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To cite this article: Sigmund Loland (2021) The poetics of everyday movement: human movement ecology and urban walking, Journal of the Philosophy of Sport, 48:2, 219-234, DOI: 10.1080/00948705.2021.1915148

To link to this article: <https://doi.org/10.1080/00948705.2021.1915148>



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Published online: 20 Apr 2021.



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# The poetics of everyday movement: human movement ecology and urban walking

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## ABSTRACT

Departing from the hegemonic position of epidemiology in population physical activity (PA) research and policy, I argue for the significance of a complementary, holistic approach: human movement ecology (HME). The argument is developed in two steps. In a first step, and using perspectives from body ecology and eco-philosophy, I emphasize the potential in movement of a 'dynamic and spontaneous ecologization', which opens for the development of ecological consciousness and sustainable practice. In a second step, I test HME towards a 'hard case': everyday routine walking in urban settings. Even here, and paying particular attention to the nature of habitual movement and the need for a 'greening' of urban environments, I point to a significant movement ecological potential. I conclude that HME provides a fertile and complementary conceptual alternative to PA epidemiology. The challenge of low population PA levels is probably best met with facilitating for movement as an integral part of a sustainable everyday life. Actually, with an increased realization of HME ideals in practice, instrumental PA policies would become less relevant and, on a longer-term basis, perhaps not needed at all.

**KEYWORDS** Movement; ecology; sustainability; urban walking

## Introduction

In post-industrial societies, sedentary lifestyle is considered one of the main challenges to public health and well-being. The World Health Organization (WHO) defines insufficient physical activity (PA) as one of the leading risk factors for global mortality (WHO 2018). Epidemiologists point to the fact that one out of ten deaths worldwide, around 5,3 million deaths annually, are related to low levels of PA and its effect on multiple, non-communicable diseases (Althoff et al. 2017). Insufficient PA is characterized as a global pandemic.

Obviously, an increase in the level of population PA is viewed as a main preventive measure. For adults, WHO (2018) expertise recommends a minimum of 150 minutes of moderate-intensity activity

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throughout the week. For children and adolescents, the recommendation is 60 minutes daily of moderate to vigorous-intensity activity. Reports show that, globally, one out of four adults and as many as eight out of ten adolescents fall short of the recommended levels (WHO 2018). Reports show, too, the significant impact on PA levels of socio-demographic factors and infrastructure (Sallis, Cerin, and Conway et al. 2016). In affluent urban parts of Europe and the Americas, inactivity levels are considerably higher than in rural and less developed areas, which has led to an emphasis in PA policies on developing 'greener' and more sustainable and movement-friendly urban environments.

Epidemiological approaches offer clear and well-defined analyses of population PA. From a philosophical point of view, however, the perspective is challenging. In its classic form, at least, human movement is portrayed in narrow, quantitative terms. PA is defined as '... any bodily movement produced by skeletal muscles that require energy expenditure', and inactivity as '... behaviour characterized by an energy expenditure that equals or is less than 1,5 metabolic equivalents' (WHO 2018, 14).<sup>1</sup> Moreover, the rationale for enhancing PA is primarily instrumental. Simplistically speaking, PA is a means, improved health is the goal. 'Exercise is medicine', as the slogan goes.<sup>2</sup>

A quantitative and instrumental understanding of PA is not problematic *per se*. In public policy development, however, challenges arise if a reductionistic understanding becomes the predominant approach with little or no conceptualization of experience and meaning *in* movement. Human movement is of great diversity, both in form and meaning. Walking to work, hiking in nature, playing hide-and-seek, dancing, exercising in a fitness studio, or competing in sport are experienced and interpreted in radically different ways. Developing a sound and comprehensive knowledge base for public PA policy requires complementary perspectives. In this article, I aim to develop a richer conceptual framing of human movement that I believe can serve this purpose.<sup>3</sup>

In a first section, and influenced by an emerging scholarship in body ecology, I conceptualize what I will refer to as *human movement ecology* (HME) that includes an emphasis on experiences of environmental interconnectedness, and on the potential for developing ecological consciousness and the disposition to live and act in sustainable ways. In the next section, I apply this perspective in an analysis of a highly prioritized activity in PA policies: regular everyday movement (such as walking) in urban communities. The discussion includes an analysis of habit as a source of meaning, and of the significance of a 'greening' of urban infrastructure. I conclude that HME offers important and original insights and should become a complementary perspective in knowledge and policy development in the PA field.

## Human movement ecology

In the philosophy of sport, and with Metheny's (1968) book *Movement and Meaning* as a paradigmatic work, interpretations of bodily movement is a core topic. Typically, emphasis has been on analyses of physical education, sport, leisure activities, and the execution of complex skills. A common departure point can be found in phenomenological attempts on understanding the experiential structures and qualities.<sup>4</sup> The phenomenologist is interested in the lifeworld (*Lebenswelt*): the directly perceived, pre-theoretical, and practical work of everyday experience from a first-person point of view. In his radical re-description of embodied experience and perception, Merleau-Ponty's (1978) conception of perception and the 'lived body' has become a standard reference. 'The lived body' is always situated and sensorily engaged in the world in dynamic and interactive ways and is considered the primary access to the world.

An emerging field referred to as body ecology builds on phenomenological premises with a particular interest in unifying experiences in which body-mind and body-environment distinctions are transcended (Andrieu and Loland 2017). Andrieu et al. (2018) has presented a series of case studies of how, by immersing in practices such as yoga, scuba diving, and (naked) surfing, the lived body is 'awakened' and 'emersed' in terms of a 'dynamic and spontaneous ecologization': a unifying experience of interconnectedness, either with an internal focus such as in yoga, or with an external focus in being and moving in nature.

These are rather abstract ideas. Let me elaborate with a concrete example from a sport in which transcending body-environment distinctions is crucial: skiing (Loland 1996, 2008). To enhance equilibrium conditions, a novice is taught to keep feet apart, knees and hips bent, upper body straight but flexible, and arms stretched forwards and outwards. A predominant experiential quality is one of constant tensions between falling in and out of control. The perceptual field is narrow and framed by attempts on interaction between the body, boots, skis, and the immediate environment. Gradually, though, via instruction and trial and error processes, balancing and creating friction to control speed and direction become standard skills. The proficient skier extends the perceptual field in playful ways. Skis and poles become indistinguishable prolongations of the body as the skier moves creatively and innovatively in what is experienced as a fluid web of interconnections. Experts refer to movement qualities of 'flow' and 'rhythm'. In dynamic and spontaneous ways, the lived body is 'awakened' with the potential of an enhanced environmental awareness. The skiing experience is one of 'ecologization'.

Departing from perspectives and concepts from body ecology and eco-philosophy, I will proceed by outlining HME in more detail.<sup>5</sup> As I am exploring

an alternative conceptualization in the PA field, movement is my main interest, and not, for example, internal processes of the lived body as in meditation. Moreover, and as indicated in the skiing example, 'ecologization' has additional layers beyond the immediate perceptual field. In his original eco-philosophical work on endurance sports (in particular cycling), Welters (2019) points to how movement practices can be an integrated part of a sustainable lifestyle. Simplistically speaking, my thesis is that the experience of environmental interconnectedness in movement can cultivate an extended ecological consciousness, and with that, an integrated disposition for acting and living in sustainable ways. Let me elaborate and start with the idea of ecological sustainability.

### ***Sustainability: anthropocentric and non-anthropocentric views***

Ideas of sustainability and sustainable development belong to the core of ecological thinking (Visvader 2017). The basic premise is uncontroversial: we are ecological beings who are mutually dependent upon each other and also upon other forms of life and the ecosystems within which we live. Hence, if the aim is to secure our survival, we should live and act in sustainable ways. Elaborating on this premise, there is a diversity of positions. Distinctions are drawn between anthropocentric and non-anthropocentric views (Brennan and Lo 2014). Anthropocentric views imply a value theory in which only humans and their experiential states have intrinsic value, and with the survival and flourishing of humans as the ultimate goal. A standard anthropocentric definition of sustainable development refers to meeting '... the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Education and Development 1987, 43) (WCED). One obvious application is found in the comparison between solar and fossil energy sources (coal, oil, gas). Whereas use of the former does not compromise future generations' energy needs, use of the latter is non-sustainable as fossil fuel is a finite resource with destructive and, to a certain extent, a non-reversible impact on human life.

Non-anthropocentric views come in several versions but share the premise that *not only* humans and human flourishing have intrinsic value. Richard Routley's (2009) 'Last Man' thought experiment, published for the first time in 1973 and adopted as an inspiration to an emerging grassroots environmental movement, illustrates the basic premise. We are asked to imagine a post-apocalyptic world in which the last human being, in his or her dying moment, has the possibility of pushing a button that would destroy all non-human life on earth. Would pushing the button be morally wrong? A commonly shared response is in the affirmative, indicating that most people consider at least some forms of non-human life to possess some kind of intrinsic value. Sentientism attributes moral status to all beings

with the capacity to experience pain. Biocentric perspectives emphasize the intrinsic value of all living things, whereas ecocentric views attribute intrinsic value to landscapes and ecosystems as well (Thompson 2017).

Biocentrist and deep ecologist Arne Næss (1993) criticizes WCED's anthropocentric sustainability ideal as narrow and argues for an integrated and holistic interpretation of 'needs'. Sustainable development depends upon individuals moving from narrow ego-orientation, via an individualistic 'self', towards an extended ecological 'Self' (with capital S). The process is one of increased identification with all life forms, and even landscapes and ecosystems, acknowledging our common potential for flourishing and for being interconnected parts of a whole (Diehm 2007). To the deep ecologist, identification comes with empathy and compassion and with an integrated disposition to act in ways that support and enhance richness and diversity of life (Næss 1989, 171–181). In what follows, I will refer to this enhanced awareness with the more familiar term 'ecological consciousness'.

From a sentientist point of view, intrinsic value can be differentiated according to the capacity of pain experience, whereas the deep ecologist would refer to the principle of biospheric egalitarianism in which all life forms are of equal value and with an equal right to live and flourish. Independent of positioning, however, there is a general sense here of humans occupying a unique role in the ecosphere (the sum of all ecosystems) as the only species (as far as we know) able to reflect and act upon non-anthropocentric ideas of intrinsic value. Moreover, from the deep ecological perspective, acting in sustainable ways is not a matter of obligation or duty but of a disposition deeply embedded in ecological consciousness. Acting sustainably, that is, acting in ways that secure and enhance the richness and diversity of life, is an act of intrinsic motivation: an act of ecological joy (Næss 1989, 80–86).

This is relevant for an understanding of human movement. Næss sees the ecological Self as operating in what he calls a relational total-field image, not dissimilar to, but more extensive in scope than, traditional phenomenological conceptualizations of a perceptual field (Næss 1989, 51–67; Wu 2019).<sup>6</sup> The relational total-field image is a holistic concept. As with all other organisms and forms of life, human beings are seen as knots in an extensive, ecospheric web. Systems of interconnections are found at the macro-level, as expressed in the deep-ecological understanding of ecospheric egalitarianism, as well as at the micro-level such in concrete movement practices as illustrated by the many case studies in Andrieu et al.'s (2018) essay collection on body ecology. In my interpretation here, moments of 'dynamic and spontaneous ecologization' open for even more extensive experiential structures and the potential of ecological 'awakening' in terms of an all-encompassing sense of being an interconnected 'knot' in the rich and diverse ecospheric web.

### ***Human movement ecology (HME): three premises***

The HME perspective is based on the premise that human beings are part of, and interconnected with, other forms of life in diverse and complex ways. We are ecological beings. As I have shown, further interpretation of this idea comes in many forms and shapes. Philosophically, anthropocentric and non-anthropocentric views seem difficult to reconcile. Moreover, whereas anthropocentric theories are criticized for reductionism, holistic approaches such as deep ecology are contested on key concepts, among them ideas of identification, of biospheric egalitarianism, and of the extended, ecological Self (Thompson 2017).

It will lead too far to go into these disputes here. The aim of this article, to develop a richer conceptual framework of human movement than what is found in traditional PA approaches, opens to a certain extent for a pragmatic approach where theoretical positions are judged in terms of relevance to the challenge at hand (Minteer 2017). Epidemiology typically builds on anthropocentric perspectives with the instrumental concern for human survival and well-being. HME departs from a non-anthropocentric understanding in which everyday movement can be an integrated and joyful part of a sustainable lifestyle. With the predominance of anthropocentric epidemiology in the PA field, I will concentrate on the HME perspective as an alternative and complementary understanding.

To sum up so far, HME builds on the following three premises:

- Human movement is understood phenomenologically from the perspective of the sensorily engaged ‘lived body’ moving in a perceptual field of actual and potential interconnections.
- Immersing in movement has the potential of emersion in terms of ‘dynamic and spontaneous ecologization’, and of experiences of interconnections in an extended perceptual field that in its fullest form is the ecosphere.
- Emersion in movement has the potential of ‘awakening’ our ecological consciousness with the disposition to act and live sustainably (in ways that secure and enhance richness and diversity of life) as an integral part.

In the next section, I will demonstrate the practical relevance of HME in public PA policies.

### **Walking: the HME perspective**

Typically, in the body ecological literature, examples come from specialized leisure movement practices such as yoga, parkour, surfing, or, as the example above, from skiing. In the WHO (2018) recommendations, there is

a distinction between PA and exercise and sport. Planned, structured, and repetitive exercise, or games and sport, requires specific motivation and to a certain extent specialized infrastructure such as fitness centers and sports facilities. Regular movement patterns integrated into everyday life, on the other hand, such as walking, cycling, and housework, are practiced by almost all. Hence, in public PA policies, enhancing everyday movement is considered among the most efficient measures. More often than not, these activities are portrayed as instrumental routines and with little or no emphasis on content and meaning. With the most practiced everyday movement pattern of all, walking, as my case, I will explore the potential of HME as an alternative approach.

Evolutionarily speaking, walking, or bipedalism, is considered 'natural'. Humans have an inborn propensity for the erect position and moving on two feet. Walking is characterized by an inverted pendulum movement in which the center of gravity vaults over a stiff leg with each step and with energy expenditure depending upon walking velocity, cycle period, and double stance duration (Ren, Jones, and Howard 2007). The typical experiential quality is that of an adaptive and repetitive movement rhythm. Unlike the execution of complex skills, most walking does not require executive focus. And, different from quadrupedal movement that characterizes most other primates, the erect position frees the hands and expands possibilities for operative agency while at the same time facilitating extended forward vision and scanning of the horizon. Walking means extending the perceptual field and immersing in what anthropologist Ingold (1993) refers to as the 'taskscape': a lifeworld of constantly unfolding and dynamic operative possibilities and in which traditional distinctions between the body and the environment, and between nature and culture, are transcended. Walking, says O'Mara (2019, 3), implies a holistic, multi-sensory reading of the world.

Beyond these common features, walking comes in diverse forms with their unique characteristics and experiential qualities. Zurawik (2014) exemplifies many references to bipedalism ranging from '... sauntering, ambling, strolling, plodding, promenading, wandering and roaming' to '... competitive, strenuous modes associated with sports, such as marching, trail-walking, trekking, hiking, hill-walking, yomping and peak-bagging'.<sup>7</sup> Even the same walk can offer significant diversity. Early morning walking on familiar city streets can take the character of an embodied, meditative rhythm. A well-known face emerges, a verbal greeting breaks a chain of thought, and focus redirects from introversion to a social sphere.<sup>8</sup> Entering a park, softer paths and curved lines replace the hard surface and straight lines of urban infrastructure and constitute a new perceptual field.

Is there a potential in walking for emersion, or for 'dynamic and spontaneous ecologization' and an awakening of ecological consciousness?



A detour into experimental research provides relevant insights. During walking, approximately 20% of the output of the heart is delivered to the brain. Steady bloodstream and energy delivery open for an extension of experiential qualities. In a set of experiments, Oppezzo and Schwartz (2014) demonstrate how walking activates creativity and self-reflection. The thesis is that moderate intensity 'natural' walking relaxes executive functions and suppression of memory and opens for a 'flexibility pathway' of associative thinking and ideation.

Reflecting on these and similar findings, O'Mara (2019, 148 ff) points to how walking can engage the brain's working modes in two different ways. In complex skill execution such as in technical hiking in difficult high mountain terrain, an explicit and intentional mode is at work. In moderate-intensity repetitive movement in simpler terrain a default mode takes over, opening for associative memory and creativity. O'Mara talks of 'brain wandering': problem solving and free reflection with an autobiographical and even existential dimension. Just as a hiker is oriented towards the route ahead while being aware of the route already taken, default mode 'brain wandering' connects events of the past, present, and future and stimulates reflection on selfhood and identity.

In his philosophy of walking, and echoing Nietzsche's claim that only thoughts reached by walking have value, Gros (2014) provides an interpretation of 'brain wandering' and discusses the potential in walking of a deep sense of freedom and solitude, of being one with the elements, and of slowness, melancholy, and thoughtfulness. From a HME perspective, immersing in walking seems to offer the potential of emersion, both in the form of spontaneous ecologization, and of 'awakening' a more extensive sense of 'self' and our nature as ecological beings.

In the epidemiological PA field, however, this might come through as a utopian interpretation. When it comes to relevance and application, two lines of critique come to mind. HME seems well suited in analysing recreational activities such as hiking in nature. Is the perspective really fertile when examining less adventurous everyday routine and habitual walking? A second challenge relates to the fact that the highest inactivity levels are found in densely populated urban settings. Even if habitual walking proves to have movement ecological potential, how can this be realized in urban infrastructure designed for technological transportation (car, bus, subway, train), and not for human movement?

### ***Habitual walking***

Let me first comment on the possible lack of ecological potential in habitual walking.

Some nuances are needed. HME does not conceptualize movement as a continuous flow of immediate pleasure and well-being. Hiking in nature can involve hard uphill climbs, long hours of tedious and monotonous movement, foot blisters and pain, sometimes freezing temperatures and cold wind, sometimes uncomfortable heat. Or, looking at urban contexts, walking to work on busy and noisy city streets on a rainy winter day usually gives more discomfort than pleasure.

From the HME perspective, experiences of repetitiveness, discomfort, or even pain, can be rendered meaningful if balanced with experiences of pleasure and well-being as integrated parts of ecological joy: the all-encompassing sense of being interconnected in an extensive web of life. Good movement practices offer good experiential blends of efforts and flow, and of repetition and change. Moreover, different movement practices offer different blends. Immersing in yoga can imply an inward directed 'awakening of the body'. Expertise skiing on a steep slope implies 'becoming one' with the terrain. Walking occupies a middle position in which executive functions and 'brain wandering' and awareness of environmental interconnections interact in dynamic ways.

There is also the concern that, with the ideal of extensive ecologization, routine *habitual* movement has little to offer. How can walking the same route again and again include experiences of interconnectedness and ecological joy?

The nature of habit is not an uncommon topic among philosophers. Carlisle (2014) gives an overview. Spinoza criticizes habitual life as concealing the true intelligibility and nature of the world, and Kant warns against habits as making agency mechanical and machine-like and undermining human moral worth. Others offer alternative views. Aristotle sees habit as being at the core of moral life. Competent guidance and learning of habitual 'right' action are parts of cultivating virtue and human excellence. Hume refers to habits as 'the great guide of human life'. With habit comes predictability and a sense of order. Nietzsche occupies a middle position as he considers long term stable habits 'a tyrant' of life whereas, in living a nomadic life and rejecting the static and regulated life the bourgeoisie, 'brief habits' are practical necessities.

Combining elements from various interpretations, Carlisle (2014) sees habit as standing between the natural and the constructed, and between resistance and receptibility of change. A distinction is made between unreflective and reflective habits. Reflective habits are developed consciously and deliberately, such as choosing to walk instead of driving to work. Good habits are seen as ways of shaping and constructing one's life in functional and meaningful relationships to everyday life tasks and challenges. In an Aristotelian sense, learning good habits is the gradual internalization of virtue contributing to human flourishing.

Drawing lines from William James to modern neuroscience, Carlisle (2014, 22) explains habits as expressions of the 'experience-dependent plasticity' and 'dynamically changing activity patterns' of the human brain. Habits stimulate 'runs' between neurons and create synaptic pathways to be activated again and again. Analysing the neuroscience of walking, O'Mara (2019) points to the interesting use of the pathway metaphor. As a walking pattern in a park sets its mark on the surface, habits create brain pathways that endure if used frequently. The human stride, then, can be understood as an embodied epitome of habit. Step follows step in a repetitive way, and there is an innate resistance to change. At the same time, although walking the same route, there will always be more or less diversity: in mood and sensations, in climatic conditions (temperature, precipitation, light conditions), and in walking rhythm and speed. Adaptions are made accordingly, small imbalances are corrected, rhythm is adjusted, there is receptibility for change.

From the HME perspective, a habit of everyday routine walking transcends narrow instrumental rationality. Walking is simply an integrated part of everyday life. Different from what are often strong and colourful experiential qualities in hiking in nature, habitual moderate-intensity walking offers its own blend in terms of well-known, less known, and sometimes even new experiences of interconnectedness. Clearly, there is the potential here of ecologization, and of developing ecological consciousness with an integrated disposition to act and live sustainably.

### ***The challenge of current urban space***

The second line of critique relates to the potential for ecologization in the environment in which population PA levels are at their lowest: the modern city.

Starting with *homo erectus* approximately 1.9 million years ago, human beings are evolutionarily 'designed' for moving on soft surfaces and with a sensory apparatus adapted to the curved lines and diverse colour displays of nature (Niemitz 2010). Urban environment is dominated by a hard surface and the rigid and straight lines of industrial infrastructure. Movement opportunities are limited, indeed. Forsyth and Southworth (2008) refer to 'the automobile-oriented values of classical modernism' that have eliminated fine-grained pedestrian networks and reduced the possibilities of walking to restricted areas in parks, plazas, and shopping malls. Walking is separated from everyday life, and the potential for experiences of interconnectedness is reduced both in richness and diversity.

This picture, however, is about to change. More than twenty years ago, and with the rise of the ecological movement, Blassingame (1998) argued for the inevitability of a 'greening' of the modern city. As of today, developing urban sustainability is an emerging trend (Simon 2016; McPhearson, Pickett, and

Grimm et al. 2016). There is solid empirical evidence on the links between visiting green spaces in cities, and human well-being and vitality (Berg et al. 2016; Gidlow et al. 2016). In his analysis of urban architecture from the perspective of Merleau-Ponty, Seamon (2010) suggests a heuristic distinction between the sensory and motor dimension of what he calls 'environmental embodiment'. The sensory dimension relates to a totality of the immediate environment including all its possibilities for movement. The motor dimension, similar to the phenomenological idea of a perceptual field and Ingold's (1993) 'taskscape', incorporates an immersive, full-scale, and lived realization of some of these possibilities, such as walking.

How can urban infrastructure be developed towards a richer and more diverse perceptual field in this respect?

We turn now from analyses of immersing in movement in a given environment to exploring ways of adapting and constructing environments that invite immersion and open for ecologization processes. There are several strategies in this respect. Moderate views portray a gradual transformation with an increase in green parks, a shut-down of private traffic, and the development of pedestrian and bicycling areas. Radical views imply abandoning existing infrastructure altogether and construct movement-friendly eco- or smart-cities with all energy sources being renewable and clean (Eremia, Toma, and Sandulaec 2017).

Both strategies embrace some of the same operative possibilities. Ewing and Handy (2009, 74–82) discuss what they call 'urban design qualities'. 'Imageability' refers to 'the quality of a place that makes it distinct, recognizable, and memorable', for example, in terms of forms and colors. 'Enclosure' connects to how space is framed and experienced in balanced ways by vertical elements such as walls and buildings. The 'human scale' quality emphasizes width of pavements, and placement and size of trees, benches, and sculptures as related to the walking speed of humans.<sup>9</sup> 'Transparency' is measured by the possibilities of seeing or perceiving beyond the edge of the street and defined by landscaping, placement, and shapes of buildings, walls, and fences. A final quality, 'complexity', is defined as 'the visual richness of a place' seen in the structure of surfaces on pavements and walls, ornaments and design, and in landscaping.

In this urban redesigning process, the significant source of inspiration is organic nature. Reeve et al. (2015) launch a program for cities of 'biophilic urbanism' with the aim of more or less seamless integration of nature. Mazzoleni (2013) elaborates on the value of what is referred to as biomimetic design inspired by the visual and tactile richness of natural materials and surfaces: combinations of softness/hardness, mixed color displays, curved lines, et cetera. In emerging eco-cities, and in addition to a 'greening' in terms of areas with organic nature, biomimetics could become the golden architectural design standard.

To sum up, with a greening of the modern city, urban environments can be transformed into an open and inviting taskspace for human movement. With a combination of organic nature and biomimetic urban design, the city can offer enhanced possibilities for ecologization in walking. O'Mara's (2019, 182–183) vision can come closer to reality:

We need to make walking a natural, habitual part of our everyday lives. Pound the pavements; get the wind in your face; let the light of day and streetlamps of night dance on your eyes; feel the rain on your face; sense the ground beneath your feet; hear the sounds; talk– if only to yourself, relax into the rhythm of walking and let your mind wander, deliberate, contemplate; journey into your past, delve into your possible futures; or think of nothing at all.

In her aesthetic-phenomenological approach to everyday life, Engel (2008) talks of 'the poetics of everyday movement'. At its best, habitual everyday movement is a poetic exploration of embodied meaning and ecological interconnectedness accessible to all.

## Conclusion

Departing from the hegemonic position of epidemiology in population PA research and policy, I have argued for the significance of a complementary, holistic conceptualization: human movement ecology (HME). The argument was developed in two steps. In a first step, and using perspectives from body ecology and eco-philosophy, I emphasized the potential in movement of emersion and 'dynamic and spontaneous ecologization', which opens for the development of ecological consciousness and sustainable practice. In a second step, HME was tested towards a 'hard case': everyday routine walking in urban settings. Even here I pointed to a significant movement ecological potential. I paid particular attention to the nature of habitual movement and the need for a 'greening' of urban environments.

Summing up, I have argued that an ecological understanding of human movement provides a fertile and complementary conceptual alternative to PA epidemiology, and hence should become a significant part of the development of 'green' public PA plans for the future. The challenge of low population PA levels is probably best met with facilitating for movement as an integral part of a sustainable everyday life. Actually, with an increased realization of HME ideals in practice, instrumental PA policies would become less relevant and, on a longer-term basis, perhaps not needed at all.

## Notes

1. One metabolic equivalent refers to 1 kcal/kg/hour and is approximately equivalent to the energy expenditure while sitting, reclining, or lying down (WHO 2018, 14).
2. See <https://www.exerciseismedicine.org>, a global initiative of the American College of Sport Medicine... Accessed 22 September 2020.
3. I am grateful for comments received from Paul Gaffney, editor of the *Journal of the Philosophy of Sport*, and from two anonymous reviewers. I am grateful, too, for comments received on an earlier draft of this paper from Morten Renslo Sandvik and Kenneth Aggerholm.
4. See Martinkova (2015) for a thorough overview of phenomenological approaches and review of their application in sport research.
5. The established field of *biological* movement ecology deals with the patterns, mechanisms, causes and consequences of non-human organismal movement. See, for instance, definitions of aims and scope of the journal *Movement Ecology* (<https://movementecologyjournal.biomedcentral.com/>). Intentional *human* movement is shaped to a large extent in social and cultural contexts and is explored and best understood in terms of interpretation of meaning. Therefore, human movement ecology is framed by interpretive approaches, which in my case here is eco-philosophical in kind.
6. What Næss (1989, 51–67) calls the primary qualities of reality: quantifiable qualities as defined by natural science, are considered abstract structures. The ‘concrete contents’ of the world are made up of secondary qualities, that is, the sensual world of colors, smells, tastes, sounds; and tertiary qualities, that is, perceptually complex and emphatic qualities (*Gestalts*) such as that of the beauty of a dance, the rhythm of skiing, or, more generally, the experience of interconnectedness with other forms of life.
7. Skipping, or bipedal galloping, is an additional example. Bio-mechanists point to skipping as an efficient and stable means of locomotion, in particular in situations of reduced gravity. Astronauts on the moon preferred skipping to walking! (Andrada, Müller, and Blickhan 2016).
8. O’Mara (2019, 165–180) emphasizes the significant social potential of walking. Walking together can also be ‘falling into step with each other’: a process of mutual discourse and understanding. Social walking can represent significant political force as in military marching, or protest marching. Chairman Mao’s long march, Gandhi’s march to the sea (the ‘Salt March’), or marches against segregation and racism during the US civil rights struggle of the 1960s, are vivid examples. As the primary mode of regular everyday walking is individual, however, an analysis of social walking is beyond the scope of this article.
9. There is even an estimate here of optimal distances between persons. Intimate distance is defined to be 0–1.5 feet, personal distance 1.5–4.5 feet, social distance 4.5–12 feet, and public distance 12 feet. In the current situation of the COVID19 pandemic, new norms apply. It remains to be seen whether this will lead to a lasting change of norms for social space.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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