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ORIGINAL PAPER

Multifunctional Tetralemma. Framework for the Strategic Management of Moral Trade-offs

Steffen Roth[1,2,3] · **Vladislav Valentinov**[2,4,5]

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Abstract
The issue of moral trade-offs is widely discussed in the literatures on sustainable development and stakeholder theory. Sustainability efforts often require corporate managers to balance economic, social, and environmental concerns, which frequently translate into trade-offs between legitimate stakeholder interests. We investigate how the nature of these trade-offs is illuminated by Luhmannian systems theory, particularly its vision of the polycontextural nature of the functionally differentiated society. We argue that managerial perceptions of trade-offs frequently arise from difficulties in fully grasping this polycontexturality. By applying the traditional Indian concept of tetralemma, we offer a framework that assists managers in navigating these trade-offs by emphasising the various observational perspectives associated with different function systems. Our analysis reveals that the traditional three-pillar model of sustainability is a reductionist framework that does not adequately address the incommensurability of function systems, thereby perpetuating the very issues it seeks to resolve. The adoption of the tetralemmatisation strategy we promote in this paper encourages the development of alternative corporate performance metrics that recognise the complexity of functional differentiation in evaluating corporate contributions to society.

Keywords Functional differentiation · Tetralemma · Trade-offs · Sustainability · Stakeholder theory

Introduction

Management and organisation research has, for decades, highlighted the importance of addressing "grand challenges". Originally, this concept referred to a research programme aimed at solving problems that the famous mathematician David Hilbert (1902) "considered relevant for the future development of the discipline" (Fritzsche, 2022, p. 1). Today, however, the notion of grand challenges is firmly associated with the pursuit of political goals, such as the Sustainable Development Goals defined by the United Nations (UN SDGs). Yet, the prominence of these goals does not make grand challenges—such as poverty, population growth, wars, pandemics, or climate change—well-defined problems that can be solved with mathematical precision. While these challenges share the common denominator of sustainable development, the concept of sustainability has long been known to involve trade-offs between its conceptual ingredients (cf. Hahn et al., 2010; Schaltegger et al., 2019), and ultimately between the interests of various stakeholders involved in sustainability initiatives (Pies & Valentinov, 2024).

In the business ethics literature, moral trade-offs refer to situations where individuals or organisations must choose between conflicting ethical values or principles (Becker, 2024; Crane and Matten, 2019). These decisions often involve compromising between competing interests, where adhering to one moral principle may necessitate violating another. Such moral trade-offs make ethical decision-making in business contexts complex and ambiguous, with no clear-cut solution that satisfies all moral considerations.

✉ Vladislav Valentinov
valentinov@iamo.de

Steffen Roth
strot@me.com

1 La Rochelle Business School, La Rochelle, France

2 Next Society Institute, Kazimieras Simonavicius University, Vilnius, Lithuania

3 Witten Institute for Family Business, University of Witten-Herdecke, Witten, Germany

4 Leibniz Institute of Agricultural Development in Transition Economies, Theodor-Lieser-Str. 2, 06120 Halle, Germany

5 Department of Law and Economics, Martin Luther University, Halle, Germany

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This complexity and ambiguity are further heightened by the diverse stakeholders involved, each bringing unique interests and ethical perspectives. Consequently, it is unsurprising that contemporary grand challenges are often described with considerable ambiguity (Dentoni et al., 2018; Gray & Purdy, 2018) regarding not only the variables that define these problems but also the desired outcomes of attempts at their resolution.

This ambiguity continues to present a considerable challenge for business ethics scholarship on how managers and organisations should respond to grand challenges (Kirk et al., 2023), despite the strong normative impetus underlying many streams of this research (Roth et al., 2023a, 2023b). The pervasiveness and salience of moral trade-offs result in a lack of systematic insights into how managers and organisations should navigate unclear, multiple, or even conflicting definitions of both problems and solutions (Cappellaro et al., 2023). These trade-offs make it difficult for managers and organisations to define their priorities, responsibilities, and ethical standards when faced with such ambiguous situations (Carmine & De Marchi, 2023). Consequently, as management and organisation research becomes more aware of the interrelated and, at times, conflicting nature of the UN SDGs (Fuso Nerini et al., 2019; Larosa et al., 2023), the legitimacy of isolated actions for specific SDGs diminishes, and the need to develop frameworks for managing conflicting sustainability goals and other ethically ambiguous situations becomes increasingly urgent.

Accordingly, in referring to moral trade-offs, we are not invoking moral dilemmas in the classical philosophical sense, nor are we suggesting that every organisational decision entails a confrontation between universal ethical principles. Rather, we use this term to describe situations in which managers encounter conflicting stakeholder expectations that they experience as normatively significant—not because they are necessarily grounded in morality, but because they appear to demand justification across incompatible evaluative standards. These trade-offs are moral not by definition, but by the manner in which they are perceived and processed within organisations under conditions of complexity, ambiguity, and public scrutiny. Also, we do not equate stakeholder interests with moral claims. Not every stakeholder perspective represents an ethical viewpoint, and not all moral perspectives can be reduced to strategic stakeholder interests. Doing so would risk collapsing the domain of ethical reasoning into that of instrumental rationality, thereby ignoring the value-laden and often deontological nature of certain stakeholder demands. For instance, a shareholder's demand for higher returns and an NGO's appeal to intergenerational justice may both appear in the same stakeholder matrix, but they arise from fundamentally different normative structures. What renders these interactions morally complex is not simply the presence of competing interests, but the fact that these interests speak different systemic languages and refer to incommensurable evaluative criteria.

This paper seeks to advance the understanding of how managers could deal with moral trade-offs in the proposed sense by offering a novel perspective based on Luhmannian systems theory, particularly its account of functional differentiation. Unlike many existing approaches that assume an underlying unity of interests or the possibility of synthesis, Luhmann's theory highlights the incommensurability of different function systems. From this perspective, moral trade-offs are not simply managerial dilemmas but symptoms of deeper polycontextural complexity, wherein different social systems (e.g. economy, law, politics, science) operate according to distinct, self-referential logics. This view contrasts with theories that emphasise the harmonisation of interests, such as Weber's (1922) spheres of life, Walzer's spheres of justice (Walzer, 1983), and institutional logics (Thornton et al., 2012). While these alternative approaches recognise value pluralism, they do not fully capture the radical incommensurability that Luhmann's concept of functional differentiation foregrounds.

Stakeholders, as typically understood in management theory, are persons, groups, or institutions that affect or are affected by corporate activity (e.g. Freeman et al., 2018). From a systems-theoretical standpoint, however, stakeholder claims are not simply reducible to the interests of these actors. Rather, they are often articulated from within the observational frameworks of distinct function systems. For example, a government agency may frame its demands in legal terms (legal/illegal), a scientific body in epistemic terms (true/false), a consumer group in economic terms (payment/non-payment), and a social movement in terms of political legitimacy or moral urgency. Stakeholder positions are thus not free-floating preferences; they are functionally embedded perspectives—concretisations of system-specific logics. This link between stakeholder claims and function systems is crucial for understanding why moral trade-offs persist and why they are often experienced as irresolvable. Managers are not simply balancing conflicting interests; they are navigating a polycontextural environment in which those interests emerge from heterogeneous systems of meaning and legitimacy. What makes alignment difficult is not the volume of stakeholder claims, but the structural incompatibility of the evaluative codes that underpin them. Accordingly, stakeholder engagement is not only a practice of negotiation or consensus-building, but also one of inter-systemic translation and boundary management, in which organisations must remain structurally coupled to multiple societal systems without assuming their logics can be unified.

Building on this foundation, we introduce the tetralemma, a conceptual tool originating from Indian philosophy, as an alternative framework for strategically managing moral trade-offs. Unlike conventional approaches

that assume trade-offs must be either resolved (win–win solutions) or accepted (zero-sum choices), the tetralemma presents four logically distinct alternatives: (1) A, (2) not-A, (3) both A and not-A, and (4) neither A nor not-A. This framework enables managers to recognise and navigate competing stakeholder claims in ways that go beyond conventional dichotomies. We argue that applying tetralemmatisation within a Luhmannian framework allows for a more sophisticated engagement with moral trade-offs, revealing opportunities for decision-making that do not rely on artificially imposed commensurability.

Thus, rather than asking *"How can managers and organisations navigate the moral trade-offs inherent in the pursuit of grand challenges and SDGs?"*—a question that presupposes a normative imperative to resolve these tensions—we aim to pursue the following research question: *"What are the underlying structural conditions that shape managerial perceptions of moral trade-offs, and how can managers engage with them?"* By shifting the focus from prescriptive guidance to analytical exploration, we contribute to a more realistic and systematically grounded understanding of moral trade-offs in business ethics. In so addressing this question, we respond to calls for a systems-theoretical reinterpretation of paradox theory (Carmine & De Marchi, 2023), which we enhance with Niklas Luhmann's (1982, 2006, 2013) concept of functional differentiation and the traditional Indian concept of tetralemma (Fritzsche, 2024; Kleve et al., 2020; Roth et al., 2023a, 2023b). As a result, we develop a multifunctional framework for the strategic management of the ambiguity inherent in moral trade-offs.

Our paper makes three key contributions. First, it strengthens the conceptual foundation of moral trade-offs by linking them to the polycontexturality of functionally differentiated societies rather than treating them as mere dilemmas of ethical decision-making. Second, it introduces tetralemmatisation as a structured approach for navigating these trade-offs, offering an alternative to prevailing frameworks in stakeholder theory and paradox management. Third, it critically assesses the three-pillar model of sustainability, arguing that its implicit assumption of commensurability between economic, social, and environmental dimensions may in fact contribute to the very trade-offs it seeks to resolve.

In the following sections, we first review the literature on moral trade-offs, stakeholder theory, and paradox management, highlighting their strengths and limitations. We then present the Luhmannian framework of functional differentiation as a lens for reinterpreting trade-offs, before elaborating on the tetralemma as a strategic tool for managing them. We conclude by discussing the broader implications of this approach for business ethics, sustainability, and stakeholder management.

The Nature of Moral Trade-offs: Reviewing Recent Debates

Contemporary debates on sustainability and stakeholder theory increasingly foreground the issue of moral trade-offs, yet often within a framework marked by epistemological optimism. This is particularly evident in the assumption that win–win scenarios can harmonise economic, social, and environmental goals (Hahn et al., 2017; Iivonen, 2017). In both literatures, there remains a tendency to envisage cooperative configurations where stakeholder interests are presumed to align in value-generating synergies (Freeman et al., 2007, p. 52). However, critical scholarship challenges this integrative ideal, contending that such perspectives underestimate the structural and institutional constraints that give rise to trade-offs (Hahn et al., 2010). These tensions, far from being anomalous, reflect deep contradictions embedded within the functionally differentiated society (Seidl et al., 2021). In this light, sustainability trade-offs are not accidental managerial frictions, but symptomatic of underlying societal complexity. Achieving one sustainability objective may, unavoidably, compromise another (Hahn et al., 2010), just as satisfying one stakeholder group often entails disadvantaging another—an observation that remains central to current stakeholder theorising (Freeman et al., 2020, p. 223).

The intersection of stakeholder and sustainability theory further reinforces this point. Scholars increasingly argue that sustainability-related trade-offs are, at their core, trade-offs between stakeholder interests (Freudenreich et al., 2020; Hörisch et al., 2014; Schaltegger et al., 2019; Valentinov, 2023). Yet recent interventions complicate this picture. They ask whether such trade-offs are best understood as contingent managerial dilemmas or as paradoxical conditions intrinsic to a pluralistic social system (Hahn et al., 2017). This distinction is vital, for it determines whether organisations should seek to eliminate trade-offs through integrative strategies or instead learn to navigate them within enduring systemic plurality. Further contributions, particularly from stakeholder theory, explore how trade-offs are framed as more than technical tensions: they are increasingly cast as identity-defining conflicts within corporate ethics (Iivonen, 2017). Trade-offs, in this view, are not static obstacles but interpretively and communicatively constructed (Seidl et al., 2021). This calls for conceptual approaches that account for their self-referential, contingent, and dynamically evolving character—rather than treating them as resolvable through managerial technique alone.

Insights from the Stakeholder Literature

The question of stakeholder interest trade-offs constitutes a core tension within stakeholder theory, particularly when approached from a strategic management lens (Freeman et al., 2020; 2020a). Freeman et al., (2018, p. 7) offer a particularly authoritative formulation, asking whether increasing value for one stakeholder necessarily entails decreasing it for another. Their answer unfolds in three points: (1) value creation need not be a zero-sum game;

(2) positive stakeholder relationships compound over time; and (3) managerial sensitivity to local complexities can yield mutually beneficial outcomes.

Of these, the first—the positive-sum view of business—is foundational. It implies that stakeholder trade-offs are not inherent to managerial practice but are often overstated, or even artificially constructed (Tantalo & Priem, 2016; Sachs & Rühli, 2011, p. 111). For Freeman et al., (2007, p. 10), persistent reliance on trade-offs signals a dysfunctional organisational logic: "A business that constantly trades off the interests of one group for another is doomed for trouble and failure". Even when trade-offs are unavoidable, they are, ideally, the starting point for creative innovation rather than managerial impasse (Freeman et al., 2007, p. 54). This position aligns with Putnam et al.'s (2016) notion of "more-than" strategies: reframing paradoxes not as contradictions to resolve, but as generative tensions.

Yet, the practical challenge remains: how do managers "improve" trade-offs in real-world complexity? This question relates closely to Freeman et al.'s (2018) third point—the need for contextual and imaginative decision-making. Even ethically fraught decisions, such as plant closures, may carry positive potential for affected stakeholders when framed with broader awareness (ibid, p. 9). Freeman et al. (2020) go further: the persistence of trade-offs may signal a deficit of imagination—a managerial failure to envision win–win outcomes. Thus, rather than a theoretical flaw, trade-offs are increasingly framed as a managerial problem, contingent on the cultivation of appropriate stakeholder mindsets.

Central to this shift is a reframing of strategic questions. As Freeman et al., (2007, p. 11) argue, the traditional approach asks how to distribute burdens and benefits, while a stakeholder mindset asks how we can "create as much value as possible for all of our stakeholders?" Stakeholder mindsets, in this view, allow managers to interpret their environment differently and "lead in a more positive fashion" (Freeman et al., 2007, p. 3). In many cases, the very *salience* of trade-offs may reflect an adherence to shareholder primacy, which amplifies perceptions of irreconcilable conflicts. According to Freeman et al., (2018, p. 13), this logic distracts from collaborative value creation and reproduces a "Blame the Stakeholder" dynamic (Freeman et al., 2007, p. 55). This emphasis on mindset over mechanism positions trade-off management primarily as a matter of executive responsibility rather than theoretical innovation. One reason for the relative lack of theoretical development around trade-offs in stakeholder theory may lie in its limited engagement with paradox theory—a lacuna increasingly addressed by recent work bridging stakeholder approaches with broader organisational paradox literature (Roth et al., 2023b; Schad et al., 2016; Putnam et al., 2016), to which we now turn.

Insights from the Paradox Literature

Paradox theory defines paradox as a "persistent contradiction between interdependent elements" (Schad et al., 2016, p. 10), particularly salient in contexts of environmental dynamism and complexity (ibid, p. 12)—conditions that typify contemporary business environments (Smith & Lewis, 2011). Such turbulence has long been associated with the turn to stakeholder models in strategic management (Jones et al., 2018; Freeman et al., 2010, p. 3; Freeman, 1984, p. 27). Indeed, stakeholder theory itself is grounded in the paradoxical claim that stakeholder interests are both distinct and joint (Freeman, 2010, p. 27; Freeman et al., 2007, p. 52; Freeman et al., 2018, p. 3). Paradox scholars have highlighted how conflicts among stakeholders exemplify what Smith and Lewis (2011, p. 384) call "performing paradoxes", arising from the plurality of stakeholder demands—often divergent and in conflict (ibid; Roth et al., 2023b).

Recent contributions have extended this insight using Luhmann's theory of decision paradoxes, suggesting that trade-offs may not originate from external constraints alone, but from the self-referential nature of organisational decision-making itself (Seidl et al., 2021). Decisions generate their own contradictions through the very expectations and boundaries they establish. This recursive dynamic is central to understanding moral trade-offs in sustainability. Organisations often attempt to resolve paradoxes by simplifying tensions—e.g. by privileging economic over ecological concerns—but such moves can reproduce or exacerbate paradoxes rather than eliminate them (Seidl et al., 2021; Hahn et al., 2017). Hence, effective engagement with trade-offs requires not resolution but adaptive navigation within paradoxical conditions.

Stakeholder theorists have begun to adopt this insight more explicitly. Pies and Valentinov (2024), drawing on Smith and Lewis (2011), frame stakeholder trade-offs as paradoxes involving competing demands that cannot be satisfied simultaneously. They juxtapose stakeholder theory with Putnam et al.'s (2016) typology of paradox response strategies—namely, "either-or", "both-and", and "more-than". While the "either-or" approach resembles zero-sum logic, and the "both-and" view reflects stakeholder theory's cooperative ethos, it is the "more-than" strategy—encouraging

reframing, learning, and innovation—that Pies and Valentinov argue remains underdeveloped. They suggest that reflexive practices such as stakeholder dialogues and deliberation (Putnam et al., 2016, p. 65) are key to transcending fixed trade-off frames and exploring new problem spaces.

We propose that the application of paradox theory to stakeholder interest trade-offs can be fruitfully clarified through Smith and Lewis' (2011) influential distinction between contingency and paradox perspectives on organisational tensions. While the contingency view emphasises achieving alignment with internal and external environments (ibid, p. 395), the paradox view explores how contradiction and tension may be harnessed to generate creative organisational potential. Applied to stakeholder trade-offs, this suggests that the contingency perspective treats value creation as constrained by existing trade-offs, whereas the paradox perspective considers the possibility of transcending such trade-offs, enabling qualitatively new forms of value creation. If this interpretation holds, it raises an important observation: stakeholder theory predominantly reflects a contingency orientation, giving relatively little attention to the generative potential of paradox.

This emphasis is evident in studies exploring how managerial responses to trade-offs vary according to cognitive frames (Crilly, 2019) and structural conditions—such as governance mechanisms (contractual vs. relational), relational arrangements (dyadic vs. collective), or time horizons (long vs. short-term) (Dorobantu, 2019, p. 257). Yet, while these contingency-driven insights are valuable, they leave a notable research gap: the underdeveloped application of paradox theory to stakeholder interest trade-offs. This gap is striking, particularly given that prominent stakeholder theorists have long drawn on the notion of social dilemmas—a construct rooted in both paradox theory and game theory—to explain how conflicting individual interests may be transformed into cooperative outcomes (Bridoux & Stoelhorst, 2016; Jones, 1995; Pies & Valentinov, 2024).

In his foundational articulation of instrumental stakeholder theory, Jones (1995, p. 414) argues that cooperation is often undermined by opportunism in contexts shaped by principal-agent problems, transaction cost logics, and team production. Yet, these dilemmas, akin to the prisoner's dilemma, are in principle resolvable: mutual cooperation can become a rational strategy when embedded in stable institutional arrangements. Building on this, Bridoux and Stoelhorst (2016) interpret stakeholder value creation as a public good dilemma, where actors may be tempted to free-ride (cf. Alchian & Demsetz, 1972; Olson, 1965; Phillips, 1997). They examine relational models—communal sharing, authority ranking, equality matching, and market pricing—for their potential to mitigate dilemmatic incentives and support cooperation. Similarly, Pies and Valentinov (2024) invoke social dilemma theory to argue that win–win outcomes can emerge through stakeholder engagement in political processes of rule-setting and rule-finding. Here, stakeholder participation becomes a mechanism not for resolving trade-offs externally, but for transforming the underlying game structure itself.

Among the contributions discussed, Pies and Valentinov's (2024) approach stands out for demonstrating how resolving social dilemmas through stakeholder involvement in rule-setting and rule-making can generate radical win–win solutions. Their work sits at the vanguard of the stakeholder–paradox interface. Yet, we suggest this intersection could be further deepened through a sociological lens that places paradox at its conceptual core. Here, Luhmannian systems theory offers a compelling framework. Conceiving modern society as composed of multiple autonomous function systems and organisations, it situates paradox not as an anomaly to be resolved but as a constitutive feature of complex communication. This aligns with recent developments in paradox research (Hahn et al., 2017; Seidl et al., 2021), which argue that trade-offs should not be artificially eliminated but navigated through frameworks sensitive to polycontexturality—the coexistence of incommensurable observational perspectives (Putnam et al., 2016).

Recent work by Seidemann (2024) adds further refinement, showing that organisational responses to paradox are not binary selections between "either-or" and "both-and", but rather dynamic oscillations shaped by the communicative environment. This view redefines stakeholder trade-offs not as fixed dilemmas, but as fluid constructs continuously reconstituted through communicative shifts in expectations. We integrate this insight into our theoretical approach by demonstrating how tetralemmatisation—as a formalised strategy for engaging paradox—offers a structured means of navigating trade-offs as self-referential, evolving phenomena, rather than as externally given managerial problems.

Functional Differentiation and Business Ethics

Niklas Luhmann's concept of functional differentiation constitutes a cornerstone of social systems theory and offers a radically distinct view of modern society. While frameworks such as Weber's spheres of life (Weber, 1922), Walzer's spheres of justice (Walzer, 1983), and the institutional logics approach (Thornton et al., 2012) similarly attend to normative fragmentation, they typically retain an implicit harmonisation assumption—suggesting that tensions between value spheres may be managed through legal, moral, or institutional mediation. Luhmann departs from this view by insisting that function systems are structurally incommensurable. Their respective rationalities—economic calculation, legal reasoning, political legitimacy, scientific truth—cannot be

fully reconciled or integrated (Seidl et al., 2021). Though interdependent, these systems remain operationally autonomous, each organised around its own binary code: payment/no payment (economy), legal/illegal (law), government/opposition (politics), and true/false (science).

Functional differentiation is not merely a division of labour, but a profound expansion of the horizons of meaning and communication (Roth et al., 2017). It enables any single event or phenomenon to be interpreted through multiple systemic logics. A painting, for example, might simultaneously appear as an artwork, a speculative asset, a political provocation, or an act of sacrilege, depending on the observational position (Will et al., 2018). In contrast to earlier stratified societies, modern functionally differentiated societies are polycontextural: they no longer possess a unified moral or epistemic centre but host multiple, mutually irreducible perspectives. As Luhmann puts it: "Society remains the same but appears different depending on the functional subsystem (politics, economy, science, mass media, education, religion, art, and so on) that describes it" (Luhmann, 1995a, p. 48). Any given event may be politicised, aestheticised, economised, or mediatised, reflecting the contingent and perspectival nature of modern social reality. The following two subsections examine how this sociological account of differentiation challenges conventional assumptions in business ethics, and how it reframes the role and function of morality in modern organisations.

Morality in the Functionally Differentiated Society

Luhmann's theory of functional differentiation fundamentally challenges the classical sociological view of morality as a unifying force in society. Whereas Durkheim (1893) and Parsons (1951) saw shared norms as the cohesive substrate of social order—whether through solidarity or normative integration—Luhmann contends that modern society achieves integration not through common values, but via structural couplings among autonomous function systems (Luhmann, 1995a, 1995b). This shift does not signal the disappearance of morality. Rather, it repositions morality as a distinct mode of communication, operating alongside—but not governing—systems organised around symbolically generalised media such as money (economy), power (politics), truth (science), or belief (religion) (Will et al., 2018). In this view, functional differentiation renders modern society structurally amoral—not in the sense of being immoral, but in that it no longer depends upon or is directed by shared moral codes.

Importantly, Luhmann does not reject morality outright. He acknowledges that moral communication remains vital, especially during periods of crisis or political polarisation, where it intensifies to mark boundaries between in-groups and out-groups (Luhmann, 1993). Yet, he remains deeply sceptical of morality's capacity to resolve systemic problems. This scepticism rests not on normative grounds but on structural ones: morality lacks the operative code to substitute for function systems. A moral critique may influence political debate, but it cannot override a legal ruling or reshape market dynamics. Indeed, Luhmann argues that moralisation often exacerbates conflict by misattributing systemic complexity to individual blame, thereby fuelling polarisation and misunderstanding. Ethical theory, in his view, ought to warn against the risks of moral overreach, particularly when morality is used to interpret and act within complex systems that obey different operational logics.

Although some moral philosophers have criticised Luhmann's position as excessively dismissive (Kirchmeier, 2012; Neckel & Wolf, 1994), his work has sparked rich debate on the role and limits of moral communication in contemporary Western societies (Reese-Schaefer, 1999; Gensicke, 2008). These debates often affirm his observation that morality tends to intensify in moments of systemic turbulence (Luhmann, 1993), while also grappling with the tensions it introduces when projected across functionally differentiated domains.

Reception in the Business Ethics Literature

Luhmann's scepticism towards moral communication has rendered his work somewhat elusive for mainstream business ethics, which has traditionally been guided by normative theories that foreground ethical principles in corporate decision-making (Crane & Matten, 2019). By contrast, systems-theoretical approaches displace moral normativity, instead emphasising the structural constraints and communicative dynamics that shape corporate behaviour (Valentinov et al., 2019). Some scholars have sought to bridge this theoretical divide. von Groddeck (2011a, 2011b, 2011c), for example, argues that moral communication can act as a coordination mechanism, enabling managers to navigate competing systemic demands. However, such accounts remain managerially anthropocentric, presuming that moral language can be strategically deployed to resolve functional tensions (Pies et al., 2014). More critical perspectives, such as Roth (2013, 2014), challenge this instrumental view, contending that corporate moral discourse is often performative—designed less to effect ethical change than to align with societal expectations.

A more systemic orientation in business ethics has emerged through recent applications of Luhmannian social systems theory, which shift the analytical lens from individual responsibility to the institutional and systemic architecture within which corporations operate. Roth et al. (2020), for instance, employ Luhmann's concepts of paradox and functional differentiation to interrogate the empirical-normative divide in business ethics. They propose a framework that

incorporates normative, empirical, and instrumental dimensions of CSR, interpreting their tensions as reflections of the moral ambivalence endemic to functionally differentiated societies. Valentinov et al. (2019) extend this work through a systems-theoretical reconstruction of stakeholder theory, suggesting that corporations exhibit both operational closure and environmental sensitivity through their function-system couplings. Similarly, de Olde and Valentinov (2019) reinterpret Carroll's (1991) CSR pyramid through a Luhmannian lens, showing that its upper tiers—ethical and philanthropic responsibilities—highlight the inadequacy of economic and legal function systems in fully mediating corporate-societal relations.

In a complementary move, Roth et al., (2020a, 2020b) examine the dysfunctionalities of the CSR discourse, tracing its entanglements with capitalism to the privileged status of the economic and political systems within the current differentiation regime. Valentinov et al. (2021) further argue that while profit maximisation offers effective complexity reduction in stable contexts, social goals become indispensable in turbulent environments, allowing firms to demonstrate responsiveness to system-environment risks. Here, morality re-enters the frame not as a universal standard, but as a context-sensitive medium sustaining organisational legitimacy under volatile conditions (Valentinov, 2019).

These insights are further reinforced by paradox theory, which interprets trade-offs not as external challenges but as endogenous features of organisational complexity (Seidl et al., 2021; Schad et al., 2016; 2022). From this vantage, moral dilemmas in corporate sustainability—such as profit versus environmental protection—are not ethical conflicts in the classical sense, but expressions of incommensurable systemic rationalities (Hahn et al., 2017). Thus, Luhmann's systems theory does not displace business ethics; it reframes its fundamental questions. Instead of prescribing moral solutions, it asks how organisations reproduce and sustain paradoxes through their structural couplings with various function systems. This epistemological shift opens space for a more structurally attuned understanding of moral trade-offs, steering away from simplistic integrative ideals and towards an appreciation of persistent systemic incongruence.

A Framework for Multifunctional Trade-off Management

We argue that a key implication of Luhmann's concept of functional differentiation is that moral trade-offs do not derive from inherent conflicts between stakeholder interests but from the structural incongruence of function systems, each of which observes reality through its own binary distinctions. This incongruence means that what appears as a ;trade-off from one system's perspective (e.g. the legal requirement to meet environmental standards conflicting with economic cost reduction goals) is not necessarily perceived as such from another system's perspective (e.g. the science system may see both as reconcilable through technological innovation).

However, this does not imply that trade-offs are purely"apparent"(Freeman et al., 2020, p. 213) or that they can always be eliminated through integrative thinking. Rather, trade-offs persist as system-internal paradoxes that organisations must navigate rather than resolve (Seidl et al., 2021). The Luhmannian understanding of polycontexturality does not deny trade-offs but suggests that they shift depending on the observer's position—an insight that challenges conventional approaches to sustainability and stakeholder theory.

As Freeman et al., (2010, p. 27) note, "seeing stakeholder interests as joint rather than opposed is difficult. It is not always easy to find a way to accommodate all stakeholder interests. It is easier to trade off one versus another". Fortunately, contemporary literature on Luhmannian systems theory provides a practical tool for developing this understanding: the concept of the tetralemma. The following subsections will introduce this tool, present a stylised example of its application, and explore its radical implications for reassessing the prevailing sustainability paradigm.

The Concept of the Tetralemma

As Roth et al., (2023a, 2023b) elucidate, the tetralemma is an ancient Indian framework designed to address dilemmas by encompassing a comprehensive range of approaches to managing paradoxes, as identified in seminal works such as those by Putnam et al. (2016). This framework integrates the "either-or", "both-and", and "more-than" strategies (Putnam et al., 2016, p. 125ff), and introduces an additional "neither-nor" strategy. Beyond its Indian and Buddhist origins, the tetralemma concept aligns with Luhmann's theory of paradoxes and system differentiation, particularly in how it formalises different modes of resolving self-referential contradictions (Spencer-Brown, 1969; Luhmann, 1995a, 1995b). In Luhmannian terms, decision-making always involves a paradox of inclusion and exclusion—choosing one option necessarily implies rejecting others, yet every decision simultaneously creates new undecidable elements.

While we do not consider the tetralemma as a tool directly derived from Luhmannian systems theory per se, we argue that it offers a complementary conceptual resource—one that aligns with Luhmann's key theoretical commitments and provides a formal vocabulary for expressing the strategic and cognitive challenges faced by managers operating in polycontextural environments. We accordingly propose that the tetralemma can be fruitfully brought into dialogue with Luhmannian systems theory.

While Luhmann himself did not explicitly invoke the tetralemma, we suggest that there are profound structural affinities between the two frameworks. Both share a commitment to observing paradox not as a flaw in reasoning but as a constitutive feature of complex systems. In particular, Luhmann's notion of self-referentiality—wherein every system distinguishes itself through operations that cannot encompass the totality of its environment—mirrors the tetralemma's refusal to settle for binary oppositions. In this light, the tetralemma is a structuring aid that supports reflexive engagement with paradox in decision-making. More specifically, the tetralemma offers four distinct strategies for engaging with paradoxes:

1. Either-A or not-A (binary resolution, as seen in economic cost–benefit analysis).
2. Both-A and not-A (paradoxical co-existence, often seen in hybrid business models or paradox strategies in organisations).
3. Neither-A nor not-A (deconstruction of the dichotomy, leading to a search for alternative frameworks).
4. More-than-A and not-A (expanding the problem space beyond the original trade-off, aligning with organisational innovation and second-order observation).

This Luhmannian interpretation of the tetralemma is crucial for corporate sustainability and business ethics because it reframes trade-offs not as external constraints but as systemic paradoxes that organisations continuously reproduce and reinterpret.

Due to its inherently paradoxical nature, the tetralemma serves as a powerful tool for managers, enabling them to logically explore the implications of the polycontextural nature of functional differentiation in addressing specific practical challenges, such as navigating perceived trade-offs. Specifically, the tetralemmatisation of trade-offs facilitates the incorporation of the multiple observational perspectives inherent to functional differentiation. Just as functional differentiation offers a spectrum of perspectives from various systems, the tetralemma leverages these perspectives to transcend binary trade-off logic.

By integrating these perspectives into the tetralemma framework, managers are better equipped to embrace the complexity of contemporary business environments. This approach helps manage ambiguity by clarifying that issues within the regime of functional differentiation are rarely dichotomous but instead embedded within a matrix of competing values and truths. Navigating this incongruence within the tetralemma framework involves synthesising conflicts by recognising how "either-or", "neither-nor", "both-and", and "more-than" approaches can coexist and complement one another. This empowers corporate managers to develop creative solutions that account for the multifaceted nature of modern business challenges.

Our earlier argument that moral trade-offs frequently manifest as conflicts among stakeholder interests leads us to propose that managers' perceptions of these trade-offs are often shaped by their interpretation and understanding of the stakeholder environment. Such trade-offs often result from narrow or truncated interpretations, where managers might concentrate on specific stakeholder groups or interests while neglecting others. In contrast, the concept of tetralemmatisation advocates for a broader, more inclusive approach to stakeholder engagement. This approach encourages managers to incorporate a diverse array of perspectives from a wide range of stakeholders. The practical application of tetralemmatisation thus requires active collaboration with stakeholders, fostering an environment where diverse voices contribute meaningfully to decision-making processes. In this collaborative framework, secondary stakeholders might play a more significant role than is typically recognised in much of stakeholder theory, which often implicitly prioritises primary stakeholders, as suggested by the very terms"primary "and"secondary"(cf. Valentionov and Iliopoulos, 2024). By engaging a more extensive range of stakeholders, managers can enhance support and legitimacy for their corporations, ensuring that decisions more accurately reflect the complex, multifaceted nature of their stakeholder environment.

Navigating (in-)Commensurability in Functionally Differentiated Systems

A central challenge in business ethics and sustainability discourse is the tension between commensurability and incommensurability in decision-making. Traditional approaches assume that trade-offs between competing interests—such as economic profitability, social equity, and environmental responsibility—can be evaluated within a common framework (Espeland & Stevens, 1998; Järvinen et al., 2020). This assumption implicitly endorses commensurability, the idea that different value dimensions can be measured, compared, and balanced within a single decision-making logic.

However, ESG reporting research has increasingly recognised that sustainability frameworks enforce commensurability on inherently incommensurable concerns (Alexander & Blum, 2016; Islam & Greenwood, 2022). ESG metrics, for example, reduce ethical complexity by imposing a hierarchical ranking of environmental, governance, and social concerns, while often neglecting other functional perspectives (Roth et al., 2023a, 2023b). By privileging scientific and political values over economic, religious, or aesthetic concerns, these frameworks create an illusion of comparability where none exists (Parfitt, 2020, 2022).

From a Luhmannian perspective, modern society is functionally differentiated, meaning that distinct function

systems (e.g. economy, law, science, and politics) operate according to mutually incommensurable logics (Luhmann, 1995a, 1995b; Valentinov, 2019). In this view, trade-offs do not simply arise from competing stakeholder interests but from structural incongruence between function systems, each of which constructs problems, solutions, and legitimacy criteria differently (Roth & Schutz, 2015; Schneider, 2009).

This insight reframes managerial perceptions of trade-offs in two ways: First, it challenges the overestimation of commensurability, which refers to the circumstance that managers often assume that trade-offs can be resolved within a single function system, leading to reductionist strategies that force incommensurable concerns (e.g. sustainability goals) into economic metrics (Espeland & Yung, 2019). This false commensurability obscures systemic paradoxes rather than clarifying them (Folkers, 2024). Second, it also points to the possible underestimation of paradox transcendence, which occurs when managers perceive trade-offs as widespread and irresolvable, neglecting the structural couplings between function systems that might enable strategic responses beyond binary choices (Pina e Cunha et al., 2021). For example, while economic rationality and ecological sustainability may appear conflicting in market-based decision-making, regulatory frameworks (law) or scientific innovation (science) can create pathways for overcoming apparent contradictions (Seidl et al., 2021).

Rather than assuming that function systems must be reconciled, tetralemmatisation offers a structured method for decision-making that accommodates systemic incongruence. Unlike traditional trade-off models, which force managers into "either-or" dilemmas, the tetralemma enables them to recognise when trade-offs are artefacts of false commensurability; to acknowledge when trade-offs are structurally embedded paradoxes that cannot be "resolved" but must be navigated; and to identify strategic interventions that transcend binary logics by incorporating "neither-nor" or "more-than" responses. This approach does not suggest that managers can harmonise function systems or eliminate all conflicts. Instead, it provides a framework for observing and structuring decision-making across function systems without forcing a singular evaluative framework. As the following section will illustrate through a stylised example, this method enables managers to engage with trade-offs more flexibly while avoiding the pitfalls of both false commensurability and inescapable opposition.

A stylised Example

To concretise the theoretical discussion and illustrate the practical implications of polycontextural complexity, this subsection introduces a stylised example—that is, a deliberately simplified but analytically generative scenario. The example features an agricultural company committed to advancing Sustainable Development Goal (SDG) #2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture. This is not a real-world case study, nor a prescriptive model. Instead, it serves as a heuristic device designed to explore how a single organisational challenge—namely, the tension between profitability and sustainability—can be differently constructed, observed, and responded to by various function systems within a functionally differentiated society. In this context, we do not seek to provide an exhaustive account of how each system"would"or"should"view the situation. Rather, we offer a tentative, illustrative mapping of how different systems might attribute meaning to the same organisational dilemma, based on their respective binary codes and contextually evolving programmes. Our goal is to demonstrate the selective and contingent nature of these interpretations, and to show how the tetralemma, when situated within a Luhmannian framework, provides a structured way for managers to reflect upon and navigate these system-differentiated perspectives.

Accordingly, the following attributions of meaning to different systems are illustrative and contingent, not definitive. From a Luhmannian perspective, function systems do not provide unified agendas or fixed positions. Rather, they observe their environment through distinct binary codes, and specific programmes that operationalise these codes evolve historically, contextually, and often contentiously. The associations drawn here between sustainability challenges and particular system perspectives are therefore tentative and should be interpreted as examples of possible, not necessary, system observations.

Let us begin with the economic system. Its binary code of payment/non-payment provides the basic orientation for its operations. This code does not inherently prioritise profit-seeking, capitalist growth models, or fossil fuel dependence. Rather, these represent programmatic concretisations of economic rationality in specific historical contexts. An economic system might just as plausibly support alternative programmes—such as impact investing, circular economy models, or social enterprises—that pursue value creation aligned with long-term ecological and social viability. Hence, reducing fossil fuel reliance could, under certain economic programmes, be seen not as a trade-off but as a strategic investment in resilience and future returns. Yet under other programmes (e.g. shareholder value maximisation), it may appear as a sacrifice of economic performance.

The political and legal systems, respectively, guided by the codes government/opposition and legal/illegal, similarly do not dictate any single policy stance or legal order. Rather, they generate regulatory responses through contingent programmes, which might manifest as either prohibitive instruments (e.g. bans on environmentally harmful practices) or market-conforming tools (e.g. carbon pricing, cap-and-trade

schemes). In this context, renewable energy investment may be framed as compliance with politically or legally mandated goals. But this framing is not inherent to the legal or political systems themselves—it reflects specific forms of regulation chosen within broader policy discourses. Thus, to interpret renewable investments as expressions of political or legal system logics, and fossil fuel investments as economically motivated, is itself a selective observational construction, shaped by the ways in which these systems couple with the organisation.

The scientific system, operationalised through the binary code true/false, does not necessarily advocate for innovation in service of economic productivity. While some programmes within science emphasise technological advancement, innovation, and optimisation (e.g. through agro-tech or biotech paradigms), others—such as ecological economics, planetary boundaries science, or degrowth studies—adopt more critical postures. For these, scientific 'truth' may demand downscaling agricultural output, revisiting assumptions of efficiency, or reframing sustainability altogether. Whereas science could be framed as offering evidence-based solutions to enhance productivity, we recognise that this reflects a particular epistemic programme, not the definitive outlook of the scientific system.

Given this multiplicity of observational standpoints, the tetralemma offers a way of navigating the constructed nature of trade-offs. Managers may oscillate between the following four strategies, depending on how the organisation is structurally coupled to various systems:

- *Either-or*: framing decisions as binary choices between fossil fuel dependence (aligned with a particular economic rationale) and renewable energy transition (aligned with certain political or legal imperatives).
- *Both-and*: pursuing hybrid models that attempt to reconcile short-term economic viability with long-term sustainability goals, for instance, through transitional investments or diversified portfolios.
- *Neither-nor*: challenging the framing of the dilemma itself by questioning whether the dichotomy between fossil and renewable energy captures the underlying complexity—perhaps reframing the problem in terms of soil regeneration, food system resilience, or regional sustainability needs.
- *More-than*: redefining the business model altogether, by integrating multiple systems through innovations such as carbon sequestration agriculture, nature-based solutions, or multi-stakeholder governance frameworks that transcend conventional trade-offs.

It is critical to stress that these strategic orientations are not rooted in a single function system. Rather, they emerge through the organisation's structural couplings with several systems, each of which provides its own logic, expectations, and sources of legitimacy. The ability to enact"neither-nor"or"more-than"strategies depends less on managerial ingenuity alone and more on the organisation's capacity to remain sensitive to and communicatively engaged with the polycontextural environment.

Luhmann's theory suggests that organisations can only observe and respond to function systems through structural couplings—mechanisms that allow systems with distinct logics to interact without collapsing their differences. In the case of our agricultural company, structural couplings may include legal departments engaging with legislative codes; investor relations attuned to capital markets and payment structures; scientific advisory boards linked to research institutions; CSR units communicating with civil society actors and environmental standards; regulatory compliance functions responding to political mandates. These couplings enable the organisation to translate between system logics without assuming their commensurability. The tetralemma, in this sense, becomes not a decision tree but a schema for reflecting on the conditionalities imposed by system difference. The possibility of identifying a "more-than" solution, for instance, arises not from transcending systems but from creatively synthesising multiple perspectives without denying their irreducibility.

To conclude, the example provided in this subsection is intentionally selective. It does not aim to specify what each function system necessarily observes or prescribes. Instead, it shows how *observational diversity* and *structural coupling* jointly shape the field in which organisations perceive, construct, and respond to moral trade-offs. The tetralemma becomes a guide for navigating—not resolving—this complexity. Its real value lies not in suggesting that trade-offs can be solved once and for all, but in helping organisations remain alert to how trade-offs are themselves artefacts of contingent system observations, whose coexistence must be acknowledged, interpreted, and engaged with strategically.

Reassessing the Sustainability Paradigm

In this final theoretical movement, we offer a tentative exploration of how sustainability might be re-interpreted through the lens of Luhmann's theory of functional differentiation. The aim here is not to replace the widely adopted three-pillar model of sustainability with a new definitive framework, but rather to initiate a shift in perspective—from viewing sustainability as a unified objective with commensurable dimensions, to understanding it as a polycontextural field composed of diverse and incommensurable system logics. This is very much a work in progress, and we present the reflections in this subsection as a heuristic invitation to observe sustainability differently, rather than as a prescriptive intervention.

The familiar model of sustainability, with its three pillars—economic, social, and environmental—presents itself as a balanced, integrative framework. However, from a systems-theoretical viewpoint, it obscures the differentiated nature of modern society, in which these pillars correspond not to unified domains but to distinct function systems, each of which constructs meaning based on its own internal code. These codes are not merely thematic orientations (e.g. "economic" or "environmental") but operational distinctions—such as payment/non-payment or legal/illegal—that guide how each system selects and processes information. The assumption that the three pillars can be evaluated within a unified logic of sustainability tends to flatten this differentiation, and in doing so, creates the illusion of comparability and synthesis. To illustrate this, Table 1 proposes a tentative mapping of selected sustainability domains onto corresponding function systems and their binary codes:

This table should be read not as a proposed replacement for the three-pillar model, but as a provocative heuristic—a way to reimagine how sustainability might be differently constituted across function systems. It gestures towards the possibility of observing sustainability polycontexturally, without reducing its dimensions to a single evaluative logic. However, each pairing in the table is programmatically contingent: that is, it depends on particular historical and institutional configurations that shape how codes are specified and operationalised.

Take, for instance, the economic system. Luhmann identifies its code as payment/non-payment, yet in much of the sustainability literature and practice, this is often specified as profit/no profit. This is not a trivial shift: it reflects a particular capitalist programme in which market dynamics are oriented towards surplus extraction and investment returns. But alternative economic programmes—such as circular economies, social enterprises, or commons-based economies—may operationalise the payment code differently, and resist equating economic sustainability with profitability per se.

Likewise, the scientific system operates through the binary code of true/false, but what counts as scientific "truth" in sustainability debates is itself deeply contested. Programmes of technological innovation may align truth with efficiency, productivity, and scalability (e.g. precision agriculture or gene editing). Yet other scientific paradigms—such as ecological economics, planetary boundaries science, or resilience thinking—emphasise limits, systems vulnerability, and downscaling, often challenging growth-oriented notions of innovation. Thus, "sustainability" from the perspective of the scientific system is not a singular claim, but a plurality of knowledge practices, each embedded in distinct epistemic traditions.

Table 1 Functionally differentiated perspectives on sustainability

Sustainability domain	Corresponding function system	Key binary code
Economic sustainability	Economic system	Payment/Non-Payment
Political sustainability	Political system	Government/Opposition
Legal sustainability	Legal system	Legal/Illegal
Scientific sustainability	Science system	True/False
Media sustainability	Media system	Attention/Non-attention

The legal system, oriented by the code legal/illegal, engages sustainability through instruments such as environmental regulations, land use laws, or corporate liability frameworks. Yet how sustainability is legalised depends on programme choices—e.g. whether laws adopt market-conform mechanisms like emissions trading or prohibitive bans on extractive activities. Similarly, the political system—operating through the distinction government/opposition—frames sustainability via policy negotiations, electoral debates, and institutionalised contestations, with varying degrees of partisan polarisation or consensus. The media system, which operates through attention/non-attention, shapes which sustainability narratives gain visibility and public resonance. Its contributions to sustainability thus depend on editorial priorities, communicative formats, and audience logics—not simply on the accuracy or urgency of the issues at stake.

By recognising that each system constructs sustainability on the basis of its own internal logic, we expose the false commensurability inherent in the three-pillar framework. When corporate or policy actors attempt to "balance" economic, social, and environmental priorities, they often presume that trade-offs between these can be measured and optimised within a single framework of decision-making. However, from a systems-theoretical viewpoint, such efforts often result in forced translations across incompatible logics, contributing to the very perception of trade-offs that the three-pillar model aims to overcome.

This is where the tetralemma becomes a useful cognitive tool—not as a means of resolving these trade-offs, but as a framework for observing their constructed nature. Rather than forcing managers to choose between economic and ecological priorities (either-or), or insisting that they must always be reconciled (both-and), the tetralemma allows for more reflexive positioning: challenging the very terms of the trade-off (neither-nor), or exploring unanticipated alternatives (more-than). Yet the viability of such positions is not a matter of managerial willpower alone. It depends on the structural couplings that link the organisation to its societal environment—e.g. through regulation, research collaboration, media coverage, or financial flows. These couplings condition which perspectives are available to observe and navigate sustainability issues.

In conclusion, our argument is not that sustainability must be redefined along functionally differentiated lines. Rather,

we propose that observing sustainability through the lens of functional differentiation opens up new conceptual and strategic possibilities. It helps explain why trade-offs persist—not necessarily because values clash, but because different systems observe the world differently. The table presented above is best understood as a heuristic snapshot within an evolving theoretical exploration. Future research could further investigate how sustainability is performed, interpreted, and contested within and across function systems, and how organisations might cultivate more reflexive structural couplings that enable them to operate in polycontextural environments without falling back on the false harmonies of commensurability.

Contributions of the argument

One of the key contributions of our argument to the business ethics literature is its exploration of how Luhmann's systems theory offers a novel perspective on moral trade-offs, particularly those arising as conflicts between stakeholder interests. While mainstream business ethics approaches—including normative stakeholder theory (Freeman et al., 2020), corporate social responsibility (Carroll, 1991), and paradox management strategies (Smith & Lewis, 2011)—offer valuable frameworks for addressing trade-offs, they often assume that these tensions can be resolved through managerial deliberation or stakeholder negotiation.

In contrast, a Luhmannian perspective suggests that moral trade-offs are neither external dilemmas to be solved nor merely subjective managerial challenges, but systemic paradoxes embedded in functionally differentiated societies (Valentinov et al., 2019). This approach challenges existing business ethics paradigms by shifting attention from moral reasoning and stakeholder dialogue to the structural conditions that shape managerial perceptions of trade-offs. By integrating Luhmann's theory into business ethics, we advance a system-oriented approach that acknowledges the persistence of trade-offs not as failures of management, but as fundamental features of modern organisations operating across multiple function systems.

This contribution adds depth to ongoing business ethics debates about Luhmann's systems theory, which have predominantly focused on the effects of moral communication and the shift from person-centred to system-centred morality. By applying Luhmannian concepts such as paradox and functional differentiation to the issue of moral trade-offs, our argument transcends traditional binary dichotomies of right versus wrong or stakeholder versus shareholder. This shift is crucial because it better reflects the realities of modern, functionally differentiated societies, where moral issues are often situated within broader systemic contexts rather than isolated individual actions. Our approach is both timely and necessary, as it challenges the prevailing business ethics paradigms that still heavily rely on moral communication and person-centred ethics. By integrating Luhmann's systems theory into the discourse, we offer a pathway for business ethics to advance towards a system-oriented perspective that is better suited to address the complexities of contemporary organisational life. This approach not only provides a more accurate representation of the interconnected nature of modern moral trade-offs but also equips managers with practical tools, such as tetralemmatisation, to navigate these challenges effectively.

The second major contribution of our paper is the development of a structured tool for navigating trade-offs in functionally differentiated environments: tetralemmatisation. While paradox theory (Smith & Lewis, 2011) has provided valuable insights into managing organisational tensions, it primarily focuses on 'both-and' responses to trade-offs. This assumes that managers can integrate conflicting stakeholder demands into hybrid strategies (Hahn et al., 2017). However, this approach often fails to address situations where integration is not possible due to systemic incommensurability.

By contrast, tetralemmatisation expands the range of managerial responses beyond binary logic (either-or) and paradox resolution (both-and) by introducing:

1. Neither-nor: Questioning the underlying trade-off framework rather than assuming its validity.
2. More-than: Expanding the problem space by considering higher-order system interactions rather than remaining within the immediate stakeholder dyad.

This provides a crucial advancement over paradox theory by equipping managers with tools to reframe trade-offs, rather than merely balancing or negotiating between stakeholder interests. For example, instead of attempting to find a balance between short-term profitability and long-term sustainability (both-and), managers using tetralemmatisation might challenge the assumption that financial metrics are the sole measure of corporate success (neither-nor), or they might develop a new, functionally differentiated framework for corporate impact (more-than).

The third contribution of our paper is to reframe the origin and persistence of stakeholder interest trade-offs through the lens of Luhmannian systems theory. In doing so, we revisit a central paradox in stakeholder theory: if capitalism, as Freeman et al. (2007) assert, is fundamentally cooperative—designed for joint value creation among stakeholders—why do trade-offs between stakeholder interests persist so stubbornly in practice? We suggest that this paradox may in part reflect an underlying theoretical conflation.

Freeman's emphasis on the cooperative nature of capitalism appears to be rooted in an implicit alignment of capitalism with the economic function system, as if capitalism were the economic system itself. Yet from a systems-theoretical perspective, this is a categorical mistake. The economic system, as Luhmann defines it, operates according to the binary code of payment/non-payment and remains indifferent to specific institutional or normative programmes, including capitalism. Capitalism, in this view, is merely one historically contingent programme—albeit a dominant one—that channels economic communication through particular forms of market coordination, property rights, and profit-seeking logics. By treating capitalism as structurally cooperative, stakeholder theory may be attributing to the economic system a degree of integrative capacity that it does not, in fact, possess. From the standpoint of a functionally differentiated society, stakeholder trade-offs arise not because capitalism fails to fulfil its cooperative promise, but because organisations exist within a polycontextural social environment, where economic, legal, political, and scientific systems each construct reality according to their own autonomous, self-referential logics. These logics are incommensurable by design; their coupling is structurally possible, but not unifying in any normative sense.

The real source of persistent trade-offs, then, lies not in the limitations of capitalism alone, but in the structural misalignment between multiple function systems. What counts as success within the economic system (e.g. value maximisation) may conflict with what counts as legitimacy in the legal system (compliance), credibility in the scientific system (truth claims), or acceptance in the political system (public accountability). These trade-offs are not anomalies, nor are they managerial failures—they are constitutive features of a functionally differentiated society in which no single system can claim universal primacy. From this perspective, the managerial challenge is not to eliminate stakeholder trade-offs, but to navigate their continual re-emergence through strategies that remain sensitive to the different observational standpoints of relevant function systems.

The fourth and perhaps most provocative contribution of our argument lies in its critical examination of the widely accepted concept of sustainable development, particularly its reliance on the three pillars of economic, social, and environmental sustainability. Our analysis reveals that while these pillars are intended to offer a comprehensive framework for evaluating sustainability, they fall short of capturing the true complexity of modern society as understood through Luhmann's theory of functional differentiation. We therefore advocate for further research into developing new metrics for evaluating corporate societal performance—metrics that align with the diverse and incommensurable function systems of contemporary society. This research should involve a radical rethinking of how we assess corporate impact and performance, moving beyond the traditional three-pillar model. We propose creating new metrics grounded in the concept of functional differentiation, which acknowledges and respects the distinctiveness of each function system, thereby offering a more nuanced assessment of corporate interactions with and impacts on society. Such metrics should help us reassess grand challenges by reframing our understanding of the ambiguity and complexity inherent in these issues. Rather than viewing this ambiguity as a problem to be reduced or eliminated, we suggest embracing it as a natural outcome of the complex interplay among different function systems, each with its own logic and priorities.

Conclusion

The exploration of moral trade-offs in business ethics, particularly in stakeholder theory and sustainable development, has traditionally been framed through the three-pillar model of sustainability, which assumes that economic, social, and environmental concerns can be aligned and integrated. In this paper, we have questioned this assumption of commensurability, arguing that such trade-offs are not merely managerial dilemmas but expressions of the structural incongruence among function systems in a functionally differentiated society. By drawing on Luhmann's theory of functional differentiation, we have shown that attempts to harmonise stakeholder interests and sustainability priorities within a single decision-making framework risk oversimplifying the polycontextural complexity of organisational environments. Rather than seeing trade-offs as obstacles to be resolved, we suggest they are better understood as systemic paradoxes—persistent, recursively reproduced tensions that shift according to the observational vantage point of each function system.

In light of this perspective, our contribution lies not in replacing existing approaches to business ethics, stakeholder theory, or sustainability governance, but in expanding the space of reflection. We do not advocate abandoning prevailing models; rather, we invite scholars, managers, and policymakers to explore alternative modes of engagement that embrace structural complexity, tolerate paradox, and cultivate systemic awareness. Instead of offering prescriptive claims for how business ethics *should* proceed, we suggest that observing from the perspective of functional differentiation invites a shift: from focusing on moral decision-making as the domain of individuals or firms, to seeing it as a systemic process shaped by differentiated and often incompatible logics.

This perspective opens possibilities for developing sustainability metrics that are sensitive to system-specific rationalities, rather than relying on one-size-fits-all indicators; encouraging methodological pluralism, rather than

converging on normative consensus; fostering interdisciplinary collaborations not to unify perspectives, but to surface their contradictions productively. These are not prescriptions but heuristic provocations—not what ought to be done, but what becomes visible when we adopt a different observational stance.

Trade-offs are often experienced by managers as binary tensions—e.g. profit versus sustainability, shareholder versus stakeholder, short-term versus long-term. Our approach suggests that this binary framing is itself the product of limited observational configurations. A tetralemmatic stance enables managers to observe where a decision is being framed as either-or, and to explore both-and possibilities; question whether the very terms of the dilemma are appropriate (neither-nor); reframe the situation altogether by expanding the problem space (more-than). This does not offer a "solution" to moral trade-offs, but a strategy for living with them—not by collapsing difference, but by recognising and navigating systemic plurality.

Likewise, we do not propose that policymakers should discard the three-pillar model. Rather, we invite reflection on how this model may itself be producing the very perception of trade-offs it is meant to overcome, by presuming that different value domains can be measured and managed within a shared evaluative space. A systems-theoretical orientation would instead prompt policy frameworks to acknowledge the plurality of logics that underlie sustainability disputes; design adaptive, reflexive governance mechanisms that do not aim to integrate all concerns, but to hold tensions open in productive ways; accept that polycontextural ambiguity is not a deficit to be corrected, but a feature to be observed and engaged.

Rather than offering new rules for sustainability or stakeholder management, this paper advances a reflexive perspective—one that encourages neither the acceptance nor the resolution of trade-offs, but a more nuanced engagement with their systemic origins. The conceptual integration of tetralemmatisation and Luhmannian systems theory suggests that organisational life is structured not by the elimination of contradiction, but by the need to make sense of multiple, incommensurable perspectives simultaneously. We do not claim that this perspective renders trade-offs easier to manage. But it may render them more intelligible—and in doing so, open up space for rethinking the cognitive and institutional tools used to navigate the paradoxes of modern business ethics.

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