

The stoic practice of sustainability leadership in complex social-ecological systems

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Abstract

The United Nations has sought a new standard of leadership aligned with a sustainability agenda consistent with recent scholarship calls for greater reflection and independence of thought, pro-social outcomes and understanding of the place of leadership. Through this conceptual paper, we outline how the practice of Stoic principles can inform the enactment of contemporary leadership to address sustainability challenges. The teachings of Epictetus and Seneca provide context for potential contemporary applications of these principles in leadership conduct aligned with Complex Adaptive Systems (CAS) theory within social-ecological systems (SES). Leadership practices, captured in the reflective journals of Roman Emperor and Stoic, Marcus Aurelius, encourage consideration of leadership conduct that is informed through broader SES perspectives. This conceptual enquiry contributes insight into the potential for Stoicism to provide practical leadership responses to the UN sustainability agenda and emerging ‘sustainability leadership’ debate.

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Introduction

The United Nations (UN) Sustainable Development Goals (SDGs) position 17 areas requiring global attention and intentional leadership toward sustainable social, environmental and economic outcomes (United Nations, 2024a). The conceptual enquiry undertaken in this paper offers a leadership approach informed by Stoic philosophy which provides practical leadership responses to the UN sustainability agenda and emerging ‘sustainability leadership’ debate (Metcalf and Benn, 2013; Morgan, 2018; Steffen and Rezmovits, 2018). While attention in this paper is specifically drawn to leadership for social and environmental sustainability, we acknowledge the importance of economic imperatives in achieving overall sustainability. However, we note that the dominance of Western-centrism has been questioned for some decades with concerns being raised around the social and environmental impacts of more recent capitalist, economically driven agendas (Shrivastava, 1995). Contemporary organisational and business model impacts on social-ecological systems (SES) remains an evident concern in the literature. For example, Dentoni et al. (2021: 1216) stress the ‘importance of assessing sustainable business initiatives in terms of their impact on resilience at the level of socio-ecological systems, not just of organizations’.

‘Western’ or ‘Anglo’ approaches of the past, such as those of the ancient Stoics discussed in this paper, contain insights and wisdom that can inform contemporary social and environmental crises. A seemingly reluctant return to greater focus on social and environmental factors may, in part, be due to the sheer magnitude of leadership challenges faced within increasingly complex, anthropogenically affected systems (Clarke and Harley, 2020). For example, early considerations of sustainability leadership, in terms of organisations operating as and within complex adaptive systems (CAS), indicate ‘leadership for sustainability requires leaders of extraordinary abilities. These are likely to be leaders who can read and predict through complexity, can think through complex problems, engage groups in dynamic adaptive organisational change and can manage emotion appropriately’ (Metcalf and Benn, 2013: 381).

More recently, the UN Global Sustainable Development Report 2023, compiled by an independent group of scientists appointed by the Secretary-General to address sustainability challenges, called for ‘a new standard of leadership’ (United Nations, 2023: 83) at global, local and institutional levels. This ‘new standard’ calls for greater emphasis on environmental and social outcomes to remedy the established standard which prioritises economic imperatives. From the perspective of the UN SDG agenda, placing leadership as essential to the sustainability of social-ecological systems, we align our inquiry with recent calls for greater attention to pro-social outcomes (Allen et al., 2022) for the commons and understandings of the place of leadership (Sutherland et al., 2020) in this context. We contribute conceptually to leadership scholarship regarding what this new standard of leadership might entail to address sustainability agendas and challenges with obtaining greater inclusivity of social, environmental and economic outcomes. To this effect, the paper explores the practice of Stoicism, specifically, to offer a perspective that aligns with CAS theory within SES.

CAS theory is used to define ‘[...] the nature of the interdependencies and interactions among agents within a system as well as those between the agents and the system’ (Dentoni et al., 2021: 1218). The complex, self-organising and adaptive conditions within and between social and ecological systems allow the interactions among these systems to be categorised within CAS theory

(Bohensky et al., 2015). These interactions are referred to here collectively as social-ecological systems (SES). We engage with SES sustainability from the CAS perspectives outlined by Metcalf and Benn (2013) whereby sustainability is defined in terms of complex interactions of ‘people, planet and profit’. By drawing attention to the UN 2030 Agenda for Sustainable Development which articulates ‘people, planet, prosperity, peace and partnerships’ (2024b), we seek to extend this definition in an effort to accommodate the complexities of social-ecological systems.

Leadership under these conditions requires attention to optimal and efficient use of scarce resources (economic) and a maintenance of stability within social and cultural (social) and biological and physical (environmental) systems to foster sustainability within the system (Morgan, 2018; Steffen and Rezmovits, 2018). Social, environmental and economic perspectives are used here ‘as the lens through which sustainable development can be defined and evaluated for effective leadership intervention strategies’ (Morgan, 2018: 69). From this perspective, leadership is deemed integral to being ‘adaptive to the demands of those systems’ (Metcalf and Benn, 2013: 378). Further, the notions expressed by Nicholson and Kurucz (2019: 25) with respect to a need for ‘leadership approaches that support efforts to systemically address issues of the commons that sustainability presents’ are explored here from a Stoic perspective. Leadership for the ‘common’ good in this regard is considered a stewardship of relational interactions through common purpose and objectives toward sustainable social, environmental and economic outcomes (Maak and Pless, 2006).

Our claim is that Stoic philosophy resonates strongly with SES and CAS theory principles. Stoicism, we contend, offers practices through which complex adaptive thinking can be approached by way of developing an awareness and recognition of the interconnectivity of ever-changing circumstances, combining cognition and affectivity in its apprehension and response to SES sustainability leadership challenges. Seneca’s *Natural Questions* (2014), for instance, invites deep contemplation and philosophical explorations of our place within, and understanding of, the complexities of the natural world and societal interconnectivity. Similarly, Epictetus offers ways of considering how we might best respond to these complexities to imbue equanimity and balance throughout the whole structure of the ethos. Thus, presented in this paper is the notion that Stoic practice may be a suitable response to the challenges raised by Metcalf and Benn (2013) of developing the leadership efficacy and emotional awareness suitable for operating within complex adaptive systems.

By selecting Stoic philosophy as the focus of this inquiry, we draw attention to Aristotle’s notion of *eudaimonic* (flourishing) over hedonistic (pleasure seeking) experiences, in so far as obtaining wellbeing through virtue rather than sensual or psychological pleasure (Whiting et al., 2018). The Stoics drew upon Aristotle’s and other philosophical perspectives and inquiries, including Plato and Socrates (Luce, 1994; Whiting et al., 2018) to develop a unique philosophical perspective, principles and practice. Stoicism diverged from the other main Hellenistic schools of thought, Epicureanism and Scepticism, in the late BCE and early current era centuries based on an ontological position which was decidedly focused upon being at one with the natural world and forming appropriately virtuous responses to all that this presents (Luce, 1994). Further, Stoicism was governed toward *practices* exemplifying virtuous actions which offers opportunity to explore leadership practices guided by Stoic principles to address sustainability challenges. The Stoic importance of experiencing and creating *eudaimonia* (flourishing) through practice is expressed by Whiting et al. (2018: 476) as,

[...] a person [whom] shows *eudaimonia* to exist empirically and does not just infer that it does in the mind’s eye or another abstract form. This is because the ontological premise of Stoicism is intrinsically grounded in physical reality and thus action, not simply thought.

To the best of our knowledge, representations of leadership practices grounded in ancient philosophies that support sustainable social-ecological systems thinking and practice, have yet to be specifically explored. Following the trajectory provided by Case et al. (2011) and Hirsh et al. (2023), we choose to assess Stoicism as an informative philosophy for rethinking leadership practices in the face of sustainability agenda challenges. The ancient teachings of the Stoics, we contend, provide a unique theoretical contribution to this line of leadership enquiry. We also engage further with the positioning by authors of recent studies to explore modern relevance of Stoicism, specifically in relation to sustainability issues (e.g., Müller, 2023; Usher, 2020; Whiting et al., 2018).

The analyses undertaken in this paper of the practice of the Stoic principles of logic, ethics and physics offers the potential for individuals to achieve a wisdom that promulgates a ‘common good’, attributed here to leadership practices cognisant of social-ecological system sustainability. As a representation of the applications for Stoic principles within a leadership context, we draw from the reflective journaling of Marcus Aurelius, Roman Emperor circa 161–180 AD, famed through the posthumous publication of his translated journal entries as the book, *Meditations* (2003). Through his journaling, Aurelius contextualised the Stoic principles of logic, ethics and physics from the perspective of a Roman Emperor who faced highly complex challenges, albeit under very different and historically remote circumstances. Nonetheless, we see value in transposing Aurelius’ reflections here as the underlying philosophical principles to a universality that is relevant to contemporary sustainability contexts.

The reflective journal entries of Aurelius suggest real-world applications of the practice of Stoicism within a leadership context, and therefore are drawn upon here in response to contemporary sustainability agendas. Notably, we are not invoking Aurelius’ reflections to valorize his individual ‘power’ or ‘charisma’. On the contrary, we recognize and acknowledge that he lived and ruled under very different historical circumstances (a fact that it would be extremely naïve to neglect). Yet, Aurelius’ documented reflections suggest a leadership approach which indicates a cognition of one’s place within and contribution to the whole of the social-ecological system developed through the practice of Stoicism.

Through the subsequent sections of this paper, reflective practice is positioned as central to Stoic practice applicable within contemporary leadership objectives. Alignments of contemporary leadership challenges with Stoic principles are presented through the constructs of CAS theory and SES, followed by detailed analyses of the Stoic principles, logic, ethics and physics, contextualised within these perspectives. The practical applicability and relevance of Stoic leadership to CAS and SES are illustrated through references to the teachings of Stoic philosophers, Epictetus and Seneca, and the reflective journaling of Marcus Aurelius. The paper concludes with a summary of the potential contributions of Stoic principles to contemporary sustainability leadership practices outlined through this enquiry and directed toward the UN sustainability agenda.

Aligning ancient Stoic principles with contemporary leadership challenges

There are two key considerations this enquiry draws upon which require detailed explanation to conceptualise Stoic philosophy within the contemporary leadership circumstances outlined above; specifically, to inform leadership practices that can respond to the UN sustainability agenda. These are: (1) the recognition of Stoicism as a critically reflective practice; and (2) the inherent alignment of ancient Stoic principles with contemporary CAS theory in the context of SES. We develop each of these strands of enquiry in this section.

Critical reflective practice

Stoicism entails discipline in the way in which events are responded to and interacted with based on an understanding of the physics of how the world works (Tuffley, 2011). The practice of Stoicism consists of reflective exercises aimed at enacting philosophical principles as a way of being in continuously changing and interconnected environments, such as described through CAS theory, rather than solely adopting a belief structure or set of intellectual positions (Hadot, 1995; Pigliucci, 2017). This constitutes critically reflective practice (Brookfield, 1998) and aligns with the later works of Argyris and Schön (1978), Schön (1987, 1991), Fook and Askeland (2006) and Fook (2009). We take critical reflection, in this context to be the practice of ‘unearthing deeper assumptions or “presuppositions” through a transformative process that focuses on questioning ‘dominant or hegemonic assumptions’ that may otherwise remain tacitly influential (Fook, 2009: 40). While reflective practice allows us to contemplate differences between ‘espoused theory’ and ‘theory in use’ (Schön, 1991), critical reflection draws forward deeper understandings held within the interconnectedness of knowledge, power and reflexivity (Fook and Askeland, 2006). Notably, Reardon et al. (2019: 21) assert that critical reflection is crucially important to leadership practice, particularly within complex and inherently unstable ‘open systems’, in order to better ‘navigate the complex situations encountered in today’s daily interactive environments’.

Complex adaptive systems theory and social-ecological sustainability in contemporary leadership

Our understanding of the interconnectivity of CAS systems and agents forms our first, and arguably most important, alignment between CAS theory and Stoic philosophy as we consider potential contributions to contemporary leadership practice. While CAS theory provides a basis for understanding the interactions between agents and within systems, Stoicism provides a philosophical basis for determining appropriate responses through these interactions. The appropriateness of responses to interactions within complex systems is central to the sustainable management of SES (Biggs et al., 2015). Hence, we propose Stoic practice as an applicable philosophy to guide the development of appropriate leadership responses within complex SES. Developing an understanding of the principles of Stoic philosophy helps to align these concepts further.

Through Stoic practice, the systematic process of response entails ‘*vivere beate*, to live happily, [which] is just to have a perfectly content and satisfied mind’ (Descartes cited by Rutherford, 2004: 179) and to do this, one must observe the three normative principles of logic (*logikê*), ethics (*êthikê*) and physics (*phusikê*). Rutherford (2004: 179) offers the following definitions of these principles:

1. **Logic:** ‘always try to employ [one’s] mind ... to discover what [one] should or should not do in all the circumstances of life’;
2. **Ethics:** ‘have a firm and constant resolution to carry out whatever reason recommends without being diverted by ... passions or appetites’ [i.e. emotion]; and
3. **Physics:** ‘bear in mind that while [one] guides [one’s self] ... by reason, all the good things which [one] does not possess are one and all entirely outside of [one’s] power’.

Stoic philosophy offers practices aligned with these principles for the rationalization of emotion (ethics) and close deliberation of causal factors and correspondingly deliberative responses (logic) to guide enactments of leadership for broader social-ecological sustainability outcomes (physics).

In the following more detailed analyses of each of the three Stoic principles, we expand upon practical alignments with contemporary leadership themes. We show that while Stoic principles are based on developing individual consciousness, the specific philosophical underpinnings may well inform leadership practices that are cognisant of contributions to, and impacts on, the sustainability of broader SES identified within CAS theory. Elements of CAS theory are thus considered through a Stoic lens. These include ‘a high level of interconnectedness, potential for non-linear change, and inherent uncertainty’ (Bohensky et al., 2015: 142) as these relate to Stoic physics, ethics and, in the first instance, logic, respectively.

Stoic logic

Metcalf and Benn (2013: 378) argue that ‘organisations operate within many broad complex adaptive systems and must use “leadership” to be adaptive to the demands of those systems’ and that a ‘balance [of] human “sensemaking” of the external complex adaptive system with financial viability of the firm’ is an important consideration in leadership research pertaining to sustainability. Central to Stoic practice is a deliberate consideration of potential responses appropriate to circumstances, which is highly germane to SES and cognition of the complexity and adaptive constructs of these systems. Developing the wisdom to respond to circumstances through the practice of Stoic logic has the potential, we argue, to reinforce leadership practice that is grounded within responses informed through reflective consideration of the interconnectedness of CAS and to enhance awareness of sustainability challenges.

Through the practice of Stoic logic, the Stoic practitioner recognizes that the initial assent to a formed opinion is considered weak or false until self and social scrutiny is applied to gain broader and fuller understanding. This process begins with an *assent* to the *impressions*, followed by the *conviction* of the assent to obtaining *knowledge* beyond initial individual impressions to gain greater collective insight. Staniforth (1976: 11–12) describes the reflective process of Stoic logic with the following temporal, and progressively iterative, sequence:

Impression – ‘the impact of things or qualities on the senses’

Assent – ‘the power of the mind to pass judgement on what the senses report’ so as to form an opinion

Conviction – to then ‘be submitted to the scrutiny of reason’

Knowledge – finally, compared with experiences of others and ‘confirmed by the general verdict’.

A closer consideration of the teachings of Epictetus will elucidate these points. In his *Discourses* (2008) and *The Enchiridion* (2011), Epictetus offers insights into the potential existential effects of considered, reflective and disciplined action. Epictetus (1995) implores practitioners to reflect upon initial impressions to ensure assents are considered fully for appropriate conduct to follow:

Don’t let the force of the impression when first it hits you knock you off your feet. (2008: 123)

With this simple statement, Epictetus asks his disciples to pause and consider what the impressions are bringing to their attention. He further encourages them to question what the impression represents:

‘Hold on a moment; let me see who you are and what you represent. Let me put you to the test.’ (2008: 123)

The ‘test’ here is referring to reflection upon one’s first impression and a broadening of perspective through collective wisdom and insight. Without this pause and consideration, Epictetus highlights that the impression will ‘lead you by the nose wherever it wants’ (2008: 123), allowing unscrutinised impressions to guide knowledge and subsequent conduct. Practicing Stoic logic thus also incorporates, by necessity, the scrutiny of convictions and obtaining relevant knowledge through a broadening of perspectives beyond individual impressions. The practice of Stoic logic, therefore, provides a potentially useful reflective process to consider leadership conduct within complex contemporary settings of interrelated social, environmental and economic perspectives.

Epictetus further encouraged scrutiny of the belief structures that contribute to interpretations and responses to impressions, exemplified in the following translated excerpt from *The Enchiridion* (2011: 15):

People are disturbed by their opinion of what happens, not by the happening itself. The world has no fixed reality. It is our belief system that determines how we think about the world. We interpret the world through the lens of our beliefs.

In *Discourses*, Epictetus also suggests that ‘[...] every habit and faculty is formed or strengthened by the corresponding act’ (2008: 121), thus perpetuating norms and fixed perspectives of reality. However, scrutiny of belief structures is not seen by Epictetus as an easy task, relating it to a physically demanding ‘[...] fight for autonomy, freedom, happiness and peace’ (2008: 123–124) and stating:

If you lose the struggle once, but insist that next time it will be different, then repeat the same routine – be sure that in the end you will be in so sad and weakened a condition that you won’t even realise your mistakes, you’ll begin to rationalize your misbehaviour. [32] You will be living testimony to Hesiod’s verse: “*Make a bad beginning and you’ll contend with troubles ever after*” (original emphases).

We here can draw upon the perpetuation of economically driven outcomes of capitalist industrial agendas now more frequently being brought into question in relation to environmental and social impacts, or ‘trade-offs’. The Stoic view was that the primary focus of a rational being was to be of their own mind (independence of thought) and not subject to external events which might interfere with their judgement of what is good (i.e. virtuous) and associated contribution to a common good (Seneca, 1995); more recently interpreted within leadership scholarship as the need for greater focus on ‘pro-social outcomes’ (Allen et al., 2022). Through the reflective process of impression, assent, conviction and knowledge, the practice of Stoic logic, offers a practical approach to reflection and wise-reasoning, ultimately informing, we propose, leadership conduct aligned with CAS thinking and enhancing attention to the required inclusive consideration of social, environmental and economic outcomes.

Stoic learnings guided a reflective state of mind as Marcus Aurelius encouraged himself to, ‘Look inward. Don’t let the true nature of anything elude you’ (2003: 69). The testament of Aurelius’ application of Stoic philosophy as a Roman Emperor, which has drawn attention in contemporary literature, was his apparent ability to engage with leadership responsibilities without, it seems, an inflation of priority of his position above that of his fellow citizens or place in the broader SES. As he asserts:

[...] by keeping in mind the whole I form a part of, I’ll accept whatever happens. And because of my relationship to other parts, I will do nothing selfish, but aim instead to join them, to direct my every action

toward what benefits us all and to avoid what doesn't. If I do all that, then my life should go smoothly. As you might expect a citizen's life to go – one whose actions serve his fellow citizens, and who embraces the community's decree. (2003: 132–133)

Aurelius' reflections bring attention to the role of leaders in exercising actions that align with a common good, regardless of the status or position they may hold; the kind of leadership attention and attitude that is imperative in contemporary contexts if SES complexities and challenges are to be addressed.

To contextualise such examples of wise practical leadership conduct, defined in ancient Greek terminology as *phronesis* (Allen et al., 2022), in terms of contemporary leadership theory calls for greater engagement with SES perspectives. Stoicism is considered further in the following section from the perspective of the affectivity of emotion on ethical conduct to support pro-social outcomes. The principle of Stoic ethics allows us to respond to the call for management of emotion, reinforcing its importance to contemporary leadership enactments within CAS (Metcalf and Benn, 2013). We consider practices aligned to pro-social outcomes as context for the 'social' element of SES from a Stoic ethics perspective; the 'ecological' elements are considered later through an alignment with Stoic physics.

Stoic ethics

Allen et al. (2022) noted that developing leadership with pro-social outcomes requires practical frameworks to be established and offer several suggestions for how this might be achieved. Ultimately, they suggest, 'Phronesis rests upon the capacity to choose and act wisely in advancing towards one's future' (Allen et al., 2022: 585). In this section, we outline Stoic practice through the principle of ethics as a practical framework for intrinsically pro-social conduct to emerge within CAS, in part, by appropriately managing emotion (Metcalf and Benn, 2013).

To the Stoics, pro-social outcomes were the result of wise-reasoning and virtuous conduct. Through reflective wise-reasoning (logic), Stoic practice allows for discernment of what is right and good (ethics), which serves as an inadvertent contribution to a common good through individual conduct. The Stoics taught good conduct as a way of being which would result in outcomes that served a common good in relation to the ancient understandings of the interconnectivity of all elements in the cosmos; a principle of Stoicism that resonates strongly with the interrelatedness recognized and acknowledged with contemporary SES and CAS perspectives.

Stoic philosopher, Cicero, in c.1st Century BCE, considered Stoic ethics with regard to making appropriate decisions, including an understanding of the proclivity to act on an emotional response to external events, rather than a duly reflective and more informed assessment of what is good (Gill, 2003). Cicero understood the tensions that exist between 'benefit and honour', for which Bragues (2010) offered Stoicism as a framework for navigating this tension within contemporary leadership environments. Indeed, Bragues (2010) provides due consideration of how a Stoic approach may advance leadership experienced through the benefits of honourable actions. Stoicism encourages observation and discernment of emotion for the purpose of ensuring an 'apathetic' but appropriately 'good' response (apathy in this sense relating to a calm state of mind rather than disinterest) (Luce, 1994). The potential for enactments of leadership aligned with a common good to affect pro-social outcomes is associated here with the Stoic practice of assessing the influence that emotions can have on perceptions and conduct. As Stoic philosopher Seneca (c.1st Century AD) wrote to Lucilius (translated in *Letters on Ethics*):

Do you see that king of Scythia or of Sarmatia, with the splendid crown on his head? If you want to know his true worth, the entirety of his character, then take away his headdress: much that is bad lies hidden underneath. (2017: 263)

Seneca's assessment of one's emotional impression of another's character in this letter considers, in part, societal position and perception of authority as masks of true worth and character. The emotion that is provoked through impressions of status, wealth or power, particularly within a capitalist agenda, are seen to disguise underlying deficits of character and perspective, of which Seneca encourages closer scrutiny (i.e. critical reflection). Scrutiny of this nature may encourage leadership practice considerate of the implications of the status afforded to economic prosperity, often to the detriment of social and environmental outcomes. Written earlier in the same letter, Seneca observes that we are all but slaves to the parts we play in our social roles:

A good man [sic] will do what he believes is honorable, even if it is arduous, even if it is dangerous. Conversely, he will not do what he believes is base, even if it brings money, or pleasure, or power. (2017, p 243)

The Stoics paid great attention to deciphering individual experiences and actions as a way of better understanding the complexities of human existence. The practice of Stoic ethics promotes responses cognisant of the potential influence of our emotions to ensure these are not driving responses which are inappropriate or not aligned with what we *ought* to do to as participants within the complex systems we live. Emotions were viewed by Seneca and other Stoics, including Epictetus, as a product of one's own judgement of a situation rather than a necessary or uncontrollable response (Seneca, 1995); thus, emotions are activated through external happenings (impressions) and balanced through our interpretations (assent) of these happenings. In Stoic practice, 'emotions were all regarded with suspicion because they tend to disturb and upset the mind and make it lose the calmness and balance of reason' (Luce, 1994: 136). Importantly, for the most part, the Stoics recognized emotion as a natural, and potentially uncontrollable, part of being human, particularly the momentary shock of our initial impression of happenings (Asmis et al., 2014).

Through Stoic practice, it is the rationalization of emotion and subsequently appropriate response to external events that are marks of ethical character. The practice of Stoic ethics does not draw emotion itself into question but, rather, the intentional and wise understanding and *application* of emotion. Of significance is not to be imprudent to the ability to control responses through emotional regulation and to embrace the value placed upon the wider contribution of an intrinsic Stoic sense of wellbeing beyond individual welfare (Arjoon et al., 2018). Responses rooted in passion, rather than reason, were recognised as potentially damaging to the equanimity of the individual experiencing the emotions and those within the broader social-ecological system who might be affected by the conduct of that individual.

A considered approach, cognisant of the potential influence of emotion, such as offered through the practice of Stoicism, could be of great value practiced through enactments of leadership focused upon creating more inclusive and sustainable perspectives of social, environmental and economic factors. However, a latter-day tendency to regard emotion as nonsensical has been identified as a potential deterrent for research into the efficacy of emotion within contemporary leadership scholarship (Küpers and Weibler, 2005). Despite a contempt of sorts toward displays of emotion, Ashkanasy et al. (2015: 3) remind us that 'emotions are an inherent part of the workplace' which contribute to both disruption and progression depending on how they are managed and experienced. Hence, the suggestion by Ashkanasy et al. (2015: 6) that emotions would perhaps be better considered in terms of transient 'evaluations of oneself' is apt with respect to applying the principle

and practice of Stoic ethics to contemporary enactments of leadership which consider sustainable pro-social outcomes in relation to environmental and economic sustainability.

The reflections articulated by Aurelius indicate an understanding of the principle of Stoic ethics in relation to personal responsibility and accountability for individual conduct. As he observes:

If an action or utterance is appropriate, then it's appropriate for you. Don't be put off by other people's comments and criticism. If it's right to say or do it, then it's the right thing for you to do or say. (2003: 54)

Aurelius articulates an understanding of the interconnected complexity of decision-making, information and interactions between system components that 'inevitably produces emotion' (Metcalf and Benn, 2013: 381). The rationalisation of emotion within a leadership context, therefore, must be considered as a key element in achieving pro-social outcomes through enactments of leadership. The Stoics would refer to this as contributions to a universal common good through greater awareness of the potential influence of emotion, inclusive of, but also beyond, the particularities of individual experience. By adopting a Stoic ethics perspective of a common good, we suggest leadership practice can align with the need for 'a profound appreciation for our inter-connectedness within the ecosystem(s) of life on earth' (Chirico and Nystrom, 2018: 225). To fully contextualize the *common* good within this leadership context requires an acceptance of universality and the associated particularities of the place of leadership within an interconnected SES perspective, presented in the following section through a deeper understanding of the Stoic principle of physics.

Stoic physics

To explore contemporary leadership from a Stoic perspective requires a holistic appreciation of social and psychophysical experiences that propagate a mindset of 'learning to regard both society and the individuals who comprise it from the point of view of universality' (Hadot, 1995: 242). Sutherland et al. (2020) recently called for leadership scholarship to attend to the 'place' of leadership within broader concepts, such as geography, values and beliefs, and organisational culture, structure, power, and politics. In this paper thus far, leadership informed by Stoic practice has sought to position the particularity of individual conduct within broader universal SES context, in part through the practice of Stoic logic, to encourage greater balance of dominant economic views with social and environmental sustainability thinking and practice. The social elements of these systems were considered through Stoic ethics as this relates to conduct intentionally orientated towards a common good within complex social environments. This section delves deeper into the ecological complexities of these systems by seeking to explicitly align Stoic physics with elements of CAS theory.

A Stoic philosophy approach to leadership accepts and does not seek to disturb the natural flow and continuous transformation within SES as explored and understood through CAS theory. Specifically, CAS theory draws upon the entirety of the interdependencies and interactions which create ever changing equilibriums within complex systems. The Stoic acceptance of universality favours an adaptive and considered approach to the specificities of each circumstance as these reside within the much greater whole of existence. For example, the ancient Greek term *politikē* referred to society as a whole (Aristotle, 1962: 4, Book One, 1094b) which offers the opportunity to explore interactions as a holistic interpretation of the particularities, and therefore place, of leadership conduct within a universal context.

It is within this nexus of the dichotomy of control that particularism and universality interact and are acknowledged through the practice of the Stoic principle of physics. Stoic physics entails an

acceptance of that which is outside of one's control (universality) and that which is within one's control (particularity). The focus, therefore, becomes that of a universal perspective of leadership through intentional individual conduct within and contributing to the whole ecosystem which interactions of society and the natural world form. To draw attention to the importance of understanding individual conduct within this interconnected ecosystem perspective, Seneca offers the following critique of the tendency to focus on matters other than individual conduct:

There are countless people who have been in control of nations and cities, very few who have been in control of themselves. (2014: 27)

Stoicism insists that we are only in control of particularities of our own actions, not of other happenings (Hadot, 1995) and that to accept this through the Stoic principle of physics is to contribute effectually to the greater whole without attempting to control anything beyond individual conduct. Stoic philosophers valued a life guided by virtue, one which flowed with nature (Arius as cited in Annas, 2007: 64-65) and, therefore, fostered an appreciation of being part of a much greater whole. The core of Stoic *being* was to live virtuously through an ability to flow with and adapt to changes in the environment and whatever it might bring to our attention.

In *Natural Questions*, Seneca (2014) questions the human understanding of the complexities of the natural world and relationships with it. He considers the movements of the natural environment from fire and rivers to earthquakes and planets, the sun and moon as an interconnected system (i.e. a historical conceptualisation of modern CAS theory). Seneca philosophically and metaphorically related natural world phenomena to human experiences, drawing attention to what he saw as the relative minutia and insignificance of human existence when considered in relation to the power and awe of the natural world. Resonant of modern CAS theory, Seneca recognised the vulnerability of individual human existence in relation to the ebbs and flows, transience and interconnectedness of the natural world. Seneca argued that a greater understanding of the world would correspondingly enhance understanding of the human condition. He not only questioned human existence in relation to the natural world but also challenged any interactions which lacked recognition and respect of this relationship, as exemplified in the following passage:

What is most important in human life? Not filling the sea with fleets, nor setting up standards on the shore of the Red Sea, not, when the earth runs out of sources of harm, wandering the ocean to seek the unknown; rather it is seeing everything with one's mind and conquering one's faults, which is the greatest victory possible. (Seneca, 2014: 26-27)

Seneca and Epictetus implored greater consideration of the faculties within human control to maintain cognition of the interconnectedness humans share with the natural world and each other. These concerns seem remarkably germane and relevant when considered in relation to the UN sustainability agenda's recognition of interdependency and its importance in addressing the social and environmental impacts of industrialised economies and globalization.

Contemporary leadership practices informed by Stoic philosophy

The Stoics encouraged the adoption of practices that led to a harmonization of the individual and the body politic with the natural world to afford equanimity of thought (logic) through an understanding of how individual conduct contributes to the greater whole (ethics) within an acceptance of universality and pluralism (physics).

In *The Discourses*, Epictetus examined the ability to engage one's rational faculty to determine what should and should not be done (Epictetus, 2000, 2008). He further delved into the debate as to what constitutes 'rationality', concluding that an individual is only in control of their own conduct as a contribution to the broader system, not of external happenings or others' thoughts, behaviours or actions. As such, when action is taken or a decision made, consequences must be accepted as outside of the decision maker's control even if they are not satisfied with what follows (Epictetus, 2000, 2008).

Aurelius' understanding of the interconnectedness of the Stoic principles becomes ever more apparent as his journal entries progress toward more complex notions and are reminiscent of the tenets of CAS theory. His conception of the use of logic to determine right action (ethics) in relation to the physics of the dichotomy of control articulates an understanding of the power of assent as his own responsibility for assessing what is right within the bounds of what is outside of his control and, therefore, not possible. This provides a leadership perspective to visualise and act on what is required to support the sustainability of complex SES and acknowledge and align with the natural forces, external to our immediate control; acting within these systems that maintain and adapt to new states of equilibrium. Aurelius' articulation of his understandings and corresponding applications of the Stoic principle of physics, recognising the interconnectedness between the people, the law and the state, is exemplified through the following translated journal entry:

[...] the reason that tells us what to do and what not to do is also shared. And if so, we share a common law. And thus, are fellow citizens. And fellow citizens of something. And in that case, our state must be the world. What other entity could all of humanity belong to? And from it – from this state that we share – come thought and reason and law (2003: 39).

As complex systems are continually adapting, change and uncertainty exist within the unpredictable complexities of interactions within a system (Biggs et al., 2015). Thus, it is not enough to understand rational thinking through the experiences of others; rather, we must be able to learn from the application of and critical reflection upon it ourselves (Epictetus, 2000, 2008) in order, ideally, to enact leadership from a position accepting of universality and thus being conscious of the particularities of our own assent (Küpers, 2007).

Stoicism, in principle, offers a sound philosophical basis for enacting leadership in a manner efficacious to current demands on leadership practice. The nuanced constructs of the Stoic leadership approach theorized throughout this paper address some of the critical concerns expressed in recent leadership scholarship (e.g., Kars-Ünlüoğlu et al., 2024). A leadership approach guided by Stoic philosophy provides a potential framework for rethinking practices to be grounded in core values and beliefs aligned with the need to integrate social, environmental and economic sustainability imperatives and expanding leaderful possibilities beyond ego-centric accomplishment and ability to influence (Allen et al., 2022). Greater focus on enactments of leadership from a place of living in harmony with the whole of society and the natural world, *eudaimonia* (flourishing) (Arjoon et al., 2018), is promoted through Stoic practice. Moreover, Stoicism promotes an awareness of the broader socio-material interconnectivity of leadership decisions and actions.

Through practical alignments of Stoic leadership with contemporary sustainability concerns, we must also cast a critical eye on the context within which Stoicism was originally practiced, including by Marcus Aurelius. At the height of Stoic philosophy, social practices were barbaric by contemporary standards and environmental conditions vastly different to today. Yet, owing to what we contend is their trans-historical and trans-cultural applicability, the Stoic principles represented within translations of ancient texts, are identified here as equally salient to contemporary circumstances and priorities. Stoicism, we have shown, informs holistic and cohesive leadership

practices amenable to accommodating complex systems thinking and understanding. As are the elements of complex systems, in practice, the principles of Stoic philosophy are fluid and interconnected, allowing leadership practice to be responsive to system changes. No single principle is foundational to the others but, rather, all contribute to the application of Stoic practice within complex systems. Cognisant of this broader contextualisation, we can also draw specific responses from the Stoic principles to scholarly calls for adaptations in contemporary leadership practice.

The Stoic principle of logic is based on acquiring wisdom by practicing wise-reasoning through reflection upon experiences, which aligns with a recent call for greater reflection and independence of thought within contemporary leadership practice (Wilson et al., 2022). Sutherland et al. (2020: 9) specifically draw attention to the importance of ‘accepting reflection and being open to learning, [so that] leadership may become more socially responsible and sustainable’. As the ‘scaling up of the impact of human activities and the consequent changes to the functioning of the Earth system potentially have far-reaching and substantial consequences for the provision of key ecosystem services on which humanity depends’ (Biggs et al., 2015: 4), consideration of social-ecological perspectives is a warranted potential application of Stoic logic in contemporary contexts of sustainability agendas.

The Stoic principle of ethics encompasses developing an awareness of and responsibility for individual conduct as a contribution to a common good and to do what is right as an intrinsic motivation and understanding of broader implications. Thus, Stoic ethics may contribute to directing leadership efforts toward ‘pro-social outcomes’ as noted by Allen et al. (2022: 574) in the following conjecture: ‘Imagine if leadership researchers raised their sights away from finding the silver bullet that can motivate followers, and focused instead on convincing those with corporate power to swap out profit for pro-social outcomes at the heart of the business model’ and talk of ‘reframing value creation as social impact’. Within the practice of Stoic ethics, there exists a potential for developing a philosophical consciousness for socially and environmentally responsible decision-making as a value proposition.

The Stoic principle of physics entails developing an acceptance of what is within and outside of an individual’s control through an intrinsic understanding of the broader context within which we exist, including local social frameworks through to natural ecosystems and the cosmos as a whole. Stoic physics offers an opportunity to understand the particularities of the ‘place’ of leadership (e.g., Sutherland et al., 2020) in terms of the universality of a broader SES perspective. This outlook aligns with the Stoic principle of physics in that awareness of social-ecological perspectives are paramount in guiding individual behaviours cognisant of the potential for wider implications.

Considered in relation to the facets of CAS theory, Stoicism provides a practical approach to leadership which allows for thoughtful reflection on what is required under various circumstances (Seville, 2017), thereby supporting and responding appropriately to the continuous adjustments of interconnected system elements. Developing the wisdom required to navigate impressions through the application of the Stoic principles is intrinsically interconnected with the choice to respond to situations through a developed awareness of complex SES (Bohensky et al., 2015). Stoicism is continuously transformational in nature, encouraging practitioners to reflect on their experiences (Annas, 2007; Saunders, 2018) and adapt responses to the changing circumstances expected of complex systems. It thus lends itself to further exploration in relation to one’s ability to navigate the ever-changing dynamics of leadership-as-practice (Cunliffe and Hibbert, 2016; Raelin, 2011) or leaderful practice (Fisher and Robbins, 2015) in CAS for the purpose of aligning with sustainability agendas.

The concepts presented in this paper position Stoicism as a valuable philosophical resource for responding to calls for recognition of leadership practices evident within social-ecological contexts and intentions (Kars-Ünlüoğlu et al., 2024; Schweiger et al., 2020), offering a perspective and

disposition from which leadership can be understood and enacted (Tourish, 2019). We suggest that the Stoical perspectives and practices presented here support holistic and nuanced constructs of leadership within contemporary contexts (Hirsch et al., 2023), particularly in circumstances requiring broader social-ecological systems perspectives.

Conclusion

The UN sustainability agenda has provided impetus for our global community to respond to growing pressures on social, environmental and economic welfare issues through a new standard of leadership practices cognisant of sustainability challenges and crises. In this paper, we position practical approaches to sustainability agendas through a conceptual analysis of ancient Stoic principles and practices within contemporary leadership contexts. Aligned with CAS theory, such practices, facilitate wise responses that address leadership challenges within the complexities of SES sustainability agendas. Situated here is an intentional philosophical consciousness of Stoic leadership practiced through the knowledge that our social framework is interconnected with - as well as impactful and reliant upon - a broader ecological system. We contend that Stoicism offers a philosophical foundation for leadership consciousness directed at the social-ecological perspectives required to contribute meaningfully to the sustainability of social and natural environment ecosystems, in particular. Thus, this paper offers an alternative practice of the prioritisation of economically based worldviews, to elevate social and environmental agendas for the common good guided by the wisdom of Stoic philosophy. As such, sustainability leadership may flourish within complex social-ecological systems.

The Stoic concepts outlined in this paper, contribute to a growing exploration into contemporary applications of ancient philosophies (Bowden, 2012; Case et al., 2011; Case and Gosling, 2007; Flanigan, 2018; Hirsch et al., 2023; Kodish, 2006; Ladkin, 2010; Souba, 2011) and offer a theoretical framing of Stoicism as a response to sustainability challenges. Further, our focus on Stoicism as an underlying philosophical approach to sustainability creates an opportunity to explore critically reflective processes which may otherwise be overlooked in attempts to conceptualize CAS theory and SES perspectives in relation to contemporary leadership practices and challenges.

Through philosophical enquiry, the call for approaches to leadership development to 'be designed to produce ethical and moral leadership' (Wilson et al., 2022: 485) is also progressed. As stated by Steffen and Rexmovits (2018: 295), 'Leadership for a sustainable future is not a matter of acquiring a particular political mindset; it is about crafting a daily practice of action and service'. The principles of Stoic philosophy may help to conceptualize the particularities of leadership practices that can be enacted in purposeful ways that align with contemporary leadership themes and emphasise important universal social-ecological concerns regarding sustainability.

Youngs (2017: 145) ventured that a common theme emerging within leadership scholarship is that of 'recognising and understanding sources of initiative beyond those in formal leadership positions'; a sentiment central to progressing the UN sustainability agenda across multi-faceted leadership challenges. Further research into how Stoic philosophy is practiced and experienced to guide leadership conduct, specifically toward sustainability outcomes, would help to build empirical and normative knowledge of the potential efficacy of a Stoic leadership approach in this regard. Future studies might focus on the experiences of individuals applying the principles of Stoic philosophy in leaderful ways, to gain further understanding of the practical contemporary applications of each of the Stoic principles. To this end, we invite and encourage empirical investigation of the theoretical propositions advanced in this paper.

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