

"This is the peer reviewed version of the following article: The paradigm shift: Business associations shaping the discourse on system change. *Business and Society Review* 129, 2 p155-167 (2024), which has been published in final form at <https://doi.org/10.1111/basr.12359> This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived Versions. This article may not be enhanced, enriched or otherwise transformed into a derivative work, without express permission from Wiley or by statutory rights under applicable legislation. Copyright notices must not be removed, obscured or modified. The article must be linked to Wiley's version of record on Wiley Online Library and any embedding, framing or otherwise making available the article or pages thereof by third parties from platforms, services and websites other than Wiley Online Library must be prohibited."

**The Paradigm Shift:
Business Associations Shaping the Discourse on System Change**

Sandra Waddock, Boston College, Carroll School of Management, Chestnut Hill, MA 02467
USA, waddock@bc.edu, ORCID: 0000-0003-1089-7686

Irene Henriques, York University, Schulich School of Business, Toronto, Ontario, M3J 1P3
Canada, ihenriques@schulich.yorku.ca, ORCID: 0000-0002-6953-9982

Martina Linnenluecke, University of Technology Sydney, UTS Business School, 14-28 Ultimo
Road, Ultimo NSW 2007, Australia, martina.linnenluecke@uts.edu.au, ORCID: 0000-0001-
7984-9717

Nicholas Poggioli, Appalachian State University, Department of Management, Boone, NC 28608
USA, poggiolin@appstate.edu, ORCID: 0000-0002-0830-9577

Steffen Böhm, University of Exeter, University of Exeter Business School, G11 SERSF, Penryn
Campus, Cornwall TR10 9EZ UK, S.Boehm@exeter.ac.uk, ORCID: [0000-0002-0888-1362](https://orcid.org/0000-0002-0888-1362)

Business and Society Review Submission: Agenda 2050

Abstract:

This *Agenda 2050* piece is a call to action for management scholars to follow the lead of business associations, foundations, and businesses in studying and understanding the transformative change needed to bring about a more equitable and flourishing world for all living beings—including humans and other-than-humans. These entities advocate for a significant paradigm shift in how business is practiced as a way of responding to ‘polycrisis’—the interrelated set of civilization-threatening crises that includes climate change, social inequality, and biodiversity loss. Yet, management scholars lag behind business discourse with issues of sustainability and ecological flourishing, adapting to the type of leadership needed for the future, and understanding the need for system change. We provide four keystone pathways to help scholars shape future discourse in business scholarship, practice, and curricula: 1) structural changes to management education, 2) piloting social impact, 3) development of regenerative business models, and 4) moral, legal, and financial case for action.

Keywords: transformation, system change, management education, sustainability, corporate social responsibility, regenerativity

Introduction: Getting in Front of the Need for System Change

“The research-teaching-practice gap seems particularly noteworthy when it comes to global sustainability. Relatively little attention is given by business researchers to the developments coming from global natural science research agendas...or to the impact of business on the resilience of planetary ecosystems. This is in spite of the ‘promising initiatives in the practice of business’ (Winn & Pogutz, 2013, p. 203) that are currently being explored by some corporations” (Edwards et al., 2021, p. 45).

We propose a 2050 Agenda for management scholars to emulate business associations in shifting systems of business practice toward greater sustainability and responsibility. The most powerful transformational change lever is a paradigm shift (Meadows, 1999). Our proposition stems from a professional development workshop (PDW) we conducted at the 2023 Academy of Management (AOM) Annual Meeting. Business associations, foundations, and businesses argue for this paradigm shift as a response to the polycrisis—the interrelated and civilization-threatening crises including climate change, ecosystem collapse, social inequality, and biodiversity loss (Homer-Dixon et al., 2021). Initiatives like Seafood Business for Ocean Stewardship aim for a paradigm shift in the global system of seafood production and consumption (SeaBOS, 2023). The World Economic Forum’s ‘The Great Reset’ intends to create a new social contract honoring human dignity, refocusing global and business models, and supporting entrepreneurial solutions that tackle climate change and advance sustainability (*The Great Reset*, 2020). The World Bank promoted a paradigm shift in the relationship between nature and businesses (World Bank Group, 2021a, 2021b). The World Business Council for Sustainable Development updated its Vision 2050 to call for a ‘mindset shift to transform everything’ (WBCSD, 2010) and collaborated with Forum for the Future on *A Compass for Just and Regenerative Business* (Forum for the Future & World Business Council for Sustainable Development, 2021). The MacArthur Foundation’s 2021 report *The Nature Imperative: How the Circular Economy Tackles Biodiversity Loss* (Ellen MacArthur Foundation, 2021) complemented its longstanding advocacy of a shift from linear to circular economic systems (Ellen MacArthur Foundation, 2013).

Efforts by business associations for a paradigm shift are complemented by policy makers and business leaders who recognize the need for a ‘whole of society’ transformation across industries, especially to mitigate the harmful effects of extractive, nature- and human-insensitive business practices (Subsidiary Body for Scientific and Technological Advice & Subsidiary Body for Implementation, 2023). The European Union created the European Green Deal. Finland, New Zealand, Scotland, and Wales adopted Wellbeing Economy ideas and metrics. Intergovernmental reports describe changes needed to address problems of climate change (IPCC, 2022; Masson-Delmotte et al., 2021), biodiversity loss and species extinction (Díaz et al., 2020), the unsustainable use of wild species (Fromentin & Al, 2022), and undervaluing nature’s biodiversity and ecosystem services (Edwards et al., 2021; IPBES, 2019). Leaders of Unilever and Ikea call for a paradigm shift for their firms toward regenerative and net positive business models to put more back into society, the environment, and the global economy than they extract (Cooperrider & Godwin, 2022; Cooperrider & Selian, 2021; Polman & Winston, 2021).

These efforts, calls, and reports signal an urgent need for a paradigm shift in business practices to effectively address the polycrisis. They emphasize the leading role that business associations are taking in detailing how to foster a paradigm shift, including through regenerative practices in food and agriculture, moving value chains from linearity to circularity, and shifting humans' and businesses' relationships with nature. Despite this attention to paradigm shifts, key journals in the broad field of management (including the business in society field) seldom discuss system change or transformation. (Exceptions include Colombo, 2023; Edwards et al., 2021; Lucas et al., 2022; Sulamoyo, 2022; Winn & Pogutz, 2013). How can we management scholars and teachers do more to accelerate the paradigm shift in business practice?

To answer this question, we organized the PDW at the 2023 AOM Annual Meeting titled, "Making the Paradigm Shift Happen: Following the Lead of Business Associations" to provoke and elicit feedback from AOM scholars. The session put management scholars' analytical and intellectual skills into action to understand how management education can contribute to the paradigm shift called for by business associations. We identified four pathways for a paradigm shift. We view these pathways as four 'keystone' pillars that can help shape future discourse in business scholarship, practice, and teaching.

- 1) Structural changes to management education,
- 2) Piloting social impact,
- 3) Development of regenerative business models, and
- 4) Moral, legal, and financial case for action.

We engaged the international audience of the PDW in an interactive exercise and dialogue on these topics. This paper presents the results of the exercise and, from those results, describes the four pathways for how management scholarship can contribute to the much-needed paradigm shift.

A Generative Conversation about Regenerative Business Practice, Economics, and Management Education

The aim of the generative exercise with session attendees was to identify how to shift the economic paradigm towards a more regenerative approach. We organized attendees into roundtables and asked each table to generate ideas for realizing the paradigm shift. Participants wrote each idea on a sticky note and placed each note in the center of the table, creating a tangible, accumulating pile of contributions as the exercise progressed. Once the rate of idea generation slowed, the notes were moved to one of the room walls, where participants silently contemplated all contributions. Following this reflection, participants collaborated to organize the notes into thematic categories, which was followed by a general discussion. These thematic categories form the foundation of our paper's recommendations.

Attendees expressed diverse views on what needs to change and how to achieve them. For one, they recognized the need for experimenting with the idea of looking backward to move forward, showcasing regenerative practices, learning from what is already known about overcoming past crises, traditional knowledge systems, and working within the system. Suggested strategies to taking 'pluriversal' approaches to stakeholder engagement include

changing values and mindsets with particular emphasis on rethinking/re-understanding humans as part of (rather than separate from) nature, moving from circular to regenerative practices transparently, and building political power for change. Participants also advocated for engaging with stakeholders and communities to generate cultures of respect for other-than-humans and nature as well as other people, and changing the moral foundation on which businesses rest. Creating regenerative economies, using concepts like Raworth's Doughnut Economics (Raworth, 2012), adopting well-being-focused metrics beyond gross domestic product (GDP), stopping extractive practices and problematizing growth as a central economic goal were also key points. Potential steps forward included governmental action, increasing the costs of problematic practices, media strategies to increase public awareness, regenerative design, and shifting away from profit as the sole incentive for businesses.

The broad-ranging conversation that followed the exercise emphasized a need for management scholars to catalyze collaboration among different stakeholders and sectors as a key aspect of undertaking needed transdisciplinary research. In addition, the idea of engaging more fully with Indigenous perspectives and recognizing, acknowledging, and working collaboratively with people with different worldviews is crucial to dealing with ecological and social challenges. For example, the incorporation of more place-based or local solutions tailored to the unique needs and challenges of different contexts may suggest moving beyond Western-centric dialogue and ways of knowing, to be open to different ways of communicating, collaborating with, and understanding various perspectives. Such an approach requires we overtly acknowledge the ethical issues associated with these changes and adopt an openness to different ways that people communicate and engage with knowledge, particularly around issues of system change, regenerative practices, place-based approaches, and other-than-human beings. The conversation also underscored the need for a shift in the economic system from growth and extractive practices to resilience and wellbeing, necessitating changes in business education on all fronts (Kennedy & Linnenluecke, 2022).

Four Pathways to Paradigm Shift

Structural Changes to Management Education

One principal topic that emerged from discussion was that existing management education is not capable of achieving the needed paradigm shift. Management education was developed within an era of unfettered fossil fuel use. But halting climate change and its associated social and environmental harms requires the world to stop burning fossil fuels, reorganize our transportation systems, change land use and management, innovate new ways of making steel, cement, and other industrial products, and change other management practices (Project Drawdown, 2023).

Transitioning business practice to activities that do not cause additional global warming is a significant management challenge. Is management education useful for understanding organizations and organizing in a world without fossil fuels? Do strategic management courses teach how to successfully compete and survive against firms that use fossil fuels and other destructive business practices? Do international business courses teach how to manage foreign

direct investment and global supply chains without using fossil fuels? Scholarship suggests the answers to these questions might be no (Higham & Font, 2020; Yu et al., 2023).

Instead, management scholars seem confident that innovations will allow unsustainable practices to continue, requiring little change in the teaching or practice of management. There is strong enthusiasm that sustainable aviation fuel, carbon capture and storage, carbon offsets, and solar geoengineering will solve climate change without ending the use of fossil fuel-based management practices. This optimism resembles what Gifford (2011) called an ideology of technosalvation: we do not need changes today because innovations will save us tomorrow. The truth is there is little evidence that technologies like sustainable aviation fuel, carbon capture and storage, carbon offsets, and solar geoengineering can scale up to solve the climate challenge. Guarding against a misplaced faith in technology innovation requires management scholars to develop conceptual and curricular innovations that teach how to organize and manage economically sustainable firms and industries in environmentally and socially sustainable ways.

Concerted, accelerated effort from business school administration and faculty is probably required to shift management theory into a paradigm useful in a world without carbon emissions. Emerging curricular paradigms like sustainability management (Baudoin et al., 2022) and sustainability competencies (Brundiers et al., 2021; Wiek et al., 2011) offer initial movements toward climate friendly management education, but past attempts to advance new paradigms like ecocentric management (Shrivastava, 1995) and sustaincentrism (Gladwin et al., 1995) have so far failed. A practical first step to show success is for business schools to demonstrate that they can operate without using fossil fuels. This shift would require reorganizing business schools to no longer use airplane travel, faculty, staff, and student commuting, and building heating and cooling that burn fossil fuels. These efforts would generate invaluable theory about how organizations can be managed without fossil fuels while remaining viable against competitors. If such change sounds infeasible, that simply demonstrates that we lack theory explaining how to manage organizations without contributing to global warming, reinforcing the need for a paradigm shift in management education.

Piloting Social Impact

Another theme that emerged from the exercise was a need to understand whether corporate social responsibility efforts lead to a better society. Are CSR initiatives providing the societal good they promise? A mapping and analysis of 6,254 articles addressing CSR performance published in the last 50 years suggests that although the massive CSR literature has progressed beyond its long-standing focus on firm financial performance, it has failed to provide insight into how effectively CSR initiatives fulfill their promise to society (Barnett et al., 2020). Without such information, how can scholars address the grand challenges faced by society? There is a need to reorient management research towards an exploratory, experimental design approach guided by what works. In the field of development economics, Esther Duflo (2017) likens economists to ‘plumbers’ as opposed to a scientist or engineer. Whereas scientists analyze policies and engineers design policies, ‘[t]he plumber goes one step further than the engineer: she installs the machine in the real world, carefully watches what happens, and then tinkers as needed’ (Duflo, 2017, p. 5). Field experiment is essential in development economics (Duflo,

2020) for designing, implementing, and evaluating solutions. Unfortunately, there is currently no arena in which CSR interventions can be piloted and assessed.

To address this, business scholars, businesses, and practitioners can work together to create *CSR sandboxes*, in which organizations assess the social impacts of CSR initiatives. A sandbox is a controlled, supervised environment that simulates a real-life context where businesses can experiment with new products or services (Clarke, 2017). The concept, applied to sustainability, facilitates the re-thinking of what sustainability is and should be (Godelnik, 2019). Companies should apply this concept to CSR to test initiatives, assess their success or failure, and redesign them for more widespread implementation (Aronson & Henriques, 2022). Organizations can use a CSR sandbox to safely try out new ideas and evaluate their effectiveness before committing significant resources to them at a larger scale.

There are five important properties of a CSR sandbox: 1) isolation and control, 2) experimentation, 3) collaboration, 4) monitoring and evaluation, and 5) flexibility and learning (Hitt et al., 1998). Isolation and control relate to an organization's ability to separate the CSR sandbox from main operations so that the interventions can be independently controlled and assessed. Experimentation is a process of trial and error in which continuous and iterative tests are conducted (Thomke, 1998) until the organization has enough data and related insights to indicate the likelihood of success of the intervention (Aronson & Henriques, 2022). Collaboration with stakeholders, including employees, customers, scientists, NGOs, and communities, can be an important part of a CSR sandbox to not only ensure that interventions are effective and positively received, but also provide more diverse perspectives and ideas for addressing social and environmental challenges. A CSR sandbox must also have systems in place to monitor the progress and impact of interventions whereby multiple actors can pool their resources, knowledge, and expertise to achieve a greater impact. Finally, a CSR sandbox should be flexible and open to learning and modification as needed, based on the results of the experiments (Hitt et al., 1998). The outcome of such an approach will go a long way in addressing the research-teaching-practice gap.

Development of Regenerative Business Models

Participants also noted that a change of how businesses operate on a daily basis, especially to move away from linear and extractive business models towards circular and regenerative approaches, is needed (Gualandris et al., 2024; Konietzko et al., 2023). The 20th century saw an unprecedented rise in fossil fuel use and adoption of a destructive 'take-make-dispose' linear business model. Resources are extracted to produce goods and services, which are then discarded as waste (Bocken & Short, 2021). This model leads to valuable resources ending up in landfills, rivers, and oceans (Stahel, 2016), and has produced a host of negative impacts – from social inequalities to environmental degradation – which remain unaccounted for (Alexander et al., 2023; Hochschild, 2018).

Participants agreed that we need a paradigm shift away from a linear model and towards a regenerative model of business practice (Wright & Nyberg, 2017). This would shift business practice away from the idea of doing less harm – which is what corporate sustainability and CSR approaches are mostly focused on – towards business practices that contribute positively to

restoring and maintaining social and ecological systems (Velenturf & Purnell, 2021). This shift requires holistic systems thinking that goes beyond profit and loss, shareholder value, GDP growth, and other economic indicators. A regenerative business paradigm considers the interconnectedness of ecological, social, and economic systems, and understands that whatever is done in one domain creates ripple effects across the entire system (Waddock, 2020b). There is an urgent need to restore and repair systems damaged or destroyed by linear business paradigms through regenerative practices. These include rewilding, reforestation, regenerative agriculture, and regenerative water management, all based on adopting a different perspective on the relationship between business and ecological and social systems (Navarro & Pereira, 2015).

Regeneration also includes a social dimension. It would be problematic to exclude people from large areas of land to use them for carbon sequestration or rewilding projects (Franco & Borrás Jr, 2019). In addition to emphasizing ecological systems, regenerative business includes the wellbeing of communities and individuals, social justice, employee welfare, fair labor practices, and inclusive community development (Bennett et al., 2021).

Alternatives to the linear and extractive management are available but undervalued by management scholarship and teaching. Land management practices by Indigenous groups like the Bajau and Puruvesi, for example, have provided stewardship of nature for hundreds, and in some cases thousands, of years (Böhm et al., 2014; De la Cadena, 2015). In contrast, business and policy cycles of 3-5 years struggle to maintain regenerative and resilient business systems. It is time to unlearn old business paradigms to establish deep understandings of systems change and regenerative approaches to life (Morgan et al., 2023). As is evident, the paradigm shift in business requires a society-wide effort of re-imagining our future (Gümüşay & Reinecke, 2022). It is an effort of cross-sectoral activism (Böhm et al., 2023; Skoglund & Böhm, 2022) that is focused on co-creation and collaboration, rather than only competition. We cannot solve many of today's ecological and social challenges without collective efforts that include diverse perspectives from around the world (Antonacopoulou, 2022). This reality is one reason why business associations, rather than individual businesses, are so active in calling for paradigm shift.

The Moral, Legal, and Financial Case for Action

Businesses are confronted with a moral imperative to address environmental and social degradation. This obligation, which is rooted in the principles of ethical responsibility and intergenerational stewardship, resonates throughout the sustainability and ethics literatures, fueling sporadic instances of proactive action within corporate spheres. The paradigm shift of these moral convictions in business practice has not yet occurred, partly because of structural and behavioral barriers in management scholarship and education (Linnenluecke & Smith, 2019).

While companies are still grappling with doing 'what's best' for society, the development of international agreements on climate change has further accentuated the push for climate action. Global agreements such as the Paris Agreement, the UN's 17 Sustainable Development Goals, and the Kunming Montreal Global Biodiversity Framework signal a growing momentum for transformative action on climate change and ecosystem issues. Despite these endeavors, most countries worldwide still lack comprehensive policies to combat climate change (and its negative

impacts on issues such as ocean acidification and biodiversity loss) or inequity effectively and to move towards net zero targets. This policy gap constrains businesses from taking substantial action as they grapple with uncertain regulatory environments (Waddock, 2020a). The overarching challenge continues to lie in creating comprehensive and consistent policy frameworks that drive both corporate and collective climate action.

Sustainable business has become a battleground in culture wars, reflecting a dynamic clash between growing public pressures to act and growing amounts of misinformation. Climate strikes and legal actions amplify public demand for responsible corporate behavior. But the propagation of misinformation and unsubstantiated science simultaneously muddles the discourse. Nonetheless, climate lawsuits are on the rise and underscore the imperative for businesses to align with broader societal goals for sustainable business practice. Despite initial setbacks in the early 2000s (unsuccessful attempts to bring North American oil, gas, and electric companies to court), a renewed surge of strategic lawsuits and inquiries against corporations has arisen, which aim to seek redress for climate change-induced harm. Augmented by advancements in climate attribution science, these cases seek to hold these significant carbon emitters accountable for their contribution to climate impacts and disruptions, indicating a convergence between litigation, research, and corporate accountability. It is still unclear if lawsuits might drive more substantial business action in the future, but they are nonetheless raising awareness (Setzer & Higham, 2023).

The financial incentives for climate-conscious practices are becoming increasingly prominent (OECD, 2021). Companies recognize the financial advantages inherent in renewable energy and climate-oriented ventures. This shift is underpinned by technological advancements and a realization that the transition to a net-zero future can be synonymous with profitability. This trend toward ‘climate capitalism’, however, raises ethical questions about the prioritization of profitable endeavors over holistic sustainability, potentially sidelining other vital societal concerns. Initiatives such as the *Task Force for Climate-related Financial Disclosures (TCFD)* are reshaping corporate reporting paradigms. This shift has steered attention toward the evaluation of climate risks to the global economy. While this financial-centric approach drives companies to consider economic stability, it might not comprehensively address the broader climate-related societal risks. Thus, the challenge remains to strike a balance between financial considerations and a more encompassing understanding of climate risk, acknowledging the interconnectedness of corporate actions and societal well-being.

Discussion and Implications

Few management scholars seem to have responded actively to Winn and Pogutz’s 2013 call to action for researching and better understanding the ways in which (business) organizations need to intersect with the natural environment to bring about the regenerative, ecologically flourishing natural environment needed to support human civilization (Buckton et al., 2023). Perhaps that is because such approaches mean dealing with the complex-wickedness of real socioecological systems and the transformative processes that need to be engaged. Some may view that task as daunting. As one scholar in a recent conference stated openly: it is just too hard for scholars, or perhaps whole fields, to do. Complexity, wicked problems, and systems-

based concepts can facilitate understanding the need for a paradigm shift and how to overcome the challenges to achieving it.

The actions of business associations, foundations, and businesses show that management scholarship around a paradigm shift in business practice lags behind what businesses are calling for and doing. There are growing literatures on system transformation in fields outside management (Abson et al., 2017; Bentz et al., 2022; Chapin et al., 2011; Dorninger, 2020; Fazey & Leicester, 2022; Geels, 2011). Fields where this conversation is active include geography, ecological, wellbeing, and other heterodox economics, Indigenous scholarship, systems change and transformation literature, ecology, and other biophysical scientific fields that recognize the need for transformative change, such as marine science, sustainability, and agroecology (Dasgupta, 2021; IPBES, 2019; IPCC, 2022). Management scholars can draw on this existing work to grapple with the ways in which businesses, business leaders, and, indeed, business schools themselves can understand the paradigm shift needed to respond to the polycrisis.

We encourage management scholars and teachers to courageously engage with difficult, complexly wicked topics. Neglect of issues of sustainability, never mind systemic change (Edwards et al., 2021; Winn & Pogutz, 2013), is bad enough that in 2022 a group of early-career scholars published a call to action for imagining a place for sustainability in business schools and business scholarship (Baudoin et al., 2022), and widely-read practitioner outlets publish calls by established scholars for integrating sustainability into core MBA programs (Delmas & Sparks, 2024).

We acknowledge that the paradigm shift described in this paper increases the expectations on business practitioners to move from reducing harm to contributing proactively to regenerative outcomes. Competitive realities can present significant barriers to adopting regenerative practices, especially if those practices raise costs over competitors that continue to use practices limited to harm reduction, such as increased resource use efficiency or even destructive practices. These realities are one reason that business associations feature prominently in calls for a paradigm shift: if all businesses in an industry shift practices simultaneously, no business faces competitive disadvantages of adopting what is usually a higher cost structure associated with regenerative rather than destructive practices that externalize costs to society and nature. Concepts like pre-competitive partnerships and Sustainable Development Goal #17: Partnerships for the Goals acknowledge this tension and provide ways to resolve it through coordination and cooperation among competitors to shift whole systems of production and consumption, rather than the practices of individual firms (Altshuler et al., 2010; Ospina, 2022).

Conclusions

The paradigm shift described in this paper argues for a transformative change in our scholarship, our journals, and how we view our work, so we as management scholars can begin to catch up with business associations, businesses, and other academic disciplines already pushing forward to realize the paradigm shift. Ideally, we might eventually lead in addressing these issues so we can understand and inform management practices with prospective or future-oriented theories (Laszlo, 2021; Pavez et al., 2021).

We in management scholarship need to close the gap, to start thinking systemically. We need to understand the problematic nature of many existing management theories and practices, including their business-centric orientation in an ecologically constrained world. The imperative is to adopt innovative and new approaches to understanding and studying businesses in their societal and ecological contexts, much as business associations are already beginning to do. As scholars, we are now poised on the edge of a potential paradigm shift that incorporates system thinking, dynamics, big picture understanding, and the need for transformational change in our work, in the focus of research, and in the academy itself. This paradigm shift threatens to decenter business schools and management scholarship from a central place of relevance. In our 2023 AOM session, we began this conversation and forward it here—not just with early career scholars but with anyone willing to take the risks, and outline pathways forward that retain our excellence as scholars while enabling us to do work that really matters. It is long past time we shifted the conversation towards systemic issues and dealing with the complexity that it brings. For our environment, and for the continued sustainability of business systems.

References

- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., von Wehrden, H., Abernethy, P., Ives, C. D., Jager, N. W., & Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, 46(1), 30–39. <https://doi.org/10.1007/s13280-016-0800-y>
- Alexander, A., Pascucci, S., & Charnley, F. (2023). *Handbook of the Circular Economy: Transitions and Transformation*. Walter de Gruyter GmbH & Co KG.
- Altshuler, J. S., Balogh, E., Barker, A. D., Eck, S. L., Friend, S. H., Ginsburg, G. S., Herbst, R. S., Nass, S. J., Streeter, C. M., & Wagner, J. A. (2010). Opening Up to Precompetitive Collaboration. *Science Translational Medicine*, 2(52), 52cm26-52cm26. <https://doi.org/10.1126/scitranslmed.3001515>
- Antonacopoulou, E. P. (2022). Partnering for Impact: A Grand Challenge and Design for Co-Creating a Just, Resilient and Flourishing Society. *The Journal of Applied Behavioral Science*, 58(4), 571–594.

- Aronson, O., & Henriques, I. (2022). Shared value creation in equivocal CSR environments: A configuration approach. *Journal of Business Ethics*, 1–20.
<https://doi.org/10.1007/s10551-022-05260-5>
- Barnett, M. L., Henriques, I., & Husted, B. W. (2020). Beyond good intentions: Designing CSR initiatives for greater social impact. *Journal of Management*, 46(6), 937–964.
<https://doi.org/10.1177/0149206319900539>
- Baudoin, L., Carmine, S., Nava, L., Poggioli, N., & van den Broek, O. M. (2022). Imagining a Place for Sustainability Management: An Early Career Call for Action. *Journal of Management Studies*. <https://doi.org/10.1111/joms.12887>
- Bennett, N. J., Blythe, J., White, C. S., & Campero, C. (2021). Blue growth and blue justice: Ten risks and solutions for the ocean economy. *Marine Policy*, 125, 104387.
- Bentz, J., O'Brien, K., & Scoville-Simonds, M. (2022). Beyond “blah blah blah”: Exploring the “how” of transformation. In *Sustainability Science* (2; Vol. 17, Issue 2, pp. 497–506).
<https://doi.org/10.1007/s11625-022-01123-0>
- Bocken, N. M., & Short, S. W. (2021). Unsustainable business models–Recognising and resolving institutionalised social and environmental harm. *Journal of Cleaner Production*, 312, 127828.
- Böhm, S., Bharucha, Z. P., & Pretty, J. (2014). *Ecocultures: Blueprints for sustainable communities*. Routledge.
- Böhm, S., Ho, C.-H., Holmes, H., Manolchev, C., Rödl, M., & Spekkink, W. (2023). 14 Circular society activism: Prefigurative communities in everyday Circular Economy action. *Handbook of the Circular Economy: Transitions and Transformation*, 241.

- Brundiers, K., Barth, M., Cebrián, G., Cohen, M., Diaz, L., Doucette-Remington, S., Dripps, W., Habron, G., Harré, N., Jarchow, M., Losch, K., Michel, J., Mochizuki, Y., Rieckmann, M., Parnell, R., Walker, P., & Zint, M. (2021). Key competencies in sustainability in higher education—Toward an agreed-upon reference framework. *Sustainability Science*, 16(1), 13–29. <https://doi.org/10.1007/s11625-020-00838-2>
- Buckton, S. J., Fazey, I., Sharpe, B., Om, E. S., Doherty, B., Ball, P., Denby, K., Bryant, M., Lait, R., Bridle, S., Cain, M., Carmen, E., Collins, L., Nixon, N., Yap, C., Connolly, A., Fletcher, B., Frankowska, A., Gardner, G., ... Sinclair, M. (2023). The Regenerative Lens: A conceptual framework for regenerative social-ecological systems. *One Earth*, 6(7), 824–842. <https://doi.org/10.1016/j.oneear.2023.06.006>
- Chapin, F. S., Pickett, S. T., Power, M. E., Jackson, R. B., Carter, D. M., & Duke, C. (2011). Earth stewardship: A strategy for social–ecological transformation to reverse planetary degradation. *Journal of Environmental Studies and Sciences*, 1(1), 44–53.
- Clarke, D. (2017). *The serious business of sandboxes*. Strategy+business. <https://www.strategy-business.com/article/The-Serious-Business-of-Sandboxes>
- Colombo, L. A. (2023). Civilize the Business School: For a Civic Management Education. *Academy of Management Learning & Education*, 22(1), 132–149. <https://doi.org/10.5465/amle.2021.0430>
- Cooperrider, D., & Godwin, L. (2022). Our Earthshot Moment: Net Positive OD for the Creation of a World of Full Spectrum Flourishing. *Organization Development Review*, 54(1), 2942.
- Cooperrider, D., & Selian, A. (2021). *The Business of Building a Better World: The Leadership Revolution That Is Changing Everything*. Berrett-Koehler Publishers.

Dasgupta, P. (2021). *Final Report - The Economics of Biodiversity: The Dasgupta Review*.

GOV.UK. <https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review>

De la Cadena, M. (2015). *Earth beings: Ecologies of practice across Andean worlds*. Duke University Press.

Delmas, M., & Sparks, B. (2024, February 7). It's Time for Sustainability to Become a Core Part of MBA Programs. *Harvard Business Review*. <https://hbr.org/2024/02/its-time-for-sustainability-to-become-a-core-part-of-mba-programs>

Díaz, S., Settele, J., Brondízio, E., Ngo, H., Guèze, M., Agard, J., Arneth, A., Balvanera, P., Brauman, K., & Butchart, S. (2020). *Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*.

Dorninger, C. (2020). Leverage points for sustainability transformation_ a review on interventions in food and energy systems. *Ecological Economics*, 9.

Duflo, E. (2017). The economist as plumber. *American Economic Review*, 107(5), 1–26. <https://doi.org/10.1257/aer.p20171153>

Duflo, E. (2020). Field experiments and the practice of policy. *American Economic Review*, 110(7), 1952–1973. <https://doi.org/10.1257/aer.110.7.1952>

Edwards, M. G., Alcaraz, J. M., & Cornell, S. E. (2021). Management Education and Earth System Science: Transformation as if Planetary Boundaries Mattered. *Business & Society*, 60(1), 26–56. <https://doi.org/10.1177/0007650318816513>

Ellen MacArthur Foundation. (2013). Towards the circular economy. *Journal of Industrial Ecology*, 2, 23–44.

- Ellen MacArthur Foundation. (2021). *The Nature Imperative: How the circular economy tackles biodiversity loss*. <https://ellenmacarthurfoundation.org/biodiversity-report>
- Fazey, I., & Leicester, G. (2022). Archetypes of system transition and transformation: Six lessons for stewarding change. *Energy Research & Social Science*, 91, 102646. <https://doi.org/10.1016/j.erss.2022.102646>
- Forum for the Future, & World Business Council for Sustainable Development. (2021). *A Compass for Just and Regenerative Business*. <https://www.forumforthefuture.org/just-and-regenerative-business>
- Franco, J. C., & Borrás Jr, S. M. (2019). Grey areas in green grabbing: Subtle and indirect interconnections between climate change politics and land grabs and their implications for research. *Land Use Policy*, 84, 192–199.
- Fromentin, J.-M., & Al, E. (2022). *Thematic Assessment of the Sustainable Use of Wild Species: Summary for Policymakers*. <https://policycommons.net/artifacts/2485016/thematic-assessment-of-the-sustainable-use-of-wild-species-of-the-intergovernmental-science-policy-platform-on-biodiversity-and-ecosystem-services-zenodo/3507444/>
- Geels, F. W. (2011). The multi-level perspective on sustainability transitions: Responses to seven criticisms. *Environmental Innovation and Societal Transitions*, 1(1), 24–40. <https://doi.org/10.1016/j.eist.2011.02.002>
- Gifford, R. (2011). The dragons of inaction: Psychological barriers that limit climate change mitigation and adaptation. *American Psychologist*, 66(4), 290–302. <https://doi.org/10.1037/a0023566>

- Gladwin, T. N., Kennelly, J. J., & Krause, T. (1995). Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research. *Academy of Management Review*, 20(4), 874–907. <https://doi.org/10.5465/AMR.1995.9512280024>
- Godelnik, R. (2019). *Sandbox zero: Rethinking sustainability-as-usual introduction: Sustainability-as-usual*.
- Gualandris, J., Branzei, O., Wilhelm, M., Lazzarini, S., Linnenluecke, M., Hamann, R., Dooley, K. J., Barnett, M. L., & Chen, C. (2024). Unchaining supply chains: Transformative leaps toward regenerating social–ecological systems. *Journal of Supply Chain Management*, 60(1), 53–67. <https://doi.org/10.1111/jscm.12314>
- Gümüşay, A. A., & Reinecke, J. (2022). Researching for Desirable Futures: From Real Utopias to Imagining Alternatives. *Journal of Management Studies*, 59(1), 236–242. <https://doi.org/10.1111/joms.12709>
- Higham, J. E. S., & Font, X. (2020). Decarbonising academia: Confronting our climate hypocrisy. *Journal of Sustainable Tourism*, 28(1), 1–9. <https://doi.org/10.1080/09669582.2019.1695132>
- Hitt, M. A., Keats, B. W., & DeMarie, S. M. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *Academy of Management Perspectives*, 12(4), 22–42. <https://doi.org/10.5465/ame.1998.1333922>
- Hochschild, A. R. (2018). *Strangers in their own land: Anger and mourning on the American right*. The New Press.

- Homer-Dixon, T., Renn, O., Rockstrom, J., Donges, J. F., & Janzwood, S. (2021). *A Call for An International Research Program on the Risk of a Global Polycrisis* (SSRN Scholarly Paper 4058592). <https://doi.org/10.2139/ssrn.4058592>
- IPBES. (2019). *Global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (Version 1). Zenodo. <https://doi.org/10.5281/ZENODO.3831673>
- IPCC. (2022). *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC, 2022: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press; Issue IPCC, 2022: Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press).
- Kennedy, S., & Linnenluecke, M. K. (2022). Circular economy and resilience: A research agenda. *Business Strategy and the Environment*, 31(6), 2754–2765. <https://doi.org/10.1002/bse.3004>
- Konietzko, J., Das, A., & Bocken, N. (2023). Towards regenerative business models: A necessary shift? *Sustainable Production and Consumption*, 38, 372–388.

- Laszlo, C. (2021). Prospective Theorizing: Researching for Social Impact. *Journal of Management, Spirituality & Religion*, 18(6), 19–34.
- Linnenluecke, M. K., & Smith, T. (2019). A Primer on Global Environmental Change. *Abacus*, 55(4), 810–824. <https://doi.org/10.1111/abac.12175>
- Lucas, D. S., Grimes, M. G., & Gehman, J. (2022). Remaking Capitalism: The Strength of Weak Legislation in Mobilizing B Corporation Certification. *Academy of Management Journal*, 65(3), 958–987. <https://doi.org/10.5465/amj.2020.1688>
- Masson-Delmotte, V., Zhai, P., Pirani, A., Connors, S. L., Péan, C., Berger, S., Caud, N., Chen, Y., Goldfarb, L., Gomis, M. I., Huang, M., Leitzell, K., Lonnoy, E., Matthews, J. B. R., Maycock, T., Waterfield, T., Yelekçi, R., Yu, R., & Zhou, B. (2021). *IPCC 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 1–41). Cambridge University Press.
- https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf
- Meadows, D. (1999). *Leverage Points: Places to Intervene in a System* (Vol. 2020, Issue June 17,). https://donellameadows.org/wp-content/userfiles/Leverage_Points.pdf
- Morgan, C. B., Brevik, K., Barbieri, L., & Ament, J. (2023). Humans in/of/are nature: Re-embedding reality in sustainability sciences. *Elementa: Science of the Anthropocene*, 11(1).

- Navarro, L. M., & Pereira, H. M. (2015). Rewilding abandoned landscapes in Europe. In *Rewilding European Landscapes* (pp. 3–23). Springer International Publishing Cham.
- OECD. (2021). *Biodiversity, natural capital and the economy: A policy guide for finance, economic and environment ministries* (OECD Environment Policy Papers 26; OECD Environment Policy Papers, Vol. 26). <https://doi.org/10.1787/1a1ae114-en>
- Ospina, C. (2022, August 5). *What are Pre-Competitive Partnerships?*
<https://www.resonanceglobal.com/blog/what-are-pre-competitive-partnerships>
- Pavez, I., Godwin, L., & Spreitzer, G. (2021). Generative Scholarship Through Prospective Theorizing: Appreciating the Roots and Legacy of Organization Development and Change to Build a Bright Future. *The Journal of Applied Behavioral Science*, 57(4), 459–470. <https://doi.org/10.1177/00218863211049836>
- Polman, P., & Winston, A. (2021). *Net Positive: How Courageous Companies Thrive by Giving More Than They Take*. Harvard Business Press.
- Project Drawdown. (2023, April 21). *Drawdown Roadmap*. Project Drawdown.
<https://drawdown.org/drawdown-roadmap>
- Raworth, K. (2012). *A Safe and Just Space for Humanity: Can We Live within the Doughnut?* [Oxfam Discussion Papers]. <https://www.oxfam.org/en/research/safe-and-just-space-humanity>
- SeaBOS. (2023). *About SeaBOS*. SeaBOS. <https://seabos.org/about/>
- Setzer, J., & Higham, C. (2023). *Global Trends in Climate Change Litigation: 2023 Snapshot*. Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science.

- Shrivastava, P. (1995). Ecocentric Management for a Risk Society. *The Academy of Management Review*, 20(1), 118. <https://doi.org/10.2307/258889>
- Skoglund, A., & Böhm, S. (2022). *Climate Activism: How Communities Take Renewable Energy Actions Across Business and Society*. Cambridge University Press.
- Stahel, W. R. (2016). The circular economy. *Nature*, 531(7595), 435–438.
- Subsidiary Body for Scientific and Technological Advice, & Subsidiary Body for Implementation. (2023). *Technical Dialogue on the First Global Stocktake: Synthesis Report by the Co-Facilitators on the Technical Dialogue* (Advance Version FCCC/SB/2023/9; Framework Convention on Climate Change, p. 46). United Nations. <https://unfccc.int/documents/631600>
- Sulamoyo, D. S. (2022). The Dichotomization of Ubuntu as a Cultural Strategy for Large System Change During the COVID-19 Pandemic. *Organization Development Journal*, 40(2), 28–37.
- The Great Reset*. (2020). World Economic Forum. <https://www.weforum.org/great-reset/>
- Thomke, S. H. (1998). Managing experimentation in the design of new products. *Management Science*, 44(6), 743–762. <https://doi.org/10.1287/mnsc.44.6.743>
- Velenturf, A. P., & Purnell, P. (2021). Principles for a sustainable circular economy. *Sustainable Production and Consumption*, 27, 1437–1457.
- Waddock, S. (2020a). Achieving sustainability requires systemic business transformation. *Global Sustainability*, 3. <https://doi.org/10.1017/sus.2020.9>
- Waddock, S. (2020b). Reframing and transforming economics around life. *Sustainability*, 12(18), 7553.

- WBCSD, V. (2010). 2050—The New Agenda for Business. *World Business Council for Sustainable Development (WBCSD), Geneva*
[Http://Www.Wbcsd.Org/Includes/getTarget.Asp](http://www.wbcsd.org/Includes/getTarget.asp).
- Wiek, A., Withycombe, L., & Redman, C. L. (2011). Key competencies in sustainability: A reference framework for academic program development. *Sustainability Science*, 6(2), 203–218. <https://doi.org/10.1007/s11625-011-0132-6>
- Winn, M. I., & Pogutz, S. (2013). Business, Ecosystems, and Biodiversity: New Horizons for Management Research. *Organization & Environment*, 26(2), 203–229.
<https://doi.org/10.1177/1086026613490173>
- World Bank Group. (2021a). *Unlocking Nature-Smart Development: An Approach Paper on Biodiversity and Ecosystem Services*. World Bank.
<https://openknowledge.worldbank.org/handle/10986/36047>
- World Bank Group. (2021b). *World Bank Group Climate Change Action Plan 2021–2025: Supporting Green, Resilient, and Inclusive Development* [Strategy Document]. World Bank. <https://openknowledge.worldbank.org/handle/10986/35799>
- Wright, C., & Nyberg, D. (2017). An Inconvenient Truth: How Organizations Translate Climate Change into Business as Usual. *Academy of Management Journal*, 60(5), 1633–1661.
<https://doi.org/10.5465/amj.2015.0718>
- Yu, H., Bansal, P., & Arjaliès, D.-L. (2023). International business is contributing to environmental crises. *Journal of International Business Studies*, 54(6), 1151–1169.
<https://doi.org/10.1057/s41267-022-00590-y>