

Title: Affect and public health e Choreographing atmospheres of movement and participation

Author: Andrew Barnfield, London School of Hygiene and Tropical Medicine, United Kingdom

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Abstract

Attempts at improving physical activity rates among the population are central to many government, public health, and third sector approaches to encouraging health behaviours. However, to date there has been little attempt by public health to embrace different theoretical-methodological approaches, relying instead upon largely quantitative techniques. This paper argues that through a development of a framework of affect amplification, public health approaches to physical activity should incorporate the choreographing of spaces of movement. Drawing on two case studies, both incorporating ethnographic methodologies, this paper complicates the idea that public health can rely on individual or population level approaches that overlook affective and spatial entanglements. This paper concludes by outlining offer a series of ideas to encourage physical activity participation.

Introduction: Affect and Public Health

Physical activity is central to public health approaches and interventions in combatting non-communicable disease (obesity, cardio-vascular disease, cancer). Despite the omnipotence of message little change has been made. Public health is reliant on rational cognitive and behavioural theories of action. In foregrounding the rational human, these approaches leave no room for the role of affect in shaping practices. There is an opportunity for geographies of affect to cleave a space within public health theory and research that could develop thinking and establish more ethically sensitive approaches to pressing health issues.

For public health this means experimenting with creating and choreographing atmospheres to aid careful thinking about the drivers and constrainers of physical activity. The intention of this paper is to outline how choreographing affect can be utilised for improving public health methodologies towards physical activity. There are three aims; (1) provide a theoretical orientation for thinking with affect for public health engagements with physical activity, (2) examine the techniques, technologies, and material arrangements of creating an affective space to think through methods of practical engagement with affect, and (3) by way of a conclusion, offer a series of ideas of how choreographing affect could help to improve physical activity participation. The orientation developed throughout the paper draws on the choreography of affect (Manning, 2013), the cartography of affective intensity (Guattari, 1995; Spinoza, 1996), and the atmospherics of experience (McCormack, 2013).

The world is full of affects, working on registers of awareness that often escape the grasp of conscious reasoning. Thrift (2008, p 175) writes that affects are “a different kind of intelligence about the world, but it is intelligence nonetheless”. While Conradson and Latham (2007, 236) position affect as “not thought in the sense of a conscious working through a series of logical steps or evaluation, but rather a whole-body cognition of the world. Rooted in a particular set of physiological and neurological responses, affect is an embodied appraisal of external stimuli”. The power of affect has been deployed in different fields. For example, in politics by the use of sensations of fear (Connolly, 2005), as the potential of making ‘new worlds’ that would open political agency to new modes of consideration (Amin and Thrift, 2013), and how the development of sensations has the potential to dislocate subjectivity, which in turn has political potential for new styles of living communally (Panagia, 2009). The idea that spaces, objects, and other elements have the power to move people in certain ways is certainly not new (Whitehead, 1938).

The potential of thinking with affect matters because of the concerted effort by governments and public health bodies to increase levels of physical activity (Breckenkamp et al., 2004; Faramawi and Caffrey, 2010). However, despite the cautions, participation rates in physical exercise are decreasing across Europe (Hallal et al., 2012). The decline of physical activity across the continent has sparked appeals for an improved understanding of how, why, and in what ways people engage in physical activity to help inform ideas and policy (Hagstromer et al, 2006).¹ Despite the suggested urgency, research and policy recommendations draw on a relatively small field of knowledge. Therefore, the promise of working with theories of affect amplification is an important opportunity for public health and social science to work more closely together. The adoption of thinking with affect in public health circles also presents an opportunity to challenge ingrained ideas about how to encourage new modes of participation and embolden a rethinking of the reliance on quantitative studies (Hitchings, 2013). This would open the discipline to wider theoretical-methodological perspectives (Barnfield, 2016).

The paper is structured as follows; the next section will outline the two research projects that the empirical material of this paper is drawn, this is followed by the development of the theoretical orientation of choreographing affect that is drawn from the work, principally of, Spinoza, Guattari, Manning, and McCormack. The second half of the paper is devoted to the empirical material that is presented in two case study vignettes and a discussion that explores the ways affect is drawn out in the development of a football pitch and a ParkRun. The paper ends with a conclusion that points to ways that affect amplification could be incorporated into public health approaches.

A note on method

This paper is based upon on two case studies from separate research projects. The first is from a PhD research project that explored the spatialities of football as an expressive event. It examined the tools

¹ However, a note of caution should be sounded when suggesting certain body types, practices, or spaces are unhealthy, see Colls and Evans for an excellent critique of the obesogenic literature and attitudes towards bodies seen as physically unfit or diseased (Colls and Evans, 2009; 2014)

and processes used in creating and maintaining an elite level football pitch. The fieldwork involved spending several weeks with the pitch staff at Everton, an elite professional football team in the English Premier League. The second is from a post-PhD research project that examined the techniques and technologies of participating in physical exercise in Sofia, Bulgaria². It explores a weekly ParkRun in a European city. A ParkRun is a free to enter running event. The route is five kilometres and there are no restrictions on age, numbers, or ability. The ParkRun has been very successful, attracting nearly two hundred regular runners in a city with declining participation rates in physical exercise (Eurostat, 2012). The organisers have also started ParkRuns and running weekends in three more cities in Bulgaria. I kept a multimedia field diary that recorded my own and others' experiences of establishing and maintaining running routines in the city of Sofia.

The two research projects used mixed methods, prioritising qualitative approaches. In particular participant observation was used to gain a deep insight into how these two different affective events are produced (Burawoy, 1998). I participated in the daily actions of the pitch staff to prepare the pitch for matches, keeping a field diary, photographs, and interviews with the pitch staff and their practices (Vannini, 2015). In the running project I participated in recreational running events, running club activities, and explored practices of daily exercise routines. The runners, drawn from two recreational clubs, were surveyed and then a group of sixteen (10 male and 6 female) participated in follow up qualitative interviews to discuss their practices (Hitchings, 2012).

Developing Public Health

This paper is interested in thinking with affect and how this can be best used within public health approaches to physical activity. This involves thinking about how space and affective intensities can be choreographed or 'engineered' (Lin, 2015). The potential of material arrangement, the staging of atmospheres, and moving bodies in affect amplification hold promise for public health approaches to cities. Public health research and guidance has tended to place a great amount of importance on the rational human who either chooses to exercise, or needs 'nudging' into good health behaviours. However, both of these approaches discount the influences of more-than-human elements in the world. To help improve both public health approaches and rates of physical activity requires thinking about the spaces, techniques, and technologies of engagement in exercise practices. Starting and staying physically active encompasses more than mindful and rational decision-making (McCormack and Schwanen, 2010). Therefore, public health research needs to adopt delicate techniques for the range of contextual factors (Barnfield, 2015).

There are three reasons why the methods used for research require modification. First, a statistics-based approach continues to lead in physical activity research (Hitchings, 2013). This is a reasonable state of affairs given the methodological background of much of public health. That being said, statistical analysis will only ever be able to deliver a colourless version of the everyday and what this means for physical activity (Heath et al., 2012). Further, the desire for ever larger sample sizes, only reduces the connection between researcher and participant. The danger is of missing out on the subtle and not so subtle pressures, concerns, and fixations that help to explain participation. Second, as a

² See Barnfield and Plyushteva (2015) for a study of cycling practices in Sofia.

result, much less is known about how the subtleties of engagement influence participation in physical activity (Cummins et al, 2007). This is due to much of the focus being primarily on land use design and planning (Frank et al., 2010). This serves to limit the range of research by understanding space as a passive backdrop that is solely animated by human endeavour (Massey, 2005). This elides the complex assemblages of different materials, practices of engagement, and cultures of movement that need to be considered as fundamental to any form of participation. Therefore, the choreographing of affect and space opens up the possibilities for engendering an active disposition of movement. A disposition that would foreground a daily ethics of moving bodies and physical activity.

Finally, is the reliance of public health approaches on behavioural models such as the theory of planned behaviour (PBT) (Ajzen, 1985). This has been the leading theoretical approach guiding research on health-related behaviour over the last thirty years (Sniehotta et al, 2014). Briefly PBT advances the notion that volitional human behaviour is implemented within the intention to execute the behaviour and perceived behavioural maintenance. Here, intention is theorised to be an outcome of attitudes towards the behaviour, subjective norms, and perceived behavioural mechanisms (Sniehotta et al, 2014). PBT has weaknesses due to its emphasis on rational reasoning, rejecting unconscious influences on behaviour and the function of emotions beyond projected affective results (Conner et al, 2013). The inert illustrative nature offers little insight into the effects on cognitions and future behaviour (Sutton, 2002). Further, there is a distinct lack of accountability for variability in observed behaviour and of individuals who form an intention and subsequently fail to act.

Choreographing Spaces of Affect

Atmospheres of experience

The capacity to affect and to be affected. This is the fundamental notion of affect. A body being able to affect and be affected by another body. It necessitates an encounter, a state of already being immersed in the world. Anderson (2009) has suggested that the terminology of atmosphere best grasps the meaning of affect. Atmosphere speaks to the ephemeral and transitory nature of affect, whereby affect is understood as the transpersonal or pre-personal qualities that materialise as bodies affect each other (Massumi, 2002). Anderson concludes his argument by suggesting that, “the concept of atmosphere is good to think with because it holds a series of opposites – presence and absence, materiality and ideality, definite and indefinite, singularity and generality – in a relation of tension” (2009, 80). Stewart (2011, p452) writes that affect is a field of atmospheric sensations that can be attuned to, writing that atmospheric attunements are “not an effect of other forces but a lived affect, a capacity to affect and to be affected that pushes a present into a composition, an expressivity, the sense of potentiality and event. It is an attunement of the senses, of labours, and imaginaries to potential ways of living in or living through things”.

An atmospheric line of thinking about affect brings into focus the many relationships between objects and subjects. Affect has been argued to be ‘located’ in various subject-object relations (Navaro-Yashin, 2012). Bohme (2007), for example, suggests that the properties of affect are sensed at the juncture of object and subject. While Anderson and Wylie (2009) suggest that affects are a category of involvement

in the world that occurs prior to and in conjunction with the formation of subjectivity, that traverses human and non-human materialities, and amid a cleavage of subject and object. More than transpersonal, affect is a trans-matter potentiality (McCormack, 2007). This is an intensity that is not located in either subject or object and in fact helps to destabilise the power of strict binary conceptions and their discursive terms. Affect does not reside in individuals, human life is an ingredient without playing the central and only role (McCormack, 2006).

There is a diverse assortment of objects, entities, and molecular actions within space, which are imbricated within the field of affective potential (Latham and McCormack, 2004). Space itself has the power to affect, further weakening the subject centred psychoanalytic approach (Brennen, 2004). Thus, affect is transmitted through sensing bodies *and* their environment³. This supports Deleuze's (1988a) view of a body that is drawn from his reading of Spinoza's affective materialism⁴, comprehended as ethological relations that operate between sensing bodies of various intensities of activity and passivity. In Spinozian terms, they are relations that encompass the affective capacity of bodies. Not simply bodies of corporeal visage, but bodies as collections of speeds and slowness, density and porosity.

Material arrangement is key in nurturing affective atmospheres and is a central issue for this paper. As Conradson and Latham (2007, p 235) comment this draws further from a Deleuzian-Spinozian standpoint in comprehending affect as "at the broadest level – a consequence of the interactions that occur between the bodies, objects and materials that comprise particular ecologies of place". The idea of an ecology, a relational field of potential holds particular promise for this paper and is drawn together with notions of atmosphere, or rather, atmospheric qualities of affect and experience. Ecology, as Stengers (2010, p33) suggests, points to a different kind of ethos that intimates "new relations that are added to a situation already produced by a multiplicity of relations" which entails the construction of new relations. An ecology is always more than the sum of its parts.

In *Refrains for Moving Bodies* (2013, p 2) McCormack explores how the many spaces that comprise daily life are demonstrative of how the movement, immobility, and flow of bodies is facilitated and controlled by all sorts of "material architectures, habitual behaviours, and organisational technologies". Thinking through the atmospheres of experience entails experimenting with experience through the development of affective spaces generated by moving bodies. It means paying attention to lines of potentiality and flight, which develop affective refrains. Refrains are resonate blocks of spacetime sensed as gatherings of intensity, "refrains hold bodies in certain worldly arrangements at the same time as they open other ways in which bodies can generate worlds and the values that sustain them" (p 204). They can linger long after an event that has brought them forth, working in multiple ways to reconfigure spatial experience "sometimes these refrains are shapes that won't let you go, while on other occasions they are creative variations in the tissue of experience" (p 204). Atmospheres of

³ Such readings of affect have been inspired by work in neuroscience (e.g. Connolly, 2002; Dimasio, 2004)

⁴ A body is a collection of forces, moving within a field of relations. To use a Spinozian-Deleuzian term, a heaccieti, a body is a collection of speed and slowness, of rest and movement, it has a certain this-ness. It cannot adequately be explained by a single term, as a body always exceeds singular representations. A body in this paper has no gender, race, or ability distinctions.

experience not only shape the experiences of space, they also imbue space with relations, trajectories, and connections that unite bodies, working across multiple registers of sensation. Thinking about space in this way would enable public health to incorporate geographies of affect into approaches by understanding spatial experience as atmospheric, multiplicitous, and resonate.

Choreography of affect

Movement is an important ingredient to affective spaces. As such, consideration has to be made to thinking through the potential of movement as more-than sense-making and thought creation. Movement comprehended as an ethics of relations. This foregrounds a milieu of experience negating the starting position of the human body and prioritising the continued process of being (individuation). Erin Manning has written on ways to attend to the body that holds open its field of potential (2007; 2013). Manning's work vibrates with ideas, focusing upon and prioritising thinking with movement. How movement shapes perception, experience, and worlds on a pre-cognitive level. However, movement does not originate nor conclude with the human body. In *Always More Than One* Manning draws attention to several concepts (e.g. bodying, composing-with, mobile architecture, movement-making, and spacing) that present promise for thinking with the power of movement to delimit an ethical understanding of moving bodies. Three concepts that Manning works with are useful for this paper. First, bodying explains how movement is not of the body, it cuts-across composing with different velocities of movement-moving. As Manning explains with the use of dance, "There are an infinity of ways of touching on the more-than of movement-moving. Dance is one example. What dance gives us are techniques for distilling from the weave of total movement a quality that composes a bodying in motion." (2013, p 14) This vibration is a movement of thought, one that is a thinking that composes with movement, with the body in the making.

Second, mobile architecture is when human movement evolves to include its related milieu, such that the milieu's ecologies of relation themselves be sensed. It is,

"not a resting place for human bodies, nor is it a built enclosure....a mobile architecture is about fielding of experimental spacetimes such that they produce an intensive turbulence that becomes the force for a distillation of absolute movement, for the making felt of how movement-making merges with the actual in its unfolding. The mobile architecture of choreography is not the plan of the movement or the partitioning of individual bodies in space. It is the relational force that persists from the collective movement's incipient cueings and alignings." (2013, p 136).

Third, composing-with "is a commitment to making the pure experience of the more-than of expression felt. It is an ecological approach that seeks to work with the complexities of expressibility." (2013, p 162). To compose-with is to attune to the affective tonality of movement, texture, or sensation as they create new rhythms and new environments. Composing-with is a disposition that thinks past subject-object, starting instead with the more-than of an ecology. Composing-with is encouraging the concrescence of the 'relation between affective tonality and affective attunement' in a togetherness animated by a multiplicity that, 'captivates, that unmoors, that tunes towards radical difference'.

In *Always More Than One* Manning uses these terms to ruminate on the potential of choreographic thinking, “choreography asks: What else? What can the event do? (2013, p 91). The world is choreographed, objects are placed, and relations are brought together. However, what is created is not bodies but relations, a field of relations is animated through thinking choreographically. In composing a field of relations Manning’s writing has the potential to activate how to compose with movement to develop what more the event can do. The event in this case is the dynamic field of relations that can be composed-with to develop an approach to moving, exercising bodies. This means, as Manning suggests, “Choreography becomes a field for movement expression when the body becomes an intensive participant with the evolving milieu rather than simply the instigator of the action. This occurs when the choreographic begins to make felt the coming-into-eventness of the field of relation.” (2013, p 101) Manning is describing encounters. The staging of the event of movement, means staging encounters to make spaces of always more-than just bodies or movement. This is choreography of spatial and material encounters, questioning how to animate the field of relations.

Cartography of affective intensity

The idea of encounter was essential to Spinoza and his ideas of emergence (Thrift, 2007). For Spinoza, affect not only occurs in the encounter between multifarious things, but the consequence of each encounter is reliant on the arrangement that these entities are able to become involved in. The resulting embodied encounters reach the level of comprehension by individuals in a range of ways, most commonly as positive or negative sensations. Affect as a result of an encounter is a dynamic agent that materialises through the body and mind’s ability to register this sensation together (Deleuze, 1988b). Either as more positive ways, such as joy or happiness, or in negative ways, such as sadness or despair. This is a cartography of apprehension that Spinoza delineates in order to comprehend the relation between affects, bodies, and regimes of movement (movement in the sense of speed and slowness, density and porosity between particles). This poses questions of not only what a body is, but of a consideration of the relation of non-human entities and affects that are imbricated in comprehension and sensation (Spinoza, 1996).

The strength of Spinoza’s affective cartography is twofold. First, it enables a manner of understanding of individual expressions of human emotion and second, it does so by proposing an ethological model of affect that activates the molecular in a way that avoids both the naïve particulate reductionism and the diminution of affect to individual feeling (McCormack, 2010). Hence, Spinoza affords a technique of understanding the relation between spaces, objects, atmospheres, and bodies. Approaching the interactions, instead of being ontologically discrete, as two different ways in which intensive constituents articulates itself in extension, despite their differential relative speeds (Deleuze, 1988b). However, Spinoza’s cartography of affective relations is about more than the interactions between bodies of countless speeds and slowness. It entails a space of affective materiality made apparent via the perpetual movement of bodies by means of Spinoza’s famous description of having the capacity to affect and be affected by other bodies, and not by any rigid human quality or phenomenological integrity, “situated along this Spinozist cartography, the affectivity of moving bodies does indeed become more abstract, less immediately fleshy, and less tangibly human” (McCormack, 2008 p 426).

In a recent special edition of this journal, Bille et al (2015) and the related papers, explore the notion of 'staged atmospheres' and spatial experiences. The papers draw out the potential for politics, culture, and social settings of the development of space to be conducive to or induce affective intensities. Affect amplification builds on the idea of developing an encounter; how to shape the setting and how to draw entities together to influence their affective push. It holds in tension the key themes of approaching space, not as a static backdrop, but as a lively entity itself and emphasises the interconnections between subjects, objects, and pre-personal relations. The idea of amplification is developed in the writing of Felix Guattari (1996) on affective cartography. In particular, the attention paid to intensity in his schizoanalytic cartographies. For Guattari intensity is an experience before discourse or identity. Guattari's concern was to try and understand how change could happen within an uncertain process (Walkerdine, 2013). Guattari contends that human subjects perceive knowledge of being through embodied experience in certain moments, times, and spaces (Walkerdine, 2013). Therefore, the idea of a schizoanalytic cartography, is composing with the idea of establishing the conditions for the possibility of becoming other, of becoming different, of advancing re-territorialisation, and of attending to new ways of being and new modes of experience (Guattari, 2012).

The next two sections present the empirical material. It features two vignettes, on making a football pitch and a ParkRun, that explore how affect is choreographed and how an atmospheric quality of experience is emphasised through space and a cartographic intensity. These two examples of affect amplification build towards techniques that public health approaches could incorporate to improve participation in physical exercise that are developed in the discussion.

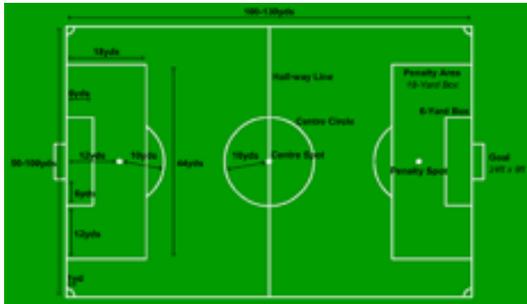
Making a Football Pitch

A football pitch is a space in which moving bodies are highly visible. Their presence transforms a pitch: altering the affective, imaginative, and sonic qualities of the space (McCormack, 2008). By moving in different ways, bodies can produce, generate, or modify space (Gil, 2006; Serres, 2005). However, space can be made to be conducive of certain movements or corporeal technique. This vignette presents how a football pitch is created through establishing a milieu of relations. Bodies, objects, and movements are brought into the relational field of the pitch during the game. This is demonstrative of how a pitch is imbued with a mobile architecture, a space that holds open the potential of movement as a fielding of experimental spacetimes that, 'create an intensive turbulence', one that draws out the force of movement as affective intensity. This is the relational power that is drawn from the collective movement's emerging force. It is not reliant on the diagramming of movement or the positioning of bodies in the match. Rather, this is a composing with the ecology of movements and affective relations that are a result of the choreographed space of a football pitch (see figure 1 for a diagram of a football pitch).

Football pitches may seem simple. However, as I am discovering they are complex entities. I am conducting fieldwork with the pitch staff at Everton Football Club, in Liverpool. As I write I am sitting in the stand that runs the length of the North touchline, sheltering from the rain and the cold. The grass

pitch has been relayed numerous times over the years Goodison Park has been in use. On the pitch at the moment, a Monday morning, are two rows of grow lights, data gathering devices, and various pieces of equipment used to prepare the playing surface for the matches on Wednesday and Sunday. The natural grass surface is wet and glistens under the lights.

Figure 1: Plan of a Football Pitch (FIFA, 2012)



The dimensions of the 2010/11 Everton pitch are 110 yards in length and 74 yards in width. The rules and guidelines concerning how the pitch should be prepared have been established by football's governing bodies – The English Football Association (FA), The European football committee (UEFA), and the world governing body (FIFA). The grass of the Goodison Park pitch is cut to a length of 25mm for matches. This is a requirement for teams participating in the Champion's League European club football tournament which is played by the top finishing teams in European leagues. Under these regulations the pitch must also be smooth and level, have good drainage, and must be green with lines marked in white.

To help with the preparation of the pitch, growth lights and mobile lighting rigs have over the last seven years become commonplace at larger club grounds and national stadiums. The rigs and lamps have been developed as an aid to pitch staff and their efforts to alleviate shading issues, poor growth, and improved grass development and health. The rigs can be used with varying lamps attached (picture 4 and 5). The rigs at Goodison use only 60 watt lamps. The lights are supported by data boxes which are used to analyse the pitch and different types of grass. There are two data boxes. One for soil moisture content and the other is a light meter, which creates a shade analysis of the pitch (picture 6). The shade analysis creates a number of diagrams which shows where and when the pitch has received sunlight and where the rigs should be focused.



Picture 1: Dennis Mower



Picture 2: Haytor Mower



Picture 3: Line Painter

The pitch is cut with petrol powered hand mowers; a large Dennis mower -- a cylinder mower that has a small roller underneath -- and a smaller Haytor rotary mower (picture 1 and 2). The pitch is cut in two directions across the widthways and lengthways to create a smooth surface and nurture a uniform growth direction. The pitch is made complete by painting lines to demarcate the outline of the playing area (picture 3). In preparation for tonight's match the pitch will be watered heavily. The pitch has an

excellent drainage structure. It includes a precise laying of different materials and composition, which facilitates a preference of playing on a pitch that is firm underfoot but has moistened grass that enables the players to move the ball around with ease.



Picture 4: Light Rigs in position

Picture 5: Light Rigs close-up

Picture 6: Data Boxes

The preparation of the pitch is about preparing relations of movement, speed and slowness. The match will be played at a high tempo. The players will be moving quickly, changing direction, and the ball will be travelling quickly. The pitch staff, as they work, think about how to prepare a space that is open to speed and movement. The pitch is prepared to create a dynamic space of action that is brought to life by the endeavour of the players. But it is the pitch that frames the action; it is the pitch that provides the setting, the space, through which to foster affects.

Making a ParkRun

A ParkRun is a different situation where affect is choreographed through animating the relational field by using materials, techniques, and moving bodies. This vignette demonstrates how through bringing together different bodies, different velocities of speeds and slowness, establishes a field of experiential spacetime as Manning (2013) describes in her concept of bodying. The ParkRun is a field of affective resonance that fosters the conditions for becoming other that Guattari (2012) also invokes. The bodies are becoming bodies-running or bodies-exercising, that are brought into relation not only with other bodies but also with other modes of experience in a relational field of intensity. The ParkRun is an example of how, through the choreographing of space, an ethical disposition of moving bodies can be foregrounded. The runners, spectators, and other users of the South Park in Sofia are drawn into an atmosphere of affective sensation that modulates thinking, feeling, and experience.

Saturday morning 8am. South Park Sofia, Bulgaria. I have run the five kilometre route a couple of weeks ago. Following this I have met with Georgi the organiser. The ParkRun is a straightforward idea (although you can imagine the various issues that arise when trying to organise such a weekly event). Find a suitable five kilometre track, mark out a route, and invite people to participate free of charge. The event appealed to Georgi after seeing it in London. There was something fascinating about it. Something moved him. He saw this gathering of happy and smiling bodies. Some were out of breath, others were clapping and encouraging, and others were dressed in bright colours offering drinks and

recording times. He was so moved by what he encountered that upon his return to Sofia, he set up a ParkRun.

South Park is located in a very accessible place. It has easy connection by trolley-bus, tram, and metro. The route is one loop of a measured trail that starts and finishes on the park's central avenue. The single loop only works if the event is well attended, the current weekly turnout averages around 180 people. As Georgi explained, the idea is to get people running, doing something active, that is fun and that brings people together. To make people feel that sense of togetherness, they need to feel they are running with others even if they are participating on their own. There are a lot of runners with different skill levels so no-one feels like they are running on their own. They have other runners around them throughout the route.

To set-up the ParkRun permission has to be granted from the municipality. All sorts of things are needed; websites, social media accounts, advertisements, paper, printers, running shoes, drinks, signs, volunteers, and runners. One morning when I arrive, Georgi is cycling round the route checking it is safe, placing signs, and positioning distance markers. A start finish banner is erected, a finish funnel to have your barcode (used to record times) read, and an area to leave bags and receive instructions. As more people arrive, everyone starts to engage with each other, whether new or regulars. Other park users who are walking dogs or playing table tennis stop to watch. Music is played and then the runners are asked to assemble, applauding newcomers and cheering returning runners. There are people of all ages, all abilities and passions.

Running apps are started, music is plugged in, and stopwatches are posed. Then we are off. The sea of bodies is bobbing up and down. The signs are colourful and point the way forward. I follow the markings to keep on the route as the bobbing heads in front stay ahead. I try to stretch out my stride and catch up as we turn a corner onto the paved strip to the finish. I hear the breathing of runners pushing to sprint the line. I make a final turn and head towards the finish to high-fives, handshakes, and smiling red faces. I make it through the funnel to receive my chip and scan my barcode. We all wait and applaud all the runners finish. The old and the young are all cheered with much enthusiasm and happiness.

Discussion

Public health has much to learn from geographies of affect. One way this has been explored in this paper is through the idea of experimenting with choreographing atmospheres. This takes many forms. Initially, it entails public health not being overly reliant on behavioural or rational theories of action. Incorporating techniques of affect amplification and choreography hold promise for public health to move spatiality to a more important position in approaches. The theoretical orientation developed in the first half of the paper emphasised the choreography of affect (Manning, 2013), atmospherics of experience (McCormack, 2013), and the cartography of affective intensity (Guattari, 1995). The idea this paper sought to work with is the practical engagement with affect. The potential to think through

the ways that concepts of affect can be thought about as tools of intervention in real world settings, and the potential benefits this would have for techniques of public health.

The two vignettes expose a way of thinking about movement, bodies, objects, and an ecological approach to spatiality. They also demonstrate that affect isn't a singular entity. Rather, affect can be choreographed in many forms. They are evidence of a choreography of spatial and material encounters, which question how to go about animating the field of relations. They both play with the idea of experience and what it means to experience space, not as an empty container waiting for activation. Rather, as space that is active and connected to, and through, bodies and objects. In their own way both are events of movement, they are staging encounters that contribute to the making of spaces as always more-than just bodies or movement. More than merely throwing things together, both events give rise to techniques of an attunement towards movement-moving (Manning, 2013).

The ParkRun and the creation of a football pitch emphasise the notion of mobile architecture (Manning, 2013). They are not establishing enclosures of the body. Rather, they establish a fielding, an encounter, that produces an experiential spacetime through which an intensive turbulence coalesces through movement, experience, and bodies. The mobile architecture of the ParkRun is not tied to a run taking place in a park. It is through the bodies, objects, and terrain that the event of a ParkRun becomes more-than a route. It is through the many ways that the ParkRun animates the thoughts and actions of the runners as they are participating as well as the others in the park. In establishing a relational fielding of bodies the ParkRun is able to animate the runners as part of a field of movement. The runners are participating in the 'coming-into-eventness' of the ParkRun, of moving in concert with other bodies. Thus, it creates a bloc of movement sensation, a resonating spacetime, which does not require breaching thoughtful cognition but is able to animate and be felt through bodies. A sensing that occurs across multiple registers and scales.

The football pitch in the same way is not just about a demarcation of sport. It is about creating a setting where the movement of the match is able to generate new relational fields of affective intensity. The body is not the instigator of action of the football match. Rather, it is the pitch that fosters the bodies' intensive participation. The pitch-staff are working to create a setting for action. They are 'composing-with' the idea of movement and football; looking to establish a setting that is open to new collections of actions, movements, and rhythms (Spinoza, 1996). It isn't about making a setting to produce a result. Rather, it is about establishing a milieu of action that enables the match to be played in numerous ways. The pitch is nurtured in a way that maximises the movement of the players and the ball. The interaction between surface-ball-foot is developed to make the play as dynamic as possible. The grass is cut very short to enable to players to pass the ball with speed and to be able to run, turn, and vary the pace of the game with ease. The pitch is rolled to be flat and grow lights are used to encourage full grass coverage all year round. This works to make the pitch smooth and grass covered with no mud through the football season. This accentuates the possibility of movement, of relations of speed and slowness, and the corporeal skills of the players.

The ParkRun also speaks to the manner different sensations act in a plurality of ways to work through the bodies, objects, and the space of the park to imbue runners and spectators in a way that 'does not let you go', creating atmospheres of affect that resonate through the fabric of experience. Both the ParkRun and football match are atmospheres of experience, they operate as affective refrains that are produced through setting and action. Refrains are resonate blocks of spacetime that cut across thinking, feeling bodies comprising an intensive potentiality (McCormack, 2013). This potentiality is experienced through the collection of entities that resonates away from a single moment. Refrains are sensed as gatherings of intensity that, "hold bodies in certain worldly arrangements at the same time as they open other ways in which bodies can generate worlds and the values that sustain them" (p 204). Not only do refrains embrace bodies in certain ways, they also reverberate through bodies to permeate sensations and bodies as aftershocks. They open out into a field of relations that is constantly bringing new relations together (Stengers, 2010), new modes of entanglements that give rise to affects that percolate out from the event of the ParkRun or a football match (Barnfield, 2011).

Further, the runners are developing a cartography of affect, one that is animated by the re-drawing of spatial practices (Guattari, 1995). The idea of a schizoanalytic cartography, is the idea of establishing the conditions for the possibility of becoming different and of attending to new ways of being and new modes of experience. This is attending to new ways of inhabiting the city that brings about changes in people's everyday cartographies of their city and their lives. The ParkRun is organised through different surfaces, route markers, barcodes, music, and bodies. It creates atmospheres of affect by drawing these entities together. ParkRun choreographs space as an encounter that works upon different registers; sight, sound, smell, and exertion. In bringing together all sorts of bodies to run in all sorts of ways the runners are composing nonrepresentational spaces of affect, whereby movement and nonverbal physicalities are providing a texture to and a new way of understanding the city.

Conclusion

The two case study vignettes explore the potential of thinking with affect for public health researchers and practitioners. The Lancet series on physical activity has argued that legislation works (Heath et al., 2012). The case of cycling in Denmark and Holland was evidenced to suggest that by providing a legislative backing to interventions that promote moving bodies, wide-scale change can occur. However, legislation does not always provide entirely unproblematic outcomes. Therefore, thinking with affect as this paper suggests offers a more sensitive way forward. This requires that the world is approached as comprising of ecologies of practice that animate relational fields. For public health this need not be restricted to physical activity. For example, the various affects that e-cigarettes, hospital rooms, and dementia care programmes are part of and sustain make these spaces and practices more than either rational spaces or behaviours. However, as this paper is interested in physical activity there are three areas where paying attention to affect would help public health strategies.

First, support for infrastructure of movement routes to enable moving to work or safe routes in neighbourhoods would improve the practicality and visibility of running. Movement routes would promote movement of all types that are conducted without enhanced motion, so motor vehicles would

be prohibited as would bicyclists who are aiming to travel as fast as possible. The movement route will be a mixture of smooth and rough surfaces, with mixed use and planted areas that enable different movements and rest, speeds and slowness. This would emphasise the potential of movement for all types of human and non-human entities. Second, public health could engage in the development of activity apps for smart phones and other devices. This would help to think through new ways of experiencing space and physicality. Third, on a more complex level, legislation could also raise the status of non-vehicular traffic as a means of getting about, above other types of transport, which would make it safer, challenging the domination of the motor vehicle. This would have multiple implications which would need to be very carefully considered. Plainly, developing an openness toward moving bodies requires effort on a number of levels. Public health is attempting to deal with complex issues. However, by prioritising the ongoing and performative assemblage of practices that shape the world, public health thinking with affect can offer a more sensitive, pluralistic way forward.

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