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Editorial

Truly Sustainable Responsibility: A New Research Direction Building on Environmental Management, Corporate Social Responsibility, and Corporate Sustainability

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1. Introduction

Many advances have recently been made across three key streams of sustainability research: (1) environmental management (EM), (2) corporate social responsibility (CSR), and (3) corporate sustainability (CS)—the focus of this *Sustainability* Special Issue. Historically, CSR research concentrated on social issues [1]. EM research focused on environmental concerns and management practices [2]. The emergence of CS research, which has sought to address both social and environmental issues, has blurred the previously clear boundaries between CSR and EM [3].

Despite their partial overlap due to the above history, each research stream has continued to maintain its distinct focus and socio-cultural tradition. CSR research has remained centered on personnel and other human stakeholder groups. EM research has focused on environmental and non-human issues. CS has emphasized an economic and quantitative approach to integrate across EM and CSR [4–9].

The differing foci across the three research streams has led to conceptual fragmentation. inconsistent methodologies, and gaps in research knowledge (see e.g., [7,8]). This lack of coherence has not been confined to academia; it has contributed to conflicts in practice and policy [9].

In this brief editorial, we aim to unpack this conundrum. We begin with a conceptual exploration. Sustainability researcher Frank Geels and his colleagues have identified how EM and CSR have interconnections both with one another and with a broad megatrend of 'sustainability transitions in consumption-production systems' [4]. This group of researchers has emphasized the worth in sustainability science of addressing multiple interacting system levels at once: (1) a global landscape, (2) national macro-level systems ('socio-technical regimes'), and (3) micro-level circularly operating socio-cultural niche systems (see Figure 1). Any successful transition tends is in the view of Geels and his colleagues to be driven by solution-oriented research and solution-oriented policies that reconnect how human society from now on will interact with nature or with technology [4].

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Figure 1. Three-level model of sustainable responsibility: global landscape, macro-level socio-technical regimes, and micro-level niches of agents and activities (Adapted from Geels et al. [4]).

In this editorial, to refine Geels's argument, we build on the Brundtland Report [2]. The Brundtland Report states that meeting the needs of our generation in human society should not compromise the ability of future generations to meet their own [2,10,11]. From the latter perspective, the distinction between social interactions with technology or with nature is somewhat of a false dichotomy. Appropriate interaction is not always of an either-or kind but can be of a blurred and both-and kind. With our currently pressing grand challenges of climate change, social strife and economic globalization, there is an urgent need to engage without delay with both technology and nature at once (see Figure 1).

This Special Issue of *Sustainability* journal includes five research articles:

1. *Article 1 in this Special Issue:* Jiang, Y.; Ampaw, E.M.; Xu, F. Unpacking the mechanisms of network embeddedness for low-carbon innovation in Chinese enterprises: A Dynamic and cognitive theory perspective. ***Sustainability 2024***, 15, 11498. https://doi.org/10.3390/su151511498.
2. *Article 2 in this Special Issue:* Morales-Parragué, M.A.; Varela-Laso, R.A.; Araya-Castillo, L.; Molina-Luque, F. Corporate social responsibility: Where does it come from, and where does it go? Evolution of the conceptual structure from 1975 to 2021. ***Sustainability 2024***, 15, 5770. https://doi.org/10.3390/su15075770.
3. *Article 3 in this Special Issue:* Zhang, X.; Wan, J.; Jin, Y. Exploring the outcomes of customer engagement in DSR: The role of affective commitment and gamification affordance. ***Sustainability 2024,*** 15, 5037. https://doi.org/10.3390/su15065037.
4. *Article 4 in this Special Issue:* Sun, L.; Saat, N.A.M. How does intelligent manufacturing affect the ESG performance of manufacturing firms? Evidence from China. ***Sustainability 2024,*** 15, 2898. https://doi.org/10.3390/su15042898.
5. *Article 5 in this Special Issue:* Waxin, M.-F.; Bartholomew, A.; Zhao, F.; Siddiqi, A. Drivers, Challenges and Outcomes of Environmental Management System implementation in public sector organizations: A systematic review of empirical evidence. ***Sustainability 2024,*** 15, 7391. https://doi.org/10.3390/su15097391.

Each of the five articles in this Special Issue makes a valuable and novel contribution to our thematic focus. While embracing traditional themes in the field, they offer fresh perspectives on established research topics. We extend our gratitude to the authors for advancing the development and vitality of sustainability science.

In Table 1, we visualize how build on the research and policy frameworks initiated by Geels [4] and Brundtland [9]. Using the five articles and their contributions as starting points [4,9–11], Table 1 positions CSR, EM, and CS along one dimension, with the multi-

level processes (MLPs) along the other dimension. 'Truly Sustainable Responsibility' (TSR) emerges as a new concept at the interconnections of CSR, EM, and CS. We also propose calls for further research.

Table 1. Positioning the five articles on responsible business practices in this Special Issue, advancing Truly Sustainable Responsibility (TSR) as a new concept related to global corporate sustainability, and pointing to new research directions.

	Environmental Management (EM)	***Corporate Social Responsibility (CSR)***	***Corporate Sustainability (CS)***
Transformation in global landscape = progress in global sustainability ethics	Jiang et al. (*Article 1 in this issue*) on EM driven by corporate executives' social cognition	*Call for more research: Collective action as to Truly Sustainable Responsibility (TSR) globally*	*Call for more research: Parameters for TSR to interconnect EM, CSR and CS practices*
Macro-level transition in socio-technical regimes	Sun et al. (*Article 4 in this issue*) on economic, social and governance ('ESG') reporting	Morales-P. et al. and Zhang et al. (*Article 2 and Article 3 in this issue*) on evolution of CSR and on 'digital social responsibility' ('DSR')	*Call for more research: How to avoid (and not only treat) macroeconomic moral hazard and socio-technical regress*
Micro-level change at Organizational-niche level	Waxin et al. (*Article 5 in this issue*) on EM as in part corporation-particular systems	*Call for more research: Local cultural norms of opposition and compliance and TSR*	*Call for more research: How to avoid (and not only treat) microeconomic moral hazard and socio-technical regress*

Below, we detail how we see the new research directions in Table 1 to contribute to sustainability science and related disciplines for responsible-business practice, policy, and civil activism.

2. Detailing What Is Truly Sustainable Responsibility (TSR)

We introduce TSR as a concept to bridge and integrate CSR, EM, and CS in a new way (Figure 2). TSR research represents a new and hybrid approach, combining social responsibility from CSR, environmental responsibility from EM, and the economic perspective typical of CS, creating a unified framework for studies and research projects within sustainability science.

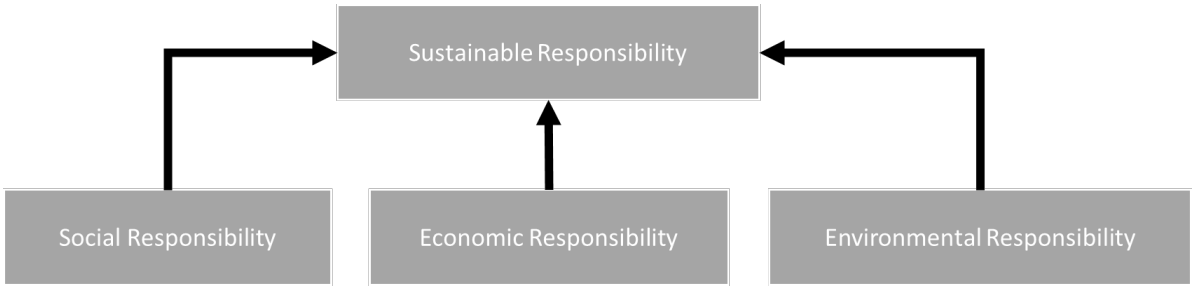

Figure 2. Truly Sustainable Responsibility (TSR)—towards integrating sustainable responsibility, encompassing CRS, EM, and CS, as well as taking responsibility for cleaning up after the past deeds of earlier generations.

What emerges is a comprehensive and dynamic global research landscape [12], where current and future advances in research on CSR, ESM, and CS enables a transition and transformation towards a truly inclusive and global understanding of environmental, so-

cial, and economic responsibility. Until now, responsible business practices have ranged from broader environmental approaches to more narrowly defined ones (contribution 5). TSR promises to envelope and integrate the as-of-yet fragmented and difficult-to-fathom range of ideas and practices. Within the TSR framework, CSR is a system that includes individual-level social cognition and innovation that may be highly personalized (contribution 2), a system of innovation that is autonomous and de-personalized (contribution 3), or both. The various EM dimensions of environmental responsibility can be integrated through quantification methods, such as ESG reporting (contributions 4 and 5),without such quantification needing to surrender to economic imperialism. Advances in computer science and digitalization can here help.

The title of Table 1, 'Advancing Truly Sustainable Responsibility (TSR) as global corporate sustainability' can extend CS practices and principles beyond the confines of the economic responsibility of a given individual corporation, deliberately blending intra- and inter-organizational elements of CSR, EM, and CS. In this context, TSR represents a transparent commitment to genuine corporate purpose, an attitude that transcends the singular responsibility of one corporation, to include accountability for also the past actions of other corporations, even of those that no longer survive. TSR thus embodies what can be considered an ethical take on sustainable responsibility—a global commitment to a purpose and mission of a kind that has been underrepresented in sustainability science so far.

Developing effective TSR systems poses significant challenge but also significant upsides. The five research articles within this Special Issue by no means manage to exhaust empirically or theoretically the upsides in or at the interstices of academic-research findings, corporate practice, public policy, or civil-society activism, at which we in this editorial can as of yet but point to.

3. Conclusions

The urgent need for accelerated deep transitions towards globally sustainable development pathways is now widely recognized. Research on responsible business has but begun to address this need. The three key research streams covered in this Special Issue are corporate sustainability (CS), corporate social responsibility (CSR), and environmental management (EM). We have highlighted that it is essential not only to examine CS, CSR, and EM as distinct research streams. We have instead mapped these three streams of research on responsible business as a dynamic, circularly operating and multilevel system framework [4], consisting of: (1) a global landscape, (2) national macro-level systems (socio-technical regimes), and (3) micro-level socio-cultural niche systems.

In this editorial, we illustrate how we see the five research articles in this special is them to synthesize into the emerging three-by-three, dynamic and global framework we call Truly Sustainable Responsibility (TSR). Also Geels [4] has highlighted the urgency of this kind of research. While the focal agency he has in mind is the National Academy of Sciences in the USA, this framework emphasizes the urgency of the need for transitions towards increasingly responsible and hopefully increasingly circular business models. Within the complex international supply chains of production and consumption by corporations and other players that characterize the modern economy, it is important to remember how the dynamics of the supply chains are embedded in an ecosystemic interplay of regulators, other public-policy actors, consumer-interest groups, and civil-society activists.

In this editorial, building upon the five articles within this Special Issue, as well as our review of EM, CSR, CS, and other sustainability-research literature, we thus propose our new concept and framework of TSR as a new research stream and set of new research directions, to both build on and to complement research still focused on CS, CSR, EM, or any combination thereof.

We believe that TSR research may most contribute to CS research. Tweaking CS research toward TS will extend CS research beyond current circular-economy analyses of costs and returns, to focus also on environmental impacts, such as on downcycling, on disposal, and on waste management. It may also extend CS research to consider creative, cultural and technological performance such as upcycling, smart products, and new materials. Promising research focused in one or several of the above ways has seminally already been carried out in industries such as the fashion industry, with commitment to clean up after deeds of also others than those one's own, paying attention to upcycling [13], digitalization to increase the efficiency of information process [14], and data-sharing across corporations [15]. We foresee similar fruitful new research directions also in other industries. Advances in computer science and digitalization without a doubt will continue to enable rapid advances in EM, CSR, and CS. Multi-level empirical studies of enviro-socio-economic dynamics will produce ever new research-based knowledge in and across EM, CSR, and CS, as well as now also TSR, in and across industrial-corporate and governmental-policy players, consumers, as well as civil society pressure groups and activists.

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