on the traditional financial bottom line, the implicit message here is to adopt only those sustainable practices that do not compromise financial outcomes. The approach in effect provides an excuse not to engage in sustainability practices if financial outcomes are negatively impacted in the short term. In addition, as noted earlier, we may witness the manifestation of Jevon’s paradox (increased consumption and resource intensity) because of lower costs and prices.

Addressing perceived tensions via an integrated approach is based on the argument that all three TBL dimensions be focused on synergistically. Despite its apparent merits, in practical terms, achieving a truly integrated approach is very challenging and unlikely. Firstly, financial outcomes are much easier to measure, comprehend, and communicate in comparison to social and environmental outcomes; in fact, financial and accounting professionals are finding it very difficult to assess companies based on their environmental, social, and governance (ESG) performance [55]. Secondly, financial outcomes are produced and measured in the short term. For instance, the practice of quarterly financial reporting attracts the time and attention of managers much more than social and financial outcomes which take longer to manifest and are hard to measure. In a context where maximization of shareholder wealth is valued and rewarded more than other outcomes, it is only logical that managers pay most of their attention to financial outcomes even while proclaiming an adherence to the TBL. Jalal, Nelidov, and Hoffman [56] argued that while firms may proclaim a commitment to TBL integration, the reality is manifested in a “Mickey Mouse” model where the economy is represented by a large circle and social and environmental aspects are represented by much smaller circles—his “ears.”

The fourth way to address perceived tensions, as a variation on integration, is to accept the paradoxical nature of the competing demands that adopting a sustainability strategy generates.

Managers who view the tensions as paradox are called upon to manage the tensions on a case-by-case basis. Often referred to as the “Both/And” approach (e.g., [57–59]), they are expected to *innovate* [11] to address the tensions they experience. For instance, business models developed to serve customers at the bottom of the pyramid [52,53] can enhance financial performance and growth even while addressing poverty [60]. Similarly, the carpet tile company, Interface, partnered with supplier Aquafil, to use only waste fibers in making their carpets, in pursuit of their zero-impact strategy for circularity, resulting in less environmental harm, reduced operating costs, increased product differentiation, and greater profits [61].

We contend that, although the paradox approach presents some intellectually stimulating challenges and possibilities, it can also become a formula for weak sustainability. From a practical perspective, we have doubts a Both/And strategy is likely to succeed. As we noted in our discussion of the integrated approach, the short-term nature of financial outcomes and the ease of measurement, communication, and comprehension will draw greater attention of managers than the social and environmental imperatives to which they profess their commitment. From a conceptual perspective, Schad and Bansal [57], in proposing a systems perspective, argue that in most cases the paradox approach is limited to the actors’ perception of tensions—the epistemological realm—at the expense of the underlying ontological realm that might lead to a deeper understanding of the complexities that generate the tensions. They recommend “zooming out” to bring this larger perspective into the field of vision. Zooming out, morally, spatially, and temporally, will bring the larger planetary and societal levels of analysis into the field of vision rendering the perceived paradox at the corporate/firm level inconsequential. We return to this point later in this essay.

We add “hypocrisy” as the fifth way in which corporations address their perceived tensions. Unfortunately, the tensions literature does not discuss this approach. In our view, it is probably the most practiced approach in the form of “greenwashing” [37]. As noted earlier, Brunsson [40] framed corporate hypocrisy as a lack of alignment between talk, decisions, and action arguing that the practice is a legitimate way of managing competing demands from different stakeholders, thus, giving the management of corporate reputation more importance than genuine sustainability management.

Although the notion of tensions in sustainability is intriguing and stimulating, they in reality may be doing a disservice to the vision of a truly sustainable world. As noted by Ehrenfeld and Hoffman [18], they, at best, may help to reduce unsustainability. By deploying the “Both/And” approach, corporations have limited their actions on sustainability issues to only those where financial performance is protected from a narrow accounting perspective. Therefore, while notions like the TBL and the approaches to tensions, ostensibly seek to balance or integrate financial, social, and environmental outcomes, they, in reality, prioritize financial outcomes and serve to preserve the existing business paradigm. Tensions are a socially created phenomenon rooted in the neo-classical economic perspective that preserves and rewards shareholder primacy. They create the illusion of responsible corporations while serving to preserve the “amoral” status quo that permits corporations to avoid responsibility for the negative externalities they generate. This perception of tensions has forced managers to limit their sustainability efforts and has been found in empirical studies to result in weak sustainability [13,62]. Wright and Nyberg [63] show that their sample of organizations started with good intentions but eventually diluted their response to climate change to manage competing demands of different stakeholders. As noted earlier, the adoption of weak sustainability is not in alignment with any of the commonly accepted definitions of sustainability. More importantly, it is unlikely to help humanity avert the extreme conditions scientists warn us about [23,24].

Recall that intergenerational justice is an important and essential component of every definition of sustainability—from the Brundtland Commission [19] to Ehrenfeld’s [16] concept of flourishing—which clearly state that ensuring the ability of current and future generations to meet their needs is our responsibility today. These definitions are clearly advocacy for strong sustainability because they implicitly call for the continuous preservation of ecosystems that create and maintain the conditions that make human and other life possible on planet earth. As noted earlier, the word “future” is not

bound by any timeframes. The definitions apply to *all* future generations. In our view, the contingent approach implied by the business case logic, the TBL, and the notion of tensions provide an excuse to do less than needed in a world in crisis, with the potential of impossible living conditions for future generations [23,24].

We argue that true and strong sustainability calls for a rejection of the balanced, or *Both/And*, approach. Rather, it calls for a hierarchical approach that prioritizes social good, the elimination of environmental harm, and the restoration of the environment over economic/financial outcomes. We surely do not discount the importance of financial sustainability—we fully recognize that it is essential for the long-term success of a business. We simply argue that it cannot be obtained at the cost of a reasonable quality of life for all current and future generations of all species.

5. The Way Forward

We suggest below some of the specific actions that companies would need to take to get to true and strong sustainability [12,14,15,62,64].

5.1. Prioritize Social and Environmental Goals in Strategic Thinking

It is critical to understand that the economy must serve humanity and the planet and not the other way around. We must recognize that the TBL and business-case arguments for sustainability are failing and the likelihood of a reasonable quality of life is fast receding. Sustainability actions that are driven by a business case become contingent on it. Principles, values, and the moral case will make sustainability sustainable [65]. Strong sustainability calls for reordering the hierarchy of decision factors. Corporate and political leaders must prioritize quality of life and the planetary conditions that sustain such life over short-term financial gain. Society can flourish, and businesses prosper, only on a flourishing earth. The economy exists to serve society [12] and the planet and, therefore, must be subservient to it.

In addition, traditional business models that are wedded to unlimited growth are not in alignment with the challenges of our time. To meet the needs of all humanity while preserving planetary conditions and finite resources that ensure intergenerational justice calls for not just de-growth [66] but for “good growth” that addresses poverty now and in the future. Most attempts at sustainability do not address the “book-ends” of extraction and consumption in the production system. A comprehensive approach to sustainability must find “circular” ways to limit or eliminate extraction and reduce consumption [67]. Anything else is weak sustainability.

We again emphasize that we affirm the importance of financial performance. However, when financial performance is associated with the generation of negative externalities, it is simply a transfer of value from those impacted by the negative externalities to the firm without fair compensation. Externalities like global warming, air and water pollution, and biodiversity loss negatively impact the commons and transfer public goods to private entities. That is unjust. We do not believe it is too much to call on firms to take responsibility for the harms they cause, and to lobby hard for changes in governmental policies that disincentivize doing this. Our argument is in alignment with calls from leading scholars like Freeman et al. [43], Ghoshal [68], and Waddock [69].

In this context, from an economic perspective, we advocate that firms apply marginal analysis incorporating externalities to reveal their true marginal benefits and true marginal costs. In their attempts to equalize marginal benefit and marginal costs, firms will be able to make production and consumption choices that maximize the well-being of society and the planet even while they engage in profit-making activity. In the absence of such an analysis, the negative externalities generated by firms are subsidized by society and the planet and it is unlikely that positive externalities will be distributed equitably across society. Business-as-usual is bound to be inefficient at the societal and planetary levels. Given the current paradigm governed by the neo-classical economic perspective, we realize that the transformation we advocate may seem to be a “bridge too far”. We support our argument by citing the company Interface and its late founder Ray Anderson [70,71]. In the mid-1990s,

Anderson had an epiphany. The epiphany was the result of an understanding that his petroleum-based carpet-tile company, while complying with all environmental laws prevailing at the time, was in fact an instrument of destruction of the earth's natural infrastructure. He concluded that his company operations were endangering the well-being of the planet as well as its current and future inhabitants. Taking responsibility, he resolved that his company would become a zero negative impact firm by the year 2020—Mission Zero. The commitment to Mission Zero was made without a clear understanding about how it could be achieved. In effect, Anderson implicitly took the position that legitimate profits are earned only when negative externalities are eliminated. The commitment led to a lot of exploration, experimentation, and innovation and Interface has declared the accomplishment of Mission Zero on time. Staying true to its late founder's legacy, the company has now launched initiatives like "Climate Take Back" by implementing projects to draw down carbon dioxide from the atmosphere [72]. In all of these actions Interface has not just maintained but, in fact, grown its profits.

5.2. Engage in Sustainability Thinking at the Appropriate Level of Analysis

Klien, Danserau, and Hall [73] warned that one needs to be very cautious about generalizing a concept from one level of analysis to another. All definitions of sustainability refer to the larger system—society and the planet—and *not* to the firm level of analysis. Focusing on the corporate level of analysis is at best meaningless, and at worst dangerous. Simply adopting the notion of corporate sustainability may itself be contributing to co-opting the strong sustainability agenda and restraining action proportionate to the challenges at hand [64]. Even though corporate actions may be local and within the scope of a firm's resources and boundaries, they need to be designed and executed in the broader context of human and planetary needs now and in the future. Yet, to the best of our knowledge, this fact is insufficiently discussed in the context of corporate sustainability (exceptions include Hahn et al. [9] and Schad and Bansal [57]). We agree with Schad and Bansal [57] that the perceived tensions at the corporate/firm level of analysis dissipate when we view the same issue from the societal/planetary level of analysis. They argue that "even though scholars recommend that paradox theory be applied to address wicked problems, the epistemological focus on perceived tensions overlooks the complex, ontological realities that cause them" ([57], p. 1491). Arguing for a systems perspective, these authors advocate "zooming out" to enable a wide-angle global view of the system, thus, exposing the underlying generative mechanisms that lie at the root of the tensions. They recommend then "zooming in" to focus on the dominant problems. This systems approach to sustainability enables transcending the tensions by elevating the level of analysis, seeing the wider interconnectedness of elements, and better identification and solutions to the underlying dominant problems.

In zooming out, we call for a focus on the needs and quality of life for all humanity and the preservation and enhancement of conditions that enable the flourishing [16–18] of all living things forever. For instance, researchers have identified the nine planetary boundaries [74,75] that define the necessary and safe living conditions on earth. Raworth's [76] "Donut Economics" draws our attention to the needs of humanity that must be met within the constraints of those planetary boundaries. The planetary boundaries and Donut Economics together provide an ideal context within which firms can define their purpose and widen their spatial, temporal, and moral lenses.

5.3. Infuse Tools for Strategic Analysis with Systems-Level Sustainability Constructs

Specific corporate strategies tend to emerge from strategic analysis. Thus, even reaching genuine widespread consensus about the purpose of business and the proper level of analysis for sustainability thinking is likely to be insufficient for creating strong sustainability strategies. Rather, the tools we use for strategic analysis must incorporate essential factors for assessing a firm's external and internal situation from a sustainability perspective. Unfortunately, the types of holistic, systems-level, social, and environmental factors needed for such analysis are mostly or entirely absent in the traditional management tools that appear in mainstream strategic management textbooks to teach future

managers, or the ones most often used by consulting companies to assist current managers. As a result, such important strategic diagnostic tools as macro-environmental analysis, stakeholder analysis, materiality assessment, competitive strength analysis, strengths–weaknesses–opportunities–threats (SWOT) analysis, and business-model development, compel little attention to the social and environmental threats and opportunities faced by a business. Thus, it is not surprising that the strategies that emerge from these analytic exercises tend to focus on firm growth, irrespective of the consequences at the societal and planetary levels. Dyllick and Muff [64] called for firms to look outward for opportunities to serve humanity. Schad and Bansal [57] pointed out that firms need to expand the view of their business environments to look for ways to serve. To make this happen, it is necessary to change or modify strategy diagnosis and formulation practices to ensure that sustainability is embedded deeply in the firm's practices and not just bolted on for reputational purposes [8]. All of this compels development of analytic tools that force planners to focus on a firm's broader responsibilities. One example might be introducing to a SWOT analysis such questions as: What are a firm's responsibilities to its internal and external stakeholders? What conditions in the outside world provide an opportunity for firms to serve society? What conditions in the outside world might hurt the company, humanity, and the planet?

6. Conclusions

Our purpose in this essay is to examine the concept of strategic sustainability–management thinking in the context of the role of business in society. We have argued that corporate sustainability thinking and practices have been limited because of a dominant economic paradigm (and supporting governmental policies) that prioritizes economic factors and financial results over the social and environmental dimensions of sustainability. According to Daly [77], the foundations of the current neo-classical economic system was developed for an empty world and an indefinite future and can no longer hold with the aggregate burden of humanity reaching and in some cases exceeding the limits of nature at the local, regional, and planetary levels. At the micro level, individual firms want to maximize their financial wealth. At the macro and aggregate levels, the obsession with economic growth is leading us on the path to ecological collapse, thereby imposing irreversible costs on our well-being and threatening our survival. There are limits to growth as is evident by the interdependence and interconnectedness of economic activity and ecosystem services. More economic growth means fewer natural ecosystem services, making obvious the physical conflict between the growth of the economy and the preservation of the natural ecosystems (the environment). The notion that the environment is part of the economy and needs to be integrated into it to promote economic growth is flawed and a fallacy of composition. Economic growth must remain within the planetary boundaries for “strong” sustainability. We have argued that the firm is a subset of the economy and that the economy needs to be integrated into the finite ecosphere. Storm and Schröder [78] sound the alarm that “business-as-usual” cannot continue—the idea of “green” growth is a myth, and the future has to be different from the past. We see clear indications of social, environmental, interspecies, and intergenerational injustice. Obviously, such a situation is unsustainable and calls for thoughtful, values-driven transformation with justice as a centerpiece.

An increasing number of corporations are adopting sustainability strategies in an effort to become an influential part of the solution. Guiding them are such core ideas as the TBL, shared value, and the business case for sustainability. Attempts to put these ideas into practice has highlighted tensions in trying to manage sustainability, and approaches to managing them [9–11]. We have pointed out several flaws in these dominant sustainability ideas and approaches that are effectively limiting the ability of corporate sustainability-related strategies and actions to respond adequately to the existential challenges we collectively face. We add value to the literature with our argument that it is only possible to achieve true sustainability [64] by elevating strategic thinking from the corporate to systems level of analysis. We call for a widening of the spatial, temporal, and moral lenses used by corporations and their managers. We also call for strategic analysis tools for formulating strategy that mirror

this expanded focus. Only through such fundamental mindset shifts will it be possible to develop sustainability strategies capable of creating the type of truly strong sustainability and the paradigmatic change the world so desperately needs.

One important limitation of our essay is the scope and scale of change we advocate. While we believe that the kind of paradigmatic change called for is an imperative for the well-being of society and the planet, we do realize that it would call for unprecedented efforts at the individual, firm, societal, and governmental levels all over the globe. There is no prior research to draw on in the face of a crisis of such massive proportions. While we have referenced anecdotal evidence provided by Interface carpets demonstrating that transformation to a zero negative impact firm is possible and profitable, we realize that it will take corporate leadership with great insight and courage to initiate and manage the transformations that are proportionate to the current and impending crises we as a humanity face. There is an urgent need to identify and study companies large and small that are rising to the challenge and hold them up as exemplars for others to learn from and emulate. Furthermore, research is also needed to understand the challenges of change management in this context as well as ways to overcome them.

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