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THE NATURE OF SPORT

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ABSTRACT

The relation between playing, game and sport is of central interest to the author. Playing is understood as a cultural tool that enables us to 'leap' from everyday, paramount reality, transporting us from habitualized cognitive responses to more unpredictable, possibly also creative responses to stimuli. Four ideal type worlds of pretence are generated by playing: games (a parallel world in which we create unnecessary obstacles and try to overcome them), performances (a parallel world in which aesthetic artefacts are created), rituals (a parallel world in which supernatural experience is sought) and experimentation (a parallel world in which hypothesis about the world are constructed and then examined). The four emergent forms of playing overlap in different ways in concrete cultural contexts. In tribal communites, it is for example often difficult to distinguish religious rituals from sport games. At the other extreme, in contemporary modern societies, it is sometimes difficult to distinguish a sport game from a performance (for example in gymnastics). Sport games are also often scientised (methods of training, psychological preparation, use of performance enhancing drugs etc.). Sport is often also contaminated by everyday, paramount reality (professionalisation, routinisation, standardisation of the game etc.). It is characteristic of modern societies that playing in general and sport games in particular are becoming increasingly organised. This is probably the consequence of a paradox: as productive efficiency in modern societies rises, the average individual work time also increases. On the average, we do not have more leisure time at our disposal in modernity. As our leisure time shrinks, we can resolve the problem in at least two different ways: we can problematise leisure time as such, or we can organize it better and spend it in a more efficient manner.

Key words: game, play, sport, leisure time

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POVZETEK

Avtorja prispevka zanima odnos med igranjem, igro in športom. Igranje razumeva kot kulturno orodje, ki omogoča 'skok' iz vsakdanje, vseprisotne resničnosti in nas prestavi iz območja običajnih kognitivnih odzivov v območje bolj nepredvidljivih, a včasih tudi kreativnih odzivov na dražljaje. Igranje proizvaja štiri idealne tipe svetov pretvarjanja: igre (vzporedni svet, v katerem si sami postavimo ovire in jih nato skušamo premagati), predstave (vzporedni svet, v katerem ustvarjamo estetske artefakte), rituali (vzporedni svet, v katerem iščemo nadnaravno izkustvo) in eksperimentiranja (vzporedni svet, v katerem postavimo in preverimo hipotezo o svetu). Štiri pojavne oblike športa se prekrivajo na različne načine v konkretnih kulturnih kontekstih. V plemenskih skupnostih je pogosto težko razločevati med religioznimi rituali in športnimi igrami. V drugi skrajnosti, v sodobni moderni družbi, je ravno tako pogosto težko razločiti, ali je določen šport igra ali predstava (npr. pri gimnastiki). Športne igre so pogosto tudi znanstveno obarvane (metode treninga, psihološka priprava, uporaba substanc za izboljšanje učinkovitosti, ipd.). Športi so pogosto tudi onesnaženi z vsakdanjo, vidno realnostjo (profesionalizacija, rutinizacija, standardizacija igre, ipd.). Za sodobno družbo je nasploh značilno, da igranje in še posebej športne igre, postajajo vse bolj organizirane. To je verjetno vzrok paradoksa: ko se v sodobnih družbah dvigne delovna učinkovitost, se dvigne tudi povprečje delovnega časa posameznikov. V povprečju sodobni ljudje nimamo na voljo več prostega časa, ko pa se naš prosti čas krči, imamo na voljo dve rešitvi: lahko sam koncept prostega časa problematiziramo ali pa ga bolj organiziramo in ga izrabimo na bolj učinkovit način.

Ključne besede: igra, igranje, šport, prosti čas

INTRODUCTION

Three issues are addressed in the paper. The first one is a terminological one: concepts taken from everyday life often have numerous, only partially overlapping meanings. If they are used in scientific research, ambiguity may arise as to what precisely is meant by the concepts in their context. Three such everyday concepts (play, games and sport) will be analysed in an attempt to introduce greater clarity to their use in science.

The second issue is a theoretical one: how to understand play, in which all games and sports are embedded. We opt for the evolutionary theoretical perspective. If play is universal in all more developed animals and most evolved precisely in humans, then it must make some sort of evolutionary sense. The question of our fascination with play is also addressed in the second part of the paper.

The final issue addressed is the culturally specific manifestation of sport in modern societies. Primarily, the reasons for its increasing level of organization are analysed.

PLAY, GAMES AND SPORT

The meaning of "sport" which interests us is closely related to "play" and "game". Etymologically, the root of the word sport is derived from Old French "desporter" which means "to divert oneself in a light, frolicsome manner" (The Free Dictionary a). Today, the meaning of the word "sport" that interests us is: activity requiring physical skill and which is often of a competitive nature (Random House Unabridged Dictionary, 1987, p. 1844). We see that the meaning of the concept has changed substantively. The modern concept denotes a relatively autonomous activity in which diversion is sought in physical activity itself, relatively independently of religious or productive considerations. The word "game" is derived from Old English "gamen" which means "people together", companionship, and, since approximately 1300, also "contest played according to rules" (Online Etymology Dictionary a). This meaning is still similar to the contemporary meaning of the word "game": an amusement or pastime, a contest with rules to determine a winner (The Free Dictionary b). The word "play" has its root in Old English "plegian" which means "to exercise, frolic, perform music" and was in general opposed to work (Online Etymology Dictionary b). The contemporary meaning of the word is still similar: to occupy oneself in amusement, sport or recreation (The Free Dictionary c).

We see that the three words converged towards similar cognitive states (amusement) and activities (ones distinct from everyday routines). Their meanings seem to overlap, but how are they understood today? What is their interrelation? Today the relation between the three concepts is hierarchical: play has the broadest meaning, followed by games and sport as more specific.

Bernard Suits distinguishes two forms of play. The most rudimentary is "primitive play" (Suits, 1995b, p. 16-17). He gives an example of a baby playing with the water in his bath. The skill learned (more efficient ways of splashing water) is not the payoff the baby is seeking. What gives him pleasure is the splashing of water itself, the introduction of a new experience that arises accidently. Or in the words of Klaus V. Meier (1995, p. 32): play is an autotelic activity, pursued voluntarily for predominantly intrinsic reasons. An example of a more structured, "sophisticated play" is given by Huizinga (1995, p. 5) – a child pretending that a row of chairs represents a train and then playing with it.

According to Suits (1995a) and Meier (1995), games and sports may or may not be play; if they are involuntary and extrinsically motivated, they are not. There is another crucial difference between play, game and sport. For play, one person suffices; it is defined by the cognitive attitude of amusement, of detaching oneself from everyday life and of entering the world of play. In contrast, games and sport are usually more socially structured activities of actors in social networks.

Suits also defines the internal characteristics of games which distinguish it from everyday activity. According to him, "...to play a game is to engage in an activity directed toward bringing about a specific state of affairs, using only means permitted by rules, where rules prohibit more efficient in favour of less efficient means, and where such rules are accepted just because they make possible such activity" (ibid., p. 24). In soccer, offside, kicking the ball with your legs and prohibition of tripping opponents would be examples of such rules. In Suits' definition of a sport game, it is a combination of a goal (winning), means (permitted methods), rules (creating unnecessary obstacles to the achievement of the goal) and a lusory attitude (mentally adopting the rules of the game) (Suits, 1995a, p. 8-10).

In his later work, Suits distinguished sports that are games from those which are not. In sport games, rules are the crucial (for example the offside rule in soccer), while in performance sports, ideals are essential and are to be approximated. In soccer, the elegance with which a goal is scored is appreciated by the audience but is not crucial to the result, whereas in gymnastics, for example, the elegance with which a gymnast dismounts the parallel bars is (Suits, 1995b, p. 19). The distinction between the two types of sport is undoubtedly significant, but his conclusion that sports like gymnastics, ski jumping or diving are not games is, in our opinion, questionable.

Be that as it may, according to Suits, the relationship between play, games and sport can be illustrated with three partly-overlapping circles where seven different forms are distinguished (ibid., 1995, p. 20): (1) primitive play (child splashing water in the bathtub), (2) sophisticated play (child pretending that a row of chairs is a train composition), (3) professional nonathletic events (a game of cards like poker), (4) amateur performances (a group of children performing roles from Harry Potter novels in the home yard), (5) amateur games (a group of children playing soccer in the home yard), (6) professional athletic games (professional athletes running the 100-meter dash), and (7) professional athletic performances (professional gymnast performing on parallel bars). His basic claim is that all sports are not necessarily play (for example a professional soccer game) or games (for example a gymnastic performance).

Meier's position is somewhat different. According to him, all games are not sports (for example a game of cards) but all sports are games. Unlike Suits, he does not categorise sports into games and performances. For a game to be a sport, it requires physical skill by participants pursuing the goal of the game (Meier, 1995, p. 24). Sport games are forms of play only when they are performed voluntarily and for intrinsic reasons (ibid., p. 32). When play is a part of a sport game, it enriches it (ibid., p. 33), but is not necessarily a part of it.

Graphically, the relationship between play, games and sport according to Meier could be expressed by two partly overlapping circles of play and games, with the third circle of sport being enriched within the game circle but only partially within the circle of play (ibid., p. 33). To summarise: Meir's basic claim is that all sports are games but not necessarily play.

Our conception of the relationship between play, game and sport is somewhat different from both Suits and Meier. First, the theoretical background for our position has to be elaborated briefly.

Theory of play is balanced between two extreme ways of understanding it. According to some, play is something irrational, merely fanciful, a pale shadow of reality, deceptive, trivial, useless, something that children do but should be educated out of. Others claim that it something that is free and poetic, which is eventually lost in the educational prison house (Meadows, 2006, p. 440). In our opinion, both extreme Positivist and extreme Romantic interpretations of play do not give an adequate explanation of this complex phenomenon.

As human beings, we spend most of our time in everyday life, in tangible reality. This is the time we are wide awake, perceiving life as normal, self-evident and natural. It is a taken-for-granted reality, not requiring additional verification. It is simply there; we know that it is real and apprehend it routinely (Berger & Luckmann, 1979, p. 35-38). In comparison, other realities appear as finite provinces of meaning, enclaves within paramount reality marked by circumscribed meanings and models of experience. On the cognitive level, typical examples of such enclaves are dreams, drugged states, extreme body states (isolation, fasting, hunger, fatigue etc.) and mental illness. On the cultural level, specific background realities emerge which direct us toward specific forms of behaviour (games, performances, rituals and experiments). They are all examples of what Berger and Luckmann would call finite provinces of meaning, created when we turn our attention away from everyday life and are, as a consequence, empowered to "leap" into one of the enclaves.

In everyday reality, we are preoccupied with questions of production (exchange of energy and matter with the environment) because of individual survival, and questions of reproduction (exchange of hereditary material with other individuals) because of species survival. It is essential from the perspective of individual and collective survival that our reactions to stimuli are habitualised, in keeping with our past experience, and in keeping with the principle of optimization (spending as little energy as the situation allows to achieve the greatest possible energy benefit). In everyday life, our activity is stereotypical and instrumental. Or as Suits describes everyday life: "[The] introduction of unnecessary obstacles to the achievement of an end is regarded as a decidedly irrational thing to do" (in Meier, 1995, p. 24).

However, unnecessary obstacles are exactly what the world of play is all about. These obstacles create a background, different from everyday background that defines an enclave as a distinct sphere of reality. Behaving in accordance with the distinct background of play (its rules, goals and means) we have to pretend (internalize specific lusory attitudes appropriate to play). We can never really escape everyday life; we can only make believe that we have achieved it. In this sense, all enclaves are products of playing and pretence is at the core of all play. Huizinga gives a good illustration of this in children's play, an example of what Suits would call sophisticated play (1995, p. 5):

Every child knows perfectly well that he is 'only pretending', or that it was 'only for fun'. How deep-seated this awareness is in the child's soul is strikingly illustrated by the following story, told... by the father He found his four-year-old son sitting at the front of a row of chairs, playing 'trains'. As he hugged him the boy said: 'Don't kiss the engine, Daddy, or the carriages won't think it's real.' This 'only pretending' quality of play betrays a consciousness of the inferiority of play compared with 'seriousness', a feeling that seems to be something as primary as play itself.

This does not mean that play cannot be taken seriously (when completely absorbed in it, as a rule we do take it seriously) but simply that at the back of our mind we are always aware that it is not

real, that it is a world of pretence. In the world of play we transport ourselves temporarily into a world of pretence, into an imaginary parallel enclave. Our awareness is focused on the world of play, but when something disturbs us (as in the above illustration, when the father disturbs his child's play), a new mental coalition is created in the brain which transports us back to the paramount reality. In play, everyday life is just on temporary stand-by.

Playing is a cultural tool which enables us to "leap" from everyday life by creating a parallel background in which cognitive responses to stimuli are structured according to a new background (different rules, goals and means). Suits distinguishes, as was already mentioned, two levels of playing (1995b, p. 20): primitive play which is weakly structured, more or less spontaneous and individual, and sophisticated playing which is more structured, socially interactive, and involves deliberate practise (for example practising precision shooting in basketball at the schoolyard with friends).

Is sophisticated playing closer to everyday reality than primitive play? In a way, this is true because efficient activity is obviously more significant than in primitive play. Conversely, skills that are practised in sophisticated playing are quite meaningless from the perspective of paramount reality. This raises the question: why do people strive towards greater efficiency of an activity that obviously has no significance from the perspective of everyday life (for example the precision of throwing a ball through a metal hoop)? The activity itself certainly has no utilitarian value because sport games have long been disassociated from physical skills of everyday life.

We can illustrate this historical development with an imaginary example from the distant past of our species. Let us suppose that in the initial stages of the development of our species, a community of fishermen existed somewhere on the African coast fishing in primitive canoes. In such a community, knowing how to swim would be an obvious adaptive advantage for every individual Deliberate practise of the swimming skill would, therefore, be desirable. As further perfection of skill was not possible during fishing (due to concentration of all energy to productive efficiency, not to experimentation), a separate enclave of deliberate practise of swimming in leisure time was favoured. Initially it was still closely associated to production, but with time, the perfection of swimming skills became an end in itself. Fishermen would have seasonal competitions in water physical skills, thus unintentionally creating sport games.

The relationship to play not only varies in the time/space of communities, but also in life cycles. People in different phases of their life have specific understanding of play. A child for example, with a less developed sense of self finds it easier to "leap" into the play world (because the borderlines with everyday reality are less defined) and a less elaborate cognitive interpretation of background (making it more difficult for him to understand more structured examples of play). In contrast, an adult with a defined sense of self finds it more difficult to "leap" from everyday life, but has a better understanding of more complex play worlds. As a result, children play more and their play tends to be more spontaneous, whereas adults play less and their play is more organized and structured.

Adults need substitutes which make "leaping" easier in the absence of a less-developed self. Elias Canetti gives an en example of such a substitute. In his opinion, a crowd makes "leaping" easier for them. In everyday life, an adult has the "burden of distance towards others", he stands "like a wind mill on an enormous plain", but in a crowd "distinctions are thrown off and all feel equal" (1973, p. 18-19). Canetti describes a crowd in an arena in the following manner (ibid., p. 31):

As long as he is there, all the others are there too; whatever excites him, excites them and he sees it. They are seated some distance away from him, so that the differing details which make individuals of them are blurred; they all look alike and they all behave in a similar manner and he notices in them only the things which he himself is full of. Their visible excitement increases his own.

People become unusually suggestible in crowds and their behaviour strangely homogenous. The Mexican wave is a good illustration of this. It starts with a small group of spectators in an arena standing up, lifting their hands and sitting down. With a surprising degree of coherence, the next section of the crowd will repeat the activity, followed by others all around the arena.

Adults also use other substitutes to make their "leap" into the play world easier. Fans in a sport game use such substitutes as alcohol (and drugs in general), rituals (behaviour stressing belonging to the group at the expense of the self; for example: similar images/logos, singing club songs, and other stereotypical forms of group behaviour). All substitutes have one main function: to make adults more childlike, more suggestible and, as a consequence, their "leap" into the play world more likely.

In all known human societies, at least four different types of play worlds, based on distinct forms of pretence are known among adults: a) games (in which a parallel world of pretence is created by players trying to approximate an ideal skill; for example, a physical skill in sports), b) performances (in which a parallel world of pretence is created by players trying to approximate an ideal representation of life; for example, aesthetic production such as storytelling), c) rituals (in which a parallel world of pretence is created by players trying to approximate an ideal form of behaviour; for example, in religious organization as mystical experience), and d) experimentation (in which a parallel world of pretence is created by players trying to approximate an ideal way of classifying the world; for example, in scientific research as a discovery).

An ideal type example of a game enclave is sport, of a performance enclave art, of a ritual enclave religion and of experimentation enclave science. A normal adult human being is able to distinguish all these enclaves from everyday reality. When, for example, playing a game of chess with utmost seriousness, we always know in the back of our mind that it is just a game and that our survival does not really depend on the outcome of the game. When lights go out in a cinema, we transport ourselves into the world that the actors on screen are representing, but we can always return to our mundane every day existences at will. We may believe that personal capricious supernatural actors determine our fate from the day we were born to the day that we will die, but we do not rely on these gods to produce the goods we need for our survival (we instead prefer to rely on our everyday stock of knowledge; for example, when we go hunting). When we construct hypothesis about how a theoretical system of elements in an analytically chosen segment of reality functions and then verify them in laboratory experiments, we can always return from these enclave of mental constructs into the reality of everyday life.

Between bottom-up pressures of everyday life and top-down pressures of playing, different levels of play worlds are created in culturally relative backgrounds of different communities of people. Significant differences cannot be expected in primitive playing as it is to a large extent determined by the universal cognitive characteristics of children, but this is no longer true for sophisticated play and even less so for the more institutionalized forms of play of adults (games, performance, ritual and experimentation), which vary significantly among culturally relative communities. The four forms of play are universal in all human communities and are embedded in paramount everyday reality.

From what has been said of the relation between playing, games add sport to this point, it is obvious that we argue for a different relation between them then either Suits or Meier advocate. In our opinion, the relation between playing, games and sport can be depicted graphically as three concentric circles, with games embedded in play and sport embedded in game.

All sports are games (according to some, also performances) and all games (performances) are play. The elements of play may be more or less marginalized in the concrete social manifestations of sport events, but this does not imply that play did not generate them, that play does not represents their respective backgrounds and that what we are seeking in games and sport are not precisely its playful elements. That play is in the background of all game and sport is obvious from the fact that we enjoy a sport event more if it is carried out in a playful manner than if it is treated as an everyday activity. We can illustrate this with a professional sport game like soccer. While it suffices to be efficient, to score more goals than the opposing team to achieve the goal (winning the game), stressing efficiency above all else draws the game too close to everyday life routine and implies that observers will enjoy it less (let us call this the German approach to soccer, or to be somewhat more fair, the industrial approach to soccer). The majority of sport fans perceive a significant difference between scoring a goal though methodical and routine effort on the one hand or scoring a goal after a brilliant dribble and assistance that defies prediction on the other hand. Whereas the first approach makes fans satisfied, only the second one gives them real pleasure. It thus comes as no surprise that the more industrialized countries in which paramount reality encroached on the sport game (stripping t to a large extent of its lusory attitude) started importing players and managers from the Third World, first from the Balkans and the Mediterranean basin, later also from South America, Africa etc. The unconscious motive behind it was to reintroduce playfulness into the game of soccer (let us call this the Brazilian approach to soccer).

To summarise: for something to be rightfully called a sport event, it has to have specific rules, goals, means and a lusory attitude, which are parallel to paramount reality. Its players must also pursue the ideal physical skills that are characteristic for the game. The element of creativity for creativity's sake is essential. Regardless of how professionalized, commercialized, monetized, advertised, publicized, globalized, media-covered etc. the game is, it will retain its playfulness only as long fans sense the lusory attitude in the players on the pitch.

Function of play

What is the evolutionary function of play? Numerous animals have certain specific patterns of behaviour such as attachment, affectionate interaction, coming to aid, grief at death, individual aggression, sexuality ... and also play (Oatley & Jenkins, 1996, p. 94). Patterns of behaviour become more complex in more developed species. According to P.D. MacLean, mammals have three things which are absent in reptiles - maternal care giving with infant attachment, vocal signalling and play (ibid., p. 139). It is probably the development of the limbic system in mammals that generates play behaviour (ibid., p. 158). Play further develops in primates and reaches its peak of complexity in humans.

Play obviously makes evolutionary sense. But what could this function possibly be? How does it make us more efficient in everyday life?

R.W. Weisberg contrasts deliberate practice (a set of activities specifically designed to improve performance in some skill) with play and work (1999, p. 233):

Play is, of course, carrying out some activity for its own sake. Many individuals report that as children they began some activity as play, but they then changed to practise as they became more serious about a possible career in that discipline. Play does not have the structure of deliberate practise, and so cannot bring about systematic improvement. Work involves performance and competition, for external reward, and the performer is supposed to be at his or her best. Work therefore usually would not provide the opportunity for deliberate practise, since problematic aspects of the skill cannot be isolated and repeated. Indeed, problematic aspects of the skill would probably be actively avoided at such times.

Between the habitualised activity of the work world and the weakly structured world of primitive play there is, as was already noted, the more structured world of sophisticated play and of the four structured play worlds (game, performance, ritual and experimentation). These play worlds, in our opinion, provide ample opportunity for what Weisberg calls deliberate practise. We may play basketball for fun in our backyard or practise it with a coach in a team, we can make accidental noises on a flute or practise a song with a music teacher, we may wonder if God plays dice with the universe before falling asleep or join a religious cult of fanatics with the purpose of killing all unbelievers, we can gather stones on a riverbank and classify them according to shape or colour, or we can study geology at a university.

However, the play world does not merely stimulate deliberate practise (perfection of existing skills, as important as it is for our competence in everyday life), it also has another, possibly even more important function. It can generate innovative, new responses to existing ways of doing things, which are potentially also relevant to others. In short, the play world makes it more probable that our responses to stimuli will be creative.

S.A. Mednic calls our attention to this other function of play. He differentiates (in Bristol & Viskontas, 2006, p. 62-63) creative from uncreative people on the basis of their ability to access remote associates. If a subject in a word association task, for example, is presented with the word "table", the most probable response is likely to be "chair" and a very unlikely one "horse". It is possible to create with repeated testing an associative hierarchy (AH) for each word and plot the probability of each response. According to Mednick, more creative people demonstrate shallow AHs (they recall remote associates with higher probability), while less creative people have steeper AHs (most associates are concentrated around a small number of predictable associates.

In everyday life situations, it makes evolutionary sense to respond to stimuli in strong, predictable ways, because most everyday situations tend to be stable in time/space. As a result, most of us respond in uncreative ways to most stimuli in such situations. Imagine meeting a friend on the street; we do not consciously deliberate whether to step on his foot, pinch him in the cheek or straighten his tie (the creative approach/shallow AHs), but simply shake his hand automatically (the everyday reaction/steep AHs). However, there are also situations in which an automatic response is not the best way of responding. If we happen to meet an extraterrestrial on the street, shaking his hand may not be the best type of response; a creative response (communication with the help of mathematical symbols, for example) would probably be more appropriate.

Evolution of life on the planet is based on the adaption of living beings to changes in the natural environment (accidental mutations of individual beings that give them a comparative survival advantage, causing them to have more offspring with their mutations, gradually changing the mutant trait into a dominant one). We can call the natural environment to which we respond our exogenous environment. More cognitively complex beings also create their own, endogenous environments (social networks on the formal level and cultural meanings on the substantive level) as the background to which they also respond. Some backgrounds stimulate habitualised responses; others creative ones. It is our contention that a specific socio-cultural background that stimulates creative behaviour (shallow AHs in Mednick's terminology) is the play world. It is most complex in human beings with (as was already -indicated) four distinct, emergent forms of background (game, performance, ritual and experimentation).

The function of play worlds is to disentangle us from habitualised everyday responses to stimuli, from steep AHs, and to stimulate us to more creative responses, shallower AHs. This is the evolutionary reason for play, for its ubiquity among cognitively more developed species, from mammals on. How does the play world background achieve this? First, the responses appropriate for the play world are different (what Suits calls parallel world of rules, goals, means and attitudes), making our responses automatically innovative from the perspective of paramount reality. The play world is also strictly confined in time/space, usually with a resolution of the play problem (for example winning the game) that enables us to observe our performance, compare it with that of others and, in this way, stimulate further perfection of skills. In contrast to the everyday world, where the effects of our activity are seldom observable, the play world is more transparent, comprehensible and comparable. Another factor which stimulates innovation in the play world is that the effects of game are meaningless from the perspective of survival in everyday life. The play world is not instrumental. The implication of this is that experimentation in the play world does not have any direct consequences for our survival possibilities, making creative responses more likely. The play world is a moratorium inside everyday life, allowing for experimentation in ways of doing things. As such, it stimulates shallow AHs.

Let us give an example of an endogenous background developing in interaction with innovative responses from the play world of sport. In the 1960s, the basic method of the high jump was the straddle (coming face on the bar, springing with one leg, coming horizontally to the bar and rolling over it). This traditional way of doing the high jump had come to a standstill; the world record had not been improved for quite some time. A young American jumper, Dick Fosbury, had experimented with a new way of doing the high jump since he was in high school: when he came to the bar he turned his back to it and sprang with both legs over the bar. There were two advantages to doing the high jump in this way: Fosbury used both legs to push himself from the ground and there was less likelihood of hitting the bar with his legs. Although there was a lot of opposition to his innovation (sport tradition is after all embedded in everyday life), Fosbury persevered (just barely qualifying for the Mexico Olympic Games and then just barely winning the Olympic high jump event). In this way, his innovation became relevant for others. The Fosbury flop soon became the new play background, the new sport tradition of doing the high jump.

Research suggests that creative children as well as adults tend to be more playful than their less creative counterparts. Scientists who find it easier to play with ideas are as a rule more creative. A creative person must have a persistent reluctance to take things for granted, to divorce oneself from the obvious, to see things from a different perspective, and to be capable of childlike naiveté (Nickerton, 1999, p. 410). As we saw, taking things for granted is characteristic of the everyday, routine way of experiencing life, when we reflect the obvious, see things from the common perspective. It is the play world which can separate us from this paramount, everyday reality, empowering us to look at the world from a different perspective, to experiment.

Play only appears to be superfluous (Huizinga, 1995, p. 5). In reality, it is central to all our innovation and creativity. In human societies, four emergent forms of play (games, performances, rituals and experimentation) stimulate specific areas of activity: in sports physical they stimulate skill, in artistic performance aesthetic pleasure, in religious and humanistic rituals moral empathy and in scientific experimentation knowledge. There are also other manifestations of the four play worlds, but the ones mentioned are most readily recognizable in contemporary modern societies.

From an evolutionary perspective, it makes sense to reinforce activities which are significant from the perspective of our survival in everyday life, by overlapping them with bodily sensations and primary emotions. In this way, these basic functions appear to us to be unavoidable, immediate bodily needs. Sexual behaviour significant for the reproduction of the species is in this fashion reinforced with the pleasure of orgasm. In a similar fashion, aggression for our individual self-preservation is reinforced with primary emotions of fear and/or hatred. In both cases, reinforcement occurs on the level of immediate bodily sensations and primary emotions (with the aid of hormones such as oxitocin in sexual reproduction, for example).

What about play? Play, as we observed, also has a universal evolutionary function. Is it also reinforced on the level of our bodies?

Our first hypothesis is that play backgrounds are important because they stimulate innovative behaviour. This is why, in evolution, play activity has been overlapped with chemical processes in the brain that stimulate the experience of pleasure and of well-being (for example: tickling by the mother generates joy in the infant). The overlapping of activity with pleasure makes it easier for us to store the activity in long-term memory, making it a part of our personal cognitive heritage with which we act in everyday life. Because play has evolutionary significance for our survival, play activity is overlapped with chemical processes in the brain that we experience as enjoyment while engaged in play.

Our second hypothesis is that once we have learned to associate play with pleasure, we will seek it regardless of its evolutionary function. Pleasure will become an end in itself. In this way, play for its own sake gradually evolves; an obvious example of this is a sport event. This solves the apparent paradox of explaining why evolution would favour an activity which in itself obviously has no adaptive advantage (like the already-mentioned skill of throwing a ball through a metal hoop in basketball).

Let us first illustrate the fascination with playing with the example of an aesthetic performance that has probably been studied most by researchers and then infer from it to the sport game. In Ramachandran's view (Ramachandan & Blakeslee, 1999, p. 287-288):

... all art is 'caricature' and hyperbole, so if you understand why caricatures are effective you understand art. If you teach a rat to discriminate a square from, say, a rectangle and reward it for the latter, then it will soon start recognizing the rectangle and show a preference for it. But, paradoxically, it will respond even more vigorously to a skinnier 'caricature' rectangle (e.g. with an aspect ratio of 3:1 instead of 2:1 then to the original prototype!) The paradox is resolved when you realize that what the rat learns is a rule - 'rectangularity' - rather than a particular example of that rule. And the way the visual form area in the brain is structured, amplifying the rule (a skinnier rectangle) is especially reinforcing (pleasing) to the rat, providing a incentive for the rat's visual system to 'discover' the rule. In a similar vein if you subtract a generic average face from Nixon's face and then amplify the differences, you end up with a caricature that is more Nixon-like than the original. In fact the visual system is constantly struggling to 'discover the rule'. My hunch is that very early in evolution, many of the extrastriate visual areas that are specialized for extracting correlations and rules and binding features along different dimensions (form, motion, shading, colour, etc.) are directly linked to limbic structures to produce a pleasant sensation, since this would enhance the animal's survival. Consequently, amplifying a specific rule and eliminating irrelevant detail makes the picture look even more attractive.

Amplification of specific rules (with the biological function of facilitating perception) in a performance gives us pleasure, thus making us experience the event as something aesthetic. In an acoustic narrative (of phonemes, words, sentences), for example, we eliminate all the unnecessary details when recounting past events (either ontologically real or only possible worlds), thus transforming it into a story (a caricature of everyday life) and are rewarded for doing so by experiencing pleasure (the aesthetic enjoyment, for example, of watching a movie). In the non-symbolic acoustic narrative of sound, we eliminate everyday noise from the account, thus transforming sounds into notes as caricatures of everyday sounds, structuring them with harmonies and rhythms) and are rewarded for doing so by experiencing pleasure (aesthetic enjoyment of listening to music with singing and dancing).

This is, in our opinion, the basic drive behind aesthetic pleasure. However, there is also an additional, perhaps unintended effect of aesthetic performance. It enables us to extend our self-conscious experience of life. In everyday life, our habitualised experience is impersonal, automatic and patchy. As a rule, we cannot recall many events, even from the recent past. As Milan Kundera expressed it (Lodge, 2002, p. 31):

We are resigned to losing the concreteness of the present... We need only recount an episode we experienced a few hours ago: the dialogue contracts to a brief summary, the setting to a few general features. This applies to even the strongest memories... We can assiduously keep a diary and note every event. Rereading the entries one day we will see that they cannot evoke a single concrete image. And still worse: that the imagination is unable to help our memory along and reconstruct what has been forgotten. The present - the concreteness of the present as a phenomenon to consider... is for us an unknown planet: so we can neither hold on to it in our memory nor reconstruct it through imagination.

Kundera believes that literature specifically (but this is in our opinion true of aesthetic performances in general) compensates for this slipping into oblivion. According to him, it allows us to possess the continuum of experience in a way we are never able to in everyday reality (ibid., p. 32). Aesthetic performances as representations of life, whether as a story (stripping events of all redundant activities, putting individuals at the centre of activity), as a picture (basic outlines and colours, frozen in a time/space frame), as a piece of music and dance (subordinating noise to repetitive patterns of sound and appertaining bodily motion) etc., always use two crucial, defining methods: amplification and dramatisation. The biological function of this is obvious: it keeps our focus on the performance and in this way extends our self-conscious experience. In human societies, we have learned to interpret this connection as an aesthetic phenomenon.

To summarize: in performances, we amplify rules (putting caricatures of everyday events to the forefront: in a picture with outlines and colours, in music by favouring certain tones and repetitions, in stories with protagonists and events etc.) and, in this fashion, dramatize the narrative. As a consequence, the narrative gives us pleasure and makes it easier for us to consciously relate to it and memorize it. If everyday life is for us to a large extent ordinary and patchy, then a performance strives to be exceptional and continuous. This aesthetisation of everyday life and our appreciation of it also influence our perception of everyday phenomena. Psychologists have noticed that people as a rule have a very unrealistic perception of their role in life. We tend to exaggerate our influence on events and to downplay the role of the background in structuring our activity. This is in our opinion a consequence of our inclination towards aesthetisation of everyday life in play world, a consequence of the pleasure we get from amplification and dramatization of everyday life.

A sport game, is in our opinion, very similar to an aesthetic performance in the sense that it also uses both amplification and dramatisation to create a parallel sport enclave. It is an amplification of specific rules (in soccer for example moving the ball without using your hands, which would be the simplest and thus also the most effective way of doing it in everyday life) as well as a dramatization of everyday life (players are at the centre of all activity, the competition between them is condensed in time/space, the game leads to a resolution of the conflict between players, losing and winning can only occur according to rules of the game). Specific rules of the game are known to players and viewers (for example the offside rule), goals are understandable to viewers (for example scoring goals), the event is condensed (in time to an hour and a half, in place to measures of the pitch which are determined in advance) and the result only counts if it is achieved according to the prescribed rules (for example: if a goal is not scored by hand). A soccer match is a caricature and a dramatization of everyday life which is why so many people enjoy it (from fans to normal viewers) and why we are, as a rule, self-conscious as long as the game lasts.

Soccer is enjoyed so much by so many people that it is even being labelled by many as "the most important incidental thing in the world." Nevertheless as we have seen, there is nothing incidental about it, or for that matter, about any other form of sport game. The biological function of playing is crucial for our survival (stimulating creative responses to stimuli), achieving this with amplification of specific rules (strengthening our perception) and dramatization of experiencing stimuli (extending our self-conscious experience). Because these cognitive processes are so important for our survival, it made sense from an evolutionary standpoint to reinforce them by connecting them to bodily sensations. As a species, we have learned to enjoy play activities such as sports because they promote our creativity.

Sport games

Bernard Suits defines sport as a game that demands physical skill and that has a wide following which achieves a certain level of stability (Suits, 1995a, p. 11). The first requirement is, in our opinion, self-evident. The outcome of a sport game significantly depends on the demonstration of physical skill. This is why a game of cards or chess is not a sport game: physical skill is irrelevant for the achievement of the goal. Two types of games can be distinguished, those that demand physical skill (sport games) and those that do not (all other games).

What of the other two requirements also mentioned by Suits: a wide and stable following? A sport game is undoubtedly a social activity. As such, it is also institutionalized (we define an institution as a correlation of value and power, a shared agreement on values, in our case of game rules internalized in players as lusory attitudes and by fans as appreciation of physical skills manifested). However, if Suits is implying more, namely that all sport games are organized, than this is certainly not the case in all sport events (for example in amateur sport events such as a game of basketball played by friends).

Nevertheless, numerous sport games in modern societies are obviously becoming increasingly organized. As Max Weber once remarked, increasing organisation is characteristic of modern societies. This is not only true of everyday life (state bureaucracies, political organizations such as political parties, parliaments or legal systems) (Đurić, 1987, p. 290-291). As Weber states, all civilizations have extensive bodies of knowledge, but only modern western societies have science based on mathematical knowledge and experimentation; all human societies have religious teachings, but only the West developed systematic theology under Hellenistic influences; all human societies have aesthetic production, but only since modernity have we had rational harmonic music, perspective in painting etc.

Weber does not mention it but this tendency towards increasing organization is also characteristic of three play worlds which he mentions, namely of:

- experimentation (systematic teaching of science in schools, research in institutes and industry);
- ritual (organization of Christianity, with the Roman Catholic Church probably still the largest multinational corporation in the business of selling superstitions);
- and performance (schools for teaching art, museums for their safekeeping, buildings for performances (galleries, concert halls, theatres etc.) as well as the cultural industry, from television culture and Hollywood and the musical industry);
- but also of game (sport is becoming an important leisure time industry).

The growing level of organization of the four forms of play in modern societies means that play is increasingly overlapping with the everyday work ethic and the principle of optimization in which activity in paramount reality in embedded. The growing level of organization of play can be observed both on the genotype level (play tends to become more organized as we grow older) as well as on phenotype level (play is becoming increasingly organized with cultural development of societies). A high level of organization of the play world is becoming something we as modern people are increasingly prepared to take for granted.

In contemporary industrial societies, more than 50% of the leisure time of children involves organized sport and other leisure time activities. Most of these are not voluntary, are highly structured, closely supervised and rigidly scheduled, something we could call "planned spontaneity". Children increasingly complain that they do not have enough time to play. Three reasons are usually given by social scientists for the erosion of pure play in the life of contemporary children: parental concern for the children's safety (play in some neighbourhoods is becoming increasingly dangerous), organized leisure time is becoming a substitute for child care (because there are more working mothers) and demographic changes in families (smaller families offer fewer available siblings for companionships) (Corsaro, 1997, p. 38-40). While these reasons are undoubtedly significant, the crucial reason for this process in our opinion is evolutionary.

In everyday paramount reality, as was already indicated, the key principle behind our behaviour as living beings is that of optimization. Studies have shown that beings strive towards strategies of finding food and other resources crucial for their survival in such a manner that a maximum return is obtained for the effort expended. Those beings that are better in their everyday production efforts maximize their reproductive success (Shannon, 2002, p. 24-27). If we look at human history, two major shifts in production strategies have occurred that significantly improved the efficiency of our matter/energy exchange with the environment: from hunters-gatherers to farmers and from farmers to industrial producers.

It is not accidental that industrial societies are becoming increasingly organized. If we as individuals are driven to optimize our productive activities, a more efficient production of commodities and services will imply higher wages for our effort. By spending our wages for leisure time activities, we would lower the optimization of our productive activity. While some people do react in this way, on the level of the collectivity of individuals, most people react in accordance with the principle of optimization: they further increase their work time effort. This is why people in simple, hunter-gatherer societies work less than people in modern industrial societies on average. What seems at first glance a paradox that the more affluent we are becoming, the less leisure time we have at our disposal in which to spend our wealth, is in reality inevitable from the evolutionary perspective.

The paradox of contemporary societies is that a substantial segment of the population has the resources at their disposal to spend on leisure time activities while the time in which to spend it is progressively eroding. How is this paradox of growing leisure time resources and dwindling time in which to spend them resolved? At least two strategies are being used by modern individuals. The first one is cognitive: we problematise leisure time as such. We often advocate values according to which work is central to our well-being and happiness, claiming that leisure time (having a good time for no special instrumental reason) is to be avoided for ascetic reasons (self-control, self-denial etc.). This "workaholic" ideology (Weber would call it the Protestant work ethic) is becoming hegemonic among increasing numbers of people in contemporary industrial societies, leading an increasing number of people to burn out. Even people who dislike their work often feel worse off if unemployed.

The other strategy is cultural and its purpose is to reorganize the remaining leisure time at our disposal in a more efficient way. Gell writes of a new guild of "consultants for leisure time" who specialize in organizing our leisure time for us (2001, p. 194). These experts promise to give us maximum pleasure in minimum leisure time. Numerous organizations from tourist agencies (who specialize in the art of seeing as much of the world as possible in the shortest time possible) to fitness studios (which specialize in making us fit by practising three hours a week and taking anabolic steroids) are typical examples of our orientation to efficient leisure time behaviour. As a result, it is not surprising that numerous aspects of the play world are becoming increasingly organized and optimized. In sport, spontaneous playing of games is increasingly giving way to organized sport activities, which erodes its elements of spontaneity and playfulness. An inherent paradox exists in modern sport. The play element at its core is absolutely essential, because it defines sport as what it is, as what fascinates us in it, Yet, in contrast, our tendency to optimize activity leads to play strategies in which results at any cost encroach on playfulness. Modern sport is in an uneasy balance between these two forces: one stimulating playful creativity and the other generating routine activity.

CONCLUSION

Five different issues concerning the phenomenon of sport have been addressed in the paper. The first one is the nature of the sport game which shows that all sports are games/performances and all games/performances are embedded in the play world. Secondly, four culturally-structured forms of play worlds are distinguished, including games, performances, rituals and experiments. The third issue is the evolutionary function of play which is to stimulate creativity, whereby specific rules of play facilitate shallower association hierarchies and more remote associations. Fourthly, the fascination with play is rooted in the fact that it makes sense to reinforce play as a significant activity in inner-bodily sensations and primary emotions. Lastly, in modern societies sport games are becoming increasingly organized and the more affluent we become, the less spontaneous our leisure time activities are.

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