# Sport and the Anthropocene (Editorial)

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Cherrington, Jim and Black, Jack. (2025). 'Sport and the Anthropocene':

*'International Review for the Sociology of Sport'.*

**'Sport and the Anthropocene'**

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**Sport and the Anthropocene**


## Abstract

This editorial introduction to the special issue, 'Sport and the Anthropocene', examines the entanglements between sport, human activity, and the planet's accelerating ecological crisis. Framing the Anthropocene as a new epoch, marked by irreversible human-induced environmental change, the article highlights the catastrophic consequences of climate disruption, resource depletion, and socio-political instability. Yet, amid collapse, the Anthropocene also offers new beginnings, which can prompt critical reflections on human exceptionalism. In light of the sociology of sport's delayed engagement with these beginnings, especially important given sport's material dependence on vulnerable ecologies, the special issue challenges the adequacy of conventional sustainability discourses, which externalize nature and uphold anthropocentric assumptions. Instead, we call for a reorientation towards our ecological entanglement and temporal complexity, examining how objects, surfaces, and environments shape movement, meaning, and our planetary future(s). In doing so, the issue foregrounds diverse theoretical and empirical contributions that position sport as both problem and possibility. Ultimately, we contend that sport must be reimagined through the lens of the Anthropocene, indeed, as a site of contested and contingent relations where ecological, ethical, and existential stakes converge.



## Keywords

Sport and ecology; environment; sustainability; climate change; temporality


## Living Through the Anthropocene: Catastrophe, Complexity, and Collective Imagination

In 2023 the Anthropocene Working Group concluded that human induced changes to the earth were so great that we are witnessing the end of a stable global environment. The extraction and burning of fossil fuels, the production of non-degradable plastics, and the

decimation of natural habitats, such as, forests, seas, and rivers, point to the catastrophic and irreversible impact that human activity is having on the 'natural', lived, and geologic landscapes of Earth (Bonneuil and Fressoz, 2017). Though opinion is divided regarding the origins, character and consequences of this new epoch, it is generally accepted that the Anthropocene is as an era whereby humans—'as landscape managers and modifiers par excellence' (Hoelle and Kawa, 2021: 656)—are not just influential, but central to Earth's future trajectory. It is against this backdrop that the outcomes of human hubris, including the political economy of 21st century living (i.e., consumerism, neoliberalism), the rationalising, bureaucratic, and colonising tendences of modern institutions (the nation state, the military, healthcare, governing bodies), 'technochauvinism' (Broussard, 2018: 7), and the discourses from which these behaviours derive (science, management, ecology), have come under intense scrutiny from sociologists as they attempt make sense of this new climatic regime (Butler, 2022; Chandler, 2018; Latour, 2018; Stiegler, 2018).

The Anthropocene generates unparalleled levels of destruction, death and suffering. The images of uncontrollable fires in California, burning, indiscriminately, through the homes of both the rich and the poor, remind us of the unprecedented pace of global warming, and the futility of localised intervention. Human-induced climate change has increased global temperatures by 1.2°C above pre-industrial levels, intensifying extreme weather events and pushing ecosystems beyond their adaptive limits (EEA, 2024). In regions of Australia, North America, and Europe, wildfire smoke alone contributes to an estimated 12,000 additional deaths annually and has been found to be particularly harmful to children (Readfearn, 2024). Rising sea levels also pose severe threats to non-developed Western countries, exacerbating existing vulnerabilities. Low-lying coastal regions face increased flooding, leading to the displacement of communities, loss of livelihoods, and damage to critical infrastructure. Furthermore, the socio-economic strain from hotter and wetter climate change contributes to increased migration pressures, heightening regional instability, increasing the likelihood of conflict, and deepening inequalities between developed and non-developed nations (Weltzer, 2012).

Yet, the Anthropocene also indicates a time of renewed hope of new beginnings (Cherrington and Black, 2022). One of the great pleasures of thinking with, and through the Anthropocene as a concept is the possibility of formulating a new politics of the human, whereby both human chauvinism, and Romantic understandings of an inert, objective nature, are relentlessly taken to task. This is reflected in the recent explosion of new materialist, posthuman, inhuman, and more-than-human analyses within sociology and the humanities, which, though having a variety of different permutations, have a shared interest in destabilising a 'worldview wherein we are individual, autonomous, and fully "in control"', arguing that 'we are instead *entangled* with our media and technologies, as well as with our environments and … nonhuman "others"' (Wilde, 2024: 3).

The Anthropocene puts humans at the centre of the discussion, highlighting, for example, the unethical, irresponsible, or unjust way(s) in which environments, materials, or objects are used and/or administered whilst, at the same time, decentring our influence, showing how 'nature', technology, and non-human objects might at times 'act back'. Accepting the ontological premise of the Anthropocene means 'recognising that human institutions depend upon the regulative stability of ecosystemic and biogeophysical foundations' (Green, 2023: 331). This sense of ambivalence strikes at the core of the Anthropocene experience, since the Anthropocene requires us to see ourselves from both a planetary (the planet as an autonomous entity with its own processes, timelines, and forces) and global (political systems, economic markets, cultural exchanges, and technological advancements) perspective (Chakrabarty, 2021). In forcing us to grapple with both perspectives simultaneously, Anthropocene living thus requires acknowledgement of our role as a dominant force shaping global systems, while, at the same time, recognising that human identities/experiences are ambivalently formed in/with the contingency of 'nature' (Black and Cherrington, 2020).

For us, this is the power of the Anthropocene as both an 'event' and a concept, and thus, one of the major contributions of this Special Issue. As an event, the Anthropocene represents a boundary indicating 'severe discontinuities' (Haraway, 2016: 160) between the past and the present, suggesting that what comes after will not be like what came before.

In this sense, then, the Anthropocene marks the 'beginning of the end' of everything we know and have taken for granted during modernity (Cherrington and Black, 2022). Socially, this means that we are required to acclimatise to more 'weird' and 'eerie' experiences (Cherrington et al., 2025), where objects 'pop up' when we least expect them (freak hailstorms, plastic washing ashore on idyllic coastlines, wildlife wandering in abandoned city centres), or in other instances, never show up at all (melting glaciers, disappearing wildlife, dwindling rainforests). Politically, it also necessitates closer inspection of 'zombie categories' (Beck, 1992), including 'nature', nation, local, and organic, which are perpetuated (kept alive) to describe social phenomenon that are already, apparently, 'dead'. In their wake, politicians, policy makers, and governments, as well as those wishing to challenge or resist the prevailing political orthodoxy, must grapple with new, more imaginative forms of collective action, which 'are more at home with discursive framings of contingency and complexity' (Chandler, 2019: 4). According to Chandler (2019: 7), the key point here is that 'the Anthropocene is understood to pose fundamentally different questions about how we can know and how we can govern without the certainties and signposts of modernity'. As such: 'the task is that of engaging more imaginatively with the constantly emerging present, alert to the fact that these relationships need to become a matter of care, attention and opportunity' (Chandler, 2019: 11).

## Sport, the Environment, and the Temporal Politics of the Anthropocene

Despite the sense of urgency with which these issues have been addressed within the humanities and natural sciences, sport sociologists have been slow to respond to the questions that are posed by the emergence of the Anthropocene. This is somewhat surprising given sport's multiple intersections with the biophysical world as well as the manifold threats that such activities may pose with regard to resource depletion, pollution, land-use degradation, and habitat loss (Szto and Wilson, 2023). Indeed, as far back as 1982 Coppock (1982) highlighted the importance of space and place, along with resourcing and facilities, in relation to leisure pursuits within both natural and built environments. Coppock's themes laid the groundwork for subsequent discussions on leisure environment relationships and underscored the need for more environmental consciousness in the

context of sports and leisure activities. Additionally, work by Humberstone (1998), and, subsequently, Mansfield and Wheaton (2011), examined how engagement in outdoor leisure might enhance environmental awareness and spur political engagement. Overall, these early commentaries paved the way for a broader dialogue about the impact of sporting practices on environmental sustainability, which were later explored by the likes of McCullough et al. (2022), and, most recently, Orr (2024) and Svenson et al. (2024). Such studies survey both the challenges, and the opportunities, presented to the sports industry as it engages with the sustainability agenda, whilst also exploring the various ways in which sport scholars and policymakers can integrate such concerns into emerging governance practices.

While we view this special issue in accordance with these commentaries, we also believe that it will offer a number of important clarifications and significant theoretical as well as empirical contentions. First, we intend to move beyond traditional debates on sustainability and sport, by considering how sporting activities work symbiotically in environments where orthodox notions of 'sustainability' may no longer hold relevance. Indeed, though the term sustainability could be argued to represent a noble attempt by sporting institutions, and governing bodies, to address the emerging climate crisis, it is a term that already seems out of step with the reality of life (and sport) in the Anthropocene. Clevenger et al. (2023), for example, criticise current sustainability discourse within capitalist sport, highlighting that despite growing awareness within professional sports organisations of environmental degradation and pollution, there has not been a significant rethinking of the interconnected industries within the global sports complex that contribute to these issues. Furthermore, by externalising 'nature' as resource for human enjoyment, and thus an 'inconvenience' when it is not, the sporting narratives pedalled by powerful institutions, such as, the IOC, FIFA, and the NBA have a tendency to 'valorize human mastery over a nonhuman nature' (ibid: 553/554), whilst obscuring how sporting, and indeed all human contexts, are always constituted by cultural-natural-technological entanglements (Cherrington and Black, 2023). What is problematic, within existing sustainability discourse, therefore, is a disregard for natural systems and elements that are perceived to have little or no instrumental utility (Kopnina, 2018).

To this end, the existential crisis of the Anthropocene not only helps us to problematise the sustainability of neoliberal, growth-oriented sporting models, but also underscores the need to examine the potentially ecological and non-anthropocentric dimensions of alternative and emerging forms of physical culture (Cherrington, 2022; Clevenger et al., 2023). Against this backdrop, there have been calls for less anthropocentric, and more relational analyses of sporting activity in which human and nonhuman agency are taken into consideration (Newman and Thorpe, 2020; 2021; Monforte, 2018; Thorpe et al, 2020). It is in this context that sport sociologists are beginning to dispense with realist renderings of 'Nature' and 'Technology' and are instead trying to (re)imagine how sporting spaces, objects, and materials might be perceived, enacted, and addressed within an historical epoch within which humans and other non/in-human lifeforms converge, comingle, and intra-act (Weedon and Patchin, 2022).

Work by O'Connor (2024) and colleagues (Glenney and O'Connor, 2022; O'Connor et al. 2023) on the grey spaces of leisure stands out in this respect. Across a number of recent publications, O'Connor shows how skateboarding spaces—which are defined by both their material (concrete, granite, steel) and symbolic (greying the distinction between sustainable/unsustainable) relations—emphasise the dynamic entanglements between human bodies, material environments, and affective forces. Rather than viewing these spaces as passive backdrops for leisure, the 'greying' of sporting spaces foregrounds their agency, recognising how surfaces, textures, and atmospheres, which, at times, might seem insert, passive or disregarded, can actively shape the possibilities of movement, play, and social interaction. For example, the smoothness of a concrete underpass invites fluid motion, while the resistance of a stair rail influences the grip and rhythm of a parkour practitioner's vaults. Abandoned parking lots, often dismissed as derelict, subsequently become vibrant multispecies assemblages, shaping human-nonhuman interactions. Grey spaces thus become a poignant reminder of socio-technical relations in the Anthropocene, whereby urban infrastructures, technical artefacts, and human bodies intra-act to generate unexpected forms of recreation.

Our final point of departure from liberal, anthropocentric, and Western commentaries on sport, climate change, sustainability, and environments stems from our ongoing interest in the issue of temporality (see Black and Cherrington, 2021; Black et al., 2025); indeed, an issue that is well represented by contributions to this special issue (see Berg, 2025; Bustad et al, 2025; Carlman and Torell-Palmquist, 2025; Holgrens, 2025; Wu, 2025). Temporality is a significant consideration in the Anthropocene because the era itself is defined by a radical shift in how time operates at multiple scales—geological, ecological, and human (Kemper, 2024). This disruption creates a critical challenge: while the ecological and climatic changes accelerate at unprecedented speeds, liberal democracy is thrown into crisis due to its own image of time as uniform, linear, and progressive. Here, writes Bird (2004), we witness a 'double death' during the Anthropocene, that is, an extinction of life, which also destroys times yet to come. Hutchins et al. (2023) use cricket as a case study to demonstrate this, showing how the sport's susceptibility to climate change makes it a space where the temporal dynamics of risk, adaptation, and sustainability are contested and negotiated. Through projections of potential futures, the paper argues that cricket—and by extension, society—must rethink its relationship with time in order to navigate the uncertainties of the Anthropocene (Hutchins et al., 2023). In a different context, Walter et al. (2024) explore how the Anthropocene reshapes our experience of time by focusing on the fleeting marks that winter sports leave on snow-covered terrain. They highlight how the fleeting nature of snow obscures the long-term ecological impacts of human activity, creating an illusion of minimal disruption. While ski touring and other nature-based winter sports appear low-impact, their cumulative effects on wildlife and ecosystems persist beyond their visible traces. This temporality—where human presence quickly disappears, yet has lasting consequences—mirrors broader Anthropocene challenges, where short-term actions shape long-term planetary futures, often in unseen ways.

Via a focus on the lived, material and temporal patterns of the sport in the Anthropocene, what we hope to have elucidated during this short editorial introduction is how intra-active and entangled forms of movement, as well as the joy, pain, pleasure and discomfort that is derived from these, offer unique opportunities to re-define, re-evaluate, and, ultimately, re-establish, new ways of approaching our relationship with sport. Clearly, this may be

negatively experienced, in that it disrupts our livelihoods, families, professions, or routines, or it may be positive, leading to new ways of living, socialising, and governing. Yet, for us, the promise of the Anthropocene is that it forces us, often violently, to recognise the 'web of histories from which all life, including human life, emerges' (Swanson et al., 2017: 3). Ultimately, this requires facing up to a future of shared dependency, by mobilising political strategies that are able to facilitate these emerging intra/inter dependencies. To this end, the papers in this special issue provide a number of poignant insights into the impact of the Anthropocene in sport from both an empirical and theoretical perspective—imperatives that we believe remain largely unconsidered in the aforementioned literature. Indeed, it is these considerations which offer valuable understandings of the political, social, and economic, as well as the personal effects of the Anthropocene as an ontological, epistemological, and temporal rupture.

**The Special Issue**

Collectively, this special issue interrogates the entanglements of sport and physical culture alongside the environmental, ethical, and existential challenges posed by the Anthropocene. The contributions in this issue foreground a range of theoretical, methodological, and geographical perspectives, all converging on the need to rethink the place of sport within a world marked by ecological crisis. Together, these articles reveal that the Anthropocene is not only a matter of planetary transformation but also a topic of profound social, cultural, and political reconfiguration for the study of society, and, importantly, sport.

The issue opens with Jacob J. Bustad, Samuel M. Clevenger, and Oliver J.C. Rick's critical manifesto, 'After Sport: Physical Culture in the Anthropocene'. Building on Brian Pronger's 'post-sport' critique, the authors introduce 'after sport' as a provocation to imagine post-growth, ecologically attuned forms of physical culture. They argue that contemporary sport, as shaped by neoliberalism and capitalist logics of expansion, contributes directly to the unsustainability of human and more-than-human life. Drawing on Kate Soper's concept of 'alternative hedonism', the article contends that pleasure,

slowness, and rest—forms of enjoyment undervalued by consumer sport—might guide more sustainable futures. Rather than adapting sport to fit climate imperatives, via technological fixes or efficiency measures, the authors suggest a more radical break: a refusal of the very assumptions underpinning modern sport. Their work sets the tone for the special issue by demanding that we ask whether sport, as currently constituted, should survive the Anthropocene at all as well as what alternative modes of movement and embodiment might emerge in its place.

The fragility of the human-nonhuman relation is taken up by Adalberto Fernandes in 'Horsing around: Animals, humans, sports, and platforms'. Through a posthumanist and Actor-Network Theory (ANT) lens, Fernandes revisits the infamous modern pentathlon incident at the 2020 Tokyo Olympics, where a horse's refusal to perform exposed the precariousness of human-animal sport assemblages. Analysing YouTube commentary, Fernandes shows how audiences negotiated the boundaries of agency, control, and moral responsibility, from which the horse becomes a 'meta-normative guarantor', paradoxically affirming human exceptionalism even in moments of nonhuman disruption. In tracing how sport's digital discourses both acknowledge and deny animal agency, the article contributes to broader debates on post-anthropocentric ethics and the need to rethink sport's multispecies entanglements in the Anthropocene.

Offering an important counterpoint, Ennan Wu's, 'I am feeling the flow of "qi": *Baduanjin* as an anthropocene movement of natural/cultural entanglement', examines the traditional Chinese practice of *Baduanjin* as an embodied environmental politics grounded in Daoist epistemologies. In contrast to Western sporting cultures, oriented around speed, measurement, and external performance, *Baduanjin* fosters attunement to 'qi'—the flow of energy that binds human and nonhuman worlds. Drawing on New Materialism and agential realism, Wu positions this ancient practice as a site for cultivating relationality, environmental sensitivity, and temporal awareness. Rejecting the 'quantified self', *Baduanjin* moves participants toward a 'perceived self', attentive to bodily sensation and ecological context. In doing so, the article presents *Baduanjin* as an Anthropocene

movement that resists capitalist temporalities and offers non-Western visions of ecological embodiment.

A different kind of loss—one tied to material structures and historical memory—is explored in John Berg's, 'Constructalgia cured: Sports heritage in the Anthropocene and beyond'. Focusing on Swedish case studies, Berg introduces the notion of 'constructalgia': the affective attachment to human-made sporting sites threatened by decay or demolition. Challenging the anthropocentric impulse to preserve these structures 'forever', Berg critiques mainstream conservation paradigms for privileging human meaning over ecological responsibility. Instead, he argues for heritage practices that embrace entropy, finitude, and nonhuman agency. The article calls for a post-anthropocentric approach to sports heritage, one that acknowledges that not all structures need to be remembered, and that sometimes, forgetting is a more ecologically ethical act.

Sander Hölsgens brings these theoretical concerns to life through a grounded ethnography in '"I thought we were useless": K-skateboarding and socio-material pollution in Nanjido, Seoul'. Investigating a former landfill turned eco-park and skatepark, Hölsgens reveals how skateboarding in this 'polluted leisure' space unsettles the greenwashed aesthetics of urban redevelopment. While skateboarders are co-opted into Seoul's modern eco-urban image, they also come to recognize their complicity in the erasure of the site's toxic history. Through sensory ethnography, Hölsgens shows how skaters experience both pleasure and moral unease, navigating visible greening and invisible contaminants. The article complicates binary notions of pollution and sustainability, framing skateboarding as a practice that reveals the messy materiality of Anthropocenic urban life and the ethical ambiguities of leisure under late capitalism.

The politics of climate response are placed centre stage in 'The post-colonial challenges of climate change and sport for development and peace in the Anthropocene', by Tavis Smith, Rob Millington, Simon Darnell, and Adam Ehsan Ali. Through a postcolonial critique of the Sport for Development and Peace (SDP) sector, the authors expose how climate action is entangled with enduring North–South power asymmetries. Based on interviews and

policy analysis, the article reveals how well-meaning global initiatives often impose technocratic solutions that marginalize local knowledge and perpetuate dependency. The climate crisis, they argue, is a 'wicked problem' for SDP, due not just to its complexity, but because it amplifies colonial logics of expertise, intervention, and hierarchy. The authors call for 'planetary thinking' and ethical frameworks that foreground local agency, glocalized solutions, and epistemological plurality. Their work underscores the political, rather than merely technical, stakes of climate response in sport development.

The theme of place, loss, and ecological reorientation continues in 'Rethinking places for sport in the Anthropocene', by Peter Carlman and Gabriella Torell-Palmquist. Drawing on case studies from Sweden, the authors propose a framework of belonging composed of material, symbolic, and emotional dimensions. Climate change, they argue, not only alters the physical viability of sporting environments (e.g., ski resorts, equestrian centres, and outdoor facilities) but also reshapes their meanings and affects. Concepts such as *solastalgia* (the grief associated with environmental loss) and the *Neganthropocene* (hope grounded in sustainable innovation) are used to theorize these transformations. The article ultimately calls for a relational understanding of sport's connection to place, one that resists nostalgia and embraces the possibility of new forms of ecological attachment in a changing world.

The special issue concludes with 'From local elds to global spectacles: Sport in the shadow of the Anthropocene', an interview with Billy Graeff, Brendan Hokowhitu, and Holly Thorpe, conducted by Jack Black and Jim Cherrington. In this wide-ranging dialogue, Graeff, Hokowhitu, and Thorpe situate sport within broader histories of imperialism, industrialization, and environmental degradation. They argue that sport has long served extractive and disciplinary functions, organizing bodies and landscapes within capitalist and colonial logics. While sustainability efforts in sport remain superficial or complicit, the conversation also explores transformative possibilities, such as, athlete activism, Indigenous knowledge systems, and grassroots movements, which reimagine sport as a space for resistance and relationality. The interview foregrounds the importance of

interdisciplinary, feminist, and Indigenous approaches in rethinking sport's ecological and political futures.

Together, each contribution unsettles the dominant narratives of sport as apolitical, benign, or merely a site of leisure. Rather than treating sport as separate from environmental or social concerns, these articles foreground its deep entanglement with the material, symbolic, and affective crises of the Anthropocene. From post-sport imaginaries and multispecies ethics to postcolonial critiques and reimaginings of place, they compel a critical rethinking of the ecological, historical, and political foundations upon which physical culture rests. What emerges is not a single vision of sustainable sport, but a plurality of responses: some critical, others hopeful, but all attuned to the urgency of our planetary condition. In this context, sport becomes both a problem and a possibility; indeed, a terrain for exposing extractive logics and for cultivating more relational and ecologically responsive futures.

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