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THE ROLE OF SKILL IN SPORT

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Skills play an important role in sports. Even if they are centrally important they have received surprisingly little attention from sport philosophers. I think it is time to take up a more thorough discussion of what sporting skills really are and what kind of roles they play in sports. In the 1970s, with contributions from Ziff (1974), Steel (1977) and Wertz (1978), the focus was on the learning of skills. Apart from Fraleigh's (1975) early analysis of skills and abilities and Kretchmar's interesting essay in 1982 about what he called 'distancing' few articles took up sporting skills before Torres (2000) discussed the role of skill in sport competitions and Davis (2007) the normative status of skills. But then from 2007 and onwards several new contributions looked at skill and its relation to intentionality, consciousness and knowledge (Moe, 2007; Breivik, 2007; 2014; Hopsicker, 2009, Birch, 2011, and Ilundain Agurruza, 2014). The philosophical arguments came from several sources; phenomenology, neurophilosophy, and Eastern philosophies. But in these approaches skill was not in the center of the discussion, but was discussed in relation to knowledge, consciousness and so on. In this article skill is in the center and then the relations to these other themes are discussed.

The article will thus focus on skill and try to define what 'skill' could and should mean relative to sport contexts. I will then discuss how the concept stands in relation to several central topics and dilemmas in philosophy of sport:

- a. I will first discuss the concept of skill and see how it relates to similar concepts like ability. I will then give a short characterization of different types of sporting skills and suggest how they may be differentiated and characterized.
- b. I will then look at the role skill has in relation to knowledge, whether 'knowledge how' is the same as 'skill' or not. This leads further to a discussion of skill in relation to intentions and actions in sport.
- c. Skill at high levels is called 'expertise'. What is characteristic of expertise and does expertise presuppose only skills or more than skills? I will here relate to the views of Ericsson (2006) and Dreyfus (2002).
- d. Skills are central in sport. Does this mean that sport is mainly about skills and should the most skillful therefore always win? Or do other factors like courage and nerve play

important roles, even more important ones than skills? What is the role of skills when it comes to the causality and the value of winning?

- e. My last point is about the normative status of skills. In sports, especially at elite level, athletes are very skillful at cheating in various ways. Should skills always be in the service of the good, morally and/or aesthetically, or can we admire skills that are in the service of the bad or ugly. Should skillful diving in football be admired?

A. The concept of skill

The definition of skill

How should we define 'skill'? Dictionaries are supposed to reflect common usage. Skill is typically defined as the ability to do something well, to have expertise or dexterity. To use Dictionary.com as an example 'skill' is here defined as

- A. 'the ability, coming from one's knowledge, practice, aptitude, etc., to do something well.
- B. competent excellence in performance; expertness; dexterity:
- C. a craft, trade, or job requiring manual dexterity or special training in which a person has competence and experience.'

<http://dictionary.reference.com/browse/skill>)

We see here that skill is related to concepts like 'knowledge' and 'expertness' (or expertise) which I will take up later. What I want to underline here is that skill is defined as an ability, but more than an ability. Skill implies some quality, competence, or dexterity. Skill seems thus to be something that is more than what one is born with, more than what comes natural to a person. It is something one has acquired through training and thus admits of degrees.ⁱ

If skill is an ability how is then ability defined? Dictionary.com defines 'ability' as

- A. 'power or capacity to do or act physically, mentally, legally, morally, financially, etc.
- B. 'competence in an activity or occupation because of one's skill, training, or other qualification:

C. 'abilities, talents; special skills or aptitudes.

<http://dictionary.reference.com/browse/ability>

We see here that 'ability' is defined among other things as 'competence' and 'special skills', which make the definitions of skill and ability circular. But we need not stop here.

Dictionaries are supposed to be descriptive of actual usage. Sport philosophers can have a normative use of words that differs to some extent from actual use. I want to suggest that we as sport philosophers define 'ability' as a natural capacity or competence that people have without special and purposeful training. It would follow that to walk is an ability but race walking is a skill or based on skills. Walking is a phylogenetic natural ability that most people have and that is learnt in various informal ways from early childhood on. In contrast skillful walking, like race walking is an acquired ontogenetic skill that is based on deliberate and purposeful training. 'Skill' thus means a trained or trainable ability that admits of grades. Skilled performances can be better or worse. Walking is a natural ability common for most people. We would not say that a natural walker walks more skillfully than others, but a race walker may be more or less skilled. And a backhand stroke in tennis can definitely be executed more or less skillfully.

According to the definitions above 'concepts like 'skill' and especially 'ability' encompass more than pure physical skills, even if 'skill' has a strong association with manual expertness, dexterity and thus physical or motor competencies. But other types of skills, like mathematical skills or language skills, are not excluded. I will come back to this later but first say something about the physical or motor skills that are so central to sports.

Characteristics of physical skills in sport

Skills in sport typically come as parts of complex actions and thus not as isolated and discrete executions. Skills in sports are hierarchically ordered and come in parallel (100 meter sprint) and serial (pole vaulting) versions, with timing and integration. Someone may be a skillful tennis player, and each of the single capacities may be skillful in itself. But the single skills must be coordinated and integrated to result in a skillful action. According to A.T. Welford (1970) 'skills'

- 1) '...consist essentially of the building of an organized and coordinated activity in relation to an object or a situation and thus involve the whole chain of sensory, central and motor mechanisms which underlie performance.
- 2) They are learnt, in that the understanding of the object or situation and the form of the action are built up gradually in the course of repeated experience.
- 3) They are serial in the sense that within the over-all pattern of the skill many different processes or actions are ordered and coordinated in a temporal sequence.' (Welford, 1970, 22)

Skills are here rightly characterized as ordered and coordinated activities that constitute skillful actions with contextual and temporal characteristics.

The importance of coordination and integration is strongly underlined in the classic skill definition by the E.R.Guthrie cited by Richard A. Schmidt: 'Skill consists in the ability to bring about some end result with maximum certainty and minimum outlay of energy, or of time and energy.' (Schmidt 1991, 4). Being skillful is thus being able to maximize certainty, minimize physical and mental energy costs, and minimizing time used. This definition underlines objective, performance-related criteria for skillful actions. It stands in contrast to Dreyfus & Dreyfus (1986) who define skill according to how the mental machinery of the agent operates. Only when something is executed in a semi-automatic manner without conscious deliberation or mental representations can one talk about skill at the highest levels. I will come back to this point when discussing expertise.

Skillful action in sport presupposes physical skills that are integrated and coordinated relative to a time horizon, a context and in view of a task or goal. Different sports here show big differences in task, context and time horizon and thus allow for many different types of skills. Without going into this problem in detail we need at least take a look at it.

Types of skill and the problem of mental skills

Physical skills in sport can be classified in various ways. In sport psychology and motor learning and control a well-known distinction is between open and closed skills (see Schmidt, 1991). Closed skills occur in a predictable environment (gymnastics, archery), whereas open skills typically take place in unpredictable environments (playing football) (Schmidt, 1991, 6-7) Semi-predictable environments are exemplified by walking a tightrope and steering a car.

Furthermore one can distinguish between discrete, continuous and serial skills. Continuous skills have no particular beginning or end, such as swimming, running or paddling. Discrete skills like throwing or kicking a ball have an easily definable beginning and end. While kicking a ball has a definable beginning and end, playing football has not. Football consists of series of discrete skills that are linked together. Other examples are shifting gear in a car or performing a gymnastics routine.

While physical skills can be divided into classes or categories in many different ways, a more fundamental problem is whether we want to open up for other types of skills than the physical ones. Models of expert behavior (Johnson & Tennenbaum, 2006) distinguish between physical skills and motor skills. While this distinction somehow remains inside the physical domain, a more fundamental division is suggested by Welford (1970) who has proposed a distinction between ‘manual skills’ and ‘mental skills’. This means that in addition to the public physical skills we open up for mental skills that are hidden and only identifiable through behavioral consequences and results.

Researchers like Schmidt (1991) with a background in the subject area ‘motor learning and control’ also uses a distinction between the physical and mental but calls it a distinction between ‘motor’ and ‘cognitive’ skills. ‘With a motor skill the primary determinant of success is the quality of the movement itself, where perception and subsequent decisions about which movement to make are nearly absent.’ (Schmidt, 1991, 8). A high jump is a typical example. But ‘with a cognitive skill the nature of the movement is not particularly important, but the decisions about which movement are critical.’ (Schmidt, 1991, 8). Chess is an example here. Sports typically consist of a combination of motor and cognitive skills. This combination is unique for each sport.

Skills in sports – a Suitsian classification

A different way to categorize skills is to use the defining characteristics of what we call ‘sports’ as a starting point. An interesting approach along these lines is taken by Torres (2000) who defines skill relative to Suits’ model of sports as rule-based games, where the goal is to overcome problems and unnecessary obstacles. ‘I define skills here as acquired, intentional, and purposeful capacities to negotiate solutions in problematic situations. Skills require a type of knowledge – often called intuitive, tacit, or procedural knowing.’ (Torres, 2000, 84)

According to Torres' definition skills presuppose or require knowledge. It is not quite clear what this means. Ryle argued that skills and knowing how are more or less the same. Skills would then not presuppose knowledge but rather be a form of knowledge. I have argued for another solution, where knowing how is more than a mere skill, but includes a cognitive grasp of an 'objectual' type. I will come back to this later.

When it comes to the distinction between different types of skills Torres uses the well-known distinction between constitutive, regulative and auxiliary rules, to discuss the relation between constitutive and regulatory skills. Different sports generate particular and specialized skills created by the constitutive rules. Various ways of kicking spherical objects become skills of football only within the rules of football. New forms of skills grow out of the constitutive rules of games.

Restorative skills, like a free kick or penalty kick, in football have a less secure place. This leads to a gradation of skills, where constitutive skills are more central than restorative skills and also a gradation of constitutive skills relative to how close they are to the heart of the game. Torres argues that whereas the constitutive skills, like dribbling in football invites to openness, variation and flexibility, restorative skills, like a throw-in, are 'rigid, repetitive, and generally monotonous.' (Torres, 2000, 87). I would argue that this gradation and characterization of constitutive versus restorative skills may be problematic, especially at elite level. Free-kicks and throw-ins have become important parts of football games that often lead to goals and influence the result. The variation in execution and purpose of these skills have become great. It is not reasonable to place them in the second row in the way Torres suggests.ⁱⁱ Constitutive skills may be closer to the heart of what defines a sport, but not more important when it comes to influencing the results of the contests in that sport.

In conclusion I think the Suitsian approach brings the discussion of skills in line with the discussion around the definition of sport, which is an advantage. The weakness is that it does not throw much light on the concept of skill as such and does not bring the understanding of the different types of skill required by the different types of sports much further.

A last aspect of Torres definition of skill that should be noticed is that skills are intentional and purposeful. Sporting skills are not pure knacks, habits or customs, but purposeful bodily actions. But if so, we need to take a closer look at the relation between skill, knowledge and action.

B. The relation between skill, knowledge and intentional action

Skill and knowledge

Let me start here by taking a closer look at the relation between skill and knowledge how. There are two main theories of knowledge how. One theory, called *intellectualism*, implies that knowing how is simply a version of knowing that. Knowing how is propositional knowledge related to a practical situation. The other theory, *anti-intellectualism*, implies that knowing how is the same as skill. To know how to do something is to have the skill to do it (Ryle 1964; Bengson and Moffet 2011).

A third alternative, between intellectualism and anti-intellectualism, implies that knowledge how is more than a skill (Breivik, 2014). Knowledge how involves a cognitive grasp of how to do something. This cognitive grasp is not an intellectual grasp with propositional content but a direct *objectual* grasp of a situation and of what to do. It is a direct bodily skillful understanding of what to do. And even more, this grasp is a direct practical understanding of how the world operates and what we are able to interact with it. This understanding is what Heidegger (1962) calls 'circumspection' (Umsicht).

Skills are thus not the same as knowledge how, but knowledge how involves skills. Skills are the backbone of knowing how. I know how to execute the Eskimo roll in kayak; the skill is so to say wired into my body as a movement pattern. It is not a mental or conceptual thing but a 'body scheme', an operative possibility that can be executed when needed. And since it is wired into my body I know how to do the Eskimo roll even when I no longer have the capacity to do it. I may be too weak, too old or I may have lost an arm. But the movement Gestalt is still present, it resides in my body.

But is it possible to have knowing how without ever having had the skill? Can a trainer or coach who has been with kayakers for many years know how to do an Eskimo roll without ever having done it herself? Obviously the coach has more than theoretical knowledge of kayaking. She is not like a scientist who has read all the books about Eskimo rolls and studied the biomechanics and motor control patterns of Eskimo rolling. The coach has more than theoretical knowledge. She has practical knowledge acquired by being with kayakers for years, being close to them, having observed them, and identified with them. But is this practical knowledge the same as knowledge how? I think not. Obviously she has not first person knowing how since she has never done the roll herself. But maybe one could say that

she has a third person knowledge how. She knows how to train and correct kayakers when they roll. She has practical understanding. But I would not say she has knowledge how, especially since she has never had ‘phenomenal’ experience of what doing an Eskimo roll feels like. She had never had the qualia of doing Eskimo rolls. The movement pattern does not reside in her body, even if she has a clear picture of it in her mind.

In conclusion this means that skills are a necessary but not sufficient condition for knowing how. But it is not enough. Knowing how is more than a mere execution of bodily skills; it includes a cognitive grasp with objectual content. And on the other hand; a person lacking the bodily skills do not have knowing how even if she has both experience and knowledge of relevant practical situations.

Skill and intentionality

Skills are or are parts of sporting actions. This means that they are intentional in character; they are directed at some task. Whereas ‘intention’ and ‘intentional’ are concepts that have been used in phenomenology, philosophy of mind and action theory for a long time, the concepts have recently, through neuroscientific research, been found to have a much deeper and more basic foundation than we earlier thought. Neurophysiological studies by Rizzolatti and co-workers have found that brains of monkeys and humans respond directly to motor actions performed by other agents (Rizzolatti & Sinigaglia, 2008). When a Macaque monkey see another monkey lifting the hand to the mouth with a piece of food the same motor areas in the two brains are activated in the two monkeys. They mirror each other. The observing monkey immediately sees the act of the other monkey as goal-directed (food to mouth) because the same brain areas are activated. This means that skills have an intentional character (food to mouth) and it is the goal (food in mouth) that is steering the arm/hand movement. Skills are directed at goals. Skills are neither reflexes without goals nor mindless habits, but intentional in character. This means that many animals as well as humans from birth on ‘see’ the world through lenses of intentions. Our living is about something and for something. And this is the case even at basic muscular levels as directing the hand with food to the mouth.

Another version of the deep foundation of intentionality comes from Heidegger’s phenomenological analyses (Heidegger, 1962). For Heidegger intentionality means our ‘directedness’ and specifically our ‘self-directedness’ towards the world. Against Husserl he holds that this directedness is practical and embodied in nature. We are ‘beings-in-the-world’

continually transcending towards the world and interacting with it. Our dealing with the world is practical and skilful; we use things as equipment or tools in order to realize our intentions and goals. We live 'in-order-to', where the deepest 'in-order-to' is to take care of our own lives. Heidegger uses a wide concept of equipment and a corresponding wide concept of skill. The concept of skill encompasses a variety of skills from our daily practical dealing with our surroundings to the 'existential skill' of being able to take care of ourselves and our lives in the world.

An important contribution to the phenomenological study of intentionality came from Merleau-Ponty (2002). He goes further in the direction of a practical and embodied form of intentionality. Through our bodies we are in a deep way interact with and constitute a world before we cognitively can relate to it and understand it. 'Our bodily intentions already lead us into a world constituted for us before we conceptually encounter it in cognition.' (Moran, 2000, 402). This means that intentionality has a corporeal basis and a historical situatedness. Merleau-Ponty uses the concept 'intentional arc' to describe how we intentionally relate to things and tasks. Through our gaze we anchor ourselves in the flying baseball and place our bodies in the right position to receive it. With this intentional contact with things and tasks we are also able to optimize our distance to the paintings in a gallery or the distance from the net in tennis. Merleau-Ponty coins the term 'motor intentionality' to describe this bodily skilful dealing with the surrounding world.

From analytic philosophy especially Searle has contributed importantly to the study of intentionality and skills. Skills in sports are not pure bio-mechanical executions of movements but have intentional content. . Searle defines intentionality as 'that property of many mental states and events by which they are directed at or about or of objects and states of affairs in the world.' (Searle, 2004, 1). Since intentions aim at bringing about certain states of affairs they have what Searle calls 'conditions of satisfaction.' In sports intentions and actions are especially relevant and important. If I intend to shoot the ball into goal my intention will be carried out if and only if I manage to shoot the ball into goal. My intention can be carried out only if I have the relevant skills. This means that 'an intentional action is simply the conditions of satisfaction of an intention.'(Searle, 2000, 80) A consequence of this is that anything that can be the satisfaction of an intention can be an intentional action. A rough test of whether something can be an action is whether or not it can occur in imperative. 'Run', 'shoot a goal', 'train' are names for actions, but 'believe', 'intend' and 'want' are not.

Intentional actions further have to come about in the right way. If I intend to shoot the ball into goal and instead it is the wind that takes it and blows it into goal without any help from me, my intention is not satisfied. The goal was a goal but it did not come about in the right way. It was not the result of an intentional action. As we all know there are many intermediary cases here. The wind can help blow the ball into goal to varying degrees and my intention may be partly realised depending upon how specific my intention was. If I had a very precise idea of how I would do it, placing it in the upper right corner of the goal with a screwball, then it will be harder to satisfy my intention. The relevant and necessary skills must be at a high enough level. We see here how my intention will be dependent upon my capacities and skills. I have an intuitive feeling of what can be done, what is possible for me to do and my intention is formed relative to that background.

Many actions in sport may have intentions that go far beyond a context of bodily movements or even beyond the horizon of sport. Sporting skills are parts of larger structures, such as games, sports, national interests and international relations. Suppose there is a penalty kick to be taken in a match where two strong rivals met. Suppose Norway played Sweden in football. The score was 1-1 and a penalty kick was to be taken in the last minute of the match. The player had the intention to shoot the ball into goal. He had the skill and he succeeded. But his intentions and thus the conditions of satisfaction can be described on different levels. We can say of the player that he moved his right foot, he kicked the ball, he shot a goal, he made Norway win, he struck a blow to Sweden, he showed Norway is best. We could also say that he produced neuron firings in his brain or contracted certain muscles in his body, But this sounds strange. Firings in the brain are not something one can produce intentionally. Brain firings are an unintended occurrence that happens as a result of an intentional action. But we can say of the player that he intended to perform a skillful kick with his right foot, to place the ball in the upper corner, and so on. But can we say that his intention was to strike a blow to Sweden? Searle here introduces the notion of a basic action: 'A is a basic action type for an agent S iff S is able to perform acts of type A and S can intend to do an act of type A without intending to do any other action by means of which he intends to do A.' (Searle, 2000, 100). For many players to place the ball in the corner is a basic action, but to show Norway is best is not.

However what is to count as a basic action is dependent upon skill level and the repertoire of skills. What is basic for one agent need not be basic for another. Searle uses the example of

making a right turn which may be a basic action for a good skier, but for a novice it is performed by a series of movements. It also leads to the consequence that two agents may perform the same movements but for one it is a basic action and for the other it is not. For the individual agent what is a basic action may change over time as one develops more advanced bodily and mental skills and the circumspection reaches a higher level of expertise.

C. Skill, expertise and consciousness

Skills can be developed into a level of expertise. But what is expertise? And is having high-level skills a necessary and sufficient condition for being an expert? The word ‘expert’ can be used in two different ways. One can be *expert x* (adjectival), or *expert in x* (noun). The distinction can be defined as follows: ‘Whereas an “expert x” could be an “expert farmer” an expert in x could be an expert in farming. An expert “in farming” could effectively communicate, coordinate, and synthesize accurate propositional information about farming – could become Secretary of Agriculture – even if terrified of plows of tractors.’ (Selinger & Crease, 2006, 225)

An expert in sports could therefore lack physical capacity and be unskilled in a specific sport, but still be expert in it. An expert in football could have studied the relevant scientific literature, watched games, talked with coaches and players, collected, analyzed and synthesized the information and become an expert commentator on TV, advisor for teams, writer of football books. He could thus be an expert in football, but would lack football skills and would thus not be an expert football player. This is a distinction similar to the one between knowledge how and knowledge that. It shows that having propositional knowledge about something, even if it is about something practical and based on experience, is quite different from having the knowledge how and skills.

Expertise in sports is a much researched area. K. Anders Ericsson is one of the leading experts in the study of expertise. He is famous for his view that to become an expert or elite performer in sport, music, or other fields, one needs 10 000 hours of deliberate goal-directed practice. Whereas dictionaries typically describe an expert as one who is skillful and well-informed in some field and thus blurs the distinction between ‘expert in’ and ‘expert performer’, Ericsson

puts most weight on the practical aspects: 'Expertise then refers to the characteristics, skills, and knowledge that distinguish experts from novices and less experienced people.' (Ericsson, 2006, 3) Experts show that they are experts through their skillful performance. Chess players are thus more likely to consistently win games, medical specialists diagnose a disease correctly, and expert athletes more likely to win important games and competitions.

Ericsson's view of expertise means that experts show their expertise through consistently high levels of performance. It is the results that matter. Quite another view is taken by Dreyfus & Dreyfus (1986) in their model of expert performance. The model operates with five skill levels or stages from novice level to expert level. At the lowest level, when one learns a skill one is trying to listen to instruction, follow rules, being conscious and aware of what one is doing and making conscious decisions about what to do. At the highest level, the experts just immediately see and feel what needs to be done. They follow fine discriminations and cues that are solicited by the situation and the task at hand. They are non-consciously immersed in the situation and operate on automatic pilot. There is no conscious, deliberate, conceptual, thinking going on. Here expertise is defined and characterized by the *modus operandi* of the mental operations of the performer. One is an expert if one is functioning on automatic pilot without conscious and deliberate thinking.

There are several problems with the view of Dreyfus & Dreyfus (1986). 1) It has as a consequence that most of our daily coping with the environment like opening doors, sitting down in chairs and brushing our teeth has to be considered as expert performance since it is performed in a non-conscious, non-deliberative manner. This is counterintuitive to most notions of expertise and expert performance. 2) It also means that an athlete who has performed non-consciously, without deliberation and without mental representation and who has immediately responded to the situation is considered an expert, even if s/he is far from best in a competition while the winner who has performed with deliberation, conscious monitoring, and mental representations is not considered an expert. 3) The focus on intuitive and immediate response to situations makes the Dreyfusian expert into something like a zombie. But elite athletes are far from that. They use a lot of time before and after competitions and during preparation and training to think, deliberate, make decisions, control and improve their performance. This is done in a deliberate and conscious manner. And also during competitions, in the middle of the events representational thinking is going on. Breivik (2007) has used examples that show how some of the very best athletes, like downhill skier Aksel Lund Svindal and the sprinter Michael Johnson, are thinking consciously, monitor their

performance, and adjust their movements in the middle of races. They are not operating in a non-conscious, non-representational and intuitive manner like the Dreyfus' skill model predicts.

I would thus argue for a view where expert skills are more than automatic and immediate responses performed non-consciously and without mental representations. Before, during and after competitions world class athletes use deliberate and conscious thinking in addition to immediate and intuitive responses to situations and tasks.ⁱⁱⁱ

D. The importance of skill

Sports are based on bodily skills. But how important are skills relative to other factors that influence results in sport competitions. It seems at first sight that what we measure in sport competitions are various sporting skills as they are displayed by and through the body. But as discussed by Torres (2000) other factors like motivation, courage, and strategic thinking are also important and influence the result. More systematically Johnson and Tenenbaum (2006, 29) operate with the following factors which influence performance: motor skills, physical skills, cognitions, perceptions, self-efficacy, affect, coping strategies. But how important are these other factors in relation to the bodily sporting skills? What we see and what we measure when the sprinter crosses the goal line is not a set of mental capacities but the skillful body. It is through the body that athletes win competitions. A lot of different causal factors may contribute to the result, but it is through the skillful body that the different causal factors are in operation, are instantiated and displayed. I would claim that in most sports the motor skills are the single most important factor. Obviously, character, attitude, nerve, will, courage, endurance, and pain tolerance play a role. A lot of factors contribute to and influence the performance. So do strategy, tactics and other macro-factors. But the causal chain runs through the skilled body and if there is no skill it does not help much with attitude, strategy and a strong mind. But these other factors, like character and attitude, play an important role during planning, training and hard work over years to build up the body and the relevant skills that are displayed and tested during competitions.

Bodily skills are important not only in relation to mental factors but also in relation to certain physical factors. Pure anatomical and physiological capacities are not enough to succeed. If you are going to excel in basketball it does not help if you are tall and with jumping skills, if

you do not have the necessary register of relevant basketball skills. To have a winning attitude and the relevant decision-making skills would not help you if you lacked the relevant motor skills to actually execute what you want when you try to get the ball into the basket.

Skills are more important in some sports than in others. A hundred meter run is not only about physiology, skills play a role; the start, the running technique etc. But compared to ball games, decathlon, and gymnastics, complex skills play a less important role in the 100 meter sprint. Golf is at the other end of the spectrum. It is almost only about skills, above a certain level of physical capacity. The same is billiard. In these sports not only motor skills, but perceptual skills are important. According to my view bodily skills are the single most important factor in sports, especially when it comes to perform well and win. But does this mean that skill is the goal of sport?

The importance of skills in sport is problematized by Davis (2007). Davis takes his point of departure from the common idea that a) skill is the goal of sport, b) consequently the most skillful should win, but c) this is not always the case. The idea that skill is the goal of the contest implies that the contest is a failure if the competitor who performs with the greatest skill in a specific competition does not win. Following this view 'Brazil is blithely presumed to be the rightful winner of every football match it plays, on the ground that it has the most skillful team, with opponents typically cast as an ugly sister' (Davis, 2007, 25). Davis argues against this view. It is an open question whether the winner is the one who performs with greatest skill, since 'other performance-relevant qualities, such as courage, determination, speed, strength, power and luck' (Davis, 2007, 26) play an important role. Therefore 'skill deficits can be sometimes compensated for by sufficiently generous amounts of the other qualities such as courage, determination and luck. It must make sense for us to say that the competitor who performed most skillfully lost because of, say, inferior nerve or inexperience' (Davis, 2007, 26). Davis concludes that we cannot and should not uphold the idea that skill is the goal of the contest. Similarly Dixon (1999) argues that many factors can prevent an athlete or a team from winning. "Bad refereeing decisions, cheating, gamesmanship, and bad luck can result in a loss for the team that performed better and deserved to win. And a subpar performance can result in a deserved loss by a team that is better than its opponents." (Dixon 1999,24)

I agree and disagree with Davis, and to some extent Dixon. I agree that it is of course an empirical matter whether the most skillful in a contest wins, since many sports allow for

considerable influences from chance and luck. But I disagree with Davis' idea that factors like courage, determination, speed, strength, and power can compensate for skill. First, skill is most important in the sense that if you are not at the right skill level these other factors do not help much. If you are on the same skill level as another athlete a lot of factors will influence how well you were able to use yours skills that day, in that contest. But this is an influence that goes through skill and not aside from skill, or parallel to it. If your courage is not manifested through the skillful body it does not help much to shout it out or display it in other skill-irrelevant ways.

In some cases, when athletes are at the same skill level, mental capacities may be decisive and tip the result in one direction rather than the other. But the skill level is the single most decisive factor. If your personal best on 100 meter sprint is 10,55 you may on a mentally bad day run on 10,80 (given the same track, conditions etc.). But if your personal best is 12,55 you would not with the best mindset in the world be able to run 10,55. You cannot compensate enough for the lack of skill and speed. Skill level is more important than mindset. I think this holds also for ball games like football. It does not help if a mental genius sees how he can open the defense with a fantastic pass if he is not able to execute the pass. On the other hand the mentally dumb, but physically skillful player, may make moves that are similarly total failures. Football is more complicated than sprint but I think my thesis still holds. Skill is the most important factor in sport and other influences , except external factors like chance and luck, run through the skillful body of the athletes and not as something besides or parallel to it. And this is the way we want it to be. Sports are about skills. If chance becomes too important we should rather turn to lotteries. If mindset is most important we should choose chess and similar brainy activities. (Dixon 1999)

E. Skills and normativity

If skills are important does it mean that they should always be in the service of the good? Should sports, and consequently sporting skills, promote ethical values? Always and under all circumstances? These are important and interesting questions that cannot be discussed to any length here, but they deserve to be mentioned. I think there are two general views on the normativity of sporting skills. A neutral view could imply that we can accept and admire the skill part of diving in football even if the purpose is bad. A normative view could imply that

skill and purpose are intertwined. The bad purpose makes the diving bad. Diving skill is diving-specific and thus not morally neutral.

A more neutral view would mean that the skill part can to some extent be separated from the intentional goal and the context. If so, we could admire the technique across different contexts in the way we admire the aesthetic qualities of a performance in a purposive sport, even if aesthetic considerations were not an intentional goal or of contextual relevance for the performance. But this would be easier in some cases than other.. It would be easier to admire a nice dive than an ugly, but clean, attack on a player from behind. The badness of the intention as well as the badness of the result would matter. It is easier to admire the skill of a skillful burglar than the skill of a skillful murderer.

The level of inspection also seems to matter. If we go from the intention and action to a more basic biomechanical level it becomes easier to admire skills irrespective of intention and result. It seems that on a purely physiological and biomechanical level we can admire skillfully executed actions whatever the intentions and contexts are. We can look at the aesthetic qualities and the efficiency of the movements. We can study the curves, the symmetries and weights, the machinery of the act. The aesthetics and efficiency of a foul or a tackle, could be admired, even a brutal or nasty one.

But if one moves a step up and looks at the situation from a psychological or social point of view, it becomes more problematic. First we would not admire bad intentions. If a player has the intention to win by hard tackles and fouls, it is hard to admire the skills involved. And we would not encourage players to train on these things. So there is a normativity in play. We would not admire nicely executed hands or dives, but dribbles and good passes would be welcomed and should be admired.

But what about the contexts? In a war efficient killing could be admired in many circumstances. Efficiency and aesthetics in shooting could be welcomed. But in a murder case a comparable skill would not be welcomed in the same way. The context and circumstances are different even if the intentional goal (killing!) and the proficiency in shooting could be comparable.

In addition to the ethical normativity, there is also an aesthetic normativity in play. Davis (2007) argues against a certain normative view of sports. Skillful execution is not the supreme goal and the most skillful should not always be expected to win. Davis thinks there is a

perpetual hang-up about the aesthetic status of sport. Therefore ‘some feel that the spiritual respectability of sport is secured only if sport is art, and this in turn secure only if skill is sport’s form of the good’ (Davis, 2000, 29). But ‘there is no a priori reason to damn a sport contest as a failure if the most beautiful, graceful or elegant competitor does not win.’ (Davis, 2007, 30)

Davis’ focus is on purposive sports, not the aesthetic sports where aesthetic qualities obviously play a special role. I agree with Davis, and Dixon, that we should not expect that the best always wins and that the best should be the most valuable from an aesthetic point of view. Some of the fastest performances in downhill skiing may be quite unaesthetic because the skier is on the limits and cannot control the body completely. A slower skier may be more composed, more fluent in taking the curves and jumps, more aesthetically successful. Purposive sports should therefore not be expected to be aesthetically successful, even if they in some cases can be so. But I think that they should be ethically normative in the sense that skillful breaking of rules does not deserve to be valued or admired, even if the supporters sometimes seem to think so.

Conclusion

Skills are centrally important in sport. But the role of skills in sport is an under-researched area. My goal in this article has been to clarify what skill is and show how the relation is between skill and neighboring concepts, like ability, know how, and expertise. I argue for a distinction between skill and ability. Even if dictionaries define the concepts in similar terms I think that sport philosophers normatively can argue for a distinction between ‘ability’ as a natural capacity or competence that people have without special and purposeful training, whereas ‘skill’ means a trained or trainable ability or capacity. Skills admit of degrees. It follows that to walk is an ability but race walking is a skill or based on skills.

Skills in sport do not come as isolated or discrete movements but as part of sporting actions where the skills are integrated in complex ways to make up a coordinated whole. Skillful action in sport presupposes physical skills that are integrated and coordinated relative to a time horizon, a context and in view of a task or goal. Sporting actions use physical, motor and cognitive skills in various combinations depending on the type of sport.

In the debate between intellectualism and anti-intellectualism about the role of skills in knowledge how I maintain that knowledge how is not pure skill but includes a cognitive component. But this component is not propositional in character. Knowing how implies instead a direct cognitive grasp with *objectual* content. I think this is close to what Heidegger calls 'circumspection' to characterize our direct practical dealing with the world around us. Contrary to individualistic theories which focus on the individual person's bodily skills this theory also includes knowledge how of the world around us. It is an interactive theory of human-being-in-the-world.

Skills are not automated reflexes but are intentional in character. They are about something, directed at some tasks. Both the theory of mirror neurons and Merleau-Ponty's theory of motor intentionality lead towards an understanding of skills as fundamentally intentional at a deep and basic level. On the other hand motor intentionality is part of intentional actions directed at some higher-order goals like winning a tennis match, where each of the intentional motor skills serves the overall goal.

Experts are supposed to have skills at the highest level. I argue, however, for a distinction between being an expert in a sport, say tennis, and being an expert tennis player. Only the last needs to have the knowledge how that includes the relevant physical and motor skills. According to some theories, expert athletes at the highest level function on automatic pilot without conscious representations of what they are doing. I argue for a view where elite athletes not only consciously plan and evaluate before or after competitive events, but also in the middle of the event they consciously monitor and adjust their performances.

Sports are based on bodily skills. But other factors like chance, luck, nerve, cognition, will and so on, influence the result. Some views argue that these other factors are important and downplay the importance of bodily skills. Contrary to these views I argue that bodily skills (including physiological capacities) make up the single most important factor when it comes to winning in sports.

My last point was about the normativity of skills. I here argue that on a basic physiological or bio-mechanical level one can admire skillful execution of acts that are contrary to the rules, like diving in football. But on a psychological and social level the physiology and physics of movements become loaded with meaning and values. Here intentions as well as contextual features become normatively relevant. Consequently we should not admire skillful fouls or dives in football, even if they are bio-mechanically nicely executed.

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<http://dictionary.reference.com/browse/skill>

<http://dictionary.reference.com/browse/ability>

ⁱ This is underlined by the origin of the word 'skill' which comes from the old Norse verb *skilja* - to separate, divide; and the Old Norse noun *skil* – distinction. (<http://dictionary.reference.com/browse/skill?s=t>)

ⁱⁱ I think it is problematic when Torres sums up: “However, common athletic experience suggests that central constitutive skills often reflect qualities of complexity, openness, aesthetic richness, and symbolic power, to cite only several possibilities. Peripheral restorative skills are often simple, less open and more rote, aesthetically less interesting, and symbolically sterile.” (Torres 2000, 88)

ⁱⁱⁱ I argue that athletes use deliberate, conscious and representational thinking, before, after and even under competitions. That does not mean that they do it all the time. They are also operating in an non-conscious, non-representational and intuitive manner. They switch between mind-sets. One could ask whether deliberate and conscious monitoring needs to be representational. I think some monitoring is just being conscious and aware of what is happening during a race without any mental representation. But sometimes there is a clear representation, a picture in the mind of how one wants the performance to be, like the downhill skier Aksel Lund Svindal when he is trying to follow a line with certain check points down the downhill track. He has a conscious representation in his mind that he tries to come as close to as possible in his skiing. In other sports, like fast team sports, there is no time or no relevance of such monitoring. Sports are different.