



Article

Internal Values of Sport and Bio-Technologized Sport

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Abstract: The aim of the paper is confronting internal or intrinsic values of sport detected by different sport-philosophers, such as W. J. Morgan, J. S. Russell, R. L. Simon, N. Dixon, S. Kretchmar, to today's bio-technologized sports in order to find the ethical guidance for (non)acceptance of new bio-technologies in sport. Thus, in the first part, I will produce an overview of the internal values of sport in the sports-philosophical literature. In the second part, I will provide my understanding of 'bio-technologized sports', leaning mostly on W. J. Morgan's and S. Loland's previous work in this regard. In the third part, I will show that the key internal value of sport is 'excellence' and that the perfectionist account of sport dominates high-level professional competitive sports. However, I will show that 'excellence' is prone to different interpretations and understandings which (could) have different implications for the 'bio-technologized sport'. Finally, I will propose going back to Aristotle and his account of *eudaimonia* to build principles for the regulation of (non)acceptance of bio-technology in sport.

Keywords: internal values of sport; bio-technology; excellence; Aristotle; regulations

1. Introduction

In the literature of the philosophy of sport, internal values of sport were debated from the late 1980s onward by many scholars, such as W. J. Morgan, J. S. Russell, R. L. Simon, N. Dixon, J. Lopez Frias, and E. Moore. Discussion took two main directions—on one hand, detecting internal values of sport to answer the question of what is sport per se, or, what makes sport such a special human practice, and on the other, building the normative conception of sport with detected internal values as guidance in how to play sports morally. From the early 2000s, the topic of bio-technology in/and sport was introduced and heavily discussed in the literature of sports sciences, from philosophy of sport to psychology, sociology, medicine to bioethics, by scholars such as A. Miah, M. McNamee, S. Camporesi, S. Loland, C. M. Tamburrini, and T. Tännsjö. In this paper, I will confront internal values of sport to the 'bio-technologized sports' to be able to reveal which values are present and reflected in such sport on one hand, while on the other, what the role of such values is in its development.

Thus, in the first part, I will produce a critical overview on the topic of internal values in sport (IVS) in the literature of the philosophy of sport. IVS were presented and theorized among different normative internalist conceptions of sport, namely: historicistic conventionalist internalism (Morgan), interpretivism and broad internalism (Russell, Simon, Dixon), pluralistic internalism (Kretchmar), and shallow interpretivism (MacRea). In the second part, I will present my understanding of bio-technologized sport and discuss why we should refer to today's sport as such. In doing so, I will lean on Morgan's and Loland's previous work in that regard. In the final part, I will show that the key internal value of sport is 'excellence' and that the perfectionist account of sport dominates high-level professional competitive sports. However, I will show that 'excellence' is prone to different interpretations and understandings which (could) have different implications for the bio-technologized sport. I will finally propose a few basic guidelines for the regulation of embracing bio-technology advancements in sport based on Aristotle's account.

2. Internal Values of Sport

In 1987, the internalist approach in the philosophy of sport was introduced by W. J. Morgan [1,2] based on the grounds of three elements taken from Alasdair MacIntyre's book *After Virtue* [3], namely: (1) distinction between internal and external values; (2) distinction between social practice and social institutions as carriers of the values; (3) the pursuance towards achieving excellence. In the 1994 book, Morgan [2] further developed the concept of an internalist account of sport with the four central elements: (1) gratuitous logic of sport, (2) sports practice communities, (3) striving for excellence, (4) social context and history. Ergo, I call it 'historicistic conventionalist internalism'.

Morgan's internalist theory understands sport as a social practice in MacIntyre's terms, and accepts its specificities: inherent and intrinsic goods and values, internal "gratuitous logic" characteristics and principles, non-instrumental "inside rational deliberations of its practice-community" (ibid., 253), and Suits' unnecessary obstacles present in constitutive rules [4] (p. 41), which ensure permanent "advancement of human excellence" [2] (p. 45). Thus, it seems fair to refer to Morgan as the father of internalism.

In my opinion, internal values of sport (IVS) can be defined unless threefold: (1) values specific and essential for sport in general and for each sport in particular, and thus intrinsic; (2) values that can be recognized/identified and reached only through engaging in playing or practicing particular/specific sports [1–3], where the dominants are its "sweet tension" (Fraleigh), "zero-sum logic" (S. Kretchmar), and "gratuitous logic" (Morgan, Suits); (3) values in opposition to external or instrumental values.

Here, while talking about IVS, to make things more obvious, it is important to go back to MacIntyre and his chess example:

Two kinds of goods possibly [can] be gained by playing chess. On the one hand there are those goods externally and contingently attached to chess-playing and to other practices by the accidents of social circumstance —[. . .] prestige, status and money. On the other hand there are the goods internal to the practice [. . .] for two reasons: first, [. . .] because we can only specify them in terms of chess [. . .], and secondly because they can only be identified and recognized by the experience of participating in the practice in question. Those who lack the relevant experience are incompetent thereby as judges of internal goods. [3] (pp. 188–189)

Furthermore, if we accept and follow Morgans' division of two kinds of sports practitioners within the specific 'sports-practice communities', IVS can be reachable by both—primary agents (sportsmen/players playing sports competitive games) and secondary (officials, spectators, journalists, scientists, investigators, scholars . . .) [2] (pp. 236–237).

Within the literature on IVS, Martinková stands out as probably the only scholar who tried to show which kind of IVS can be reached concretely. Thus, she distinguishes nine groups of IVS: experiential, competition, self-knowledge, ascetic, maturation and proficiency, interpersonal, moral, sport-specific, and meaning values [5] (pp. 61–62). She considers "intrinsic values of sport" in Morgan's terms, stating that IVS are the goods, end in themselves that arise and are being generated within the participation in sport through practicing [5] (pp. 28,59–60). Thus, without active sport practice IVS cannot be achieved. However, while for Morgan involvement in sport as a part of 'sports practice communities' are the IVS itself, for Martinková IVS are 'side effects' of the active attempt of trying to win [5] (p. 28). Similarly, for Suits, not only that involvement in the autotelic of game-playing is also a precondition of achieving intrinsic values and goods, but he finds game-playing to be an intrinsic value as such, in two different yet connected ways. On the one hand, intrinsic good is the "difficulty(ies)" that prelusory goals and constitutive rules together pose to game-players, while on the other hand the "lusory attitude: of players "loving something good for the property that makes it good" [4] (p. 16).

Internalism started as an answer to the problems of formalism understood in Suits' terms presented in the Grasshopper [4]. Suits put essential importance to the constitutive or 'game-defining' rules for and in sports where, despite acknowledging the existence of the regulative or 'penalty-invoking' rules, fair play is understood as playing by the rules. Three problems are crucial here. First, in formalist

account, winning the game and cheating is not logically compatible. Hence, the very moment one cheats, one also excludes oneself from the game, therefore one cannot win [4] (p. 24). This is the so-called (logical) incompatibility thesis. Second, formalism is not and cannot be the normative theory for three reasons—one, formalism does not point out any moral value or principle besides obeying the rules; two, playing by the rules is just not enough in terms of playing sports morally; and three, playing (only) by the rules does not have the normative force to produce nor ethical guidance in sport nor to build normative theory. Finally, rules do not ‘cover’ all the situations in sport. In other words, we do not have rules for everything that is happening in sports competitions. In such cases, argue D’Agostino and Morgan, we lean on conventions or ethos [1]. The problem is that conventions do not provide us with normative force either, mostly because of their questionable normative force.

Formal rules are only the outer shell of the game. It is the history of the game—its sustaining traditions, lively passions, storied commitments, and evolving standards of excellence—that flesh in that shell, and enliven it as the specific kind of human practice that it is. [2] (p. 18)

Unlike formalism (or conventionalism), what makes internalist conceptions normative (enough) in ethical terms is the inclination to detect internal values of sport to be able to preserve them while playing sports and accord the actions one take in sports with that inclination. In that regard, IVS are the core of the conception of internalism presented in three modus with the normative background developed by three scholars presented and established through four major bibliographical efforts and under three names:

- (1) historicistic conventionalist internalism: introduced by W. J. Morgan [1,2] and leaned on in previous work of Suits and MacIntyre;
- (2) interpretivism: brought by J. S. Russell [6] based mostly on R. Dworkin’s law theory [7], which was added to Morgan’s account;
- (3) broad internalism or interpretive formalism: presented by R. L. Simon [8], heavily relied on in Morgan’s and Russell’s previous accounts, and Butcher and Schneider’s article on fair play in sport [9].

Russell’s interpretivism is based on the analogy with R. Dworkin’s theory of adjudication in the law [7] apropos Dworkin’s model of deep interpretivism in the law. Namely, Russell uses two standpoints of this theory. First, that moral principles are an addition to the rules of law as well as part of it, and second, that moral principles must be applied in resolving the hard cases in the coherent and principled way by the virtue of integrity to achieve the ethical goal of maintaining the principle of ‘justice’ [6] (p. 34). He applied them to sports for resolving the cases of ethical dilemmas in which reference to the rules and ethos is not enough, and the umpires need to do the interpretation of the rules. Just, to be able to do that, Russell replaced ‘justice’ (in law) with ‘excellence’ (in sports). Finally, Russell posed two principles for the rule interpretation which presuppose the value of ‘excellence’:

- (1) Rules should be interpreted in such a manner that the excellences embodied in achieving the lusory goal of the game are not undermined but are maintained and fostered [6] (p. 35);
- (2) [Rules should be interpreted] “to generate a coherent and principled account of the point and purpose that underline the game, attempting to show the game in its best light” [10] (p. 55).

Simon’s broad internalism presupposes the existence of internal principles or norms in the idea of sport that are nor rules nor conventions, and uses ‘excellence’ as the foundational goal of sport, its purpose or the main function [10] (p. 10). Additionally, Dixon [11] involved a form of moral realism, or the necessity to establish “rationally grounded principles about the nature and purpose of sport” [11] (p. 106) to resolve the hard cases in sport, which Russell and Simon adopted [12]. Such realist broad internalism or interpretivism became the leading normative account of sport for two decades or so.

The table shows IVS pointed out by Morgan, Russell, and Simon in their conceptions, together with the references they were using in building them. The only value common to the three interpretivism

accounts is (striving for) excellence. (see Table 1.) Thus, the authors jointly promote a perfectionistic account of sport. Also, it is quite obvious how Russell’s and Simon’s lists complement each other, while, unlike Morgan, they show no interest in contextualizing and historicizing the values within their theories. Russell/Simon’s joint position is that there is the essence of the sport that can be rationally detected and extracted as normative guidance, while Morgan insist that we should include history and social context or ethos in the sports’ normative variable. This is the answer to the questions of where, what, and why started the ongoing, more than a decade long, debate between Morgans’ conventionalist internalism [9,11] and the defenders of broad internalism, such as Lopez Frias, C. Yorke, W. Fraleigh, and C. Torres.

Table 1. List of internal values of sport in three conceptions of internalism with references used to build them.

William J. Morgan’s Historicistic Conventionalist Internalism [1,2]	John S. Russell’s Interpretivism [6]	Robert L. Simon’s Broad Internalism [8]
Internal values of sport:	Internal values of sport:	Internal values of sport:
<ul style="list-style-type: none"> - gratuitous logic of sport - social context and history - striving for excellence - sports practice communities 	<ul style="list-style-type: none"> - ideal of the integrity of games - striving for excellence - equality of opportunity - fair play and sportsmanship - good conduct of games 	<ul style="list-style-type: none"> - underlying logic and principles - striving for excellence - fair play - human flourishing
References:	References:	References:
B. H. Suits (1978); A. MacIntyre (1981)	Suits/Morgan/MacIntyre; R. Dworkin (1986)	Suits/Morgan/MacIntyre; Russell/Dworkin; R. Butcher & A. Schneider (1998)

Two attempts to correct this and bridge the gap, in my belief, deserve special attention—(1) ‘pluralistic (broad) internalism’ presented by S. Kretchmar [13,14] and partly adopted by J. S. Russel [11], and (2) ‘shallow interpretivism’ by S. MacRae [15,16]. On one hand, Kretchmar’s sixfold pluralistic internalism was built on the ‘testing and contesting’ [17] understanding of sport, accompanied by human nature as a biological evolutionary heritage [13] (p. 93). He provides practical explications and normative emphasis [13] (p. 86) of broad internalism in sporting practices, to build “comfortable balance among the influences of socialization, reason, and the bio-psychological wherewithal we bring to the sporting project.” [13] (p. 96) He introduced six models of sporting endeavors that characterize sports in one of its best lights: (1) achievement and excellence model of sport, (2) serendipitous, (3) epistemological, (4) aesthetical, (5) existential-individualist, and (6) communitarian versions of the sport.

The quest for excellence is certainly defensible and attractive, but so are the quests for drama, narrative unity, knowledge, opportunity or serendipity, individual identity, and solidarity or community. [13] (p. 98)

On the other hand, S. A. MacRae’s shallow interpretivism [15,16] aims to offer a new and defensible normative model, because broad internalism fails in three ways—first, in demonstrating that excellence can function as the foundational goal of sport; second, in proving that excellence is an ethical value [15] (p. 292); and third, in providing insights into the species of value at which goal-directed activities of sports practitioners aim to [15] (p. 285). Thus, to introduce his model that suits sport the best, MacRae distinguishes four species of values: perfectionist (excellence), prudential (well-being), ethical (fairness), and aesthetical (beauty and sublime); and three levels of understanding—the first level assumes the role of ultimate or foundational goal and provides norms and principles, the second realizes and combines specific intrinsic values which further generate the norms and principles at

the first level, while the third requires the state of integrity or internal consistency in endorsing the authentic set of values [15] (p. 286). Shallow interpretivism is a model without a third level goal and “norms at the first level are generated from different second-level values, none of which should decisively settle all conflicts or principles” [15] (p. 292).

3. Bio-Technologized Sport

Under the term bio-technologized sport (BioTS) I understand the present (historical) state or a version of the sport that has embraced bio-technologies novum in every aspect in which it can help in enhancing the competitive excellence of sportsmen to able them to win and, if possible, break records. However, as such a broad position encompasses many specific positions and characterizations of BioTS, I will narrow it down to just a few that will help me in building an ethical position for regulating the inclusion of bio-technology in sport. Here, I take a lead from W. J. Morgan [18,19], S. Loland [20], and M. Sandel [21].

On one hand, I accept Morgan’s threefold historical development of modern sports in which he distinguishes amateur, professional, and scientific conceptions of sport in the specific historical period, where I lean on the scientific one. In the late 19th century period of ‘gentleman-amateur sport’ in Britain, sport was “pursued principally for the love of the game” [18] (p. 82), anti-strategically and guided by “aesthetic ideal of balance and proportion borrowed from the ancient Greeks” [18] (p. 84). In the first part of the 20th century the rise of professional sport took place in the United States. Here, the emphasis was put almost exclusively on winning, and thus to strategic thinking and conduct, as well as to efficiency and specialization in every aspect of the sport [18] (p. 86). Scientific present-day sport is “all about surpassing previous limitations on athletic performance by incorporating the best that science and technology have to offer” [19] (p. 30). Scientific sport is after making the sport-engaged humans their best competitive athletic versions with fulfilled physical potential. The end of such a sport is enhancing humans to the ‘Gattaca’ level (after the movie Gattaca). Furthermore, Morgan sees the line separating opposing pro et contra sides. On one side, there are the ones, like W. M. Brown [22], who claim that sport should accept all the latest scientific advances that can help competitors in striving for competitive ends. On the other side are the ones, like M. Sandel and R. Simon, that are resisting free usage of pharmacological and genetic aids in sport, stating that “corrupt athletic competition as a human activity that honours the cultivation and display of natural talents” [21] on one hand, and that drug usage is not at all in accordance to ‘purpose of athletic contest’ [23]. Through Sandel’s words:

The problem with [performance-enhancing] drugs is that they provide a shortcut, a way to win without striving. But striving is not the point of sports; excellence is. And excellence consists at least partly in the display of natural talents and gifts that are no doing of the athlete who possesses them [. . .] The real problem with genetically altered athletes is that they corrupt athletic competition as a human activity that honors the cultivation and display of natural talents. [21] (pp. 28–29)

On the other hand, I accept Loland’s threefold discern to (1) non-theory, (2) thin-theory, and (3) thick-theory of sports regarding usage and embracing the technology in sport. ‘Non-theory’ is in fact ‘external’ or ‘instrumental’ theory, because it accepts “any kind of sports technology as long as it serves the purpose of reaching the desired external goals”, such as prestige and profit. ‘Thin-theory’ is ‘equality’ theory with the positive attitude to acquiring equality of opportunities and objective and optimal conditions for all participants of testing human sporting limits. Thus, according to the thin theory, every technological advancement is acceptable if it is available to all competitors involved in the supposedly equal terms and conditions. Finally, ‘thick-theory’ or ‘regulative’ theory aims to differentiate between acceptable and non-acceptable technology in sport [20] (p. 171). Here, Loland is speaking through Aristotle’s lenses: “sport ought to be an arena for human development and flourishing and one among many elements of the good life” [20] (p. 167). He finds two footholds of regulating the sports performances through the ‘norm of relevance’ that states “we should not treat

people differently in significant matters based on inequalities upon which they cannot influence in any significant way" [20] (p. 169)—(1) interaction between genes or "genetic predispositions to develop abilities and skills of relevance to sport" and (2) interaction between genes and the environment, which constitutes many elements, such as:

the organism of the [athlete's biological] mother, via the first nurture and family upbringing and the general material, social-psychological, social and cultural influences, and to sport specific influences in terms of training and access to relevant material, financial, and human resources. [20] (p. 168)

Accepting Morgan's description of the scientific historical phase of sport and Loland's accounts, I will lean the most on thick or regulative theory for several reasons. Firstly, it is following Aristotle's account of *eudaimonia* or human flourishing and well-being [24]; secondly, it supports the view that sports performance should be all about natural talent combined with environmental influence, where athletes' efforts are crucial [20] (p. 7); and thirdly, it provides clear directions towards (non)welcoming bio-technology in sport.

4. Internal Values and Bio-Technologized Sports

Previously shown analysis on internal values in/of sport within internalist normative theories has been mostly mono-dimensional considering (almost only) the value of excellence as the central, ultimate, and essential. Here, I will produce an analysis of the value of excellence and show that despite the fact that it is a single value, it appears in many forms and alterations depending on different factors like social context, understandings of sport in general, and 'sport kinds' in particular, and sport practicing specifics. Furthermore, two notions seem to be crucial and central—excellence and enhancement. It seems that BioTS for many members of sports practice communities aims for excellence in its absolute extreme—for constant record-breaking and competition-winning. For them, acceptance and immediate usage of everything that biotechnology can offer to enhance the sports' competitive performance seems to be the only paradigm in sports. Such views bring concern and the need for regulation. This paper hopes to be a small step in that regard.

However, besides excellence there are other different internal values that can provide normative strength in sports and can shape ethical norms and principles. As noted before, Kretchmar points to serendipitous, epistemological, aesthetical, existential-individualist, and communitarian values [13], MacRae to prudential, aesthetical, and ethical ones [15], while Martinková added also experiential, competition, self-knowledge, ascetic, meaning, and sport-specific internal/intrinsic values of sport [5].

Value of Excellence

Excellence seems to be the key term as well as the normative position in the literature thus far. Two questions regarding excellence seem to me as the most striking. First, what is excellence, and second, can it serve as normative guidance?

I consider excellence as a perfectionist value, which is pointed out by sports internalists as an answer to the question of what is the nature of sport, essence, and purpose of sport. Their answer is "to develop and exhibit excellence at overcoming the sport-specific obstacles created by the rules" [8] (p. 10). Here, it seems important "not [to] confuse excellence, which is attainable, with perfection, which is best seen as a goal that we lucidly see as unattainable yet desirable." [25] (p. 17) It is also worth noticing that, as well as the internalism itself, the key value of excellence was also introduced and pointed out already by Morgan—only through MacIntyre's lenses [1]. Russell later added the value of "integrity" that is implicit in applying the value of excellence to resolve "hard cases" of sport "in a coherent and principled way" [3].

Additionally, contrary to internalism, in my view excellence is not a monistic value but pluralistic, and there are many (versions of) excellence, not just one. So, it seems to me that one should not look on excellence as one value but as many. Therewithal, excellence is a value that has to be effectuated

and it is always excellence in/of something specific and actual and not excellence per se. On one hand, depending on and in relation with social context and history, the same type of excellence can appear in many different forms. In such a view, being excellent in physical endurance in football/soccer in the 1960s is in many respects disparate from 2000s and today. Also, the excellence of intensity of playing and training can be utterly dissimilar in the (social) context of poverty and lack of life opportunities than in the context of highly-developed western society. On the other hand, in terms of different specified criteria related directly to diversity of sports and its disciplines value of excellence can also be interpreted and considered in quite different ways. For instance, the value of excellence in speed is in many respects dissimilar in athletic discipline 100 m running and basketball. Moreover, within the same sport, different excellences appear in several ways. For instance, in basketball excellence can appear as excellence in playing defense or offence, dribble, rebound, or assists. More so, there are different excellences for different positions in the basketball team—thus, the excellence in being a playmaker (point guard) is quite unlike the excellence in being a power forward. More precisely, to acquire excellence, the point guard should be excellent at dribbling, passing, anticipating, and ‘reading’ the opponent team’s offence, decision-making . . . Finally, the same excellence can be practiced or actualized in several ways within the same sport. Thus, to stick with the basketball examples, defense can be played excellently as a zone defense in many variations—as a match-up zone, 2-3 zone, 1-2-2 zone, point-zone, buzz-twilight zone, or circle defense.

However, the described examples indicate that sometimes the particular value of excellence (of being an excellent point guard) necessitates previous obtainment of several other excellences (in dribbling, passing . . .), which on the other hand connote that there are miscellaneous other excellences of this type. And that connotes further the presence of diverse inner types of excellence that can be (or should be) classified and hierarchized in some order—due to their complexity, comprehensive or universalistic character, type of sport and/or discipline, gender group referment...

Additionally, the value of excellence was quite different in certain periods of sports history, it is changing and developing through the same history together with sports, per se [20]. Furthermore, in a different social context, unique ethos within the sport practice communities influence quite dissimilar understandings and roles that the value of excellence has [26] (pp. 241–242). Also, excellence in team sports like basketball or football is not the same as within individual sports such as figure skating or high jump. This is similar, as MacRae explains, for ‘test-based’ (like athletics and gymnastics) and ‘oppositional’ sports (like soccer and tennis) [16], which Suits distinguishes as “judged or performance-sports” and “refereed or games-sports” [27]. Thus, “the excellences embodied in achieving the lusory goal of the game” are distinct—‘excellence simpliciter’ in the former and the ‘comparative excellence’ in the latter [16] (p. 7). According to MacRae, in oppositional sports:

‘the excellences embodied in achieving the lusory goal’ of the game serve conflicting goals and these conflicts are foundational to the enterprise. The whole point of such sports is that the competitors try to exercise their skills and abilities to frustrate the success of their opponent or opponents. But in acting in accordance with the demands of their oppositional sport they also thereby violate broad internalism’s internal principle [of excellence and integrity]. [16] (p. 8)

Another problem with excellence is that it is not always ethical, although it often is [15] (p. 293). Examples of boxing and different martial arts where excellence requires profound ways of harming others just emphasizes the problem. More so, many training methods and disparate ways of playing (professional) sports to achieve excellence are harmful and morally questionable and/or unacceptable. Probably the best example in this regard is a recent brain concussion case in American NFL, which was discussed in the literature by scholars like J. Lopez Frias, M. McNamee, J. Hardes, and J. Fry.

All mentioned above lead to one simple and clear conclusion—excellence cannot provide us with the universal ethical normative guidance in all the (hard) cases in sport, nor it can be regarded as a sole standard to regulate acceptance and involvement of bio-technology in sport. Secondly, despite the undoubtedly extremely important role of excellence in sport, it should be considered as a pluralistic

value that can appear in different concrete forms in sport. In that regard, excellence should be precisely and particularly determined with respect to the relevant aforesaid factors, historical and social context. Finally, other values should be considered and taken into ethical normative account.

5. Five Criteria Model for Regulating Acceptance of Bio-Technology in Sport

My standpoint is that the sport needs to have (as precise as possible) regulations for accepting and embracing new technologies in sport, based on (as) strong (as possible) criteria. Also, once established, criteria should be the subject of the constant critical oversight of the sports practice community, accompanied with the permanent criteria debate—a kind of deliberation which will lead to their continual improvement. Thus, in my view, the central question is which biotechnological advancement we accept and why? Answers to those questions depend on three distinct understandings—of the notion of excellence (in sport) we accept; of the kind of normative model we implement or we are guided with; and of the intrinsic values we find fundamental in that regard. Here, I lean on Aristotle, who seems to give us all the basic principles we need for the guidance in altering them for today's BioTS.

Aristotle's normative ethical theory of *eudaimonia* is the most optimal for sports for several reasons. Firstly, his theory is a perfectionist one, which means that the goal, hence moral obligation, is to develop human nature and naturally given capacities. Hurka distinguished three forms of perfection in Aristotle's theory—physical or bodily perfection, theoretical and practical, both perfection of human soul and rationality [28] (p. 37). In terms of sport, bodily perfection is the primary, despite the fact that it is the lowest for Aristotle. However, "Aristotelian perfectionism finds the highest physical good in great athletic feats." [28] (p. 39) Secondly, even though physical perfection can acquire health, reproduction, and survival, through sport a combination of the bodily with theoretical and practical rationality, perfection can be accomplished. As Hurka states: "Athletes such as Wayne Gretzky solve sophisticated tactical problems during their games, as do scientific researchers and politicians." [28] (p. 123) Thirdly, through mixing physical with rational goods, "solve strategic problems at the same time as exercising the body", sport is suitable for "a well-rounded life" [29] (p. 90). The obvious choice here is being involved in sports which develop physical as well as practical and theoretical skills [29] (p. 96).

Finally, the five criteria model that I propose here could be of help in determining which bio-technology to include in sport and why:

- (1) **NATURAL TALENT.** The first criterion provides respect for the natural human talents that come with genes and assure human development in that regard. To be precise, Aristotle talks about perfecting or realizing our nature that is distinct and unique among all the other creatures, not just our natural talents, and especially not only bodily or physical talents. Still, it is our purpose or function (as well other living beings) to develop our nature, especially because it is the way of reaching *eudaimonia*. However, from the point of the view of sports, the first criterion goes towards not interfering with the genetically received biological package and the predisposition of athletes "to develop abilities and skills that of relevance to sport" [20] (p. 6). More so, it excludes all the technology that enhance athletes without putting significant personal physical effort in training and competition. It also excludes every possible 'Gattaca' future of sport and realization of the genetically designed 'homo athleticus'.

The real problem with genetically altered athletes is that they corrupt athletic competition as a human activity that honors the cultivation and display of natural talents. From this standpoint, enhancement can be seen as the ultimate expression of the ethic of effort and willfulness—a kind of high-tech striving. [21] (p. 25)

- (2) **PERSONAL EFFORT.** The second criterion intends to exclude bio-technologies which undermine the fundamental importance of human (sporting) development through efforts and training. According to this criterion, bio-technologies that lack respect for athletic training, effort, and skills, and provide different enhancing 'shortcuts' for athletes have no place within sporting endeavors.

“[Athletes’] own efforts in this respect are of crucial importance. Sport performances, then, become matters of our abilities to cultivate our talent through training, and our efforts in competitions. This interpretation of athletic performance enables the realization of talent prescribed by the Aristotelian principle”. [20] (p. 7)

Despite the fact that Aristotle does not use the term ‘effort’ or ‘training’ as such, it is obvious that the person her/himself should realize her/his own potential given by nature through striving and undertaking significant or even extreme efforts. In terms of sport, that means committed training and attempting to win, which brings development in/and self-realization of our own human nature to the highest possible level

- (3) HUMAN FLOURISHING. The third criterion goes towards promoting the realization of the human talents as a part of human nature. In his study on perfectionism, Hurka [28] “advocates that humans have an obligation to develop human nature, the central human talents and capacities, to the highest possible level.” [28] (p. 89) Here, the most applicable is Aristotle’s comprehensive (or secondary) account of *eudaimonia* [24] (1178a, 9–20) that includes, besides excellence of *areté* or moral virtue and practical wisdom, a series of human concerns and actions, including bodily, which lead to the well-rounded life of the well-balanced person. Therefore, the third criterion promotes personal growth and flourishing through self-realization as a human being, and even finding life purpose in and through sports. Here, sport strivings can be considered as a human good per se, while sport can be an integral part of human existence. That means, we should allow bio-technology that respect athletes as unique human beings and support “choice of the technology that seems to promote human values and respect the individual athlete, and rejects technologies that do not” [20] (p. 8).

Martha Nussbaum argued, following Aristotle, that our perspective on morality is conditioned profoundly by our understanding of what it is for beings like us to flourish. Our quest for the good life takes place against a background of our natural limitations. We can shift and alter those limits in the process of seeking greater human achievements, just as the athlete surpasses what was thought possible by straining against the existing limitation of the human body. But we need the broad idea of such a limitation to make sense of the surpassing performance. [30] (p. 178)

- (4) INTRINSIC VALUES. The fourth criterion inclines to the bio-technologies that contribute to the values of sport. In the internalist view, excellence and (its) integrity are criteria enough in this regard. I find this (broad) view narrow and not sufficient enough. Here, I would like to make a few points. First, I believe we should consider internal values in/of as intrinsic because they are not just internal but rather essential for sports (and they are not the essence of sport). Second, the single value of excellence, even in its pluralistic view, is not enough for the purpose broad internalists intended it for. More intrinsic/internal values should be taken into account here. Finally, a new and broader model for/of intrinsic values of sport is needed, where values will be seen in its social and historical sport-practicing context. In this regard, I salute previous literature strivings in that direction by scholars like Morgan [20,21], Martinková [5], Kretchmar [13], Berg [26], and MacRae [15,16]. In this area also lies my own interest and recent work [31].
- (5) EQUALITY of opportunity to use new bio-technological advancements is the fifth criterion. It demands that all sport practitioners involved in the joint competition should have equal conditions and access to all bio-technologies relevant to the sports competition. Here I disagree with Breivik’s claim that such equality in conditions is needed only among children and youngsters, while “more inequality at higher levels is needed if the highest perfection is to be reached.” [29] (p. 103) In my view, we have diverse categorizations in sport where most of what Breivik demands is already in motion. On the other hand, for every sporting competition it is essential that

all competitors have the equal starting point, which means equal conditions and chances for competitive success.

It should be noted at the end that the five criteria sketched here need further development and adjustment to the (un)predictable concrete situations in today's BioTS. However, it seems to me that they can provide ethical guidance and help in decisions on whether to accept and use new bio-technologies in sport.

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References

1. Morgan, W.J. The Logical Incompatibility Thesis and Rules: A Reconsideration of Formalism as an Account of Games. *J. Philos. Sport* **1987**, *14*, 1–20. [[CrossRef](#)]
2. Morgan, W.J. *Leftist Theories of Sport: A Critique and Reconstruction*; University of Illinois: Urbana/Chicago, IL, USA, 1994.
3. MacIntyre, A. *After Virtue: A Study in Moral Theory*; University of Notre Dame Press: Notre Dame, IN, USA, 1981.
4. Suits, B.H. *The Grasshopper: Games, Life and Utopia*; University Press: Toronto, ON, Canada, 1978.
5. Martinková, I. *Instrumentality and Values in Sport*; Charles University in Prague: Prague, Czech Republic, 2013.
6. Russell, J.S. Are Rules All an Umpire Has to Work with? *J. Philos. Sport* **1999**, *26*, 27–49. [[CrossRef](#)]
7. Dworkin, R. *Law's Empire*; Harvard University Press: Cambridge, MA, USA, 1986.
8. Simon, R.L. Internalism and internal values in sport. *J. Philos. Sport* **2000**, *27*, 1–16. [[CrossRef](#)]
9. Butcher, R.; Schneider, A.J. Fair Play as Respect for the Game. *J. Philos. Sport* **1998**, *25*, 1–22. [[CrossRef](#)]
10. Russell, J.S. Broad internalism and the moral foundations of sport. In *Ethics in Sport*, 2nd ed.; Morgan, W.J., Ed.; Human Kinetics: Champaign, IL, USA, 2007; pp. 51–66.
11. Dixon, N. Canadian figure skaters, French judges and realism in sport. *J. Philos. Sport* **2003**, *30*, 103–116. [[CrossRef](#)]
12. Russell, J. Moral Realism in Sport. *J. Philos. Sport* **2004**, *31*, 142–160. [[CrossRef](#)]
13. Kretchmar, S. Pluralistic Internalism. *J. Philos. Sport* **2015**, *42*, 83–100. [[CrossRef](#)]
14. Kretchmar, S.R. Simon on Realism, Fallibilism, and the Power of Reason. *J. Philos. Sport* **2016**, *43*, 41–49. [[CrossRef](#)]
15. MacRae, S.A. Toward a shallow interpretivist model of sport. *J. Philos. Sport* **2017**, *44*, 285–299. [[CrossRef](#)]
16. MacRae, S.A. The Conflicting Excellences of Oppositional Sports. *Sport Ethics Philos.* **2020**, 1–14. [[CrossRef](#)]
17. Kretchmar, S.R. From Test to Contest: An Analysis of Two Kinds of Counterpoint in Sport. *J. Philos. Sport* **1975**, *2*, 23–30. [[CrossRef](#)]
18. Morgan, W.J. Broad Internalism, Deep Conventions, Moral Entrepreneurs, and Sport. *J. Philos. Sport* **2012**, *39*, 65–100. [[CrossRef](#)]
19. Morgan, W.J. The normativity of sport: A historicist take on broad internalism. *J. Philos. Sport* **2016**, *43*, 27–40. [[CrossRef](#)]
20. Loland, S. Technology in Sport: Three Ideal-Typical Views and Their Implications. In *The Ethics of Sports Technologies and Human Enhancement*; Murray, T.H., Chuan, V.T., Eds.; Routledge: London, UK, USA, 2017; Volume 13, pp. 163–173.
21. Sandel, M.J. *The Case against Perfection: Ethics in the Age of Genetic Engineering*; Harvard University Press: Cambridge, MA, USA, 2007.
22. Brown, W.M. The Case for Perfection. *J. Philos. Sport* **2009**, *36*, 127–139. [[CrossRef](#)]
23. Simon, R. Good Competition and Drug-Enhanced Sport. In *Ethics in Sport*, 2nd ed.; Morgan, W.J., Ed.; Human Kinetics: Champaign, IL, USA; pp. 245–252.
24. Aristotle. *Nicomachean Ethics*; Sachs, J., Translator; Focus Publishing/R. Pullins Company: Indianapolis/Cambridge, MA, USA, 2002.
25. Ilundáin-Agurruza, J. Nothing New Under the Sun: Holism and the Pursuit of Excellence. *Sport Ethics Philos.* **2014**, *8*, 230–257. [[CrossRef](#)]
26. Berg, A. The Ethos of Excellence. *J. Philos. Sport* **2015**, *42*, 233–249. [[CrossRef](#)]

27. Suits, B.H. Tricky Triad: Games, Play, and Sport. *J. Philos. Sport* **1988**, *15*, 1–9. [[CrossRef](#)]
28. Hurka, T. *Perfectionism*; Oxford University Press: Oxford, UK, 1993.
29. Breivik, G. Philosophical Perfectionism—Consequences and Implications for Sport. *Sport Ethics Philos.* **2010**, *4*, 87–105. [[CrossRef](#)]
30. Coady, C.A.J. Playing God. In *Human Enhancement*; Savulescu, J., Bostrom, N., Eds.; Oxford University Press: Oxford, UK, 2015; pp. 155–181.
31. Škerbić, M.M. William John Morgan’s Ethics of Sport. Ph.D. Thesis, Faculty of Humanities and Social Sciences of the University of Zagreb, Zagreb, Croatia, 2019. Available online: http://darhiv.ffzg.unizg.hr/id/eprint/11557/1/Skerbic_Matija_Mato.pdf (accessed on 28 September 2020).



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