Research Article

Popularized “Organizational Democracy” Practices Have Not Yet Evolved Beyond Team-Scale Coordination Without Hierarchical Control

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The consistent failure of popularized “organizational democracy” (OD) practices to offer any viable model of non-hierarchical coordination beyond team-scale is analyzed and explained within the context of a new metatheory of coordination called evolutionary intelligence (EI). This poorly acknowledged reality is obscured by an extreme polarity in perception between praising and shunning OD in the organization and management literature, and between the perceived existence and complete lack of OD in practice. Most of this polarity is due to a failure to distinguish between decentralized strategic coordination (requiring democracy) and decentralized tactical responsibility (requiring role-based freedom). In particular, participatory management and self-management practices are analyzed and exposed as radically different models of tactical coordination that are often wrongly perceived as OD. They are also confusingly conflated under the exact same label of “self-managing teams / organizations”. Contributing still more to the confusion and polarity is that the self-management model provides genuine freedom and stress reduction to employees, whereas the participatory management model is based on stress-inducing cultural coercion and managerial manipulation. Most important, neither model, along with its practice variants, can scale without hierarchical control to meet the key criterion for OD: decentralized strategic coordination at organization-scale. As a result, both models, particularly self-management, are frustratingly prone to long-term fragility and failure, despite being extraordinarily effective at team-scale. The extreme polarity in OD perceptions surprisingly reconciles once one realizes that freedom (in tactical practices) and democracy (in strategic OD) are fundamentally different forms of coordination when viewed through the multidimensional lens of EI. Therefore, organizational democracy cannot simply be freedom at organization-scale, as most “democracy” practices are falsely popularized.

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1. Introduction: Is Organizational Democracy a Myth or Reality?

Even when organizational democracy (OD) practices have been seriously discussed amongst organization and management scholars, real OD is effectively still shunned. The last time OD was spotlighted as a special topic or forum of a top international journal was in 2004, in a series of four AOM papers. All of them essentially dismiss or redefine it to exclude OD's etymologically core meaning of decentralized power / rule [1]. Ironically, they still extol the substantive normative benefits of democracy for an organization's disenfranchised stakeholders, but at the same time they decry its legal, political or economic impracticality. For example, Kerr [2] essentially dismisses OD as "an unnatural act… almost guaranteed to be less [efficient]". He warns of "'too much' democracy" violating the sanctity of shareholder primacy's "legal ownership", which he implies is the only basis for governance "legitimacy". Likewise, Powley et al. [3] strangely characterize OD as a large-scale ideation process that shares essentially no decision-making authority. And De Jong and Van Witteloostuijn [4] substitute perfunctory participation in works councils outside of the organization for real democracy *within* the organization.

Several authors provide a typological list or categorization of potential features (or perspectives) to define what OD might include, but almost all of them exclude explicit sharing of decision authority and power. There is a near-universal emphasis on employee participation / voice, board-level governance / representation or other external oversight [see, e.g., [5][6][7][8]]. However, not even one attempt appears to have been made in recent history to develop a systematic framework, let alone theory, of how OD could eventually be internalized *within* the organization to decentralize power for collective coordination purposes. The only serious attempt to do so appears to be from nearly a century ago by Mary Parker Follett [9], whose prescient work this author has serendipitously extended in Siegfried [10][11][12]. As Romme [13] summarizes, "the future of the management discipline may largely depend on the rise of new forms of management drawing on distributed intelligence and circularity of power and authority"; yet he likewise laments, "The principles of distributed intelligence are almost entirely ignored by management scholars as well as practitioners." As a result, the only OD theories that we have now (up to June 2026) are those implicitly claiming that direct, true democracy is not really necessary.

The purpose of this paper is to apply the new theoretical lens of evolutionary intelligence (EI), as developed by Siegfried [10], to help resolve these strongly dichotomous academic and practice

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perspectives surrounding OD. These perspectives feature a diametrical polarity between praising and shunning OD in the organization and management literature, and between the perceived existence and lack of OD in practice. After more thoroughly problematizing this extreme polarity in widely embraced perceptions, the democratization history embedded in management practice will be spotlighted to analyze and explain why these contradictory perceptions persist. Once the definitive threshold for OD becomes clear, the perceived contradictions can be reconciled. More important, this threshold clarifies why there is currently no OD practice able to scale coordination beyond team-scale without hierarchical control (i.e., via collective democratic control over organizational strategy).

Building upon EI's coordination metatheory lens developed by Siegfried [10][11][12], there have been two major stages of coordination evolution in popular OD practices since the Weberian bureaucratic model of 1:1 coordination via hierarchical dictatorships. The two models are 1:n participatory management and n:n self-management. Both of these coordination models will be comparatively analyzed in detail to explain how and why they fall short of the minimum n:n:n (3D) strategic coordination required by OD. In particular, both fail to achieve OD primarily due to their consistent inability to scale even tactically (i.e., at 2D) beyond a team-sized coordination limit of about 20 individuals. That is because the number of coordination integrations required increases exponentially as the number of individuals or dimensions increases [11]. Without AI, surpassing this bounded rationality limit to achieve coherent multidimensional coordination does not appear to be possible via either 1:n or n:n popularized organization practices.

It is important to recall here from Siegfried [10] that EI's four dimensions of organization are expressed in R:A:D:E network graph format (for Resources, Alternatives, Directives, and Employees/Effort /Evaluators). These four dimensions are synonyms for Property/Platform, Preferences, Purposes, and People/Perspectives, respectively. When any of these terms is used in a dimensional context, it will be followed by its dimensional ID (i.e., R, A, D, or E) unless otherwise clarified. Also, n:n:n refers to the A:D:E dimensions only, and both 1:n and n:n refer to the D:E dimensions only. The "n" implies organization-scale (or team-scale) members of that dimension coordinating, and a "1" implies dictatorial control over that dimension. Sometimes a big "N" is used instead to imply societal-scale (or Web-scale) members of that dimension coordinating or connecting.

There are many faddish practice names and nuances used to describe the two basic coordination models that currently vie to replace bureaucratic command-and-control. However, neither model can coordinate beyond team-scale or two dimensions of organization without hierarchical control. This fundamental limitation exposes any organization-wide implementation to a much higher risk of long-term fragility

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and failure, particularly self-management when changes in strategic leadership or ownership occur. That is because the tactical freedom and trusted responsibility required for self-management to succeed are incompatible with top-down hierarchical control given the absence of any viable OD solution. The stability and effectiveness of self-management are extremely sensitive to dictatorial intervention and disruption [[14], pp. 252–255].

However, just because a coordination model like self-management is fragile does not mean it should be avoided. The benefits can be enormous, as dozens of pioneering firms have attested [15]. Moreover, current research by the author is focusing on how to find an anchor for that stability. The n:n self-management model also appears to be highly effective at reducing work stress, enhancing tactical control effectiveness, and boosting genuine intrinsic motivation [see, e.g., [14][16]]. In addition, Sawhney et al.'s [17] meta study provides very compelling indirect support for self-management, since it is based on 515 independent studies across 60 years and nearly 800,000 participants focused on role stressors. It found that role ambiguity, role conflict, and role overload were the biggest stressors negatively affecting both individual and organizational outcomes. These three stressors are the most unambiguously targeted and eliminated by the n:n self-management model, due to its focus on role-based freedom and crisp, initiative-driven responsibilities [16].

By contrast, 1:n participatory management often leads to high stress, is prone to amplifying these role stressors, and is culturally coercive and managerially manipulative [see, e.g., [18][19]]. This very real but conflated dichotomy between 1:n and n:n coordination is obviously another major reason for the extreme polarity in perceptions regarding popularized OD practices. Outside observers tend to see only the decentralized teams, not the very distinct coordination mechanisms that allow each team type to be decentralized. Such false conflation has contributed to the distorted perception that even self-management is a fundamentally flawed coordination model when it most certainly is not. It only lacks OD – preferably paired with employee ownership – to complement and stabilize it. Unfortunately, some misguided attempts to scale n:n coordination beyond team-scale have further amplified the negative perceptions surrounding self-management. Holacracy / Sociocracy and Teal Organization are spotlighted below to help demonstrate how and why.

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2. Methods

Problematization and comparative conceptual analysis are the two primary methods of theorizing applied in this paper. Theoretical elaboration and microhistory, as thoroughly described by Hargadon and Wadhwani [20], are the secondary, more indirect, methods of theorizing. Two major coordination model categories of popularized "organizational democracy" practices are mapped to – and analyzed through – the new theoretical lens of EI. A key research objective is to resolve widely conflicting assumptions (i.e., perceptions) surrounding what OD exactly is, whether or not it actually exists, and why.

The EI framework was originally introduced in Siegfried [10] as the result of reflexively and serendipitously applying the microhistory method to extend my unique lived experience to the enduring context of all human organization. EI itself was then extended as a theoretical lens in Siegfried [11][12]. A similar theoretical elaboration continues in this paper, since the EI framework is now applied to analyze and criticize the severe limitations of popularized practices touted as OD. In short, the results represent a further microhistorical extension of the EI framework, which primarily describes evolution within a single organization. EI is leveraged to explain, predict, and analytically compare the evolutionary history and effectiveness of different multidimensional coordination models across all organizations and the history of modern management.

In addition, the interdisciplinary research method is also implicitly applied to integrate organization and management practices with evolutionary theory. The latter has a long and well-established history of interdisciplinary generalizability [21][22][23][24][25].

3. Results and Analysis

3.1. Problematization

On the management practice side, the diametrical polarity of perceptions regarding OD has been consistently vigorous. By contrast, OD has long been a relatively "dormant topic" on the organization theory side [26], despite similar polarized perceptions among scholars when the topic is discussed. The conversations around OD have been overwhelmingly dominated by the pro-OD evangelists and management gurus, who continually claim, from one decade to the next, that OD nirvana is imminent. All we really need to do is summon the courage and moral leadership to implement it in one or more of the following forms:

1. Post-bureaucratic organization [27][28],
2. Just in Time and Total Quality Control manufacturing (JIT/TQC), Total Quality Management (TQM), and other self-managing team (SMT) structures [29][30][31][18],
3. Participation rights, voice and other empowerment [32][33][34],
4. Large-Scale Group Decision-Making (LSGDM) techniques like statistical clustering followed by a hierarchical consensus reaching process (CRP) [35][36][37][38],
5. Sortition-based deliberative decision-making [39][40],
6. Self-management [31][41],
7. "Liberating leadership" or "freedom-based management" [42][43],
8. Bureaucracy-busting Humanocracy [44][45],
9. Holacracy or Sociocracy [46][47], and
10. Teal Organization [14].

All of these guru-driven management practices will be addressed in the comparative analysis below within the context of the novel metatheory of coordination developed by Siegfried [10]. By doing so, the reasons why their evangelized promises have failed to materialize, let alone become revolutionary-scale management practices, will be explained. Although this confusing litany of "OD practices" may seem too overwhelming to critically assess all at once, the theoretical lens of EI actually makes it quite clear that there are really only two core coordination models in this entire list. As will be shown in the subsequent two comparative conceptual analysis sections below, the first five are all just variations of the 1:n participatory management model, and the second five are all just variations of the n:n self-management model. As a result, all of them are neither designed for nor capable of 3D strategic coordination, the defining threshold of OD per Siegfried [10][12].

Others on the pro-OD practice side are what could be loosely called the "revolutionaries" or "anarchists". Unlike the practices of the "evangelists and gurus" above, their message is predominantly negative, since it is mostly designed just to wake us up from our collective dystopian slumber. They tend to make ominously compelling and logically unassailable arguments against the status quo of concentrated corporate power. They justifiably rail against the oppressive social consequences of shareholder primacy, such as the following:

1. The ubiquitous hierarchical dictatorships that we must work under [48][49],
2. Imminent catastrophic climate change and unsustainable environmental degradation [50][51],

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3. Corporate Social Responsibility (CSR) and Environmental / Social / Governance (ESG) initiatives as shameless greenwashing strategies [52],
4. Employment as illegal human rental contracts [53],
5. Corporations as unaccountable private governments [54],
6. International finance as a deliberately predatory system of debt slavery and socioeconomic destabilization imposed upon lesser developed countries [55], and
7. Capitalism as an ultimately destructive system of concentrating power and ruthless inequality that ironically rewards and amplifies the avoidance of competition [49][56][57][58][59][60][61][62].

Arguably, these revolutionary wake-up calls should be heartily applauded and amplified. Unfortunately, the tired and worn alternatives to the status quo corporation and the overall economic system that these revolutionaries argue for are not nearly as compelling. Their pro-OD solutions to liberate humanity mostly just include cooperatives, co-determination, works councils, unions, and similar board-level governance and political representation structures [see, e.g., the 'representative management' solution of [63], pp. 77-86]. All of these exert influence primarily from outside the business organization itself; they cannot coordinate operations internally. Therefore, they cannot collectively integrate conflicting employee perspectives (E), purposes (D), and alternatives (A), nor can they decentralize any decision-making authority *within* the organization via OD. At best, they can only constrain the tyrannical tendencies of persistent management dictatorship via collective bargaining, regulations, and similar political confrontations from the outside. The same logic applies to "industrial democracy" and "industrial relations". As the names imply, they only represent external political solutions originating at the industry level, not internal collective control solutions at the organization level.

Perhaps the most ironic – and humorous – case study example of these "revolutionaries" is the anarchist organization World Education (WE) [64]. Despite a sincere, three-year "intervention" effort to democratize based on their "anarchist, radical democratic principles", their only democratic success was in publicly conceding to their total democratic failure: "WE democratically decided to reject democratic organizing" (ibid., p. 1536). This case study highlights how even an extreme act of democratic will is totally insufficient on its own to implement OD.

Staunchly opposing the evangelists, gurus, and revolutionaries / anarchists are a much smaller group of well-grounded realists. Building upon the original arguments of the pro-bureaucracy visionary, Max Weber [[65], pp. 196-244], their minority voices have proven more than enough to quickly cut through the

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modern guru gimmickry and the ever-flowing allure of OD anecdotal evidence. They make it abundantly clear that hierarchies are here to stay, despite how much we hate them [66], and that only validated facts and unambiguous statistics ultimately matter. Bombastic, generalized claims and cherrypicked anecdotes of alleged OD success stories are ultimately not at all compelling – as Foss and Klein [67] and Hoopes [68] carefully dissect – regardless of how normatively important OD may be.

Even the empirical side of OD practice and theorizing is not free of extreme diametrical polarity. It is not so much in different studies arriving at opposite conclusions, but in each study validating the exact opposite conclusion from the reader perspectives of popularized theory vs. managerial practice. In short, studies that claim to demonstrate the validity and benefits of OD in theory are arguably just demonstrating how OD can be completely avoided in practice. This is accomplished via OD "indicators" and manipulative perception management in order to reap the corporate benefits of artificial empowerment.

For example, some researchers have empirically demonstrated both the moral importance [69][70] and the psychological importance [71] of OD's alleged "indicators". However, these indicators are very obviously just false proxies for decision authority. The purpose of such studies is clearly not to research the empirical validity or benefits of OD based on any actual sharing of decision-making power. It is to research how the twin elixirs of intrinsic motivation and specialized knowledge can best be extracted by management on behalf of shareholders for an organization to maximize its profits. Employees need only *perceive* that OD exists via these false indicators to increase their performance. Achieving actual OD becomes effectively irrelevant.

This is yet another reason for the divergent obfuscation around OD from both a theory and management practice perspective. When we collectively perceive OD to be in existence and empirically very effective, an irreconcilable cognitive dissonance ensues when we are logically unable to put our finger on how and where decision-making power was specifically shared to achieve it. That is because, as will be shown, it never was shared. As Frega [72] and Battilana et al. [26] implicitly and accurately lament, genuine empirical studies of OD do not really exist, since the empirical cases that they must be based upon simply do not yet exist either.

Finally, perhaps the most commonly polarized perspective on OD comes from the "democracy hypocrites", who openly extol the benefits of democracy while actively opposing democracy's etymological core meaning of decentralized power / rule. They advocate that our normative aspirations can be fulfilled instead by a form of benevolent dictatorship, more euphemistically described as "moral leadership" or "empathetic/ethical management". It is similar to the way that benevolent dictators are irrationally extolled and relied upon as CEOs to direct the "organizational ambidexterity" and "dynamic capabilities" of a firm via Lamarckian evolution [12]. We have seen many historical appeals to benevolent dictatorial morality since at least 1970, via moral leadership [73], servant leadership [74], transformational leadership [75], and similar management philosophies. However, these concepts only emphasize more superficial ethics and empathy "from outside" – "a feeling for" rather than "a feeling with", only the latter of which can truly integrate conflicting perspectives and purposes per Follet [[9], pp. 218–219].

The most hypocritical of these benevolent dictatorship claims are the endless variations on stakeholder theory, including its most oxymoronic moniker of "stakeholder capitalism" [76][77][78][79]. This "theory" is more of a controlled opposition management practice in disguise. It is a utopian distraction promoting the absurd management propaganda of "doing well by doing good", as if there are no necessary trade-offs between shareholder primacy and social welfare – or at least none so significant that a bit of enlightened management morality and education could not fix. Lynn [80] and many others [e.g., [50][81]] have systematically dismantled these illogical claims. Unfortunately, the utopian "stakeholder capitalism" fantasy of achieving democratic responsibility without democratic rule will no doubt persist, since no viable alternatives to OD are ever offered. Even Lynn [80] reluctantly just suggests some restrained industry self-regulation. That was ironically the original lobbying idea from industry in the early 20th century that followed from the similar "good ethics pays" propaganda claim [82]. This propaganda was deliberately spun to avoid the obvious alternative of blunt government regulation severely impacting corporate profits.

Decades later, stakeholder theory continues that corporate lobbying and controlled opposition campaign by telling and retelling the same tall tale. For example, Freeman et al. [[77], pp. 11–12] very explicitly and very embarrassingly assert, "[Milton] Friedman's maximizing shareholder value view is compatible with stakeholder theory", and "Friedman…could see [stakeholder theory], as we do, as the very basis of capitalism."

All corporations should be openly rebelling against the vacuous mandate of profit maximization. However, all that they can do instead is performatively appeal to stakeholder interests while outsourcing their humanity to HR and PR departments to provide some semblance of dictatorial benevolence. HR and

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PR are the more human faces of large corporations that we all desperately want to believe in. But we all quietly know that no such faces actually exist.

3.2. Comparative Analysis #1: 1:n Participatory Management

It was not until the late 1980s and early 1990s that various attempts to break the bureaucratic stranglehold of 1:1 hierarchical coordination became popularized. Dubbed Green Organization by Laloux [14], the underlying 1:n coordination model can be appropriately generalized under the umbrella terms post-bureaucratic organization or participatory management. The former term emphasizes the desired end, whereas the latter emphasizes the democratized means. What all these attempts have in common is their focus on how to establish and maintain decisive cultural leverage – and ultimately rule-based "concertive control" [per [18]] – over the directives (D) dimension of organization to achieve rational 1:n coordination.

The trick, however, is in how to achieve such control without the appearance of violating organizational freedom – even if that means popularizing a type of Orwellian freedom that demonstrably does not exist. According to Courpasson et al. [[83], p. 186], an "avalanche" of new business books appeared beginning in the late 1980s that "encouraged employees to break the 'chains' of corporate employment and adopt an entrepreneurial orientation toward their own careers"; at the same time, books about top-down "strategic manifestos" and "heroic managers" were in distinct decline. All of these transitions are exactly in line with the nascent appearance of 1:N Web1 technology and the related evolutionary shift in society from 1:1 dictatorial hierarchies to 1:n entrepreneurial teams [11][12][14].

3.2.1. TQM and JIT/TQC via SMTs and Empowerment via Participation / Voice

Barker's [18] multiyear ethnographic case study is one of the most compelling examples of both this faddish shift towards entrepreneurial teams in real life and the contradictory organizational coercion that is necessary to achieve it. He documents how a small manufacturing operation called ISE switched in 1988 during the study from 1:1 hierarchical control to a 1:n self-managing team (SMT) structure.

Every longer-term worker reported "much more stress in the team environment than they had under the old ISE system", often working "12, 16-hour days" (ibid., p. 432). Ironically, "the teams' social rules [had] become more and more rigid" (ibid., p. 429), yet "the team members willingly accepted these disciplines because they themselves had created them" (ibid., p. 431). In fact, "they accepted this [stress] as a natural part of their work" (ibid., p. 433). Initially, a strong values-driven culture of customer-focused "freedom" imperceptibly morphed into a second phase of normative precedents and rules. And then, in the third phase, normative rules became solidified as explicit, rationalized rules in a written “code of conduct”. Rules primarily served to automate the prioritization of potentially conflicting directives (D) in the absence of top-down control. The author describes the cult-like consummation of this concertive control phase as follows:

The work life at ISE stabilized into a concertive system that revolved around sets of rational rules, as in the old bureaucracy, but in which the authority to command obedience rested with the team members themselves, in contrast to the old ISE. The team members had become their own masters *and* their own slaves (ibid., p. 433).

Concertive workers must invest a part of themselves in the team: they must identify strongly with their team’s values and goals, its norms and rules. If they want to resist their team’s control, they must be willing to risk their human dignity, being made to feel unworthy as a ‘teammate.’ Entrapment in the iron cage is the cost of concertive control (ibid., p. 436).

Through the lens of EI, this new “iron cage” of rules-based concertive control becomes a logical inevitability in a 1:n structure in order to maintain rational multidimensional coordination. Other participatory management practices may appear more nuanced in their methods of control, but they are fundamentally the same. As a result, all 1:n practices like “empowerment” and TQM have been rightly criticized as not only hypocritically invalid, but as “bogus”, “ethical failures”, “abuses of power”, and even “brainwashing” [84]. This is due to the cultural rules-based tyranny required to enforce coordination via EI’s directive (D) dimension. Pre-TQM 1:n coordination fads like JIT and TQC have similarly been skewered as extremely manipulative and abusive practices [29].

These managerial practices, described as a decades-long “illusion” and “the emperor’s new clothes”, only need to *appear* more nuanced to employees in order for today’s “emperors” to extract maximum profit from “internal commitment” [85]. For example, employee and stakeholder “participation rights” and “voice” are very effective motivators of performance and pacifiers against resistance [32]. That is because choice is an obvious prerequisite for initiative, control, and fairness. However, the latter two are just illusions, since these practices definitely do not qualify as anything genuinely democratic or fair, despite how they are popularized [86][87]. This deliberate concealment of manipulative control behind participatory management is further highlighted by Steingard and Fitzgibbons [88], who assert that “this organizational panacea for the twenty-first century conceals a capitalist schema of alienation, dehumanization, and totalitarianism." Others have aptly described it as "a kind of colonization of the workers' life world" [[83], p. 173].

There is, of course, a large management incentive to manipulate the intrinsic motivation of front-line employees [70][71][89][90][91]. By culturally extracting personal engagement and specialized local knowledge via 1:n coordination, a corporation can build and maintain profitable customer relationships and a seemingly sustainable competitive advantage over time. This is accomplished by forcefully invigorating the purposes (D) and preferences (A) dimensions of organization, and thus the BI and CI quadrants of EI [10]. The American auto industry realized this the hard way before being replaced by the "Nissan Way" and similar TQC / TQM variations [92].

The amount of competitive advantage that can be leveraged with these psychologically manipulative techniques, at least temporarily, cannot be understated. Roughly consistent over many years, less than a third of employees can even be considered "engaged" with their work as of 2023, whereas about half are "not engaged" (implying quiet quitting) and 17% are "actively disengaged" (implying toxic workplace negativity) [93]. Although these are shockingly poor baseline statistics, the flipside argument implies that there is a huge amount of value to extract from manipulating intrinsic motivation to leverage localized knowledge. There is no corporation that would not be very tempted to snatch that low-hanging forbidden fruit from their corporation's proverbial Tree of Knowledge.

Boje and Winsor [19] go even further by justifiably slamming TQM and related participatory management schemes as a "resurrection of Taylorism". They call TQM a form of "social and psychological engineering" that "masquerades under a costume of worker development, involvement, and empowerment", all based on an "illusion of common purpose and thus trust" between management and employees. Lewis [94][95] echoes their sentiment further by emphasizing how TQM and related programs "typically accomplish this goal through the creation of a corporate culture which facilitates the use of psychological and social control and coercion...seek[ing] to perfect control systems which produce and enforce uniformity." Sinclair [96] piles on further with many scathing indictments of the "team-building industry" and the "tyranny" of "artificial consensus".

Unfortunately, such participatory management programs are all doomed to failure unless they are enforced with cult-like uniformity, as Boje and Winsor [19] argue. Human beings eventually reject psychological programming, especially when it is so obviously motivated by profit-driven manipulation. That is why it should be no surprise that modern drug cartels and terrorist networks continue to thrive within brutally-enforced 1:n rules-based coordination structures [[97], pp. 25-47]. Ironically, 1984's now prolific Big Brothers are able to achieve Weber's ultimate iron cage of control over individuals within such structures.

3.2.2. LSGDM and Other Deliberative Decision-Making Practices

The same logic also applies to other 1:n coordination practices, such as Large-Scale Group Decision-Making (LSGDM), which invariably includes a deliberative Consensus Reaching Processes (CRP). An older, low-tech version of a CRP from the 1950s is the Delphi process, but today's versions are much more computationally enhanced. Directive (D) manipulation is once again indispensable in achieving 1:n coordination. Although it is deftly obscured, this time by inscrutably complex math and management-aligned facilitators, one cannot unsee this manipulative sleight of hand once it has been seen.

For example, various methods of statistically complex subgroup clustering are employed in a standard LSGDM process to artificially promote subgroup "consensus" [38]. This is little more than orchestrated groupthink by artificially reinforcing a "shared positive identity as a group" [98]. Also, various complex methods of systematic coercion and brute force manipulation over both deliberations and evaluations, respectively, are employed in a CRP to eliminate all euphemistically-labeled "uncooperative behaviors", both within and between subgroups [35][36][37]. Such well-accepted CRP coercion practices rebranded with Orwellian-sounding labels amount to a bizarre cult-like stigmatization against all minority disagreement.

However, what is perhaps the most serious indictment against such 1:n consensus decision-making methods is their predictably abysmal failure in empirical practice. In their recent LSGDM literature review, Garcia-Zamora et al. [36] conclude that "the vast majority of the reviewed papers validate their approaches by using examples with 50 or fewer experts", which they repeatedly deride as "simple toy examples with no interest to society." Keep in mind that "large-scale" is widely defined in the LSGDM literature to imply a number greater than or equal to a top team size of about 20 [36]. Therefore, an upper limit of 50 decision makers makes a complete mockery of its "large-scale" range – especially when the word "scale" is already redundant next to the word "large". Even worse, just to reach this paltry range of 20-50 decision makers, groupthink must be surreptitiously fostered via subgroup clustering and Orwellian CRP techniques. Such a blatantly manipulative process cannot possibly qualify as "coordination", let alone any genuine form of "collective control". In short, LSGDM (incl. CRPs) are so far just manipulative 1:n decision-making methods. They only masquerade as democratic coordination by providing a semblance of n:n deliberative collaboration at the CI-DI coordination node of EI.

Note that much larger groups have made demonstrably productive, consensus-driven deliberative decisions together in a democratic fashion via "citizens' assemblies" and similar methods (see, e.g., demnext.org). However, those decisions are always based on binary proposals, never on prioritizations, tradeoffs, and cardinal optimizations that are essential to all strategic organizational decisions per the EI framework. The granularity of evaluation input must logically limit the granularity of prioritization output. This glaring ignorance of actual vs. required evaluation granularity to achieve OD scalability is why we continue to see misleading calls for Athenian-style, sortition-based democracy within organizations [see, e.g., [33][39][40][99], pp. 151, 172]. Although aspirations of unity extrapolated from political democracy are obviously admirable, all such hope is completely misplaced. Heller [[30], p. 244] strongly agrees, even though he did not explicitly address any form of deliberative democracy, such as sortition.

Ultimately, all of these political approaches are based on approval voting, which will never be able to fulfill either the necessary evaluation granularity or the various process node requirements of the DI quadrant within the EI framework. This includes all so-called "democratic" structures outside of an organization's internal coordination process, such as cooperative boards, works councils, co-determination, and unions. These board-level structures and nods to worker representation are, at best, just constraints against despotism. Once again, that is because approval voting will never amount to co-ordering, which is the etymological minimum requirement for both co-ordination and OD control. Follett understood this requirement for achieving "integrative unity" quite well, noting that, "A Yes or No question is in itself a pre-judgment", since "That is fatal to the best thinking. There are almost always more than two alternatives in a situation" [[9], pp. 219-220].

3.2.3. Participatory Management Literature Surveys

For a much broader and more objective indictment against 1:n participatory management practices, including post-bureaucratic organization, one only has to review comprehensive state-of-the-art surveys of the field, such as Heckscher & Donnellon [28], Heller [30], and Wilkinson [34]. These three surveys document a chronologically deteriorating and depressingly consistent failure to create any substantive democratic control via these 1:n practices. Heckscher & Donnellon [28] wrote with excitement and hope in 1994 about the earliest disrupters of bureaucracy. Yet they embarrassingly noted, "There is not a single

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case that we can agree on as a solid demonstration of the generalizable significance of a nonbureaucratic structure" (ibid., p. 4). Likewise, Heller's [30] survey four years later is obviously still hopeful that "participation works" to some extent, but the optimism is dramatically diminished. In Wilkinson [34] 12 years later, the overall perspective becomes dry and overwhelmingly historical, leaving a distinctly postmortem impression. Only in its final chapter 25 by Robin Archer does it attempt to resurrect a prospectively positive vision by arguing for the critical democratic importance of enterprises being "governed by those who work for them". But predictably, it offers no solution whatsoever to democratize control.

Ironically, Heller's [30] survey was the most insightful of the three, especially due to its sincere attempt to envision the distant future of OD. He presciently predicted that OD in practice would never work unless it can "fit into a systems theoretical framework" (ibid., p. 222). He also hinted that "technology will have a particularly important role in facilitating or obstructing the future of organizational participation" (ibid., p. 233) due to its "clear democratization potential" (ibid., p. 237). He further emphasized, "Lack of systems thinking is very noticeable in the almost total absence of higher-level decision structures and policies in the very large case study literature" (ibid., p. 224). And then he concludes, "One major reason for [democratization] failure is the absence of a systemic approach to participation both in theory and in practice, which hinders the development of effective organization" (ibid., p. 243). Coincidentally, the systems-based EI framework and its sociotechnological theory of coevolution explicitly validate both of Heller's predicted mediating variables towards achieving true OD [10][11].

3.3. Comparative Analysis #2: n:n Self-Management

Starting in the early 2010s, a new n:n model of human coordination became popularized: self-management, where both effort/employees (E) and directives (D) are independently controlled dimensions of organization. Holacracy [46], Sociocracy [47], and the "advice process" within Teal Organization [[14], p. 100] have been the most popular practices used to implement this new coordination model. Many practitioners and scholars make the serious mistake of conflating n:n self-management (teams) with 1:n self-managing teams (SMTs). This seemingly identical nomenclature in the organization and management literature is unfortunate, since the two terms are opposites in most respects. For example, the 1:n coordination process is profoundly personal, whereas the n:n coordination process under Holacracy "feels profoundly impersonal" [[46], p. 110]. Moreover, as a Holacracy meeting facilitator, “you don’t try to invite input, and you don’t try to get agreement” (ibid., pp. 110-111), which is the exact opposite of a 1:n consensus-driven approach.

Also, under n:n, the grammatical direct object of any “management” effort is the individual “self”, since all coordination is based on dictatorial control over one’s tactical roles/responsibilities (i.e., “freedom”). Under 1:n, it is grammatically the team that is both the direct object of the “managing” and the one doing that managing collectively via cultural or rule-based concertive control. In short, 1:n implies decision by *rule-based consensus* (i.e., a consensus-based accumulation of codified rules), whereas n:n implies decision by *role-based consent* (i.e., responsibility-bounded freedom). In 1:n coordination, the accumulation of consensus-driven rules/policies becomes the hierarchical dictator over tactical organization via the D dimension. By contrast, in n:n coordination, the many tactical directives (and hence responsibilities) of the D dimension are grouped into roles by team consent. And then each role (and hence each individual assuming a role by team consent) essentially has the freedom of dictatorial control over that role’s responsibilities / directives (D).

For example, “liberating leadership” [42], “freedom-based management” [43], and Humanocracy [45] are conspicuously just variations of the latter, n:n self-management coordination. All three sets of authors over-ambitiously advocate for scaling this freedom up to organization-scale, but they offer no credible means to do so beyond team-scale. That requires OD’s n:n:n coordination. In fact, they openly acknowledge the unavoidable necessity for hierarchical control over not just strategy (which includes the A and R dimensions of EI), but also the overriding longer-term purpose of the organization [see, e.g., [42], pp. 70-71, [43], p. 27, [45], pp. 187-189]. The latter control places rigid guardrails around the D dimension to restrict the domain of acceptable organizational directives.

Unfortunately, Lee and Edmondson [31] make no such coordination model distinction in their review of less hierarchical forms of organization. They place both (e.g., 1:n Valve and n:n Zappos) under the same misleading category of “self-managing organizations” (SMOs). This newer SMO term adds even more confusion, since it is arguably incoherent. Only teams have ever managed themselves, and SMO strategy is still hierarchical and centralized, as the authors concede. Entire organizations have no means to decentralize strategy fully without at least n:n:n (3D) coordination capability, which does not yet exist [11]. Even SMO evangelists like Corporate Rebels openly admit that the boring term “middle managerless companies” would technically be more appropriate [[100], p. 49].

3.3.1. The "Top Team Size of 20" Rule

Until scalable n:n:n coordination becomes possible, we will be limited to top team sizes of about 20 members coordinating in 1:n or n:n fashion. This bounded rationality limit seems to be the maximum team size commonly recognized by multiple independent disciplines, experts, and companies [[14], pp. 88, 323, [35][36][45], p. 86, [47], p. 91, [101][102], p. 63, [103][104][105][106][107]]. Aside from this heuristic rule coined here, the classic Dunbar number of about 150 sets a hard theoretical limit on the number of relationships any individual can possibly coordinate with directly, which is still relatively small for any maximum organization size [[22][108][109], p. 118]. That said, a more practical and optimal range for team size is probably closer to only 6-12 members. As Osmani [107] concludes, "there are enough studies that show that large groups of more than 12 members bring more problems than benefits". Beyond that, per satisficing theory and groupthink research [98], cleverly disguised forms of coercion or top-down "persuasion" become required to achieve "good enough" rational coordination across an exponentially increasing number of n:n dimensional integrations (e.g., up to n^2=36 when n=6 team members vs. 400 when n=20).

A great example of this 6-12 team member optimization dynamic is the Dutch home-nursing company Buurtzorg, often cited correctly by many management scholars as a very successful case study in self-management [14][16][45][110]. Once any team grows to a size of 13, it is required to split into two independent teams to maintain this optimum n:n team dynamic [[14], p. 70]. Contrary to almost all other organizations, this requirement is relatively easy for Buurtzorg's home-nursing teams to implement given each team's easily modified neighborhood boundaries and already shared local knowledge.

Unfortunately, studies promoting SMTs and SMOs tend to obscure this coordination-scaling limitation, such as Kokkinidis' [111], where the three workers' collectives studied had only 4, 5, and 8-11 members, respectively, and none had any organic growth prospects. Similarly, larger organizations like Buurtzorg, FAVI, and RHD tend to hide these coordination limitations behind a portfolio of nearly independent "parallel teams" [[14], p. 319]. That is generally because only one organization dimension of EI – usually the resources (R) dimension – needs to be integrated beyond the tactical team level. And this, too, is generally done dictatorially, especially when such teams rarely require any significant strategic resource (R) investments to operate or grow, like at Buurtzorg. Buurtzorg's strategic decisions are essentially made by the CEO after a blog post seeking advice [[14], pp. 249-250].

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Another popular n:n coordination case study is Morning Star. This is a large 2,400-person organization supplying 40% of the tomato paste and diced tomatoes consumed in the United States, yet the n-scale coordination likely never exceeds 20-30 connections for any one factory worker [[14], p. 115, 44]. That is because each worker only has a role responsibility to a fixed number of individuals downstream in the production and packaging process, regardless of how large the organization grows. These responsibilities are managed via explicitly written 1:1 role-based commitments called Colleague Letters of Understanding (CLOUs). Therefore, even as the organization grows, each individual's effective team size is always fixed from their personal perspective due to this chain-linked production line structure. Moreover, the coordination commitments are further simplified by generally being in a single downstream direction only, thereby imposing a maximum integration burden on each worker that is equivalent to half of his or her work connections. That makes the effective team size coordination burden between 10-15 per worker, around the same team-scale ceiling that we see again and again in practice.

3.3.2. Holacracy and Sociocracy

Likewise, Holacracy's and Sociocracy's n:n practices can no doubt be effective within small "circles" (i.e., teams). However, such coordination is once again severely limited to optimal sizes of around 6-12 each, or 20 maximum [[47], p. 91], which obviously cannot qualify as OD. Thus, coordinating between circles is still a major problem. As Foss & Klein [67] document in detail and others seemingly concur [112][113], Holacracy is "overly bureaucratic", filled with "relentless doublespeak", and "It doesn't empower people, it empowers processes." Worse, both positional power and dictatorial control firmly remain, albeit deftly disguised. A hierarchy of circles, each with a "lead link" appointed by the higher circle, simply replaces the previous hierarchy of individuals, and all strategic decisions are controlled by the General Company Circle (GCC). This is essentially a euphemism for "senior management". Although each individual has dictatorial control over their own role responsibilities (i.e., organizational freedom), OD is still absent.

In addition, "prioritizing work across the whole circle" is a power that only the "lead link" individual has under Holacracy [[46], pp. 52-54]. This implies that dictatorial control also applies over tactical team prioritizations, not just strategic prioritizations. This is supported by the fact that only proposals can be resolved in a circle under Holacracy, never prioritizations. Even worse, not even binary (Y/N) proposal voting granularity is allowed in a circle. Only disapproval votes are ever addressed, and every objection must be based on evidence of likely future harm (ibid., p. 118). That is because individuals have mutually consented to each other's dictatorial role-based authority by default, as is standard in all n:n coordination. In short, only objections supported by the strongest form of Pareto optimality can challenge role-based dictatorial authority.

Once again, however, the greatest indictment of Holacracy (as well as Sociocracy) comes from practice, not theory. After well over a decade, it has failed to gain any significant traction, and popular business press declared it to be "fundamentally broken" already long ago [112]. Even the original and highly touted flagship implementation at Zappos in 2013 has since collapsed and been scrapped. This was due to an inability to maintain the OD illusion after its eccentric evangelist and originator, Tony Hsieh, sold Zappos and passed away months later in 2020 [[67], pp. 76-88].

Street & Feeney [114] similarly document the implementation of Holacracy at a technology company with about 450 employees. Despite obvious enthusiasm to make it work, the employee comments and analysis clearly show that Holacracy cannot scale, especially between higher and lower-level circles in the hierarchy. Employees could never fully embrace it, even though it admittedly worked well within their own teams. Managers in higher circles were still being managers, so it was mostly just hierarchical power in disguise. As a result, the implementation was terminated.

3.3.3. Teal Organization

Surprisingly, Laloux [14] implicitly admits that his Teal Organization methodology is essentially incompatible with for-profit entities, particularly public companies. All twelve n:n organizations featured by Laloux (listed on pp. 57-59) are or were private during the time they were studied. This is exactly what coordination metatheory would predict, since the directives (D) dimension can only be managed in n:n fashion at team-scale, never strategically (n:n:n) or at organization-scale. The benevolent dictatorship and moral authority of a private CEO and supportive board are two of Laloux's "necessary conditions" to sustain a Teal Organization, i.e., to "*hold the space* for Teal structures and practices" (ibid., pp. 237-243, 250-256, emphasis in original). In fact, for founders and CEOs, "holding the space" is "their most critical role" to shield Teal practices from top-down intervention (ibid. pp. 243, 250). Management agents of external shareholders will simply not be able to protect an organization's naturally diverse purposes (D) beyond its mandate of shareholder primacy. As even avid Teal supporters admit, with Laloux replying in "full agreement", the need for a benevolent dictator is "an awkward paradox that doesn't fit Laloux's model of the next generation of organisations" [115].

In addition, Laloux [14] implicitly concedes in Appendix 3 that Teal Organization only seems to work well in four very peculiar organization structures, the first three of which are as follows: 1) a small organization that is the size of a team (up to 20 individuals); 2) a portfolio of independent teams, each with an extremely short value chain (like Buurtzorg); and 3) an organization with a longer value chain that is based on a very linear, continuous and stable production process (like Morning Star). The fourth is an organization likely deluding itself that it has transcended 1:1 hierarchical coordination by using a very formal process like Holacracy to scale a hidden hierarchy of small n:n teams masquerading as egalitarian "circles".

That said, Laloux's [14] Teal methodology goes noticeably deeper than just relying on self-management and a benevolent dictator to protect it, so it deserves a closer look. Two of the three pillars of his Teal Organization – wholeness and shared evolutionary purpose – might even be considered necessary prerequisites of n:n:n coordination. He is obviously probing and earnestly advocating for some form of strategic coordination via shared empathic connections. However, there is no systematic way to implement it yet like there is for his core pillar of n:n tactical self-management. Moreover, there is no ICT-enabled system to help "cross the chasm" of adoption into mainstream n:n:n coordination, as both 1:n and n:n coordination previously had and did [11][12]. As a result, there are still only a handful of early adopters of a deeper form of Teal beyond the baseline of self-management, and two of those rare Teal implementations immediately collapsed after a leadership transition [[14], pp. 252-255]. To deflect against potential claims of selection bias, Laloux explains in a footnote why his book profiles only a dozen Teal companies. He surprisingly concedes that this number represents 100% of the minimally mature organizations that they have ever discovered using their full, three-pillared Teal paradigm (i.e., with more than 100 employees and at least five years old) (ibid., p. 345).

Moreover, the Teal ideas that Laloux [14] advocates still fall far short of achieving any strategic resilience, nor does he even attempt to argue how a Teal organization incorporates the necessary mechanisms to achieve Darwinian evolution like EI does [10]. The key evidence for this is that every top-down decision is considered a significant destabilizing threat to Teal structures, as multiple founders/CEOs concede [[14], pp. 240-245]. Self-management can only handle n:n (tactical) coordination, not n:n:n (strategic) coordination and its unavoidable intervention upon the D and E dimensions. Strategic paralysis and the status quo become the unappealing default alternatives. That is because n:n:n integration beyond team-scale is not feasible without AI, which Teal does not incorporate. As the founder/CEO of RHD noted, "adhering to these [Teal] values meant I wouldn't be able to impose a corporate directive – even when I was sure it was the right thing to do. This was a huge challenge. It still is" (ibid., p. 244).

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Teal practice tries to fill this obvious strategic void by emphasizing that all employees should "listen in to what the organization *wants to be* ... [to] dance with the organization's 'evolutionary purpose'", since it is "a living organism with a soul and purpose all its own" (ibid., p. 283). However, within only one paragraph after eloquently describing the organization's independent purpose (D) and how it should naturally evolve via "listening", Laloux then implicitly contradicts himself. He emphasizes, "As a leader, you can play your part by talking about the organization's purpose over and over again...[and] embed the purpose in recruitment, onboarding, and yearly evaluation processes" (ibid., p. 283). There is no logical way to make such promotion and embedding of a specific purpose (D) compatible with a truly independent purpose (D) that is supposed to continually evolve on its own.

"Listening" is only a necessary prerequisite of "evolutionary purpose". The much more difficult part is the dispassionate integration of deeply personal, shifting, and competing perspectives, purposes / directives, and preferences (i.e., the E, D, and A dimensions of EI organization, respectively). This is the only way to achieve continuous 3D evolutionary coordination (i.e., where A:D:E = n:n:n) [10][12]. That is no doubt why Laloux has never provided an example of a hierarchy-free organization, let alone one that has sustained its evolutionary success simply via collective "listening" by its members.

Finally, there is the third pillar of Teal: wholeness. Teal's advocacy of bringing one's whole self to work is quite admirable to promote more personal engagement. However, some of the practices that Teal organizations use to encourage public expression of one's whole self are psychologically intrusive at best, and potentially cult-like at worst [see, e.g., [14], pp. 190-191]. That said, even though these attempts to elicit employees' whole self in privately-owned Teal organizations may sometimes be misguided, they are undoubtedly well-intentioned. That is because it is intuitively obvious that any trust-based system of coordination must require a very intimate understanding of coworkers' perspectives (E), directives (D), and preferences (A) before anyone can make a trusted n:n:n decision on everyone's behalf.

In short, all of that subjective data would still have to be integrated without AI by all organization members. Unfortunately, that is an extremely high bar of interpersonal connectedness and coordination to reach. There appears to be no organization case in modern history where such profound interpersonal coordination has been achieved beyond team-scale without cult-like hierarchical control.

4. Discussion

Our collectively desperate desire to believe that we are already free and living under democracy leaves us vulnerable to accept each new Trojan horse of touted democracy that inevitably comes our way, such as the various iterations of 1:n participatory management. Instead of resisting these new forms of subversive subjugation, we are persuaded to embrace them by our peers. Then, as team members, we progressively become our own masters *and* our own slaves, entrapped in an even stronger iron cage, as Barker [18] so eloquently articulated. Of course, any system that provides only the semblance of freedom or democracy to pacify resistance is just another system of control. Courpasson et al. [[83], pp. 13-16, 59-63] emphasize how productively coopting and channeling that resistance is actually a defining feature of post-bureaucratic (1:n) systems: "Wise forms of power will 'build' resistance into the design."

Coopting natural human resistance against plutocratic dictatorship and encouraging self-delusions of freedom may be considered "wise" from a profiteering perspective. But we all know that such manipulation is unequivocally immoral and cannot be sustained indefinitely. EI's metatheory of coordination now makes it abundantly clear where, when, and why power is concentrated from a multidimensional coordination perspective [10][11][12]. It is therefore predicted that it will become much more difficult in the future to coopt such resistance via managerial manipulation.

Once this metatheory of coordination becomes more understood, it should also become much more difficult in the future for evangelists to sell a false nirvana of "organizational democracy", "liberation", or "freedom". Attempts to overextend n:n (or other) tactical coordination practices across an entire organization are consistently futile. This does not mean that a single organization cannot successfully comprise a large network of n:n teams, as several case studies clearly demonstrate. It just means that unavoidable strategic coordination amongst those teams makes the entire organization network fragile and at high risk of long-term failure – with very frustrating consistency. It also means that, so far, only two types of organizations larger than team-scale tend to be more anti-fragile: 1) when there is a portfolio of very independent teams (often based on easily rearranged regional or neighborhood boundaries), like at Buurtzorg; or 2) when there is a very linear value chain that automatically restricts the number of independent team coordination links to under 20, like at Morningstar, regardless of overall company size.

Only once we understand that OD can never be achieved simply by scaling freedom to organization-scale will we finally realize that successful n:n coordination practices are not the panacea they have been

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popularized to be. That is because democracy and freedom are more akin to antonyms than synonyms. In conjunction with the continuous tension of cooperation vs. competition between the CI and DI quadrants of the EI framework, it is the continuous tension of collective democracy vs. individual freedom between the DI and AI quadrants of EI that is the key to driving strategic evolution and resilience *within* an organization [10][12].

As a result, the most successful variations of self-management in the future will likely be focused much more explicitly on tactical coordination. Holacracy, Sociocracy, and (to a lesser extent) Teal fail primarily because they try to overextend n:n coordination to the entire organization and rely on significant bureaucratic procedures and hidden hierarchies to do so. By contrast, the n:n “advice process” is exceedingly simple and trust-based, with no formal meetings or even disapproval overrides [[116], pp. 200-210, [117]]. Roles also tend to be more informal and fluid, such that “any person in the organization can make any decision”, provided “that person must seek advice from all affected parties and people with expertise on the matter” [[14], p. 100]. Hence the name: the advice process. In fact, “almost all organizations in this research” by Laloux used this method “in one form or another” (ibid., p. 100). This commonsense approach has been avidly embraced in practice primarily because it maximizes decision freedom and ownership while remaining easy and informal.

However, maximizing freedom without sufficient role-based structure and responsibility boundaries can also result in more fragile coordination that could be vulnerable to abuse if that is how all decisions are made. For example, it could be disastrous if there are no required or explicit roles to implement internal control approvals over cash disbursements, or if there is an excessively fluid diffusion of role responsibilities leading to disengaged employees [118]. This is especially true in larger organizations or if there is no explicit delineation between tactical vs. strategic decision-making. The EI framework makes this tactical vs. strategic cutoff definitively clear, where strategy also coordinates the A and R dimensions, not just the E and D dimensions. Therefore, the advice process should work extremely well for tactical coordination in conjunction with a collective strategic coordination process in the future to allocate and optimize resources (R) between alternatives (A).

5. Conclusion and Future Research Directions

There is ultimately no shortcut to scaling multidimensional coordination beyond the very limited team-scale ceiling of about 20 individuals. More empathic methods of tactical coordination, as advocated by

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Laloux [14] and others, will prove invaluable in implementing the much more resilient and trust-based advice process of n:n self-management within these teams. However, achieving 3D n:n:n strategic coordination, or even 2D tactical coordination beyond team-scale, does not currently appear to be possible without hierarchical control. As a result, the only viable path forward towards scalable organizational democracy and freedom appears to be via AI-enabled multidimensional coordination, as originally theorized by Siegfried [10][11][12].

In addition to targeting future research towards achieving n:n:n (or higher) coordination capability, there is one more research target that would likely be quite fruitful based on EI's metatheory of coordination. That target is focusing on the fourth resources (R) dimension of EI, which remains the ever-invisible dictator over even n:n:n coordination. That is due to shareholder primacy having 100% override control over all strategic resource (R) allocations. This control is via the dictatorial profit-maximization directive (D), which is legally enforced by the hierarchy of management agents serving those shareholders.

The only logical way to neutralize this dictatorial disruption and override of employee self-management – along with its very effective n:n coordination – is via employee ownership. The ultimate objective should be to combine employee ownership with employee control. This should achieve not just sustainable n:n tactical coordination within any type of organization, but also an effective and strategically resilient evolutionary organization via n:n:n collective coordination [10]. That is because there would be no conflicting shareholder directives (D) controlling resource (R) allocations. Eventually, only the employees (E) would be shareholders. That means they would directly control all four dimensions of coordination, thereby neutralizing all potentially overriding external directives (D) and perspectives (E).

A key hypothesis of such research is that n:n tactical coordination combined with employee ownership (e.g., via a U.S. ESOP structure) should significantly decrease the fragility of that n:n coordination. Such a research initiative is currently being planned by the author in collaboration with a larger social impact team. This hypothesis should be true even over the longer term, despite the lack of n:n:n strategic coordination. As another hypothesis, employee ownership should also provide a significant performance bump over the already extraordinary effectiveness of n:n coordination on its own (i.e., starting with no substantive employee ownership). Likewise, the reverse hypothesis could also be studied if sufficient data is generated: that implementing n:n coordination in already existing ESOP organizations should provide a significant performance bump over the effectiveness of majority employee ownership on its own. Both scenarios could also be compared to implementing both n:n coordination and employee ownership simultaneously, which would probably be the most typical scenario in the planned initiative to be studied.

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