Editorial

In my beginning is my end

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All life is sustained by what has been before. The atoms of any living organism or non-living entity have been recycled innumerable times and in countless different forms of biotic and abiotic matter, including the biochemical characteristics of the genome of LUCA, the presumed last universal common ancestor of all living organisms, dating back to over four billion years ago (Moody et al., 2024). Since then, biogeochemical cycles have reiterated this process, constantly producing, disrupting and newly producing a potentially infinite range of different biospheric equilibria and the resulting ecosystems, ecological communities and populations of species that ensue.

In this respect, what is often referred to as the Anthropocene is no more than a particular example of this ongoing succession of change(s). What most characterizes it, however, is the tendency of one species, *Homo sapiens*, to continually disrupt existing balance(s) through both the strength and the velocity of its impacts, in terms of relentless exponential demographic growth, plundering physical resources to an extent that far exceeds their natural replenishment, exploiting indiscriminately living organisms – including fellow human beings – even to the point of rendering them at risk of extinction, destroying habitats through urbanization and expansion of agricultural land, so as to cause a drastic loss of biodiversity, accelerating production and consumption chains that massively pollute and generate volumes of waste that overwhelm natural recycling processes and degrade environments, thereby threatening the planetary health balance on which our wellbeing depends, together with that of countless

other species. All this is then infinitely exacerbated by constantly waging intraspecific war at increasingly devastating levels, and consequential mass destruction of habitats and ecosystems, together with wholesale suffering and death for human and all life.

The essence of the question can be seen in terms of the laws of physics. Power (P) is the product of force (F) and speed (s). Power can also be expressed as the ratio of work (W) to time (t). Doing a given amount of work in a shorter time means increased power. When *human time* taken to destroy balance is shorter than *Nature time* needed to recover, the outcome is unsustainable. This is further exacerbated in those areas where intensity - defined as the ratio of power to surface area - is at its maximum, thereby straining to breaking point an ecosystem's carrying capacity.

Such human *hubris*, compounded by the unprecedented power certain technologies and systems have conferred on modern societies, without corresponding governance mechanisms able to manage their consequences, means that we have largely continued to ignore the fact that resource ceilings and carrying capacities cannot be ceaselessly exceeded and human-inflicted devastation relentlessly pursued without dramatic consequences. If as a collective species we will be able to recognise this before it is too late, such recognition necessarily means we must exit from our dominant Western anthropocentric vision and reconsider our existence in terms of its beginnings and ends at various levels and in terms of the material and immaterial processes that characterize our trajectories. Each one of the papers in this issue can be seen as explorations in that direction.

In terms of material processes involving beginings and ends, in recent years much attention has been paid to the concept of Circular Economy (CE). In "Bridging ESG and the Circular Economy. Advancing corporate sustainability through the updated R-hierarchy and Circularity Scoring Model" Kopnina et al. offer an innovative vision for CE. They explore how CE and Environmental, Social, and Governance (ESG) frameworks can intersect by integrating relevant theories and practical approaches to enhance organisational alignment and accountability, in particular regarding the environmental dimension. They propose an updated 10-R framework for qualitative reporting, incorporating new dimensions such as Regeneration (e.g., Rewilding and Restoration) to reflect biodiversity considerations, together with the Circularity Scoring Model (CSM) to quantitively assess organisational CE performance concerning ESG objectives, and report findings suggesting that embedding CE principles into accounting and

investment practices can highlight opportunities for improvement in key areas of sustainability.

While Kopnina et al. present a macro-framework for CE, two following papers offer micro-visions for circularity in waste management. In "Cocoa shell bioplastic: a circular path towards sustainability" Burgos Bravo et al. investigate the potential of cocoa shells as feedstock for bioplastic synthesis. They compare two treatments for filtration, solubility, elongation, resistance, moisture content, and biodegradability and conclude that in both cases results show cocoa shells can offer a sustainable and environmentally friendly resource for bioplastic production, contributing to a circular economy and reducing agricultural waste. In "Enhancing compost quality with *bacillus* bacteria: Leveraging cocoa shells and banana *pseudostems"* Basurto et al. examine different treatments to evaluate *Bacillus albus* and *Bacillus wiedmannii* for composting banana *pseudostem* and cocoa shell waste. Their results show the important role of composting in recycling and reducing the polluting impact of agricultural waste.

Higher education clearly has a key role to play in creating the necessary awareness of the paradigmatic changes necessary for promoting more sustainable human trajectories. In "Assessing campus sustainability practices. A systematic literature review" Putra & Ulkhaq set out to evaluate sustainability practices in Higher Education Institutions (HEIs), focusing on assessment frameworks and methodologies. Their findings reveal the adoption of diverse frameworks, together with the integration of sustainability principles into curricula, campus operations, and research. The authors show challenges such as resource constraints, limited stakeholder awareness, and infrastructural barriers hinder effective implementation and highlight the need for comprehensive, localized assessment tools to enhance HEIs' contributions to promoting sustainability.

Attention has also been increasingly directed to indigenous knowledge and local wisdom and how this can be related to understanding mutually beneficial relationships between human populations and populations of other species within ecological communities. In "Leveraging selected Local Wisdom Species in developing peatland restoration in South Sumatra, Indonesia" Armanto et al. examine applying Local Wisdom Species (LWS) to involve rural communities in peatland restoration. They argue that if LWS disappear due to pressure from industrial plantations, rural communities will be controlled by the international trade system, which threatens their rural lifestyles, and they will be pushed out of the peatlands where they have lived for hundreds of years and propose rural community-based peatlands restoration based on four approaches that focus on decentralization, conservation, protection and optimization.

Local wisdom can be seen as the outcome of living in balance with all the biotic and abiotic components of one's environment, and this also been linked with a growing recognition of the importance of a relationship with nature that enhances health promotion. In "Mountain Therapy as a support in breast cancer treatment. A pilot study in Southern Italy" Piattelli et al. illustrate research on Mountain Therapy (MT) as a therapeutic-rehabilitative and/or socio-educational methodological approach aimed at the secondary prevention, treatment and rehabilitation of people with different pathologies. The main results show that the patient's quality of life improved after the MT approach, reducing stress and anxiety levels, thereby confirming the regenerative capacity of the natural environment in people suffering from a disabling disease, monitored through the assessment of psycho-physical parameters, helping to improve their quality of life and reduce hospitalisations.

The nature of and the relationship between human activity, urban expansion and various kinds of natural habitats, including forests, is a key question in much sustainability literature. In "Sustainable approach for socio-ecological development of urban areas" Chhachhiya et al. explore the multifaceted dimensions of resilient and inclusive urban planning, focusing on its significance amidst urban expansion and socio-economic disparities affecting the corresponding ecologically sensitive areas. The authors examine the theoretical underpinnings and practical applications of resilience and inclusivity within urban planning frameworks. They highlight the importance of integrating eco-sensitive approaches, adaptive strategies, and participatory mechanisms to foster resilience and inclusiveness in urban development processes. In "The effect of tree harvesting rights on investment in tree growing and promotion of sustainable tree conservation practices by private land holders in Kenya" Chisika & Yeom use a case study approach and document content analysis to examine the impact of assigning tree harvesting rights on sustainable tree growing. Their results show that, while assigning tree-growing rights has had positive impacts, including ecological and economic benefits, it has also led to negative sustainability outcomes. They argue that developing a stable legal framework, improving market access, and offering financial incentives are crucial for supporting sustainable forestry on private lands.

New visions are always built on the basis of current and previous visions. This involves understanding how narratives, discourses and dialogues evolve and can be unconsciously subscribed to or questioned and thereby changed. In "Terror Management Theory and grand-metanarratives. The search for a consilient ethics of conscious limitedness for the ecological transition" Sanniti et al. argue that it

is essential to examine dominant ethical systems and whether they can be redirected to encourage sustainable behaviours. They draw on Terror Management Theory (TMT), which suggests that cultural systems evolve in response to humans' awareness of their biological limitations. They maintain that both individual and collective actions rely on a shared system of beliefs, or grand-metanarratives, that give meaning to experiences. Through examining the disembodiment metanarrative in the Western Judeo-Christian paradigm as central to the expansion of global beliefs, they propose a shift towards more ontologically open and epistemologically pluralist metanarratives that lay the foundation for the emergence of global and localized ecological consciousness.

In "Reinterpreting intercultural dialogue for sustainability in the Anthropocene era" Skrefsrud explores the concept of intercultural dialogue in an era shaped by significant human impact on the planet to show how an Anthropocene narrative can offer a critical and imaginative reassessment of that dialogue and extend its scope beyond traditional anthropocentric perspectives. The author argues the need for critical analysis within Anthropocene discourse, situating intercultural dialogue within an ecological context, and challenging dominant narratives, so as to amplify marginalized voices and foster more just and sustainable ways of coexisting.

In "The representation of nature in a political speech in promoting 'Indonesia Maju"' Max et al. adopt an ecolinguistics approach to examine how topics on nature in political discourse and speeches are strategic not only to gain people's attention but also to hide agendas. Their research aims Systemic Functional Grammar's transitivity and Greimas' actantial analysis. The research object is a speech which promotes the notion of "Advanced Indonesia". Linguistically, the speech emphasizes green economy but neglects indigenous people and environmental concerns. Through an actantial analysis, the authors argue that in promoting "Advanced Indonesia" as the goal the speech neglects the nature it purports to promote by maintaining anthropocentric perspectives of the subject.

In "How can satirical fables offer us a vision for sustainability?", a book review of *Wild Wise Weird* by Quan-Hoang Vuong, Nguyen states that the book fosters readers' awareness, self-reflection, informational connectivity, and even inspires them to confront stupidity to uncover wisdom. The reviewer believes that it has the potential to resonate with readers, especially younger ones, embedding ecological sustainability in their humanistic values through the humor, vibrancy, and absurdity of its bird characters, as well as the wisdom woven throughout.

In "A vision for just and fair transitions toward a carbon-free world", a book review of *A just transition for all: Workers and communities for a carbon-free future* by J. Mijin Cha, Pham & Ho state that technological visionaries often paint a future powered by clean energy, yet these optimistic visions tend to overlook the messy socio-political realities of such transitions. They argue that the book they review illustrates how there is a vast difference between a so-called 'just' transition and one that is genuinely just and offers a much-needed, thought-provoking, and meticulously documented exploration of how political and business leaders can ensure fairness and justice for all stakeholders - especially vulnerable workers and their communities - as the world attempts a shift toward a carbon-free future.

The title of this editorial is a line from the poem "East Coker" by T.S. Eliot. In a companion poem in the volume *Four Quartets* (1943), "Little Gidding", Eliot affirms:

> What we call the beginning is often the end
> And to make an end is to make a beginning.
> The end is where we start from.

Ends can be points of arrival from which to derive new beginnings as points of departure. Ends can also be defined in terms of purpose and scope, to rethink trajectories and move from an anthropocentric to an ecocentric vision and begin anew the human enterprise. From another perspective, ends can also be the occasion for death and even extinction, something both auto-inflicted and hetero-inflicted on other species by *Homo sapiens*. As Edward Said (1975) puts it: "[…] beginning is basically an activity which ultimately implies return and repetition rather than simple linear accomplishment". If we continue to put our faith in a linear pathway of supposed progress based on economic growth and technological advance, then death and extinction will likely be our only accomplishment.

References

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