

## SENSING ATHLETES: SENSORY DIMENSIONS OF RECREATIONAL ENDURANCE SPORTS

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### ABSTRACT

Sport has become increasingly popular with recreational athletes over the last couple of decades. This has only gained minimal attention so far from scholars interested in the relations between recreational sports and everyday culture. With this paper, we seek to contribute to this field by scrutinising the sensory dimensions of recreational sport. Rather than probing into or highlighting isolated senses, we look at sensory dimensions understood as a combination of different, non-separable sensory experiences featured in recreational endurance sports. We are interested in how the senses play a role for recreational endurance athletes in running, triathlon and cycling both in training and competition. We start by examining how cultural and social dimensions are inextricably linked to doing sports. Secondly, we show how different configurations of the senses and their communicative mediation are contingent on sport disciplines, specific settings, technology, development and change as sensory careers over time. Thirdly, we discuss the kinaesthetic dimensions of doing sports in relation to the senses and the role of atmospheres. We conclude by arguing that highlighting specific senses by athletes is a cultural practice that calls for a holistic analysis of senses in sport, and outline some methodological implications for research on the senses.

KEYWORDS: senses • materiality • endurance sports • everyday culture • cycling • triathlon

## INTRODUCTION

Going to the gym, attending yoga classes, jogging or cycling are part of everyday routines for many people, permeating everyday practices and shaping parts of everyday culture. Being a member of a fitness studio, a local sports club, participating in marathons or cycling races, as well as being physically active in general, has become an integral part of everyday routines and a broad spectrum of lifestyles. Advertisements on TV, lifestyle reports in magazines and self-presentations in social media feature the ideal of the active sportsman and -woman; health insurance institutions and health ministries foster these images as benefits claimed from an active lifestyle. Rather than having to justify oneself for doing sport, one has to justify oneself for not doing sport. Endurance sports take up a considerable share of such sporting activities and images of fitness and healthiness. The lunch run at work, the bike ride with a local club in the evenings, 5K races or city marathons, as well as sports holidays, such as cycling vacations or training camps (Strüver 2010) – endurance sports like these have become a frequent and important part of everyday culture, shaping leisure time as well as perceptions of the self (Krahn and Groth 2017). As European ethnologist Wolfgang Kaschuba (1989: 154) argued more than two decades ago, “sportivity” as a “social pattern of behavior and interpretation” has become “omnipresent” and “taken for granted”. This image still holds: runners, cyclists and other recreational athletes in public spaces are perceived as normal, and mega events, such as city marathons, are a common part of urban event calendars (Berking and Neckel 1993; Müller 2015). Practicing endurance sport is not limited to training sessions or competitions: it influences perceptions of healthy and performance-enhancing diets, affects leisure activities such as holiday planning, abstaining from alcohol or going to bed early to be fit for training, and influences social relations when circles of friends mainly consist of fellow hobby athletes.

This significance of sport in general and of endurance sport in particular as a social practice in society shaping everyday culture is – unsurprisingly – mirrored in the increasing number of articles and books on sport from the perspectives of European ethnology (Maase 1989; Heimerdinger 2010; Strüver 2010; Kienitz 2016) and social anthropology (Husmann and Krüger 2002; Dyck 2004; Besnier and Brownell 2012; Faust and Heissenberger 2016; Müller et al. 2016). Such studies are closely related to a body turn in the cultural sciences (Bette 2005; Gugutzer 2006; Amelang et al. 2016), more general work on different cultural aspects of movement (Maase 2008; Windmüller 2010; Österlund-Pötzsch 2013; Tschofen 2013; Krahn 2016) and the role of tradition in sport (Hafstein 2009; 2012; Jöhler 2013). In such studies, sport and movement are not analysed as isolated phenomena, but the specific cultural practices and interpretations and their relations to sociocultural processes are emphasised. However, most of this existing literature focuses on fan culture rather than on the recreational athletes themselves (Herd 2016; Schwell et al. 2016); and despite the number of recreational endurance athletes involved in, for example, running, road cycling or triathlon,<sup>1</sup> there is still relatively little literature on those who do not compete at a professional level, but rather in their leisure time.

Furthermore, while the importance of an inclusion of the senses in research on sport in general has been highlighted (for example Allen-Collinson and Owton 2015), this does not hold true for the role that the senses play for recreational athletes. We argue

for the relevance of the senses as a main starting point, as the body is – in sport as well as in other areas – a means of perception:

Sensory perception, in fact, is not simply one aspect of bodily experience, but the basis for bodily experience. We experience our bodies – and the world – *through* our senses. Thus the cultural construction of sensory perception conditions our experience and understanding of our bodies and the world at a fundamental level. (Classen 1997: 402)

The senses play a role in recreational athletes' perceptions of fitness, healthiness and competitiveness; the emotive qualities of sport are tied to sensory experiences, and the importance of the senses stretches from material aspects (the comfort of apparel, the quality of running shoes, triathlon and road bikes) to practices of self-measuring (perceived efforts versus measured efforts) and self-presentation (beauty standards and appearances). Moreover, proprioception (perceiving one's own body and movements in space), the self-diagnosis of injuries or fitness levels, and knowledge of biomechanics and physical capabilities are all related to the senses. For recreational athletes, knowledge of the senses and emotions in sport as circulated in magazines, podcasts or online fora, cultural perceptions about landscape and nature, conceptions of immersion, ideal or desired leisure activities, the role of atmospheres (in general and specifically for bigger sporting events) and sensory biographies are important sensory dimensions which need to be considered when researching sport and the senses.

With our paper, we seek to contribute to the study of sport from the perspective of European ethnology by using the example of recreational endurance sports.<sup>2</sup> We are specifically interested in the role that sensory perceptions<sup>3</sup> play in recreational sport in their various aspects. While we draw from our own empirical research on recreational triathletes and road cycling athletes, this paper is conceptual in nature. It outlines crucial sensory elements of sport practices that need to be taken into consideration in research on sport and the senses, not only in endurance sport. Our paper brings together research and findings from different disciplines in order to allow for a more systematic and holistic approach to sports as everyday culture. Thus, we seek to contribute to this field of study by scrutinising the sensory dimensions of recreational endurance sport and outlining methodological implications for the qualitative study of sport as everyday culture.

We take up discussions on the senses and sport and shed light on the sensory dimensions of actually participating in recreational sport against a backdrop of ethnological studies on sport spectators (Giulianotti and Armstrong 1997; Schmidt-Lauber 2003; Gray et al. 2007; Eggeling 2010; Sülzle 2014; Herd 2016; Schwell et al. 2016), embodied analyses on the body and sport (Lewis 2000; Wacquant 2004; Downey 2005; Kumate and Falcous 2017) and studies employing sensory approaches to sport (Lund 2005; Hockey 2006; Spinney 2006; 2009; Sparkes 2009; Gopinath and Stanyek 2013). Rather than probing into or highlighting isolated senses (i.e. scrutinising how water is seen or felt by swimmers), we look at sensory dimensions understood as a combination of different, non-separable sensory experiences featured in recreational endurance sport (i.e. how swimmers experience water in its different dimensions in different contexts). More specifically, we are interested in how the senses play a role for recreational endurance athletes in running, triathlon and cycling, both in training and competition.

In our own empirical studies, we combine qualitative interviews, participant observation and auto-ethnography (Krahn and Groth 2017). In her research on spatial perceptions of triathletes and sensory experiences during intense physical activity, Yonca Krahn uses a praxeological approach to study sportive practices and their influence on lifestyle and social relations. She also focuses on the impact of surroundings on individual perception while doing sport (Krahn 2016; 2017). Interviews, partly held in motion while exercising, allow us to focus on diverse and situated aspects. The additional attempt of auto-ethnography allows us to understand triathletes' practices in a holistic way. Stefan Groth has participated in road cycling races and training sessions in order to analyse competitive aspects of recreational road cycling and to shed light on how hobby athletes frame their ambitions and motivations depending on context: while competitive aspects might initially be denied in qualitative interviews, they can feature prominently when cyclists are on the road and in motion (Groth 2014). This situatedness and context-dependency of competitive aspects hints at the necessity to follow the athletes in races and training sessions to catch ephemeral motivations. The same holds true for sensory experiences in cycling, as their mediation before, during and after activity can be at odds and can be further influenced by exchanges between hobby athletes in online fora or platforms (Groth 2017). Accordingly, he combines participant observation with qualitative interviews with cyclists and discourse analyses of various media to grasp the different dimensions of recreational road cycling.

On the basis of this research, we start by examining how cultural and social dimensions are inextricably linked to doing sport. We shed light on how senses are linked and connected to everyday culture and sociocultural perceptions of sport, fitness and lifestyle generated from sportive practices. Secondly, we show how different configurations of the senses and their communicative mediation are contingent on sports disciplines, specific settings, technology, and development and change, as 'sensory careers' over time. Thirdly, we discuss the kinesthetic dimensions of doing sport in relation to the senses and the role of atmospheres. Finally, we conclude by arguing that the highlighting of specific senses by athletes is a cultural practice that calls for a holistic analysis of senses in sport and outline some methodological implications for research on senses.

#### SENSING ACTORS: SOCIAL AND CULTURAL DIMENSIONS OF DOING AND SENSING SPORT

The presence of recreational runners in suburban neighbourhoods is a relatively recent phenomenon: not too long ago, people running on the streets would be seen as odd at best (Kaschuba 1989: 154); at worst, as a 1968 *New York Times* article highlights, the runners were being chased by police for looking suspicious or were ticketed for the "illegal use of the highway by a pedestrian" (Higdon 1968: 35). Perceiving of runners and other types of endurance athletes as something normal and quotidian is, thus, not given, but is the result of social processes normalising such practices over time and introducing new logics of everyday practices.<sup>4</sup> Such processes do not only pertain to observing others doing sport, for example, perceiving the runner as a normal image in neighbourhoods, seeing running gear advertised and sold in shops and magazines, or being con-

fronted with ideals of being fit and doing sport as a part of everyday culture. They also pertain to *doing* sport and to perceptions of doing sport. While observing other people jog or cycle as sporting activities is something that one can become accustomed to quite easily, jogging or cycling for exercise oneself requires more effort and a change in attitude towards such activities.<sup>5</sup> In a similar way to observing and doing sport, the senses are also subjected to processes of normalisation: encoding and expressing perceptions and sensory experiences while doing sport is not learned automatically or acquired at birth, but are the result of enculturation and socialisation as processes that can set in relatively late in life (depending on when one starts to jog, cycle or swim; cf. Maase 1994; Meuser 2005; Laging 2010).

Keeping one's balance while cycling or learning how hard one can (and should) push oneself while running is taught and embedded in the social practices of teaching people to ride road bicycles or to jog in a healthy manner. Similarly, social perceptions of desired or recommended sports efforts and about acceptable or 'normal' amounts of pain while doing sport (Degele 2006; Heimerdinger 2010) have an influence on recreational athletes taking up a sport.<sup>6</sup> Groth (2017) has shown how the measurement of effort in cycling has an influence on sensory perceptions: if, on the basis of performance tests and theoretical models, athletes know about their potential power output in training sessions or races, they try to achieve the theoretical maximum performance, even if they feel they cannot go any harder. Scientific models, performance tests and talking about them with coaches or fellow athletes in online fora shape sensory perceptions. Thus, talking about sports and sensory sportive experiences also has, in addition to biomechanical or sensorimotor aspects, sociocultural and historic dimensions; it is immersed in webs of meaning and norms of interpretation and interaction (Hymes 1964: 64).

An example of this is the encoding of a specific state of fitness known as having 'heavy legs': muscle soreness and fatigue after or before sporting activities are, in this and other examples, encoded in a "typical expression" (Bakhtin 1986: 87) which is socially shared and, accordingly, also understood by the social group in which it is uttered. Sensing one's state of fitness is, in this case, accompanied by a socially shared linguistic repertoire available for its interpretation. Sensations and experiences before, during and after doing sport are not fully intra-individual or idiosyncratic. Rather, they are mediated between different actors, sources of knowledge, cultural tropes and semantic fields. Practitioners, observers (such as family members and audiences) and experts (such as doctors, sports scientists, pro athletes) are central actors in this field, influencing perceptions and self-perceptions of observing and doing sports. Furthermore, ideals of fitness and sportiveness (Kaschuba 1989), lifestyles and trends (Linke 2003; Bausinger 2006; 2015; Maase 2008; Bender 2013; Hauser 2013; Wheaton 2013), as well as traditions (Kretzenbacher 1966; Hafstein 2009; Jöhler 2013) affect the ways in which sport is perceived. Advice books, newspaper columns and other media representations explaining the specifics of *what* a sport is and *how* it is to be done play another important role (Lutz 1989b: 198), especially for trend sports such as Nordic Walking, where the 'right' type of intensity and posture needs to be mediated to beginners. Both the knowledge and perceptions of sport are situated and contextualized, as is the mediation of knowledge and perception.

Accordingly, both sport and the role of the senses in sport are not fully accessible by looking at individual athletes, there is also a necessity to analyse sociocultural aspects. An early example of this is the work of Norbert Elias and Eric Dunning (1984) on sport and civilisation, highlighting the factors contributing to social perceptions of acceptable and unacceptable sports against the backdrop of values and norms. More recently, discussions on violent sports, such as mixed martial arts, shed light on the social perceptions of appropriate levels of violence (Kestler-Joosten 2013) and, thus, on the importance of sociopolitical aspects for an understanding of sport. This has been a truism in ethnological studies on sports, particularly with a focus on sports fans and spectators (Herd 2016; Schwell et al. 2016).<sup>7</sup> The relationship between sport and social background in its historic dimension and regarding the life worlds of athletes has been analysed in studies on workers' sport (Stiller 1991; Schönberger 1995), on sport and integration (Braun and Nobis 2011), on sport and gender (Brinkel 2008; Besnier 2012; cf. also Anderson 2011; Olive and Thorpe 2011), and on social perceptions of performance, health, fitness and competitiveness (Rigauer 1969; Graf 2013; Groth 2014). More generally, the role that movement and kinaesthetics or sensing bodies play in everyday life is stressed and the fact that this plays an important role in the construction of life worlds is illustrated. Sensory dimensions are closely connected to such social, political and cultural aspects of sports. If, for example, sport is seen as a leisure activity and enjoyment, rather than a professional occupation, a clear focus on optimal performance and, with it, the normalisation of hard and painful efforts in training and competition is not given – in this case, sensing pain, discomfort and extreme exertion is something recreational athletes try to prevent and avoid. If, on the other hand, recreational endurance athletes follow paradigms of performance and competition, and participate in races, then sensory experiences of exertion, including pain, can be an integral part of these activities (Degele 2006). To “suffer” can, accordingly, be desired and be viewed as something positive (Groth 2017).<sup>8</sup>

Sport as a cultural practice is a pervasive and quotidian phenomenon, and the role of the senses in this is crucial. Recreational sport in its social, political and economic dimensions and in relation to topics such as health, fitness, beauty or performance, are a field of study in which reflection about sensory experiences and the social dimensions of the senses play an important role. As we engage with recreational athletes, we want to understand their practices and sensory experiences in their sociocultural and group-specific contexts. Different senses feature in endurance sports, both in the self-perception of the athletes and in the perceptions of others. A central aspect is certainly the feeling of effort that accompanies sporting activities: what does effort feel like, how does one deal with the sensory experience of effort, which categories exist for processing effort (as healthy, optimal, excessive or inadequate) and how can effort be measured and mediated intersubjectively? These are, as our research has shown, questions that need to take into account group-specific parameters, cultural patterns of interpretation and dynamic processes of learning and negotiation. The same holds true for the aspect of body awareness or the sports-specific sense of one's own body, including elements such as balance on a road bike, the perception of inclines on a mountain or the resistance of wind and water, the right technique while swimming, the right division and balance of power and endurance; in addition, somatosensory factors, such as thirst, hunger, feeling the temperature and exertion, are part of this. The “aesthetic experi-

ences of those moving with their own body” (Maase 2008) are an important component in sport as well. They find their expression in the perception of athletes’ own bodies and in the observation, assessment and imitation of other athletes and their bodies. For the most part, people engaging in sport are seen as positive, healthy and aesthetic. However, there are differences between different groups and disciplines regarding assessing and judging body types and compositions. While triathletes rely on upper body strength for swimming, many road cyclists see a “pronounced muscular upper body that conventionally evokes connotations of strength and fitness” as unnecessary “for the sport of cycling as it is not performance- and output-oriented: the weight of muscles less needed for cycling is seen as a disadvantage, which prompted a recreational cyclist to seriocomically bemoan that he has to carry his biceps’ weight up a climb” (Groth 2014: 43). As Groth’s participant observation in training sessions and races has shown, the body composition of recreational athletes is a frequent topic of conversation, used to identify a muscular ‘sprinter’ or skinny ‘climber’, to justify bad performances or to assess the level of fitness of fellow athletes after the winter break.

#### SENSING CONTEXTS: CONFIGURATIONS, CAREERS AND COMMUNICATION

As our research on triathlon and road cycling shows and as studies on sport and the senses illustrate (Hockey 2006; Spinney 2006; Allen-Collinson and Owton 2015), there cannot be a universal approach to the senses in sport. Certain experiences can be more superficial than others, depending on the activity and context. What we conceptualise as *sensory configurations* includes a number of variables: runners in a picturesque landscape can highlight the view, triathletes can complain about the salty taste of the water or road cyclists can stress their perception of strong winds when cycling. In an interview in Krahn’s fieldwork, a triathlete describes what affects her during the Ironman competition in Hawai’i: “You always fight with something, like with the wind. Front wind, then it comes from the side, but never from the back!” (Interview G., 13.10.2014).

Sensory experiences while doing sport are a collaboration of different senses (cf. Classen 1997: 407 on the interplay of the senses in general), and different senses can be highlighted depending on the specific situation. For a triathlete, feeling the density of the water (Gugutzer 2015: 109) can be in the foreground, but the taste of the water or its temperature are highlighted in subsequent moments; for a runner, the perception of heat (Allen-Collinson and Owton 2015) can, at times, be foregrounded, while it is largely ignored in other situations; and for cyclists, the perception of extreme exertion can differ depending on whether it occurs in competition or in training (Groth 2017). This emphasises the dependencies of affective perception where one sensation is foregrounded, but can only be understood in conjunction with other senses and in relation to specific situations and contexts. For running, John Hockey (2006: 198) argues that “sensory patterns do not work in isolation (Merleau-Ponty 1962 [1945]) but are interlocking and mutually influential”. The individual perception might find a hierarchy of the senses, depending on personal awareness and inclination, but this does not conclude a universal order of the senses. This also hints at the fact that sensory configurations are sports-specific. Triathletes and road cyclists differ, from sport-specific

linguistic registers used to mediate sensory experiences, muscle composition as a result of specific training regimes, to material or clothing used for training and competing including the rules for what kind of material is allowed in competitions.

Sensory perceptions are, in addition, influenced by external factors, such as the surrounding landscapes (Allen-Collinson and Hockey 2015; Krahn 2016), the layout or design of swimming pools or stadia (Russo 2008; Bale 2009; Bale and Marschik 2009), clothing (Leder 1990: 46; Flanagan 2009; Woodward 2013: 56),<sup>9</sup> and rain or wind when exercising outdoors (Allen-Collinson and Hockey 2011; Allen-Collinson and Leledaki 2015); the composition of the ground can affect the way of walking not only in how shoes touch the ground, but also in the sight of the terrain while hiking (Lund 2005). Technology plays an increasing role in sensory perceptions as well. Technologies, such as sports watches, bike computers or smartphone apps have become pervasive and easy to use tools in endurance sport providing their users with, for example, GPS data, power data, altitude information, heart rate, speed and pace.<sup>10</sup> They do not only count steps and calories burned, but can also give direct feedback regarding how much power is used during a training session or how the heart rate rises and falls during competition. Measuring devices can be seen as an extension or sharpening of individual senses.<sup>11</sup> They convert physiological processes and reactions to physical activities into numbers and can be used to control effort in training and competition. The feedback these devices give is related to sensory perception and, thus, training effort can be adjusted. If an athlete knows that he or she can theoretically sustain a specific power output over a certain amount of time (according to sport diagnostics), he or she will try to sustain that effort even if his or her sense of exertion gives a different indication (Groth 2017). Technology can influence the sensory experience of a training session, as athletes monitor the numbers on cycling computers or sport watches and adjust their efforts according to prescribed training programs. Moreover, using measuring devices schools the senses. As trainers and advice books prescribe specific training zones based on heart rate or power output, these devices can be used to develop a 'feel' for the right level of exertion, even when the measuring devices are, subsequently, not used.

While the endurance athletes we focus on are individual athletes, their practices and sensory experiences are situated and contextualised as part of cultural practices and socially shared perceptions. A contributing factor to this is that other athletes feature in the configuration of senses, as a study on tandem cyclists where one of the athletes is blind illustrates. With the absence of one sense, other senses become more important and specific social forms of "togetherness" (Hammer 2015: 513) during an activity can develop. Gili Hammer (*ibid.*: 505) argues that the limited sensory perception leads to a reflection of bodily and sensory identities and to a process of "re-embodying vision as an active and somatic sense". She concludes that the tandem cyclists reach "an embodiment of reciprocity and interdependency between sight and the other senses and between sighted and blind people" (*ibid.*: 517). Such processes of collaboration with regard to sensory perceptions can also be found in other fields (for running, see Allen-Collinson 2008). In road cycling, riding in a larger group (or 'peloton') during a competition or in training creates situations in which cyclists riding at the back of the main body are not able to see obstacles ahead or on the ground. Corners, potholes and street furniture (street signs, curbs or traffic islands) only come into sight when it is too late and they cannot be dodged, especially when the speed is high. Cyclists, thus, depend

on their fellow competitors and training partners who conventionally signal obstacles, either by hand signals or by shouting. This involves trust that other athletes follow the conventional rules established in group cycling. As cyclists try especially to avoid air resistance by 'drafting' extremely close behind other cyclists – the distance between the back wheel of the person in front and the front wheel of the person behind can amount to as little as a couple of centimetres – they need to trust each other to temporarily ignore or suspend the perception that this is too close and is a dangerous situation. A sudden swerve or abrupt braking would result in a crash. Vision, in such instances, can be limited to closely monitor the distance to the wheel in front, while not looking (and not being able to look) at the road ahead. Again, there is reciprocity and interdependency between athletes regarding the senses, relying on trust in conventional and normal behaviour in cycling that obstacles are signalled and the way of riding takes others and their expectations into account (cf. also the discussion of signalling in mixed martial arts in Spencer 2011). This cooperation or sensory collaboration is context-dependent: obstacles and the route can be taken as known in races on a circuit or in training on a well-known course, and signalling is, thus, suspended. Similarly, a hobby road cyclist remarked in an informal conversation how it becomes quiet in the final stages of a race in preparation for a sprint to the finish. The competitive advantage of seeing and knowing the course outweighs the convention of informing others about the next corner.

The context dependency of sensory configurations further relates to issues of proximity and distance. In sports, such issues are negotiated differently than in other contexts of everyday life. The "territories of the self" (Goffman 1974) – the boundaries which individuals place between themselves and the environment – are perceived differently depending on context and sensory perception. During mass starts in marathons or triathlons, athletes are extremely close together and are occasionally hit by elbows or feet. Both close proximity and body contact are, to some extent, perceived as relatively normal conditions, in contrast to training situations where this would be seen as a transgression. During the course of a race, athletes are stretched out over the course, get together in smaller groups or seek to distance themselves from other athletes as the finish line approaches.

Athletes perceive and judge proximity differently in its various dimensions in different phases of competition or training situations, from seeing to feeling to hearing to smelling. A runner following another unknown runner at a close distance during a training run will be seen as annoying, while this constellation is rather common in competition. Shouting loudly in training situations to signal the next corner can be perceived as extremely annoying, while in competition, it is seen as useful. This can also be influenced by rules. Cyclists must keep a distance in some triathlons or time trials in road cycling, because drafting is prohibited. Such sensory configurations in recreational endurance sport results in sensory perceptions being experienced differently, some senses are highlighted or turned down, differing from those in other contexts of everyday life. They are fluid as they change during sporting activities, different modes of sport (training alone, in groups, competition) and as an effect of external conditions, such as landscape, weather or audiences.

We argue that reconfigurations and extensions of the senses in recreational sport can be conceptualised as *sensory biographies* or *careers*: The beginner in cycling experiences a course differently from the trained athlete; the advanced runner enjoys hill intervals,

while the novice primarily feels the burn in his or her lungs and legs. This stretches to different senses. Proprioception and balance on a bike depend on the level of skill, being able to focus on and enjoy the landscape during a climb is contingent on the level of exhaustion, a refined technique in swimming will lead to a different perception of the water and water resistance, and stronger leg and core muscles have an affect on one's feeling during a run. Sensory perceptions change with more training and experience in a sport. Learning processes are part of this: learning to 'read' a race, learning to perceive how hard others work and react accordingly, learning to distribute one's capacity and stamina throughout a period of exercise are all skills acquired over time and connected to the senses.

The *communicative mediation of senses* is a further aspect affecting sensory configurations that needs to be taken into consideration in research on sports and the senses. Stories of hard or easy training terrains or competitions circulate within specific scenarios of sport. A popular example is kilometer 38 of a marathon. This is, according to athletes, "where the marathon starts," where "you hit the wall" or where "the crisis begins" (Buman et al. 2008). In this and other examples, the question of the correlation (but not about causality) between such truisms and the actual perceptions of athletes arises. Is kilometer 38 really where the marathon becomes "hard"? Or does the popularity of the saying constitute an intersubjective mediation of sensory experiences that effects sensory perceptions in specific groups?

The difficulties of mediating sensory experiences verbally and textually are discussed by Andrew C. Sparkes and Brett Smith (2012) and Jacquelyn Allen-Collinson and Helen Owton (2014). This debate touches on the fundamental problem of how "pre-representational sensations and experiences of doing" (Spinney 2006: 711) are mediated by language and, more generally, culture; to what extent shared knowledge about training courses, shared linguistic registers in recreational sports and trickling down from pro-sports or more general concepts of fatigue, sports and leisure have an influence on this. Making sense of performance is, in many cases, also a narrative practice in which stories about efforts and the factors influencing performance are used to legitimise or make successes or failures plausible (cf. Tsang 2000; Rinehart 2005; Carless and Douglas 2008; Smith and Sparkes 2009; Spencer 2012).

We are, in our research, less interested in highlighting to what extent sensory perceptions are influenced by communicative registers and to what extent by pre-representational sensations. Instead, based on the "fundamental premise underlying the concept of an 'anthropology of the senses'" that "sensory perception is a cultural, as well as a physical, act" (Classen 1997: 401; cf. also Herzfeld 2001; Howes and Classen 2014) and on the assumption that it is neither possible nor sensible to draw a line between "physical" and "cultural" components of sensory perceptions, we argue that communicative mediation itself is context-specific and contingent on processes of socialisation into sport-specific groups and perceptions. How athletes talk about their sensory perceptions depends on specific situations, such as during a race, during an easy training session, directly after a competition or in a more formal interview setting, on their experience in a given sport, their reception of media coverage of professional races, online fora and magazines and training literature, and on the composition of the audience in front of which sensory perceptions are communicated, for example, face to face with the

researcher, among fellow cyclists, family members or in online settings. The awareness of sensory perceptions comes to life and is re-lived in the conversations about it. Studies on sports and the senses need to take into account the fact that processes of mediation can have a significant influence on how athletes talk about sensory perceptions, and that this influence changes based on situations, audiences and experiences.

## SENSING BODIES: KINAESTHETICS AND ATMOSPHERES

Experience is embodied through sensory perceptions, and bodily experiences are crucial to understanding the interplay of senses. Female triathlete G. describes the wind during the Ironman Hawai'i as something she fights against and that stays in her mind due to the sensory perceived challenges (Interview G., 13.10.2014). Although all Ironman Hawai'i athletes race the same course, the effect and perception of the wind is different from athlete to athlete and from situation to situation. Just because the wind has affected triathlete G. in one race situation, it does not mean that wind always affects her senses. The perception of wind and wind resistance are accordingly contingent on specific (race) situations and closely connected to movements and bodily experiences like feeling exhausted and fighting against the wind. In a similar vein, Justin Spinney (2006: 711) argues that it is necessary to actually experience certain activities on his own, such as climbing Mont Ventoux on a bike, "to uncover the non-reflexive and pre-representational sensations and experiences of doing". By talking about different senses, Spinney highlights the importance of internal perception, the kinesthetic value of doing sports. As a kinesthetic process, we understand "the embodied feeling and experience of movement" (ibid.: 715). Similarly, a cyclist riding up Mont Ventoux will feel his or her burning muscles and eventually reduce the intensity, because he or she wants to make it to the top of the hill without stopping. He or she does not need to decide that change of speed consciously, but is able to adapt his or her movements to what he or she wants to reach. This ability is not a universal fact every athlete can rely on – otherwise no one would need to pull out from a competition. The regulation of the kinesthetic is closely linked to the feeling of being in shape. In an interview one athlete talks about the physical feelings while being sportively active: "And there is a totally different feeling in the movement's process. Then, you can simply feel it – an athlete can feel, when he is in shape." (Interview F., 13.12.2014) He goes on to explain that this feeling allows the athletes to guide his movements, and allows him to increase the speed or tells him when he needs to decrease it. This interplay of the kinesthetic senses and the feeling about the trained body of an athlete offers a sense of what it is like to be able to move.

The motivation to do sport, even when suffering and pain are part of this activity, leads to the question whether the intensive sensory experience of sports could be the purpose for many to actually engage in sports. Many endurance athletes mention the high degree of "feeling themselves" as a reason for their activities, as we discovered in our evaluation of the fieldwork. Nina Degele (2006: 153) describes that aspect in her paper on pain, normality and arguments used. The belief of athletes searching for intense physical feelings is also often poked at in the media. The story of Andreas Niedrig, who was a heroin addict and became one of Germany's former best triathletes,

functions as such (Schmitt-Kilian and Niedrig 2009). The degree of feeling an intensive emotional high of unknown origin is often a narrative of presenting motives to engage with the sport. Moving individual limits and crossing borders is a narrative that often comes with endurance sport (Le Breton 1995; 2000). One triathlete describes her motivation for racing: "Once in my life I wanted to do that, once in a life, have a borderline experience!" (Interview H., 25.11.2014) Similarly, some runners talk about their tunnel vision during the runs and how easy it felt to "just go"; others remember mainly the suffering, the tired legs, the tightening stomach, the blood pulsing and the lack of oxygen. Those feelings focus mainly on the body and have little to do with the sense of sight, sound, taste or smell.<sup>12</sup>

Sumanth Gopinath and Jason Stanyek (2013: 140) show in their paper how music can be used by athletes to "tune your run" and create sonic environments as a crucial part of physical movement. At the press of the play button, the music kicks in and the run starts. The tempo of the run, and the perception of movement and exertion are influenced by the rhythm and intensity of the music. A similar example of the influence of the atmosphere is the work by Spinney on cycling up Mont Ventoux mentioned previously. A certain place transports an atmosphere, also because of how the place is known in the cycling scene. Roland Barthes (2012 [1957]: 146–147) describes the mountain as a place of extreme climatic conditions, a terrifying shape and a place to test the heroes. Spinney's (2006: 710–711) auto-ethnography refers to the iconic qualities of place. Spinney argues that the sensory experiences of landscape and surroundings are created by interlocking with an existing knowledge of place and culture, as myths surround iconic climbs, such as Mont Ventoux and other Tour de France stage finishes. These places have a specific atmosphere in the sense of Gernot Böhme's (1995) understanding that emotions become part of the perception of things and surroundings. The audience on the road, sometimes with frantic fans on the 'Dutch Corner' on Alpe d'Huez or the 'Solarer Berg' as part of a triathlon course in Roth, Germany, contributes to special atmospheres. These places are crowded with fans, leaving only a small corridor for athletes, and shouting encouragement (or abuse!).

Both examples show how specific experiences for the audience in sports exist which also have an influence on the cyclists or triathletes. Even during training rides up Alpe d'Huez, recreational athletes can recall the atmosphere of iconic places and are motivated by them. When it comes to the experience of surroundings, such as specific courses, gyms, landscapes or stadiums, atmospheres are crucial. They increase the sensory experience of spaces. While they can be perceived very differently by different individuals, there is a generally shared knowledge about them within the sports scene, reproduced by media representations (TV screenings of stages finishes, internet reports), stories about these places circulating among recreational athletes, or concrete signs in these places (such as road signs indicating the 'Dutch Corner' or writing on the road). The sensory awareness, thus, integrates not only what is felt, but also preexisting knowledge about place and atmosphere. The transformation of a training course into a competition area is caused by temporary competition architecture, such as changing tents, finish line decoration, sports clothing brands, trucks with takeaway food, flags and audience areas. The speaker announcing the athletes crossing the finish line in age-group competitions entertains the audience and generates a sonic atmosphere that effects the sensory experience. The audience often joins a competition because they

want to feel this certain ‘competition atmosphere’. Smells from the food trucks, the massage tents, walked-on soil (especially when running competitions end on a lawn during wet weather) and sweating athletes cause a specific and very diverse race-day-smell.

## CONCLUSION

There is a pervasive presence of sport in everyday contexts, and sport has become an important practice stretching from the general perceptions of sportiveness, fitness and health to recreational endurance sports as a time-consuming leisure activity. The ways in which the senses play a role in such developments and processes are manifold, and there is a need to fill the research gap on active recreational athletes regarding different sensory dimensions. With our paper, we argue that a holistic analysis of such sensory dimensions in sports is necessary to make sense of processes in which diverging sensory configurations and combinations of sensory perceptions appear. When specific senses are highlighted and others are neglected in talking about doing sports, this is partially influenced by social and cultural aspects. As cultural practice (Hitzler 1991), sport is part of sociocultural perceptions, interpretations and ascriptions. This calls for research not on individual athletes, but on actors in specific contexts. Making sense of sensory perceptions, the mediation of sensations, and the relations between senses and activity are all processes of learning; they are tied to intersubjectively shared ideas about the senses, about specific sports and the more abstract concepts of sportiveness, fitness and performance.

We argue that a more systematic approach to sport and the senses needs to take into account the following aspects: sensory dimensions and sensory experiences are not fixed, but are contingent on specific disciplines, contexts and situations (sensory configurations). They are group-specific, influenced by audiences, such as co-present athletes, spectators or family members and friends. Technology, such as measuring devices, sport-specific clothing or social apps increasingly play a role in the sensory configurations. Furthermore, sensory dimensions are subject to processes of change over time and experience (sensory biographies or sensory careers). These include processes of normalisation defining which sensory perceptions are normal (as part of hard efforts in sport) and which are not (as part of unhealthy and painful practice). Finally, sensory experiences and dimensions are always *mediated*, and the available registers for this are complex, contingent on social and cultural conceptions as well as on everyday culture. This calls for a micro perspective on the senses in sport, taking into account these dimensions and their situated character, including kinaesthetic aspects and atmospheres. The interplay of senses, their combinations and recombinations, the connections or interfaces between sensory perceptions, bodily practices and materialities need to be considered when researching sport and the senses. In line with current ethnological studies on such interfaces (Niewöhner et al. 2015), we suggest that further research is necessary to shed light on the specific processes during which sensory configurations shift, are modified or made explicit.

Methodically researching contemporary practices of recreational sport, while focusing on active athletes, requires approaches that reflect the different sensory dimensions and perceptions. The relationship between the perception of effort and its measuring,

the situated configuration of the senses in sport, the sociocultural mediation of body and sport knowledge, as well as group-specific interpretations, require reflections on how to grasp these issues methodically. Krahn (2016; 2017) has argued for the use of “interviews in motions” and for auto-ethnographic involvement to do justice to the ephemeral character of the senses. These methodological approaches allow insights into deeper-lying aspects of sportive practice. This makes it possible to shed light on sport-specific and multisensory perceptions; in this context, Groth (2014; 2017) has illustrated how situative factors of sensory perception need to be taken into account in ethnographic observation. Thus, we argue that an ethnological approach to sport that focuses on active athletes needs a degree of physical involvement: the use of the senses, physical activity and the co-presence of other athletes are essential for an understanding of sensory perceptions and experiences (cf. also Lund 2005; Hockey 2006; Keding and Weith 2014). Not in the sense that participation renders visible concrete and clearly delineated sensory configurations and sensory careers, but that participation makes the mediated perceptions of athletes more comprehensible.

As sensory experiences are part of the toolkit of ethnographers (Bendix 2005: 3), group-specific sensory configurations that are contingent on context and situation can be analysed by researchers engaging in sporting activities themselves. The co-presence of ethnographers during such activities is a central aspect so as not to limit research to the mediated sensory experiences of athletes after training sessions or competitions. In this, we follow ethnographic studies arguing for a “doing it yourself” (Ehn 2011; cf. also Marchand 2009) and for an “observation participante” (Wacquant 2004) to grasp the various pertinent dimensions that need to be considered. Here, further comparative research, for example, between triathletes and road cyclists, is needed to analyse group-specific configurations of the senses. Due to the nature of the sports and the different training forms and regimes, runners train less than triathletes or road cyclists. Does this result in different perceptions of fatigue and exertion?

We further suggest research on how sensory configurations from sport are transferred to everyday contexts, from work environments to other leisure activities and health issues in general. While, for example, transfer effects from sports to the sphere of work have been analysed regarding leadership qualities and skill (Kay and Laberge 2002), this has not been the case for sensory perceptions.

## NOTES

<sup>1</sup> Although the training volume of the athletes in our research can reach amounts of more than twenty hours of weekly training, we still count these as recreational sport activities because the performance level stays below the elite level. Recreational sport, therefore, excludes professional athletes, meaning that the athletes we look at do not participate in the so-called *pro field* of a competition. However, hobby athletes regularly make sense of their own performances and sensory experiences by comparing themselves with professional athletes and copying many aspects of their training, lifestyle and dietary regimes.

<sup>2</sup> We, accordingly, do not claim that our arguments are valid for all types of recreational sport.

<sup>3</sup> We use the term sensory perception following Constance Classen’s (1997: 401) definition of “perception [as] a cultural, as well as a physical, act” and her assumption that it is neither

possible nor sensible to draw a line between “physical” and “cultural” components of sensory perceptions.

4 The 1970s in Germany marked the beginning of *Trimm-Aktionen* by the German Sports Association, promoting exercise and sport as recreational activities (Lutz 1989a: 18–19). *Trimmen* (‘to get into good physical trim’) became immensely popular (Mörath 2005), and the term even found its way into everyday vocabulary (Palm 1978).

5 Cf. Lutz 1989a; 1989b for the development and roots of *Volkslauf* – recreational running events – in Germany.

6 This does not only relate to the prevention or avoidance of discomfort or pain, but also to conceptions of enduring or pushing through pain and of understanding pain to be an integral or even desired part of sport (Nixon 1993; Curry and Strauss 1994; Howe 2004), partly linked to images of masculinity (Young et al. 1994; Smith and Sparkes 2002; Spencer 2012).

7 While approaches to fan culture are limited insofar as they do not analyse active athletes, the focus on fan culture as performance is also fruitful for the study of recreational athletes.

8 One training platform is called The Sufferfest and advertises the “science of suffering” to “unlock your potential as an athlete”; the platform Strava features a “Suffer Score” indicating how hard a ride has been.

9 An example of the influence of clothing on senses in sport is swimsuits. In our research, triathletes described how they move differently in the water when a wet suit is worn and how swim times are improved with the help of that layer of clothing, experienced as a “second skin” (cf. Glavac et al. 2013).

10 Such devices and apps are, in many cases, connected with social media programs, which allow the posting and sharing of the data. Accordingly, performances can be compared to other athletes who have ridden a course before, but are not currently present. This virtual co-presence can feature as a motivation for harder efforts and influence the sensory perception of exertion, capability or stamina.

11 Cf. the edited volume by Thomas Hengartner and Johanna Rolshoven (1998) for discussions about the question whether technology can be understood as an extension or a sharpening of the body.

12 Those feelings were mentioned in diverse interviews in motion and fieldnotes, Krahn held and collected for her PhD thesis. Cf. Siedentop 1989; Vertinsky and Bale 2004; Sparkes and Smith 2012 and Spencer 2014 for further elaborations on these aspects.

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