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Grasping the Phenomenology of Sporting Bodies

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Grasping the Phenomenology of Sporting Bodies

Abstract

The last two decades have witnessed a vast expansion in research and writing on the sociology of the body and on issues of embodiment. Indeed, both sociology in general and the sociology of sport specifically have well heeded the long-standing and vociferous calls 'to bring the body back in' to social theory. It seems particularly curious therefore that the sociology of sport has to-date addressed this primarily at a certain abstract, theoretical level, with relatively few accounts to be found that are truly grounded in the corporeal realities of the lived sporting body; a 'carnal sociology' of sport, to borrow Crossley's (1995) expression. To portray and understand more fully this kind of embodied perspective, it is argued, demands engaging with the phenomenology of the body, and this article seeks to contribute to a small but growing literature providing this particular form of 'embodied' analysis of the body in sport. Here we identify some useful intellectual resources for developing a phenomenology of sporting experience, specifically its sensory elements, and also subsequently examine the potential for its evocative portrayal and effective analysis via different kinds of textual forms.

Key words: phenomenology; sociology of the sporting body; embodiment; the senses

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Grasping the Phenomenology of Sporting Bodies

The last two decades in particular have witnessed a vast expansion in research and writing on the sociology of the body and on issues of embodiment. Indeed, both sociology in general and the sociology of sport have heeded the 'deafening chorus of cries "to bring the body back in"' (Williams and Bendelow, 1998: 9; cf. Frank, 1990). As recently as 2006, however, it has been noted that the sociology of the body:

...is characterised by an abundance of theorising, but a systematic empirical research tradition is lacking...Research on the body has been chastised for privileging theorizing, of bracketing out the individual, and for ignoring the practical experiences of embodiment... (Wainwright and Turner, 2006: 238)

From a sociological perspective, the sporting body has been studied in a myriad of different ways over the past twenty-five years and more, from reflections on the place of the sporting body within the sociology of sport generally (Heinemann, 1980; Theberge, 1991), through a vast array of feminist analyses (Hall, 1996; Lowe, 1998; Markula, 2003; George, 2005) and accounts of the gendered sporting body (McKay, 1994; Aoki, 1996; Markula, 2005), the 'impaired' sporting body (Sparkes and Smith, 2002; Rees *et al*, 2003), bodies in specific sports and physical activities (Lewis, 2000; Allen Ness, 2004; Markula, 1995), and specific bodies in sport and exercise (Hargreaves, 2007), to narratives of the injured and suffering sporting body (Allen Collinson and Hockey, 2001; Sparkes, 1996; Howe, 2004; Sparkes and Smith, 2007), and on to the maturing sporting body (Tulle, 2003; Wainwright and Turner, 2003, 2006). This is to list but a few examples of the 'body areas' addressed within the general sport sociology field.

Despite this copious 'corpus' of sociological endeavour, however, it can still be argued that the sociology of sport has to-date addressed the body primarily at a certain abstract, theoretical level, with relatively few accounts to be found that are truly grounded in the carnal realities of the lived sporting body, as has been well-noted (Wainwright and Turner, 2003: 267; Ahmed, 2004: 285; Ford and Brown, 2005: 173; Howson, 2005: 43; Hargreaves and Vertinsky, 2007: 8). It seems we are still lacking a more 'fleshy' perspective, a 'carnal sociology' (to borrow Nick Crossley's (1995) evocative expression) of sport. To portray and

understand more fully such embodied perspectives, it is argued, demands engaging with the phenomenology of the body, particularly the sensuous and sensing sporting body. Interestingly, sociological studies of the sporting body using the resources of phenomenology are scant, as Kerry and Armour's (2000: 10) review of the literature revealed, and despite some notable exceptions (e.g. Young, 1998), including a phenomenological angle on the researcher's own corporeal involvement in the research process (Engelsrud, 2005). This paper contributes to the small but growing literature providing this particular form of 'embodied' analysis of the body in sport (for other examples, see also Lewis, 2000; Rotella, 2002; Wacquant, 2004; Downey, 2005), particularly outside of the well-researched areas of pain, injury and embodiment.

As Eliasoph (2005:160) has noted in relation to developing a more corporeal sociology: 'Understanding people's cognitive schemata, or cultural models, much less rational calculation, is not enough'. Phenomenology, with its emphasis on the mind-body nexus and its focus upon 'the here and now of bodily existence and presence' (Münch, 1994: 151), acknowledges the centrality of the body in the relationship between self-consciousness and the self. Moreover, the body as 'objectively' measured and assessed, and the body lived and experienced subjectively, are widely dissimilar (Rintala, 1991: 274). This article therefore calls for the sociology of sport to engage with its subject at both this level of embodiment, and at this level of analysis. It proceeds to suggest what are in our view some of the most useful intellectual resources for developing a phenomenology of sport, particularly in relation to sensory experience, and subsequently examines the potential for its portrayal analytically via different kinds of textual forms.

Resources for Constructing a Phenomenology of Sport

The theoretical work underpinning phenomenological approaches to social life generally is situated within phenomenological philosophy. The writings of Husserl, Heidegger and Merleau-Ponty provide some of the major intellectual resources available to researchers within this tradition (Kerry and Armour, 2000). In trying to grapple with the phenomenology of the sporting body, here we are using primarily the work of Merleau-Ponty, of particular relevance given his primary concern with embodied consciousness (Meier, 1988), the body as 'being-in-the-world'. The Merleau-Pontian mission was to reveal: 'underneath the objective

and detached knowledge of the body that other knowledge which we have of it by virtue of its always being with us and of the fact that we are our body' (1962: 206). From this standpoint, the body is not so much an instrument nor an object, but rather the subject of perception, socially and indeed subculturally mediated though that perception may be. For us, we know the world through the body, just as that body produces the world for us, so that: 'The lived body is not just one thing in the world, but a way in which the world comes to be' (Leder, 1992: 25). Further, as Luijpen (1966: 50) explains, our hands are not any old hands, but rather are 'I-myself-grasping-things'; our feet are not merely body parts in some anatomy discussion, but rather involved in 'I-myself-walking'. Moreover, for Merleau-Ponty this perception is inextricably linked to movement, and all bodily movement is accompanied by intentionality which lies at the core of perception (1962: 110-11).

Social life generally demands habituated bodily action, often highly complex, as in for example driving a car, that becomes taken for granted in a pre-reflective sense. Crossley (2001: 123) neatly sums up Merleau-Ponty's position: 'The corporeal schema is an incorporated bodily know-how and practical sense; a perspectival grasp upon the world from the 'point of view' of the body'. This practical sense is developed by habit, although for Merleau-Ponty habit is not merely a mechanical phenomenon. It is, rather, as Crossley (2001: 127) notes, a practical 'principle' which emerges into the social world via the formulation of meaning, intention and appropriate action. Consequently, sports participants have an understanding of how to do their sport, and this understanding is not just cognitive but also corporeal, developed by the body's immersion in habitual training practices. Merleau-Ponty's work offers researchers a powerful stance from which to gather data on the embodied perspective of sports participants. His work clarifies and establishes a philosophical position which, if adopted, opens up the rich possibility of capturing a particular kind of embodied experience. To capture more fully that embodiment (although recognising that 'fully' grasping the totality of such embodiment remains an impossibility within the Merleau-Pontian formulation), however, other kinds of intellectual resources are needed as supplementary resource, for Merleau-Ponty and indeed philosophical phenomenologists generally rarely engage with empirical data generation *per se* (Kerry and Armour, 2000: 10). Insights from other theoretical perspectives are required to 'flesh out' the analysis.

The Sensuous Sporting Body

In a recent review of the anthropology of sport, somewhat depressingly Klein (2002: 131) portrays the body sub-field as 'moribund' and can find no resources that would appear to help those interested in analysing the direct embodiment of sporting activity. More encouragingly for our purposes, however, Shilling notes that:

It is anthropology, though, that has conducted the most sustained and detailed investigations into the bodily practices and identities of those groups which have tended to escape the sociological gaze. (2007: 12)

It is therefore primarily to anthropology that we turn later in the paper to provide detailed investigations into some of the bodily practices associated with sporting groups. Indeed, within the wider mainstream anthropological literature there are certainly resources that may be of considerable use when analysing sporting embodiment, situated primarily situated within a developing anthropology of the senses (Howes, 2003) and also to some extent within an emergent 'sensuous' geography (Rodaway, 1994). They are directly relevant to the sensory activity of sports participants as they move, see, hear, feel, touch, and smell in the sporting milieu. These particular sensory dimensions work in concert (Howes 2003: 47) and constitute the direct, lived experience, the phenomenology of sporting activity. In the general literature one can find only the occasional paper that alludes to the sensory dimensions of sport and physical activity, for example in relation to touch (Lewis, 2000; Slavin, 2003). Even rarer are entire texts where the primary focus is upon the sensuous dimensions of sport, such as interesting recent work by Wacquant (2004) on boxing, and Downey's (2005) excellent study of capoeira, the Brazilian art form that combines martial arts with acrobatics, music and dance. This may well change, however, with increasing interest, from both social science and humanities quarters, in the role of the senses, evidenced by the institution of a new, interdisciplinary journal, *The Senses and Society*, since the original drafting of this article. Constance Classen's (1993, 1997, 2005; Classen *et al*, 1994) detailed work on the cultural historical study of the senses, including the gendering of the senses, should also be mentioned here as noteworthy, although not so directly related to a more phenomenological analysis of sporting experience specifically.

The lack of phenomenologically-inspired analyses of sporting activity within sociology is perhaps surprising, especially when the sensuous elements often feature so strongly in participants' experiences. In order to help remedy this gap in the literature, this article will depict a range of sensory activities involved in doing sport, employing some of the theoretical resources previously indicated. It should be noted that this is far from a comprehensive listing (taste is not examined here), and the article focuses upon the experiences of sighted, 'smelling', hearing and 'able-bodied' participants; we suspect that there is an even greater dearth of literature relating to the sporting experiences of those with sensory impairments, although there is not the space here even to begin to consider this important area. Before we consider the sensory dimension of sporting experience, first a brief word about a key element of that experience: movement; two of the central components of sporting activity will be considered here: movement and rhythm.

Movement and rhythm

Movement is axiomatic to sport and, as Ingold (2000:166) points out: 'Locomotion not cognition must be the starting point for the study of perceptual activity'; the reason being that the sporting environment – both physical and social - is in the main perceived by the participants, not from a static position, but rather from a moving vantage point. Importantly too, movement is linked to feeling, so that it might be argued: 'It is movements that trigger sensory activity that the consciousness in turn experiences as feelings' (Tangen, 2004: 21). Such 'movement' may be psychological and psychosocial as well as physical. The happiness, even euphoria, of feelings of 'flow' has been well described ([Csikszentmihalyi, 1990](#)) as the experience of optimal fulfilment and engagement in an activity, of being 'in the zone', where time just flies, and which has been portrayed across a whole spectrum of sports and physical activities from rock climbing (Csikszentmihalyi, 1975) to distance running ([Allen Collinson, 2003](#)).

Sporting movement can, for analytic purposes, be divided into two components: rhythm and timing, which are symbiotic. Each sporting social context requires its own particular rhythm, so for example, hockey has a relatively stop-start rhythm, whereas other sports such as long distance swimming will have a predominantly regular, cyclical rhythm, which is relatively constant. Analytically it becomes possible to define rhythm in human physical performance

as a 'patterned energy-flow of action, marked in the body by varied stress and directional change; also marked by changes in the level of intensity, speed and duration' (Goodridge, 1999: 43). The shape or flow of sporting action is then organized by rhythm, and at the same time it constitutes a part of that very rhythm. To accomplish such rhythm, participants must skilfully coordinate certain bodily parts, with the complexities of that coordination varying considerably between sports. So, arguably, squash players may require greater *full-body* coordination than would, say, darts competitors, as the former manoeuvre through bigger and more diverse planes of movement, which demand larger bodily adjustments, necessary for the chosen footfall and cadence in order to create effective rhythm.

To achieve this movement competently necessitates the development of a particular sense of *timing*. The expert swing of a golf-club or cricket bat, the delicate cushioning of a (soccer) football on a player's chest, swinging from one parallel bar to another, all require expert timing, which Goodridge (1999: 44) defines as: 'the act of determining or regulating the order of occurrence of an action or event, to achieve desired results'. This embodied sense of rhythm and timing requires a highly developed awareness of sensations emanating from organs (including the skin), ligaments, tendons and muscles as they move; in effect an assemblage of 'immediately lived sensations' (Leder, 1990: 23). As individuals 'do' sport, this assemblage provides information and feedback about body position, balance, pace and so on. The angle of the head and torso, for example, or stride length, arm movement, and leg cadence are all particular corporeal choices made on the basis of such sensory information, which will be specific to particular sports. It is a curious irony that there has been relatively little empirically-grounded analysis of this specific embodied sense of movement and timing within the sociology of sport (for examples, see Goodridge, 1999; [Allen Collinson, 2003](#))

The aural and respiration

Whilst movement is integral to sport, so, for many, is sound. Rodaway (1994: 95) has noted that 'sound is not just sensation: it is information. We do not merely hear, we listen'. Perhaps the most fundamental way in which sportspeople listen is to their own embodied selves when engaged in sporting action. So, for example, performance in sport is usually intimately linked to respiratory patterns (Van Emmerik *et al.*, 2005). Even in arguably less 'dynamic' or aerobically demanding sports or games such as snooker, effective action with a cue demands

hand-eye and respiratory coordination. Tense or erratic breathing is often the enemy of effective bodily control and coordination and thus sporting performance. Sportspeople, and in particular athletes, become acutely aware of, and attuned to their breathing. These respiratory patterns provide constant and almost instantaneous feedback on bodily states during each sporting session. Additionally and importantly, as Lyon (1997) indicates, physiological processes are synthesized with socially mediated processes. From the participants' point of view, how one is playing (well, indifferently, and so on) can be gauged *inter alia* by how one is breathing. Respiratory patterns are then co-related with emotion or feeling states, and as Lyon (1997: 96) notes, embodied emotion and social action are inseparably inter-connected:

...particular respiratory patterns are part of the embodiment of emotions, whatever the ontology of that emotion, and whatever the context in which it occurs. Further, it must be seen that the bodily aspects of emotion cannot be separated from the social action more generally because they partly constitute that action, and this action is part of what constitutes emotion.

The socially constituted normative order of performing sport is thus intimately connected to respiration. As experience in a particular sporting activity increases, participants develop a keen kinaesthetic memory of how they feel when playing in certain modes. As noted previously, when playing well there is usually a 'flow' or particular rhythm of respiration (Goodridge, 1999: 43), and conversely when playing indifferently or badly, breathing becomes disjointed or 'ragged'. Listening to one's sporting body is then amongst other things an important monitoring device for sportspeople, as the auditory feedback can provide embodied evidence upon which to base decisions in relation to performance (for example, to change pace, direction, tactics, line, or disguise one's breathing to competitors). In addition, hearing and listening also provide other kinds of external information, which help individuals to perform. Distance runners, for example, are accustomed to training in public places such as roads, parks, pathways, replete with hazards generated by traffic, dogs and, on occasion, less than civil pedestrians (Smith, 1997). In such contexts, by listening for hazards and identifying them early, potential injury can be avoided, training effected and in turn racing performance enhanced. In common with other sportspeople, runners evaluate how their race competitors are performing by trying to assess their breathing patterns. Similarly, the social elements of respiratory patterns have also been noted in relation to the social integration and

harmonisation of performers, for example in a team context, and Lyon notes again, in perhaps somewhat functionalist mode, the relationship between respiration and emotion in this process:

The generation of interlocking rhythms or synchrony (negative or positive) between individuals and among members of groups can only be established through emotion which itself is generated within the context of social relations. The respiratory capacity is thus one of the basic bodily capacities which functions for the social integration of individuals, and which is an important mechanism for the continual process of shaping the emotions among individuals in a social context. (Lyon 1997: 97)

The visual

For most of us, the environment is evaluated and interpreted using broad cultural codes (Rose, 1993): we see in a particular way, using cultural and subcultural resources. Particular social groups employ distinctive 'ways of seeing': for example, the police learn to see their occupational terrain in a specific way (Bittner, 1967), and it has been argued that certain groups of women learn to socially construct and see public urban places in a certain way (Brooks Gardner, 1980). Wacquant (2004) provides a vivid portrayal of how boxers must learn to see in the boxing ring, developing the specific 'eye' that enables boxers to guess at opponents' likely moves by 'reading' their eyes and also the positioning and orientation of shoulders, arms and hands. What is actually 'seen' in these situations is of course heavily dependent upon the knowledge that social actors have accumulated via previous experience of the contexts themselves. Ways of seeing are structured and mediated by cultural forms, and by specific kinds of knowledge, which are in turn informed by the act of seeing itself, in a complex circular process. On the basis of that vision and the interpretation of it, courses of action are chosen by individuals. In addition, as Emmison and Smith (2000: 185) comment: 'Environments are not simply places where we see things in a passive way. They are also locations where we must look in active ways'. Sports participants see in active ways so as to make sense of the contexts, physical and social, in which they train and compete. Moreover, as noted earlier, involvement in sport usually demands movement and, as Ingold (2000: 226; 230) notes, 'people see as they move' and 'our knowledge of the environment undergoes continuous formation in the very course of [our] moving in it'.

The playing or training terrain is seen and interpreted via a stock of sporting knowledge, usually comprising two focal concerns: of safety (injury prevention) and of performance ([Hockey and Allen Collinson, 2006](#)). So questions of relevance here might be, for example: how do cricket-players see the pitch on which they play? What is the relationship between how they see and act upon the spaces in which they move, or the spaces in to which team mates are (and potentially are) moving and the social organization and performance of their team? How do cross-country skiers see snow? What are the different classifications constructed, and how do skiers' perceptions of these impact upon their performance? It seems likely that the art of skiing effectively (and safely) is dependent in part upon being able to make the right decisions about what line over terrain to take at any particular juncture en route; decisions based on craft knowledge accrued *inter alia* via a particular way of seeing.

The olfactory

A further phenomenological dimension of sporting embodiment, and one rarely analysed, is grounded in the olfactory receptors. Sport is often intimately connected with sweat and a certain kind of pungency that permeates the sporting body. Individuals come to recognise when they are working hard in training or competition by the sensation of sweat on skin, and also by how they smell. This form of odour is then corporeally and symbolically correlated with the 'right' degree of effort. It also works to substantiate the salience of their sporting identities (cf. [Stryker, 1987](#)), to individuals. As Synott (1993: 190) indicates: 'odour is a natural sign of the self as both a physical and a moral being. The odour is a symbol of the self'. In direct contrast to the general cultural evaluation that those who smell strongly of body odour are morally negative (Synott, 1993: 273), physical pungency may also transmit different messages within sporting social spaces, including messages of mutual affirmation. One of the authors, as a regular user of a male locker room, testifies to the routine banter over how team-mates' bodies (and sports clothing) smell. This often involves ritualised humorous derision towards a particular individual's lack of hygiene, and a similarly ritualised response - to the effect that pungency is the result of hard training, and any lack of it provides proof of lack of effort! As Fusco (2006: 7) very evocatively recounts, the 'abject' and hygienically 'risky' space of the locker room is where, 'naked bodies also excrete body fluids from various

orifices, drop hair, spit, and shave', all of which contribute to the production of a particularly pungent olfactory experience.

Other aromas such as those of freshly cut grass on a cricket pitch, freshly laundered kit, pristine trainers, or the sharpness of chlorine in a swimming pool, all confirm the self's involvement in the sporting present moment, but also substantiate sporting identity via memory. Tuan (1993: 57) has noted the capacity of smells vividly to invoke memories, whether positive or negative: 'Odour has the power to restore the past because, unlike the visual image, it is an encapsulated experience that has been left largely uninterpreted and underdeveloped'. Indeed, these aromatic memories may generate highly-charged emotional responses, such as the fear and trepidation evoked by chlorine for many whose childhood swimming classes were a source of terror. Particular aromas can evoke the sporting past, and momentarily at least, fuse it with the emergent present, as memories of previous sporting moments collide with the here and now of sports engagement.

Furthermore, it seems plausible that different sports have different 'smellscapes' (Classen *et al.*, 1994: 97); an amalgam of aromas that change according to seasonal and temporal conditions, space, place, and activity. Currently there appears to be a dearth of documentation on such 'panaromas' in relation to their impact upon sportspeople and teams. Psathas (1979: 224) has identified how maps are read as a 'set of sequential particulars', physical markers such as hills, valleys, woods, road junctions, etc. It may well be that particular stretches of sporting terrain, used in training, for example, harbour sets of aromatic sequential particulars, which participants use to 'order their experience and understanding of space' (Classen *et al.*, 1994: 98), which in turn may have an impact upon *how* they train, all of which would certainly constitute an interesting topic for further research.

The touch line

In addition to seeing and smelling the milieu in which they move, sportspeople also have a haptic relationship with the sporting environment. Whilst it is beyond the scope of this paper to examine touch between sporting bodies, we will briefly consider the physical interaction between sporting bodies and objects in the form of terrain and the various kinds of equipment, ranging from the very large, such as yachts, to smaller items such as table tennis

bats, and cricket balls. Rodaway (1994: 48) defines the haptic experience as: “a combination of tactile and locomotive properties [which] provides information about the character of objects, surfaces and whole environments as well as our own bodies”. The sportperson’s touch is mainly an active one combining pressure between the sporting body, terrain and equipment, together with a kinaesthetic awareness of the body as it moves through planes. ‘Touch is, therefore, about both an awareness of presence and of locomotion’ (Rodaway, 1994: 42). In addition, humans use touch as confirmatory, to remove doubt, as Hetherington (2003) has noted. It is a directly embodied way of feeling and experiencing the world, and seeking to understand its properties.

Interestingly, as Ingold (2004: 330-331) points out: ‘studies of haptic perception have focused almost exclusively on manual touch’ and he calls for the development of studies that examine the relationships between the environment and ‘techniques of footwork’. This call is particularly apposite for a phenomenological exploration of sports and physical activities such as soccer, running, and kick-boxing, to name but a few. Using their haptic resources, participants tune in (Ingold 2004: 332) to a constantly changing sporting environment. In soccer and cricket, for example, evaluating the pitch and deciding how to play is not merely a visual process but also a haptic one. Feeling the properties of ground, air, and ball provides players with sensory input, which will influence decisions on how to play, given the perceived possibilities in terms of technique under the prevailing conditions. Sportspeople thus touch, and are in turn touched by the physical properties of terrain and equipment, and so build a two-way, embodied relationship with them.

In sum, as portrayed above, sports participants hear, smell, see, touch and move within their particular sporting environments, whether hockey pitch, mountain face, ice-rink or squash court. These sensuous embodied processes constitute the phenomenological ground of sporting activity. As indicated above, however, to-date there have been few attempts to analyse and depict these from a phenomenological perspective. In part this may stem from the problem of accessing the embodied sporting mind, as Bain (1995) has identified. Another problem has been the reluctance of many academic writers to deviate from a form of communication which gives precedence to the ‘disembodied author’ (Sparkes, 2002), with the consequence that, as Eliasoph (2005: 163) indicates: ‘Sociology’s “realist” writing genre might

not be up to the task'. Even feminist researchers and ethnographers, who perhaps have been more concerned than many to develop very grounded, analytic-descriptive accounts of human experience, have sometimes left unchallenged their socialisation into conservative writing practices, so that, as Krizek (1998: 93) notes: '...many of us "do" ethnography but "write" in the conservative voice of science'. Thus, a combination of a lack of direct engagement with the embodied sensuality of sport, and a prevailing narrative orthodoxy which failed until recently to capture and portray evocatively the phenomena of sporting experience, means that the analytic depiction of sporting activity is still found wanting in some directions. In the next section of the paper we suggest two possible ways of capturing more fully that level of embodied phenomena, which might develop further the sociological research literature in relation to sporting experience. These are not of course the only ways, and there are other modes that have been utilised, such as Labanotation – a standardised system for recording and analysing human motion, used particularly in ballet ([Hutchinson, 1991](#)).

Data gathering and representation

The first way of developing the literature is perhaps not too contentious or unorthodox a strategy. It involves a dual-phase, researcher and participant approach as suggested by [Coe and Strachan \(2002\)](#) in their research on dance. Their first phase, which they propose, is to incorporate the researcher into the process of recording data, so the researcher observes the embodied activity and records the sequence(s) of movement to produce a description of what is physically happening. This might be, for example, a depiction of the embodied routines of a high jumper in preparation for and during the jump. What is recorded is at this point relatively devoid of personal meaning. The researcher then proceeds to engage with the participant by portraying the observational data to her/him. The participant then emphasises the key points of physical effort present within the sequence of movement from her/his own standpoint, so the narrative at this juncture becomes an equal co-production. Coe and Strachan (2002) then suggest that the participant examines the narrative of this joint production, adding in the sets of personal meanings that are correlated with each phase of effortful movement in the embodied sequence. It is at this point that the capturing and depiction of something of the relevant sensory (movement, feeling, hearing, smelling, seeing) data becomes possible. [Coe and Strachan \(2002\)](#) advocate evocation in that depiction, although their examples are not

particularly revealing of that genre of writing. This is an important point, when one remembers that within 'the phenomenological approach, the purpose of writing is to bring the essences of the lived experience into being' (Kerry and Armour, 2000: 9).

Where one can find arguably more powerful examples of evocative, embodied depiction is within the personal narratives of sports participants (see for example Sparkes and Smith, 2007), and particularly within autoethnography, a genre that fuses author, researcher and researched. Authors within this small but developing literature (for example, Sparkes, 2002; Denison and Markula, 2003; Allen Collinson and Hockey, 2005) appear to be willing to take more risks with their less orthodox depiction of sporting phenomena, including sporting pain and injury, constructing forms of narrative which have greater potential to portray in an evocative fashion phenomenological experience. Little of this material, however, as indicated earlier, formally applies phenomenological theory to the data. Moreover, there is also little evidence that analytic resources from the anthropology of the senses or from sensual geography have been used to interrogate such accounts. Nevertheless, it appears that many authors of autoethnographic sporting accounts do adopt a Merleau-Pontian (1962) stance (in terms of 'the body as subject') without perhaps explicitly locating the work within phenomenology. In these accounts the narratives vary considerably in terms of the depth of embodiment portrayed. For example, here are two contrasting modes of describing running rhythm; the first by Sanders Bustle and Oliver:

An early morning rendezvous often greeted by the stiffness of the night, 6:0 a.m. or 7.30, yet hardly ever past 9:00. There were qualities to our running that involved the bodily rhythms of our heart, footsteps, breath... our breathing and stride struggle to settle into a rhythm. (2001: 512)

An arguably more 'poetic' account of running (and writing) is presented by Denison:

And out running I used to picture a radiant blue beam emanating from my waist that pulled me forwards mile after mile, lap after lap. When I write my arms become light, turn to wings almost, and I feel weightless in my chair. Exactly how running at night used to feel, when shrouded in blackness I became an apparition floating above the

road... somehow the process of moving in and through language, like moving in and through water, puts me inside myself and I trust the words that appear. Running's vital elements always felt cerebral too, with a touch of aquamarine. (2002: 132)

One can delve even further into the phenomenology of running as experienced by participants by constructing a 'deeper' account, which focuses directly on the sensations experienced by participants. The following is a fieldnote based on analytic logs kept by us during a two-year period of athletic injury and rehabilitation. It depicts re-learning how to run at speed as part of the rehabilitative programme:

Yesterday started speedwork again and both noticed the difference immediately, not just in terms of the breathing becoming harder – more burning, but in terms of how our bodies' bits moved once more pace was injected: toes push ground hard, plantar fascia moaning at increased effort, extra calf bulking-relaxing, hamstrings getting bigger and smaller rapidly – feel their 'snap', Achilles tendon whipping more. Arms driving. All is whizzing, agitating, humming, drumming. You can feel all of your body buzzing through the effort and extra blood flow... Interestingly, today the areas that can be felt most by both of us are the adductors and hip flexors (inner thighs), they feel sore and tight, having been stretched in that way for the first time for ages. It feels good though, sort of the body remembering, or perhaps awakening itself to something it has done before. (Individual Log 1)

The above portrayal perhaps begins in a small way to deal with what Leder (1990:23) has termed the body's 'ceaseless stream of kinaesthesias, cutaneous and visceral sensations'. We would argue that this kind of narrative, encompassing this level of sensation can provide another level of analysis in depicting evocatively the phenomenology of sport and physical activity.

Whether via an autoethnographic approach in which the individual is both researcher and participant, or using a combination of researcher and participant ([Coe and Strachan, 2002](#)), these ways of capturing something of the phenomenology of sporting activity can offer insight not only into the individual's meaningful sporting embodiment but also into the ways in which sports participants *share* their embodied experience. In order further to extend and

develop the analysis, a potential strategy might be to compile a series of accounts of the sensuous activity experienced in a particular sport. Such accounts could then be used to generate a set of inter-linked analytic categories. The nature of that linkage and its consequences could then be interrogated; for example, how gymnasts see and touch the apparatus, using their own subcultural understandings, and the consequences for performance of that human-equipment interaction. It would then become possible to use those analytic categories to compile an interview agenda, and to extend the scope of the phenomenological accounts by interviewing a larger cohort of experienced gymnasts. In this way, a sociology of gymnastics could be built upwards from its embodied bedrock, permitting grounded empirical data to be connected to formal theory. As Eliasoph (2005:166) has noted: 'theory usually demands close, logical argumentation'. One of the challenges at hand for the sociology of sport is to combine this kind of writing with evocative prose which captures and portrays to the reader the sensory dimensions of the sporting body. Abstract generalisations about sensory and embodied sporting activity - its corporeal ups and downs, joys and pains - might then be grounded in the actual activity rather than remaining woefully unconnected from it, as has sometimes been the case in the social sciences generally.

Discussion

Sports participants often become skilled at the highly specific forms of movement and the manipulation of objects essential for their sport. The deployment of such skill requires that individuals develop a spectrum of sensory intelligence and use that intelligence to execute skilful, practical sporting action. For example, a spin bowler in cricket develops detailed knowledge of the interaction between her/himself, ball, air, pitch and bat. This skilful fusing of knowledge and action gradually becomes, over time and with much practice, embodied and largely taken for granted. As Leder (1990: 31) perceptively notes in relation to learning skills generally: 'A skill is finally and fully learned when something that was extrinsic, grasped only through explicit rules or examples, now becomes to pervade my own corporeality'. These skilled actions may be repeated a vast number of times, but the reproduction is never identical because the conditions change, demanding improvisational adjustment and readjustment, accomplished via constant sensory monitoring of conditions (cf. Ingold 2000: 353). The sporting environment may, depending upon the nature of the activity, demand of participants an engagement with ground, water, air, meteorological conditions, equipment,

and also other players. Skill at sports (or indeed more generally) is not merely “an isolated ability in a person’s body, but is better understood as a meshing of a person’s intentions, through their abilities with the environment (including other people), already interrogated by a skilful person for significant information” (Ingold 2000: 353 *et seq.*). As Leder (1990: 17-18) puts it: ‘The sensory world thus involves a constant reference to our possibilities of active response’; or perhaps more contentiously, in Merleau-Ponty’s (1962: 137) words: ‘Consciousness is in the first place not a matter of “I think that” but of “I can”’. Presently there is a dearth of sociological research that analytically depicts sporting competence at this level of corporeality, and this article has sought only to signal some of the possibilities for future research and some potential modes for portraying such analyses.

Perhaps the analytic challenge facing us – on a number of inter-related levels - can best be illustrated by focussing upon a specific sporting activity, in this case we will use examples derived from soccer, in order to highlight a range of issues. First, it should be noted that we currently know little regarding the subculturally produced ways of bodily monitoring, comportment, and movement of professional (or indeed amateur) soccer players, what Csordas (1993:138) calls particular ‘somatic modes of attention’. Nor do we know how a player’s team position (centre back, striker, etc) impacts upon her/his somatic modes, and how these are differentiated. Second, our understanding is also deficient in relation to the corporeal processes of interaction between team-mates, their inter-corporeality. For example, how do strike partners (usually two) know and monitor where ‘the other’ is in relation to the opponents’ goal? How do they manage time and space and the movement of the other? Third, we need to examine how, in terms of embodiment, individual players play against the opposing players who are tasked with ‘marking’ them. Fourth, it would be of interest to discover how teams manage corporeal synchronisation in relation to opposing teams. These are just some of the individual and collective embodied processes that constitute the foundational elements of soccer, and which allow the ordered practice of the game to occur.

Conclusion

As Crossley reminds us:

Like the reader who overlooks the physical inscriptions on the page before them in order to follow the meaning embodied in those inscriptions, sociologists have overlooked the embodiment of agents and actions in order to better get at the meanings, purposes, interests, rules etc, embodied by them. (2007: 84)

Despite a growing 'corpus' of research literature on the sporting body, it appears that the sociology of sport has to-date addressed and analysed its subject primarily at an abstract, theoretical level. Relatively few studies can be found that are actually grounded in the carnal, more 'fleshy' realities of that moving, sweating, sensuous sporting body, which also holds meanings, purposes and interests. This paper has suggested how a phenomenologically-based analysis might begin the dénouement and examination of the sensory dimensions of sporting bodies, at this particular level of embodiment and analysis. We have also portrayed some of the potential representational forms that have begun to emerge, in an attempt to provide a more corporeally-grounded analytic depiction of sporting experience. More recent developments in the phenomenological field itself, such as the 'queering' of phenomenology (e.g. Grosz, 1994; [Ahmed, 2007](#)) - or at least some forms of phenomenology - provide the potential for its linkage with other theoretical perspectives within the sociology of sport, such as queer studies, and an enhancement of its more long-standing connection with feminism (e.g. Young, 1998). This provides not only a highly analytic stance on embodiment, but also possibilities of interrogating conceptions of socially-located, socially-related and interacting bodies: gendered, sexualised, sexually 'oriented', 'racialised', 'impaired', and so on.

References

Ahmed, J. (2004) 'Reaching the Body: Future Directions', in H. Thomas and J. Ahmed (eds) *Cultural Bodies: Ethnography and Theory*, pp. 283-300. London: Blackwell.

Ahmed, S. (2007) *Queer Phenomenology: Orientations, Objects, Others*. Durham, NC: Duke University Press.

Allen Collinson, J and Hockey, J (2001) 'Runners' Tales: Autoethnography, Injury and Narrative', *Auto/Biography*, IX (1 & 2): 95-106.

Allen Collinson, J. (2003) 'Running into Injury Time: Distance Running and Temporality', *Sociology of Sport Journal* 20: 331-350.

Allen Collinson, J. and Hockey, J. (2005) 'Autoethnography: Self-indulgence or Rigorous Methodology', in: M. McNamee (ed.) *Philosophy and the Sciences of Exercise, Health and Sport*, pp. 187-202. London: Routledge.

Allen Ness, S. A. (2004) 'Being a Body in a Cultural Way: Understanding the Cultural in the Embodiment of Dance', in H. Thomas and J. Ahmed (eds) *Cultural Bodies: Ethnography and Theory*, pp. 123-144. London: Blackwell.

Aoki, D. (1996) 'Sex and Muscle: The Female Bodybuilder Meets Lacan', *Body & Society* 2 (4): 59-74.

Bain, L. L. (1995) 'Mindfulness and Subjective Knowledge', *Quest* 47: 238-253.

Bittner, E. (1967) 'The Police on Skid Row: A Study of Peace Keeping', *American Sociological Review* 32 (5): 699-715.

Brooks Gardner, C. (1980) Passing by: Street Remarks, Address Rights, and the Urban Female, *Sociological Inquiry* 50: 328-356.

Classen, C. (1993) *Worlds of Sense: Exploring the Senses in History and Across Cultures*. London: Routledge.

Classen, C. (1997) 'Engendering Perception: Gender Ideologies and Sensory Hierarchies in Western History' *Body & Society* 3 (2): 1-19.

Classen, C. (ed.) (2005) *The Book of Touch*. Oxford: Berg.

Classen, C., Howes, D. and Synott, A. (1994) *Aroma: The Cultural History of Smell*. London: Routledge.

Coe, D. and Strachan, J. (2002) 'Writing Dance: Tensions in Researching Movement or Aesthetic Experience', *International Journal of Qualitative Studies in Education* 15 (5): 497-511.

Crossley, N. (1995) 'Merleau-Ponty, the Elusive Body and Carnal Sociology', *Body & Society* 1: 43-63.

Crossley, N. (2001) *The Social Body: Habit, Identity and Desire*. London: Sage.

Crossley, N. (2007) 'Researching embodiment by way of body techniques', *Sociological Review* 55 (1) 80-94.

Csordas, T.J. (1993) 'Somatic Modes of Attention', *Cultural Anthropology* 8 (2): 135-156.

Czikszentmihalyi, M. (1975). *Beyond boredom and anxiety*. San Francisco: Jossey-Bass.

Csikszentmihalyi, M. (1990) *Flow: The Psychology of Optimal Experience*. London: HarperCollins.

Denison, J. (2002) 'Writing a "True" Sports Story', *Auto/Biography* X (1 & 2): 131-137.

Denison, J. and Markula, P. (eds) (2003) *Moving Writing: Crafting Movement in Sport and Research*. New York: Peter Lang.

Downey, G. (2005) *Learning Capoeira: Lessons in Cunning from an Afro Brazilian Art*. Oxford: Oxford U.P.

Eliasoph, N. (2005) 'Theorizing from the Neck Down: Why Social Research Must Understand the Body Acting in Real Space and Time (And Why It's So Hard to Spell Out What We Learn From This)', *Qualitative Sociology* 28 (2): 159-169.

Emmison, M. and Smith, P. (2000) *Researching the Visual*. London: Sage.

Engelsrud, G. (2005) 'The Lived Body as Experience and Perspective: Methodological Challenges', *Qualitative Research* 5 (3): 267-284.

Ford, N. J. and Brown, D. (2005) *Surfing and Social Theory*. Routledge: London.

Frank, A .W. (1990) 'Bringing bodies back in: A decade review', *Theory, Culture and Society* 7: 131-162.

Fusco, F. (2006) 'Spatializing the (Im)Proper Subject: The Geographies of Abjection in Sport and Physical Activity Space', *Journal of Sport and Social Issues* 30 (1): 5-28.

George, M. (2005) 'Making Sense of Muscle: The Body Experiences of Collegiate Women Athletes', *Sociological Inquiry* 75 (3): 317-345.

Goodridge, J. (1999) *Rhythm and Timing of Movement in Performance*. London: Jessica Kingsley.

Grosz, E. A. (1994) *Volatile Bodies: Toward a Corporeal Feminism*. Bloomington, IN: Indiana University Press.

- Hall, M. A. (1996) *Feminism and Sporting Bodies: Essays on Theory and Practice*. Champaign, IL: Human Kinetics.
- Hargreaves, J. (2007) 'Sport, Exercise, and the Female Muslim Body: Negotiating Islam, politics, and male power', in J. Hargreaves and P. A. Vertinsky, P. A. (eds) *Physical Culture, Power, and the Body*, pp. 74-100 . London: Routledge.
- Hargreaves, J. and Vertinsky, P. (2007) 'Introduction' in J. Hargreaves and P. A. Vertinsky, P. A. (eds) *Physical Culture, Power, and the Body*, pp. 1-24. London: Routledge.
- Heinemann, K. (1980) 'Sport and the Sociology of the Body', *International Review of Sport Sociology* 15 (3-4): 41-55.
- Hetherington, K. (2003) Spatial Textures: Places, Touch and Praesentia, *Environment and Planning A* 35 (11): 1933-1944.
- Hockey, J. and Allen Collinson, J. (2006) Seeing the Way: Visual Sociology and the Distance Runner's Perspective, *Visual Studies. Journal of the International Visual Sociology Association* 21 (1): 70-81.
- Howe, P. D. (2004) *Sport, Professionalism and Pain: Ethnographies of Injury and Risk*. London: Routledge.
- Howes, D. (2003) *Sensual Relations. Engaging in Cultural and Social Theory*. Ann Arbor: University of Michigan Press.
- Howson, A. (2005) *Embodying Gender*. London: Sage.
- Hutchinson, A. (1991) *Labanotation: The System of Analyzing and Recording Movement* (3rd edn). New York: Routledge/Theatre Arts Books.

Ingold, T. (2000) *The Perception of the Environment. Essays on Livelihood, Dwelling and Skill*. London: Routledge.

Ingold, T. (2004) 'Culture on the Ground: The World Perceived Through the Feet', *Journal of Material Culture* 9, 315-340.

Kerry, D.S. and Armour, K.M. (2000) 'Sports Sciences and the Promise of Phenomenology: Philosophy, Method, and Insight', *Quest* 52 (1): 1-17.

Klein, A. (2002) 'The Anthropology of Sport: Escaping the Past and Building a Future', in J. Maguire and K. Young (eds) *Theory, Sport and Society*, pp. 129-149. Oxford: JAI Press.

Krizek, R. L. (1998) 'What the Hell are we Teaching the Next Generation Anyway?', in A. Banks and S. P. Banks (eds), *Fiction and Social Research: By Ice or Fire*, pp. 89-113. Walnut Creek, CA: Altamira Press.

Leder, D. (1990) *The Absent Body*. Chicago: University of Chicago Press.

Leder, D. (1992) 'The Cartesian Corpse and the Lived Body' in D. Leder (ed.) *The Body in Medical Thought and Practice*. Dordrecht: Kluwer Academic.

Lewis, N. (2000) 'The Climbing Body, Nature and the Experience of Modernity', *Body & Society* 6: 58-60.

Lowe, M. R. (1998) *Women of Steel: Female Body Builders and the Struggle for Self-Definition*. New York University Press.

Luijpen, W. A. (1966) *Phenomenology and Humanism – Primer in Existential Phenomenology*. Pittsburgh: Duquesne University Press.

Lyon, M. L. (1997) 'The Material Body, Social Processes and Emotion: Techniques of the Body Revisited', *Body & Society* 3: 83-101.

Maguire, J. and Young, K. (2002) *Theory, Sport and Society*. Oxford: JAI.

Markula, P. (2003) 'The Technologies of the Self: Feminism, Foucault and Sport', *Sociology of Sport Journal* 20: 87-107.

Markula, P. (1995) 'Firm but Shapely, Fit but Sexy, Strong but Thin: The Postmodern Aerobicizing Female Bodies', *Sociology of Sport Journal* 12: 424-453.

McKay, J. (1994) 'Embodying the "new" Sporting Woman', *Hecate* 20 (1) 68-53.

Meier, K.V. (1988) 'Embodiment, Sport and Meaning', in W.P. Morgan and K.V. Meier (eds) *Philosophic Inquiry in Sport*, pp 90-101. Champaign, IL: Human Kinetics.

Merleau-Ponty, M. (1962) *Phenomenology of Perception*, trans. C. Smith. London: Routledge & Kegan Paul.

Münch, R. (1994) *Sociological Theory: From the 1920s to the 1960s*. Chicago: Nelson Hall.

Psathas, G. (1979) 'Organizational Features of Direction Maps', in G. Psathas (ed.) *Everyday Language: Studies in Ethnomethodology*. New York: Irvington.

Rees, T., Smith, B. and Sparkes, A. (2003) 'The Influence of Social Support on the Lived Experiences of Spinal Cord Injured Sportsmen', *The Sport Psychologist* 17 (2): 135-156.

Rintala, J. (1991) 'The Mind-body Revisited', *Quest* 43, 260-279.

Rodaway, P. (1994) *Sensuous Geographies: Body, Sense and Place*. London: Routledge.

Rose, G. (1993) *Feminism and Geography*. Cambridge: Polity Press.

Rotella, C. (2002) *Good with Their Hands*. Berkely: University of California Press.

Sanders Bustle, L. and Oliver, K. L. (2001) 'The Role of Physical Activity in the Lives of Researchers: A Body-Narrative', *Studies in Philosophy and Education* 20: 507-520.

Shilling, C. (2007) Sociology and the body: classical traditions and new agendas, in C. Shilling (ed.), *Embodying Sociology: Retrospect, Progress and Prospects*, pp.1-18. Oxford: Blackwell/ Sociological Review.

Slavin, S. (2003) 'Walking as Spiritual Practice: The Pilgrimage to Santiago de Compostela', *Body & Society* 9 (3): 1-18.

Smith, G. (1997) 'Incivil Attention and Everyday Tolerance: Vicissitudes of Exercising in Public Places, *Perspectives on Social Problems* 9: 59-79.

Sparkes, A. C. (1996) 'The Fatal Flaw: A Narrative of the Fragile Body-Self', *Qualitative Inquiry* 2 (4): 463-494.

Sparkes, A. (ed.) (2002) *Telling Tales in Sport and Physical Activity*. Champaign, IL: Human Kinetics.

Sparkes, A. C. and Smith, B. (2002) 'Sport, Spinal Cord Injury, Embodied Masculinities and the Dilemmas of Narrative Identity', *Men and Masculinity* 4 (3): 258-285.

Sparkes, A. C. and Smith, B. (2007) 'Disabled Bodies and Narrative Time: Men, Sport, and Spinal Cord Injury' in J. Hargreaves and P. A. Vertinsky, P. A. (eds) *Physical Culture, Power, and the Body*, pp. 158-175 . London: Routledge.

Synott, A. (1993) *The Body Social: Symbolism, Self and Society*. London: Routledge.

Stryker, S. (1987) 'Identity Theory: Developments and Extensions', in K. Yardley and T. Honess (eds) *Identity: Self and Psychosocial Perspectives*. New York: John Wiley.

Tangen, J. O. (2004) Embedded Expectations, Embodied Knowledge and the Movements that Connect: A System Theoretical Attempt to Explain the Use and Non-Use of Sport Facilities, *International Review for the Sociology of Sport* 39 (1): 7-25

Theberge, N. (1991) 'Reflections on the Body in the Sociology of Sport' *Quest* 43 (2): 123-135.

Tuan, Y. (1993) *Passing Strange and Wonderful*. Washington, DC: Island Press-Shearwater.

Tulle, E. (2003) 'The Bodies of Veteran Elite Runners', in C.A. Faircloth (ed.) *Aging Bodies: Images and Everyday Experience*, pp. 229-258. Oxford: Altamira Press.

Van Emmerik, R. E. A., Hamill, J. and McDermott, W. J. (2005) 'Variability and Coordinate Function in Human Gait' *Quest* 57 (1): 102-123.

Wacquant, L. (2004) *Body and Soul: Notebooks of an Apprentice Boxer*. Oxford: Oxford University Press.

Wainwright, S.P. and Turner, B. S. (2003) 'Aging and the Dancing Body', in C.A. Faircloth (ed.) *Aging Bodies: Images and Everyday Experience*, pp. 259-292. Oxford: Altamira Press.

Wainwright, S. P. and Turner, B. S. (2006) 'Just Crumbling to Bits'? An Exploration of the Body, Ageing, Injury and Career in Classical Ballet Dancers, *Sociology* 40 (2): 237-255.

Williams, S. J. and Bendelow, G. (1998) *The Lived Body: Sociological Themes, Embodied Issues*, London: Routledge.

Young, I. M. (1998) "'Throwing Like a Girl': Twenty Years Later", in D. Welton (ed.) *Body and Flesh: A Philosophical Reader*, pp. 286-290. Oxford: Blackwell.