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Code Red for Elite Sport. A critique of sustainability in elite sport and a tentative reform programme

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ABSTRACT

Research question: Is elite sport compatible with environmental sustainability? This paper critically investigates elite sports' possible future in a world where cutbacks in resource use, pollution, and greenhouse gas emission are indispensable measures towards environmental sustainability.

Research methods: The paper is a conceptual and pragmatic inquiry that uses the current research literature to explore the logics of elite sport and its dynamics and alignment with paradigms of sustainability.

Results and findings: Elite sport's extensive engagement with governments and commercial agents pursuing prestige, growth, and profit has created a current state of overheating and runaway processes that threatens both sport's internal values and nature itself. The situation begs extending the self-imposed constraints in sports practice to the governance of sport in a way that is fully compatible with elite sport.

Implications: Provided concrete sustainability reforms are substantiated, on the innovation of equipment and technology, on state and commercial financing of elite sport, and on the organizing of competitions and mega-events, elite sport can flourish as a healthier and environmentally friendly social activity.

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Code Red for Elite Sport

In August 2021, the UN Secretary-General described the fifth climate report from the Intergovernmental Panel on Climate Change (IPCC), as 'a code red for humanity' (UN, 2021). The more recent assessment report of February 2022 has been termed the 'bleakest warning yet', pointing out that the chance to avoid the ravages of the human impact on climate is now narrow (Harvey, 2022).

IPCC dates to 1988 when environmental concerns prompted the United Nations General Assembly to establish a body 'to prepare a comprehensive review and recommendations with respect to the state of knowledge of the science of climate change' (IPCC, 2022). The panel has since prepared a series of reports, governments have

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negotiated the Kyoto and Paris and other protocols, and more recently Green New Deal policies have been launched in the European Union, the United States, China and beyond.

The climate crisis rests on two recent developments. One is the massive human population growth over the past century. When the IOC was created in 1894, FIFA in 1904, and IAAF in 1912, the world population was well below 2 billion. Today, despite a reduced growth rate, humanity is approaching 8 billion, and by 2050 it is expected to be nearly 10 billion. Notably, sport's popularization and expansion as a human activity and cultural asset coincide with this era of accelerated population growth.

The other development is the excessive technological exploitation and use of the planet's non-renewable resources. Accelerated waste, pollution, species extinction, carbon dioxide and other greenhouse gas emissions are 'overheating' the planet (Eriksen, 2016). If the world is not overpopulated, it is over-consumerist, and there is a political agreement that consumption of non-renewable resources must be dramatically reduced.

Sport has long taken nature for granted (Thibault, 2009), but is now increasingly affected by disruption from climate change (e.g. Goldblatt, 2020). With the accelerating growth of international sport and sports tourism and elite sport's affiliation with commercial TV and sponsorship, sport keeps encouraging behavioural patterns of over-consumption. The greenhouse gas emission from sporting events is enormous (Triantafyllidis, 2018), and sports' sponsorship deals with companies promoting high-carbon products, services, and lifestyles are widespread and range across many different sports and countries (Tricarico & Simms, 2021).

Sustainable development as defined by the UN World Commission on Environment and Development (1987) points to a development that meets the needs of the present without compromising the ability of future generations to meet their needs. Sport's highest officers appear to be concerned about the issue, such as the IOC President stating that 'climate change is a challenge of unprecedented proportions, and it requires an unprecedented response' (Morgan, 2020). However, sport's many stakeholders seem to rely on carbon offsetting and innovation- and technology-based responses rather than turning to the source of the problem and to measures that effectively cut greenhouse gas emissions (Goldblatt, 2020; Wilson & Millington, 2015). Hence, we should be cautioned that it is important to separate effective responses to the climate crisis from mere 'green-washing' business as usual (Miller, 2018).

While being aware of the significant environmental impact and carbon footprint caused by mass consumption of sporting goods, sports tourism, and local sports events (Wicker, 2019), our focus here will be on the negative footprints set by elite sports, such as in air transportation, the construction of sports arenas and infrastructure (UNEP, 2020), and the use and promotion of sports equipment and apparel (Drew & Yehounme, 2017; Niinimäki et al., 2020). Although elite sport has significant sustainability challenges of its own, it can also have a central position in signalling environmental concern to the masses (Trendafilova et al., 2014). More specifically, and based on a critique of the current situation, we will examine the potential for turning elite sport into a sustainable human activity. Our aims are academic in the sense of trying to improve our understanding of the complexities and possibilities of the matter and pragmatic in the

sense of attempting to exert some impact on the future decisions of sports governing bodies and governments. We aim to stimulate debate among sport management scholars, as we believe scholars are actors in the fields they study and teach, and furthermore respond to some of the critiques raised against management studies as obsessed with theory advancement beyond what is meaningful to society (e.g. Carter & Spence, 2019; Munir, 2019; Tourish, 2020).

The paper proceeds as follows: Next, we briefly introduce institutional pluralism as the theoretical framework that guides our analysis. Second, we outline three sustainability paradigms relevant for sports event management, and third, we sketch two competing yet interdependent logics of sport, namely as internal and external goods. In the fourth section, we study which of these logics guide the strategies of the main field actors in elite sport, before in the sixth, we argue that sport's internal goods are premised on a theory of constraints. Before concluding, we discuss measures that can enhance both elite sports' environmental sustainability and the internal goods of sport.

Institutional pluralism

The institutional logics perspective in management studies posits that organizations are embedded in interinstitutional systems that subject them to diverse institutional logics. These oftentimes exert diverging pressures on what to believe (in) and how to act (Greenwood et al., 2011; Thornton, Ocasio, & Lounsbury, 2012). In this space, organizational actors exert agency when they respond to complexities of assumptions, values, beliefs, rules, and practices that logics are made of (Friedland & Alford, 1991; Greenwood et al., 2011).

In 2008, Kraatz & Block defined institutional pluralism as:

the situation faced by an organization that operates within multiple institutional spheres. If institutions are broadly understood as 'the rules of the game' that direct and circumscribe organizational behaviour, then the organization confronting institutional pluralism plays in two or more games at the same time. Such an organization is subject to multiple regulatory regimes, embedded within multiple normative orders, and/or constituted by more than one cultural logic. It is a participant in multiple discourses and/or a member of more than one institutional category. It thus possesses multiple, institutionally derived identities which are conferred upon it by different segments of its pluralistic environment. (p.243)

We can infer from the introduction of this paper that an elite sport, encompassing a multitude of organizations, operates in institutional spheres beyond that of organizing sports events. Being exposed to requirements of environmental sustainability means being exposed to another 'game' and rules that are likely to circumscribe the behaviour of elite sports bodies. Old ways are rendered illegitimate and must change, but the rules are not always clear or consistent. In accounting for the challenges of environmental sustainability we draw on Hall (2012) to outline three logics, i.e. diverse sustainability paradigms that elite sport bodies currently face. These are economic, balanced, and degrowth sustainability.

In addition to organizations facing new logics in their environments, organizations are seen to embody different logics in their practices and structures, reflecting the field or industry in which they operate (Besharov & Smith, 2014; Greenwood et al., 2011; Kraatz & Block, 2008). Below, drawing on a diversity of literature works, we argue

that current elite sport bodies reflect at least two diverse logics of sport; sports valued in terms of its internal or external goods, respectively.

Following Besharov and Smith (2014), the extent to which different logics in organizations generate conflict or harmony depends on their compatibility and centrality to the functioning of the organization. However, compatibility and centrality are susceptible to change because the relationship between logics and actors is reflexive. Actors, while embedded in logics, can influence how logics are represented in organizations, and over time exogenous events, dynamics of practices and identities, cultural entrepreneurship etc., impact on the content and relationship between multiple logics. In keeping with Hallett and Hawbaker (2021), change occurs through social interactions that, even though they take place inside of organizations ‘are never completely enveloped by those organizations, nor are they independent’. (p.12). Social interaction activated by new challenges, such as the climate crisis, may cause institutional disruption or new logics to develop or add to old ones and thereby change organizational action. By juxtaposing the three sustainability logics and the two logics of sport, we intend to explore the way forward for elite sport in the context of demands posed by the urgent climate crisis.

Competing sustainability logics in sport management

Hall (2012) outlines three paradigms (or logics) of sustainability event organizers, including sport bodies, are facing (cf. Table 1). In the *economic sustainability* paradigm, no conflict is perceived between commercial growth and solving the climate crisis. Sport events are hosted to profile host destinations and enhance competitiveness, while measures such as carbon offset, i.e. greenhouse gasses that are commodified and traded on a marked, allow polluters to fund environmental projects that allegedly absorb and reduce carbon emission (Clark, 2011). However, offsetting is controversial (Watt, 2021) and carbon markets have been described as a way of promoting “a ‘fossil forever’ agenda while avoiding the mistake of openly advocating it.” (Lohmann, 2013, p. 298). An example hereof is found in Crabb (2016) who studied one of several

Table 1. Sustainability paradigms in hosting mega-events [adapted from Hall (2012)].

| Sustainability paradigms | Economic | Balanced | Degrowth |
|---|--|---|--|
| Grounding | Neo-classical economics. Events should promote economic development and destination competitiveness | Triple bottom line economics. Balancing economic, social and environmental dimensions | Ecological economics. Foregrounding the constraints of natural capital |
| Policy characteristics in mega-event contexts | <ul style="list-style-type: none"> • Economic growth priority • Benefits trickle-down to host community • Neglect of opportunity costs or long-term effects • Event enhances international profile • Self-regulation (e.g. carbon offset) | <ul style="list-style-type: none"> • Promotion of triple bottom line, but economic and visitor indicators are often key • Multiple evaluation and assessment, but tend to foreground perceived economic benefits • Focus on efficiency and technological solutions | <ul style="list-style-type: none"> • Examines opportunity costs and regards economic growth as a poor indicator of development • Quality of life approach • Reduce, reuse, recycle, and regulate (tax on damage to natural capital). • Non-hosting might be considered best option |

carbon offsetting programmes in the 2014 FIFA World Cup in Brazil. Crabb shows how Cuiabá, showcased in several FIFA outlets as an example of a ‘green’ city, was appropriated by regional business and politicians to green the reputation of the region to the benefit of business but to the disadvantage of the local population and the environment. Despite such outcomes, carbon offset is a strategy increasingly used by elite sport (Campelli, 2018; Goldblatt, 2020).

Balanced sustainability is grounded in Triple bottom line economics that aims to value assets and leverage resources so that all economic, social, and environmental capital are employed efficiently and effectively. While the concept has gained traction, its use is much restricted (Hammer & Pivo, 2017). To materialize the concept requires strategies and procedures for improved sustainability assessment and benchmarking (Collins et al., 2009; McCullough et al., 2019; McCullough & Pelcher, 2018; Theodoraki, 2017; Triantafyllidis, 2020), but improved assessment and assurance run up against a series of ex-ante and ex-post biases, such as avoidance of negative feedback, poor integration into planning and decision-making systems, long-time horizons for data collection and analysis, unclear means-ends causal relationships, and a lack of incentives for use (Hammer & Pivo, 2017). Furthermore, the selection of what instruments (not) to use and prioritize complements the preferences of political and administrative regimes (Hall, 2012). Therefore, pursuing balanced sustainability often end up keeping to the well-trodden path, procuring economic benefits first. Sport mega-events seem to fall into this pattern. ‘Balance’ never turns out in favour of the planet (e.g. Death, 2011; Müller et al., 2021; Reis & DaCosta, 2012; Theodoraki, 2017).

Degrowth sustainability is grounded in ecological economics and foregrounds the constraints of natural systems (Hall, 2012). In policy terms it focuses on opportunity costs and the four Rs: reduce, reuse, recycle, and regulate. It departs from economic sustainability on the matter of regulation and from balanced sustainability on the matter of reduction. Instead of efficiency’ it advocates sufficiency, with the aim to slow consumption through regulatory and, when feasible, market mechanisms. In terms of regulation, the paradigm advocates taxation that reflects the full environmental cost of event activities. It follows that the degrowth approach opposes the state guarantees and tax amnesties granted to organizations like IOC and FIFA (e.g. Business Leader, 2021) only to let the host city taxpayers subsidize event organizations to overuse natural resources and deliver much fewer public benefits than promised.

The economic and balanced sustainability approaches have not proved to be effective, and degrowth is hardly tried. We know that negative activities associated with the elite sport are related to air transportation, buildings and construction (UNEP, 2020), and the use and promotion of sports apparel (Drew & Yehounme, 2017; Niinimäki et al., 2020). While there are positive initiatives in these industries, they are far from effective in terms of reducing their impact on the climate. At best, growth is abated, but the overuse of the planetary resources is still growing. Offsetting, measurement, and recycling, while doing good at the small scale, can also be strategies to avoid constraints and degrowth. Concerning transportation, it is illuminating that less than one per cent of carbon emission in Formula 1 car racing is related to the racing cars’ fuel. The sport has been commended for introducing sustainable fuel (FIA, 2020), but transportation across the world of each team and their equipment (160.000 km between races and test sessions per year) makes the sport all but green (King, 2013).

The recent code red from IPCC urges us to take larger steps that connect to the degrowth paradigm that advocates sufficiency over efficiency and the four Rs. Can the elite sport be adapted to the degrowth logic? A first step implies taking a closer look at the logics of the sport themselves.

Internal and external goods. On the competing logics of sport

Arguably, the concept of sport has different meanings, and in sport studies, we can distinguish between at least two logics; that of sport as an internal good, a topic of interest predominantly in sociology and philosophy (e.g. McNamee, 2008; Morgan, 1994; Walsh & Giulianotti, 2001), and sport as an external good, the dominating perspective in sport management (e.g. Smith, 2010; Hoye, Smith, Nicholson, & Stewart, 2018; Cunningham, Fink, & Zhang, 2021).

Following MacIntyre (2007), *internal* goods can only be realized by executing the standards of excellence in a practice and make sense only within the practice itself. Internal goods are 'goods of excellence'. Typically, in sport, we are talking of mastery of abilities and skills: an athlete's sound tactical choices in a swimming race; the experienced soccer player's controlled touch on the ball and passing skills; or the joy of deep interaction and collaboration in a well-playing team. Internal goods are unique to the practice and are developed and attributed value among sporting practitioners. Despite changing social and cultural settings, internal goods have a certain historical stability within the framework of deliberative practice communities (McNamee, 2008; Morgan, 1994). Football is still football despite excessive commercialization, and track and field is still track and field despite significant challenges with doping. To sustain and develop a sport, Morgan (1994) argues, deliberative sporting communities play a crucial part in upholding and protecting its internal goods in tension with external interests.

The logic of sport based on its *external* goods emphasises values such as enhanced health, social inclusion, prestige, and profit. External goods are independent of internal goods in the sense that they can be realized by many practices among which sport is just one. Hence, they make sense outside of the practice itself. External goods are the prerogative of institutions, developed originally to support and sustain the internal goods of social practice. MacIntyre (2007, p. 194) emphasizes the point: 'For no practices can survive for any length of time unsustained by institutions'. Internal and external goods can be mutually enforcing, for instance when profits from sport events are returned to the practice community to enhance sporting participation and practice. There is, however, also the possibility for the opposite. Institutional priorities and the quest for external goods may deviate from what seem beneficial to the practice. MacIntyre notes that 'the ideals and the creativity of the practice are always vulnerable to the acquisitiveness of the institution' (2007, p. 194). If given priority, external goods such as prestige and profit can threaten internal goods and sometimes exert a destructive impact. This resonates with the competing logics perspective, which sees logics as simultaneously interdependent and potentially in conflict (Friedland & Alford, 1991).

In modern elite sport, situations with tensions and conflicts between internal and external goods are multiple. A topical example is the continuing commercially grounded efforts to expand the calendar in ball games such as football (e.g. Football Inside, 2020) and handball (e.g. Handball Planet, 2019), which athletes experience as exhausting at the limit of

health and well-being and, at worst, as career threatening. Another example is the strict rules on female clothing in beach volleyball and handball that are believed to increase non-sportive and sexualized attention, viewer ratings, and revenue (Fuller, 2021).

These examples illustrate a further distinction between the logics of internal and external goods. The development of internal goods and standards of excellence, for instance of technical and tactical elements, are in principle accessible to all and benefits the whole practice community. Internal goods are as available to future generations of athletes as they are to the current ones. They are sustainable. External goods on the other hand, such as profit and prestige, are scarce goods usually distributed in zero-sum games. As MacIntyre (2007, p. 190) notes, external goods are ‘objects of competition in which there must be losers as well as winners’. Hence, what one party gains is a loss for another. In sustainability terms, the exploitation of natural resources and the extensive greenhouse gas emissions caused by current sport mega-events reduce the possibility of future generations to organize similar events.

Can the quest for internal and external goods in elite sport be balanced in sustainable ways? A proper response depends upon further analysis of the interests and strategies of the main actors in the elite sports system.

Logics pursued by the main actors in elite sport

Sport has not developed in isolation from social and cultural contexts. For instance, the codification of many sports took place in the emerging industrialized, capitalist, and the progressive nineteenth-century England (Collins, 2013): ‘the land of sport’ (Mandell, 1999). Pierre de Coubertin, the founding father of the Olympic Movement, made attempts at universalizing the idea of quantifiable progress and considered the athletic record as ‘the eternal axiom’ of sport and as a concrete, embodied symbol of human greatness (Loland, 1995). The current world of elite sport is embedded in similar visions of growth and progress. Pursuing ever-intensified competition to cultivate sporting excellence would be slowed if not states and sponsors provided resources for athletes to prepare and compete. In accordance with the competing logics perspective, we may understand sport as a space where diverse interests, embedded in their parochial institutional logics, compete to realize sport’s values (Gammelsæter, 2021). Notably, we are talking here about both commercial and state actors, but also sports’ governing bodies. Let us start with a closer look at the latter.

Sports’ governing bodies

Sports’ governing bodies are presumably the guardian of sport’s internal goods but pursue external goods as well, in alliance with actors that seek to exploit sports’ assets. Sports associations are provided autonomy from state intervention (Hoehn, 2006) and whilst there are limits to sport’s autonomy (e.g. Meier & García, 2021), some governing bodies are extremely powerful (Nelson & Cottrell, 2016), and in a position to deliberate between growth and degrowth in elite sport. In other words, their handling of internal and external goods and their polygyny with the political and commercial spheres of society provide a framework for developing sustainability policies for elite sports. What in fact are sport’s governing bodies doing in this respect?

The short answer is that they pursue unlimited growth in many fields: the number of practitioners, sporting performance, income and profit, and even political impact and influence. The International Football Federation (FIFA), states in its statutes that ‘The objectives of FIFA are: (a) to improve the game of football constantly and promote it globally in the light of its unifying, educational, cultural, and humanitarian values, particularly through youth and development programmes’ (FIFA, 2018, p. 6). The World Archery’s vision is for ‘a world in which everyone has the opportunity to practise, engage with and enjoy the important Olympic sport of archery’ (World Archery, 2021). The International Ski Federation (FIS) declares in its mission statements that ‘FIS is committed to the global promotion and development of recreational and competitive skiing and snowboarding’ (FIS, 2018, p. 8).

Moving from vision statements to practice, the Olympic Games is ever-increasing (O’Neill, 2021) and football, despite producing the highest emissions among sports (e.g. NewScientist, 2019), is piling up loads of expansion strategies (Daly, 2021; Walters, 2020): FIFA has recently expanded the men’s World Cup from 32 to 48 teams, the woman’s World Cup from 24 to 32 teams and the Club World Cup from 7 to 24 teams. At the regional level, the Concacaf Gold Cup has expanded from 12 to 16 teams and the Africa Cup of Nations and the AFC Asian Cup from 16 to 24 teams. In Europe, the UEFA Europa Conference League saw light in 2021, a tertiary tournament with 184 teams eligible, including the qualifying rounds (UEFA, 2020). On top of that, expansion is underway for the men’s UEFA Champions League, increasing the number of games from 125 to 225 (Doyle, 2021), while FIFA is pushing to hold the men’s and women’s respective World Cup tournaments every two years (Soccer, 2020).

Concern and protest from European Leagues (the men’s national football league’s association), fan’s spokespersons, and pundits are witness to the widespread belief that the current changes are all about increasing revenue, not about the internal good of the game (Wilson, 2021). More matches are expected to translate into increased revenue from media and commercial rights but also increased long-distance fossil-fuelled travel. Hence, in the wake of this strategy, the carbon footprint of football will inevitably soar. Simultaneously, footballers voice their concern that the more congested schedules represent an increasing health risk (FIFPro, 2021). We see here an increase in grassroots reaction and engagement of deliberative practice communities with concern for the internal goods of their sport. Athletes’ representation in sport’s executive bodies is weak (Geeraert et al., 2013), but increasing activism seems to be underway and with it an increased concern for the voice, dignity, and humanity of the players (World Players Association, 2022).

Public authorities

Public authorities seem to follow suit with sport governing bodies. Governments have supported elite sport to profit from the increasing public attention and prestige connected to success in mega-events such as the Olympic Games. The Cold War rivalry across communist and capitalist ideologies and regimes accelerated the investment and professionalization in elite sport, in that context to prove ideological superiority (Tomlinson, 2005). The elite sport system of the German Democratic Republic (DDR) had the explicit aim of proving the superiority of communism over capitalism (Spitzer, 2006). The Olympic success from the 1960s and onwards of the communist bloc spurred the development of elite sport policies and investment in capitalist

Western countries (Houlihan & Zheng, 2013), with Australia being the first to emulate the East-German systematic approach to sport development (Green & Houlihan, 2005). Even in recent times of austerity policies governments have continued to invest in elite sport development programmes and mega-events (Grix & Carmichael, 2012).

State investments in sport are characterised by uncritical instrumentalism and concern with external goods. With the passing of the Cold War in the early 1990s, legitimisation of elite sport spending turned from the ideology of governments seeking to marry elite sport success with sport participation and health benefits. Researchers describe this as a presumed trickle-down (e.g. Storm et al., 2018), demonstration (Weed et al., 2015), or virtuous cycle effect (Grix & Carmichael, 2012):

... the virtuous cycle of sport holds that elite success on the international stage leads to prestige and elite sport contributes to a collective sense of identity; this, then, boosts a greater mass sport participation, leading to a healthier populace; this, in turn, provides a bigger 'pool' of talent from which to choose the elite stars of the future and which ensures elite success. The process then starts over again. (ibid., p.76-77).

Whilst the argument takes the internal goods of sport for granted, research finds almost no traces of these effects (De Rycke & De Bosscher, 2019; McCartney et al., 2010; Weed et al., 2015), not even for local elite sport (Storm & Holum, 2020). Sport is not 'a magic bullet' (Potwarka & Wicker, 2021). Green and Houlihan (2005), studying policy frameworks in Australia, Canada and the UK concluded that 'elite sport development and achievement on the one hand and mass participation and club development on the other are deeply incompatible functions' (ibid., p.189). And, when referenda have been used to determine the degree of public support for mega sport events, the populace tend to put on the brakes (Coates & Wicker, 2015). Nonetheless, the discursive construct that 'sport is in and of itself good and investment in elite sport is intrinsically good' (Grix & Carmichael, 2012, p. 74) keeps propping up government spending on elite sport, mega- and non-mega events (Djaballah et al., 2015).

Currently, states' efforts to exploit sport's assumed ideal values have come to the fore. By organizing mega-events, totalitarian states in particular attempt to 'wash' a tarnished reputation and distract public interest from problematic sides of a regime. Sportwashing (Chadwick, 2018) is intimately linked to extensive use of resources and extravagant exposure of culture, technology, and consumption, often associated with countries without or only fragile liberal democracies, such as China, Russia, Brazil, South Africa, and those in the Gulf region (e.g. Grix & Lee, 2013). Simultaneously, liberal democratic governments have failed to subject sport's governing bodies to stringent environmental regulation, relying instead on soft law sustainability policies to which sport bodies do not commit overwhelmingly (Daly, 2021). As with the visions and goals of the main sporting institutions, there is a problematic growth modality at the heart of public authority approaches to elite sport.

Commercial interests

The increased commercial potential of elite sport can be understood within a similar, instrumentalist framework with excessive emphasis on profit. Within a capitalist society, most economic activities are driven by the opportunity to invest money with the aim of making profit (Fulcher, 2015). Facing the climate crisis, economists disagree

on whether the economic growth is a function of profit-making or not, in other words, if markets can persist in the absence of growth (e.g. Binswanger, 2009; Saunders, 2016; Smith, 2010). For our purpose, it suffices to state that the enormous growth in innovation and use of the planet's resources over the past century derives in large part from the free-market economy that increasingly has dominated economic policies globally (Baumol, 2002). Growth ensues from the pursuit of profit, in the sports industry like in any industry.

The essence of the free-market philosophy, frequently referred to as neo-liberalism (e.g. Sage, 2011), is that almost any good, tangible and intangible, can be commodified, and that commodification takes place through the process of selling and buying of goods or when something is given a monetary value (Walsh & Giulianotti, 2001). Furthermore, the market is seen as the most effective distribution mechanism for all kinds of activities, including health, education, and sport (which is legitimized as both health and education). For this reason, politicians and institutions should not get in the way of unfettered competition (Mudge, 2008).

Early on, capitalist investors discovered sport's commodity potentials (cf. Fulcher, 2015). In the big cities of industrializing England, industrial entrepreneurs created 'leisure'. To avoid disruption in the cotton factory and increase work discipline to ensure stable production, work and non-work activities were separated. Shorter work-days and Sundays off opened a huge market for commercialization of leisure, such as mass travel to spectating football or horse racing. In the Mediterranean countries, motor and cycling races such as Tour de France were set up by newspapers and the sport sector to boost their businesses (Gaboriau, 2003; Mignon, 2016).

Albeit much later, and at the international scene, the presidents of the most prominent international sport organizations, FIFA and IOC, started to befriend and rely on powerful corporation, CEOs, and marketing managers, notably Adidas and Coca-Cola. Through their dealings, they attracted sponsor money to their events. Sponsors saw sport as an effective means to expand their market penetration. Coca-Cola, for instance, sponsored FIFAs first Under-20s Youth World Cup in 1977 and Under-17s World Championship in 1985 because they were hosted in regions central to the company's global marketing strategy (Sugden & Tomlinson, 2017). Furthermore, enticed by Horst Dassler, the Adidas president, both FIFA president Havelange and IOC president Samaranch used Dassler's newly founded company International Sports Leisure Marketing (ISL) to establish and implement worldwide marketing strategies that would effectively allow ISL to dominate the two biggest sport events of the world (Tomlinson, 2005). Since then, business' penetration of elite sport has only accelerated.

Summing up

When looking at what sport's own trustees, politicians, and commercial interests do, concern should be raised (1) for the danger of turning sport into mere consumption (Adams & Piekarz, 2015), and (2) for elite sports' propensity to reduce its climate footprint. Put differently, the unrestrained emphasis on sport as a means towards external goods represents a threat to sport's internal goods as well as to nature itself. As outlined in Table 2, agents set to develop sports external goods are less likely to promote degrowth sustainability compared to athletes and communities of sport practitioners that prioritize

Table 2. The logics of sport goods and sustainability.

| Logics of sport | Sport as internal goods | Sport as external goods |
|-----------------------|--|---|
| Core conception | Sport has primary value within the practice itself | Sport has primary value as a means to goals external to the sporting practice itself |
| Activities | <ul style="list-style-type: none"> • Practicing sport according to its standards of excellence • Development supported by external goods | <ul style="list-style-type: none"> • Growth in political prestige and profit with the elite sport as a means • Development of voluntary sport in the population with the elite sport as a means |
| Agents | <ul style="list-style-type: none"> • Athletes • Communities of sport practitioners | <ul style="list-style-type: none"> • Sport governing bodies • Public authorities, States • Sponsors, Corporations, Media |
| Sustainability logics | <ul style="list-style-type: none"> • Degrowth Sustainability | <ul style="list-style-type: none"> • Economic and Balanced Sustainability |

athletic development and excellence over external benefits. Whereas sport as a means to external goods is compatible with economic and balanced sustainability, sporting practice with an emphasis on internal goods aligns with degrowth. For this reason, it is unfortunate that athletes and communities of sport practitioners are poorly represented in sports’ executive bodies.

On overheating and constraints to growth

The overheating of the planet (Eriksen, 2016) has led to a double-bind situation (Bateson, 1972), i.e. the fundamental contradiction where one state or situation directly negates another, such as between the growth in the production and use of fossil fuel and a declared emphasis on sustainable development. If elite sport increases its climate footprint, how can it be sustainable? And if it aims for sustainability, how can it shun the logic of degrowth?

To describe the genesis of this double bind, Eriksen, building on Bateson (1972, 1978), describes runaway processes as ‘mutually reinforcing growth processes which eventually lead to collapse ‘unless a third instance’ enters into the process and changes the relationship’ (2016, p.21). Runaway processes are growing out of control, often taking the character of treadmill syndromes, at the micro-level appearing as if working out at the treadmill: ‘Since your competitors improve, or the environment changes, you have to improve and adapt merely to keep your place in the ecosystem ...’ (2016, p.23). The treadmill syndrome is a premise, an integral part, and an outcome of runaway processes.

It resembles the logic of the record (Loland, 2001, p. 2006). The record is a quantifiable product of competition and in this sense an external good to be admired and celebrated as an example of athletic progress. With the premise that performances take place under virtually identical, standardized conditions, every new sport record represents the use of limited resources and takes away from current and future athletes’ the possibility of their own record-breaking. The running events in athletics illustrate the point. A new record by 1/10 of a second implies 1/10 of a second less resource for future athletes. Since human potential for generating speed is relatively stable, athletes will have to find increasingly more efficient and radical means to improve. They will explore more efficient training, nutrition, and lifestyle, and perhaps radical biomedical means and methods such as

performance-enhancing drugs, or in the future, genetic enhancement. Therefore, record sports encourage infinite growth in finite systems. Resources are distributed and used in ways in which the gains of one party require increased investments on the other. The competition for resources intensifies up to a point where the resources may exhaust, and the system becomes skewed or collapses (cf. Houlihan & Zheng, 2013).

The paradox is that the extra resources do not per se add to the internal goods of the sport. A race or game in 2022 is not necessarily more exciting or passionate than previous races and games e.g. in 1990 or 1960. Athletes and entourages of the 1960s, or the 1990s, may have enjoyed just as much internal goods of their sports as the current generations. The quest for growth is marked by blind and unconstrained maximization and leads to runaway processes. Sport is instrumentalized, and to the extent that regulative mechanisms and constraints exist, exemplified by UEFA's Financial Fair Play system, the analysis of wanted and expected benefits has been insufficient. Noncontrollable growth prevails.

Further insights into the internal goods of sporting games illuminate this alternative logic of sport and its alignment with degrowth. In its simplest form, Suits' (1978, pp. 54–55) definition of game playing goes as follows: 'To play a game is to 'voluntary attempt to overcome 'unnecessary' obstacles' to reach a goal. The 'unnecessary obstacles' are defined in sporting rules. Following Searle's (1969) distinction between constitutive and regulative rules, regulative rules typically deal with external goods that do not define the activity as such, such as rules on the amount of commercial advertising on clothing and arenas, the air pressure in balls, thresholds for wind conditions, etc. The constitutive rules, however, define the 'unnecessary obstacles' of a sport and the framework within which internal excellence goods can be realized. In a hurdle race, runners are prescribed to run over the hurdles and not take the easy way around, and in soccer, rules ban touching the ball with the hands.

Outside sport, constitutive rules do not make sense. If being in a hurry in everyday life one takes the direct and fastest route and avoids obstacles. What makes up a hurdle race is precisely the acceptance of such obstacles. In Suits' (1978) words, voluntary acceptance of obstacles in game playing is an expression of a ludic (playful) attitude. The internal goods logic of sport is the non-instrumental logic of play.

Suits' ideas find their equivalent in Elster's (2000) theory of constraints. In his studies of rationality and individual choice, the basic idea is that in many situations the 'more is better' assumption is invalid. On the contrary, constraints can sometimes produce valuable and wanted outcomes. Some constraints are incidental and defined by their actual benefits. For example, before the invention of high-powered computers social scientists had a strong motivation to use sociological imagination and work on theory building. Other constraints are self-imposed, i.e. constraints that agents impose on themselves because of their expected benefits. A painter may choose a classic style for aesthetic reasons, and an athlete specializes by accepting the 'unnecessary obstacles' that define her sport to compete at higher levels. We are talking here of 'constrained maximization' (Elster, 2000, p. 201): of accepting constraints or obstacles to realize and develop the internal excellence goods of the practice.

Towards a sustainable elite sports reform programme

Bluntly speaking, unless the institutions of sport take steps to effectively reduce elite sport's environmental footprint, constraints might be installed based on other forces,

be it by sporting communities of athletes, entourages, and fans; governments and activist pressure groups; or by the physical force of nature itself. Just as sporting games are defined by certain rule-defined restrictions, sport's leadership should include self-imposed constraints on elite sport to align the elite sport system with the logic of degrowth sustainability (BASIS, 2021; Goldblatt, 2020). Notably, measures in this direction can also enhance the internal goods of elite sport. In this last part of the article, we will exemplify what such constraints can be like.

What are the constraints that can tame overheating and runaway processes in elite sport? What are the most desirable constraints that can protect and enhance the internal good of sport while at the same time meeting requirements of sustainable development? Or, even more ambitiously, how can constrained maximization of the sport system be reached?

A full-fledged response to these questions is beyond the scope of this article, but we will sketch some constraints and measures that can contribute to sustainable development. A first step can be to examine the development of means and methods closest to athletes and the realization of sporting internal goods: sporting equipment and technology. On the one hand, equipment sometimes enhances internal goods (Loland, 2009), such as when the construction of a new cut on alpine skis may enhance the excellence of skiing practice, or when lighter wetsuits in windsurfing make movement easier and improve floating qualities and safety. On the other, Foucé (2017) points to the game-changing impact of performance technology in elite sport. Elite athletes' use of innovative technology from running shoes to advanced bikes and sailboats inspires and drives mass consumption. In developed parts of the world, sports equipment consumption makes up significant parts of private family leisure budgets. The environmental impact and carbon emission of production and distribution are significant.

A paradigmatic example is sport's promotion of fast fashion: clothes (often cheap) bought and cast aside as trends change. Trends change rapidly, in part thanks to elite sport. Clothing manufacturing is calculated to emit 8–10 per cent of the world's climate-altering greenhouse gas (Niinimäki et al., 2020). Elite sport is reputed for the rapid change of costume, be it clubs or national teams in all sports approaching every new season or big event with a new clothing collection, typically advertised by the athletes in photos, videos and at the arena. Moreover, shirt sale is seen as an important source of revenue generation when clubs sign star players (e.g. Ahmed, 2021), and many celebrity athletes are attracted to the industry to develop their own trademark and profit from their celebrity status. From a sustainability point of view, there is a need 'for fundamental changes in the fashion business model, including a deceleration of manufacturing and the introduction of sustainable practices throughout the supply chain, as well as a shift in consumer behaviour — namely, decreasing clothing purchases and increasing garment lifetimes' (Niinimäki et al., 2020, p. 189). Elite sport should promote functional equipment and clothing innovation with environment-friendly material and production processes, and slow, not fast, fashion. The need is urgent.

The organizing of events is another issue. At the heart of sport governing bodies is the staging of competitions and tournaments that bring together athletes and their support staff, umpires, functionaries, sport managers, media, sponsors, security, equipment, vehicles, and oftentimes big audiences. Events presuppose facilities and infrastructure and generate transport, and the bigger and more international the event the bigger the needs for advanced facilities and carbon-intensive air transport. Elite sport events are

kept within bounds (if not, they would not be elite), but the constraints have expanded and continue to do so. Unless this changes it is difficult to see how elite sport will contribute much to reduce carbon emission. Therefore, we concur with Müller et al. (2021) that the Olympic Games must be downsized substantially, and with Walters (2020) that football's fans and regulating bodies must embrace a less-is-more philosophy, perhaps spreading the league season and cup competition over a 2-year period, return to 16 teams in the World Cup finals, etc.

A further measure to cut emission is rotating big events among the same cities, thus reusing infrastructure rather than embarking on new grandiose and costly facility construction (Müller et al., 2021), many of which are of little use or taken down after the event (e.g. Sturmer et al., 2021). Reuse corresponds with the degrowth paradigm, and it is obvious that events could be hosted with much less social, financial, and ecological disruption and cost compared to the current practice among IOC and other international sport federations. A handful of venues could be appointed, each representing a continent or an important capture area for the focal sport. We understand that some would find this unfair, but we think the fairness argument is more concerned with promoting regions and places (cf. economic sustainability) than with the internal goods of sport. What is more, sports such as road cycling and tennis seem to thrive well on repeated events and venues.

Correspondingly, federations that organize worldwide competitions (e.g. alpine skiing, formula 1, tennis etc.) should incorporate sustainability principles into their rotation schemes. The number of venues visited per season should be cut and the need for inter-continent travel reduced by expanding the programme at each venue or in the same region, moving to another continent the next year. Moreover, continental tournaments can regionalize parts of their competitions. For instance, today, football teams from across Europe play each other from the first qualification rounds in the UEFA Conference and Europa League tournaments. UEFA could easily organize more regionalized fixtures, which besides emission cuts would reduce clubs' expenditures and the strain and stress on players. Sport's internal goods would benefit from such measures.

A final point concerns the public sector and the subsidies and tax exemptions that governments grant to event organizers at the higher end of the spectrum. Many governments have invested taxpayers' money on events that at the end of the day are all but climate-friendly and that leave behind infrastructure that are either not used or not effectively exploited after the events. Hitherto, governments, at least across Europe, have largely restrained from environmental regulation of sport, leaving sport self-regulated and subjected only to soft law (Geeraert, 2017). This lack of legislation stems from the virtuous cycle perception of sport (Grix & Carmichael, 2012) and, in many nations, regulation runs counter to entrenched relations and threatens the arm's length policies that have been the trademark of Western sport policies, besides its elite sport spending and growth inducement. There are good reasons for arm's length policies, but also for enhanced regulation under the current situation.

It may be argued that our list of constraints ignores the many individuals and sport bodies that do take steps towards sustainability and climate footprint reductions, many of which are signatory to the UNFCCC Sports for Climate Action Framework (Orr, 2021; Sportanddev.org, 2019; UNFCCC, 2021). While we are not in a position to

assess the extent to which all initiatives are effective or mere greenwashing, we do take for granted that many individuals and trustees in sport are deeply concerned with the environmental issue and engage to mitigate the climate threats. Examples such as World Archery, which reduced their travelling broadcast crew from twelve to two persons to save the environment, with the rest of the crew operating a remote production centre (Orr, 2021); the football club Forest Green Rovers, which has self-imposed a series of constraints due to its owner's engagement with environmental issues (Elder, 2017); and Brentford football club that decided to keep using their 2021-kit another year (Brentford, 2021), are encouraging.

These examples show that the degrowth logic, while not being prevalent, does have its proponents in elite sport. We do not know if this movement will grow, but in pluralist organizations, new challenges can activate changes in relationships across logics (Besharev & Smith, 2014). Accruing costs of climate changes, increased athlete and fan activism, and host experiences from the pandemic-ridden 2021 Tokyo Olympic Games, the 2022 Beijing Olympic Games, and the politically contested 2022 FIFA World Cup Qatar might encourage decision-makers to increasingly adopt the degrowth perspective on elite sport. As stated above, we are hopeful that actors can succeed in increasing the centrality of the degrowth logic and that the compatibility with the sport-as-internal-goods logic is fortified.

Conclusion

Against the backcloth of the UN code red alarm about global warming, we have reviewed elite sport's development with the aim to examine possible ways of reforming the elite sport system towards sustainability. A general conclusion is that neither sport's governing bodies, governments, nor the sport industry are currently enforcing effective measures to transform elite sport into an activity that contributes to global cooling. Today, the expansion of sport to produce external goods endangers not only sport's internal goods, but, more seriously, nature as such.

However, elite sport can be compatible with effective climate-friendly policies and degrowth. The internal goods of sport are made possible by self-imposed constraints, and such constraints should be expanded to sport's preparation and competition formats. Therefore, elite sport should immediately develop and pursue policies and measures that constrain its activities, particularly those that are attached to long-distance travel, excessive (mis)use of infrastructure and facilities, and the use and promotion of fast fashion and sporting equipment. In addition, sports mega-events should no longer be admitted as economic guarantees or tax exemption in the belief that such events are an effective way of enhancing public welfare.

We conclude with conditional optimism. Reforms along the strategy we have suggested are in the sport's self-interest. They contribute to reducing climate change and its increasingly negative influences on sport, whilst simultaneously protecting and developing sport's internal goods and making them accessible to future generations of athletes. If being framed as a positive human activity, future justification of sport must include broader responsibility for the health and living conditions of any species that populate the globe. If elite sport self-regulating fails, increasing external pressure will either enforce the necessary changes or lead to the deconstruction of elite sport as we know it.

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