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Body pedagogics, culture and the transactional case of Vélo worlds

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Abstract
During the past two decades, there has been a significant growth of sociological studies into the ‘body pedagogics’ of cultural transmission, reproduction and change. Rejecting the tendency to over-value cognitive information, these investigations have explored the importance of corporeal capacities, habits and techniques in the processes associated with belonging to specific ‘ways of life’. Focused on practical issues associated with ‘knowing how’ to operate within specific cultures, however, body pedagogic analyses have been less effective at accounting for the incarnation of cultural values. Addressing this limitation, with reference to the radically diverse norms involved historically and contemporarily in ‘vélo worlds’, I develop Dewey’s pragmatist transactionalism by arguing that the social, material and intellectual processes involved in learning physical techniques inevitably entail a concurrent entanglement with, and development of, values.

Keywords
Body pedagogics, Dewey, embodiment, transactionalism, Vélo worlds

How do individuals become incorporated into cultures or societies? This question is central to the sociological tradition, but few responses have been as influential as Anderson’s (1983, p. 6) argument that nation-states and other large collectivities had to be imagined because those within their parameters ‘never know most of their fellow-members, meet them, or even hear of them’. Crucially, for Anderson (1983, pp. 35–36, 133), print languages made possible these imaginations, providing individuals with a

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‘remarkable confidence of community in anonymity’. Despite its impact, however, Anderson’s thesis about how people knew that they belonged to a culture has been criticised for its ‘excessive focus on literacy and printed media’ (Edensor, 2002, p. 5) and its emphasis on inclusion over exclusion (Ahmed & Fourtier, 2003). Alternative accounts of collective incorporation exist (e.g. Hobsbawm, 1983/2012, Gandhi, 2005), yet the most radically opposed approach to this symbolically driven vision of culture and community is rarely mentioned in debates on the issue.

Mauss’s (1979, p. 97) analysis of ‘techniques of the body’ explored how individuals became enculturated into societies through how they learnt ‘to use their bodies’. These techniques encompassed every aspect of human being – from walking, to methods of breathing that facilitated communion with culturally validated forms of transcendence – involving an imitative element that imparted social, biological and psychological similarity to members of a community (Mauss, 1979, p. 102). Here, individuals are attached to social groups not primarily through collective imaginations, but via culturally approved physical techniques efficient in relation to the society they maintain (Mauss, 1979, p. 108). While Anderson (1983) addressed the importance of knowing that one belonged to a collectivity, Mauss’s (1979) concern with knowing how to undertake activities in common ways identified the corporality of social groups as foundational to belonging, and outsiderhood, and a necessary complement to shared ideas of cultural membership.

Building on these insights, there has during the twenty-first century been a substantial growth of investigations into the embodied characteristics of group cultures (Crossley, 2007; Shilling & Mellor, 2007). Maintaining a concern with national issues, these ‘body pedagogic’ studies have also focused on how intra- and cross-national cultures are reproduced or rejected through the teaching and learning of physical and sensory techniques within social movements (e.g. Jacobsson & Lindblom, 2013), religions (e.g. Mellor & Shilling, 2010; Shanneik, 2011; Wignall, 2016), occupations (e.g. Hockey, 2009; Kelly et al., 2019; Saunders, 2007), sports and leisure pursuits (e.g. Andersson et al., 2015; Nettleton, 2013; Wacquant, 2004) and education (e.g. Andersson & Garisson, 2016; Andersson et al., 2018; Rich, 2011). Despite their diversity, such analyses converged on the relationship between those social, technological and material means through which cultural practices are transmitted, the contrasting experiences of those implicated in this learning and their embodied outcomes (Shilling, 2007, 2018). This involved attending to the emotional and sensory education of individuals (Crossley, 2015), the structuring of ‘attention’ and ‘attunement’ (Ingold, 1993, 2001) and the corporeal instantiation of power relations via the development of habits (Andersson et al., 2016; Watkins, 2012; Andersson & Östman, 2015).

In addition to exploring the physical processes in knowing how to participate within a culture, body pedagogic studies have analysed the relationship between cognition and embodiment, identifying conceptions of knowing that one belonged to a group as linked organically to people’s capacities to engage in particular ways with the environment (Allen-Collinson et al., 2019; Shilling, 2017). Despite combining these analytically distinct concerns (Ryle, 1946/1971), however, body pedagogic sociology has been less successful at explaining the incarnation of cultural values. This concern with what can be termed knowing why one belongs to a collectivity has been explored traditionally
through the Parsonian (1991, p. 37) concern with ‘normative conceptions of the desir-
able’. Yet while the determination to avoid Parsons’s focus on information rich symbo-
ically meaningful norms is understandable, the incarnation of values cannot be avoided
in comprehensive accounts of cultural transmission.

Addressing this lacuna, I develop in what follows a transactionalist approach towards
body pedagogics that draws on Dewey’s pragmatism and argues that the social, material
and intellectual processes involved in knowing how to act in, and knowing that one is
part of, a larger group, entail a concurrent embodied engagement with and development
of values; a feeling and awareness of why one belongs to a culture. This argument is
developed with reference to a particular case study, the transactional value exchanges
integral to the apparently technical and mundane abilities associated with cycling. The
cultures, or what I refer to as ‘Velo worlds’, in which cycling is implicated provide a
useful exploration of these processes as they show how the learning and exercising of
skills immerses individuals within historical, material and social infrastructures infused
with, and generative of, particular values.

**Incarnating values: The organism–environment relationship**

Body pedagogic studies have not ignored completely the transmission of cultural values.
Bourdieu’s (1979) conception of the ‘habitus’ has been utilised to suggest that the
(re-)education of people’s senses, physical techniques and habits automatically shapes
their values (e.g. Shanneik, 2011; Wacquant, 2004). Elsewhere, ‘knowing why’ one
belongs to a wider group has been explored with the assistance of actor-network theory
(ANT), and Deleuze and Guattari. While these latter two approaches share certain
features, ANT accounts for value change by viewing ‘norms’ as one element of assem-
blages that join together individuals with objects, ideals and the material environment
(Latour, 2013; see also Brown, 2012; Kullman, 2014). Deleuze and Guattari (1987), in
contrast, explain transformative changes through a radical interpretation of ‘prostheses’,
suggesting that human–material combinations result in beings transcendent of previous
incarnations, possessed of emergent capacities and values (Barratt, 2011; Cox, 2019).

These approaches have produced suggestive analyses of cultural incarnation but
remain limited. Bourdieu’s conception of the habitus assumes the social world pervades
the body, via a ‘long, slow, unconscious process of the incorporation of objective
structures’ (Bourdieu, 1993, p. 86; 1996, p. 29), yet this process precludes individual
agency (Shilling, 2012). Conceptions of acculturation involving assemblages and pros-
theses both recognise emergent value change. However, the former conceptualises these
as a result of networked relationships between separate ‘actants’, with connective ele-
ments maintaining their respective ‘modes of existence’ (Latour, 2013, p. 312), neglect-
ing how each is changed through the combinations in which they are enmeshed. The
latter, in contrast, identifies prosthetic emergences as completely transformative –
through the ‘deterritorialisation’ of what existed previously into a ‘reterritorialized
other’ – underestimating the ongoing significance of their distinctive value relevant parts
(Deleuze & Guattari, 2013). Neither, arguably, highlights adequately what Dewey anal-
yses as the partially transformative mutual entanglements occurring when individuals
engage with a new culture; transactions that shape without rendering redundant the
properties of the embodied subject and other components of the environment in which exchanges occur and values emerge (Dewey & Bentley, 1949). As a brief explication of Dewey’s (2012, 1925/1981) transactional analysis suggests, it is the experience, utility of and responses to these exchanges that orient embodied subjects towards or away from particular cultural values.

Dewey’s pragmatist theory of transactionalism – developed in conjunction with his colleague Bentley – is founded on the premise that the processes informing knowing how to participate in and knowing that and why one belongs to a culture occur concurrently as a result of embodied subjects always already acting intentionally in relation to their natural, material and cultural surroundings (Dewey, 1896). Individuals are and remain ontologically distinct from these surroundings, possessing their own identifiable properties, but emerged from them, make exchanges with them and are as a consequence shaped partly by them. In contrast to monadic conceptions of the subject, that pose the problem for body pedagogic analyses of how individuals are affected by their surroundings, Dewey (1934/1980, p. 13) thus insists that people’s values, actions and ‘most advanced knowings’ are ‘processes of the full situation of organism-environment’ (Dewey & Bentley, 1949, p. 131).

This embeddedness of embodied subjects has important implications for body pedagogic analyses of cultural values. Given that humans are already integrated into their environment, it is mistaken to suppose individuals inter-act with values, in or out of assemblages; an approach leaving unstated the media through which such engagement occurs. Neither is it accurate to speak of prosthetic transformations involving human–material combinations, or a full absorption of the social world into the body, given that individuals as well as other elements of the environment retain distinctive characteristics that pattern and limit how the exchanges in which they are engaged affect each other. Instead, it is preferable to talk of transactions occurring between distinctive yet already related entities, with values emerging as part of these processes (Dewey & Bentley, 1949, pp. 120, 193). These exchanges involve an ongoing and adaptive ‘taking in’ and assessment of the environment on which human existence depends: cultural values emerge experientially ‘as much in processes across and “through” skins as in processes “within” skins’ (Dewey & Bentley, 1949, p. 139).1

Emerging ‘through’ and ‘within’ the skins of individuals, the crystallisation of these values progresses via the intimate associations that exist between anoetic sensation (a pre-conscious awareness of the stimuli one is exposed to within an environmental) and noetic meanings (emerging when these stimuli permeate consciousness and are apprehended reflexively) (Dewey & Bentley, 1949; Garrison, 2003). Embodiment and cognition are thus closely linked in Dewey’s writings, providing distinctive yet connected physical and mental registers of the exchanges that occur between people and other elements of their environment.

If values emerge from people’s immersion within as well as from their sensory and reflexive transactions with their surroundings, however, it is also important to note that their future viability depends for Dewey (1934/1980, p. 15) on the extent to which they can help individuals ‘functionally coordinate’ with their environment in securing a minimal ‘stability essential to living’. Acting successfully in and on this environment, possessed as it is of multiple social, cultural, material and natural dimensions, requires
that individuals engage in at least minimal adaptation to its parameters (Dewey, 1925/1981).

Having outlined the broad principles of a transactional approach towards body pedagogics, the sociological utility of this perspective can be illustrated and developed through a case study. Cycling provides an illuminating example of a transactional approach towards body pedagogics because of the contested values with which it has been associated. After introducing this subject via the concept of Vélo worlds, I identify how the cognitive, physical and sensory exchanges encountered when learning to ride have implications for the development of these values, before focusing on cycling cultures that exist within wider environments both conducive to and supportive of this activity and those operating within more hostile contexts.

**Vélo worlds**

Explorations of cycling have yielded important analyses of pathways to modernity, the national habitus and class, gender and racial inequalities (Bijker, 1995; Kuipers, 2012; Oosterhuis, 2016; Pooley, 2017; Vigarello, 1997) but can be furthered through a transactional body pedagogic exploration of ‘vélo worlds’. Adapted from Becker’s (1974, 2008, p. xxiv) investigations into the ‘worlds of art’, I use the term ‘Vélo worlds’ to denote those transactional relations of people, materials and environments whose exchanges organise and infuse knowledge, practical ‘know how’ and values into conventional cultures of cycling. This includes all those elements which facilitate and constrain the existence and character of cycling, from road and pathway infrastructure and transport policy, to the technology of bicycles, and the contrasting purposes for which cycling is deemed desirable.

Contemporary Vélo worlds emerged from key historical developments: the addition of cranks and pedals to two wheelers in the mid-1860s and the development of the ‘safety’ bicycle during the 1890s were precursors to the ‘bicycle boom’ in the late nineteenth and early twentieth centuries and the post-World War One diffusion of cycling as an ‘unspectacular daily means of transport for the masses’ (Oosterhuis, 2016, pp. 234–235; Pooley, 2017). It was from these advances that the diversity of current cycling cultures proliferated, alongside their associated body pedagogics, centred on activities ranging from ‘race cyclists on razor-wheeled machines powering up French alps’, to commuters on ‘rattling, elderly mountain bike[s]’ (Jones, 2012, p. 649; Spinney, 2006). Despite their variety, however, a key characteristic of contemporary cycling cultures and the skills with which they are associated – one that makes them interesting to study transactionally – is their Janus–Faced relationship with modernity.

Viewed initially as a manifestation of progress (Pooley, 2017, p. 350), cycling was later in the twentieth century regarded in many Western countries as anachronistic in relation to cultures of automobility, yet has recently made a variably visible return with the promotion of ‘sustainable’ transport policies that has taken on a renewed urgency with initiatives related to Covid-19 (McCarthy, 2020; Stoffers, 2010; Urry, 2007). Another sign of cycling’s ambiguous relationship with modernity involves its dual associations with non-rational leisure and childhood play, and a rational approach towards commuting that be seen as an exemplar of human agency by replacing

These ambiguities place cycling in an equivocal relationship with the velocity and instrumentalism of modern life; a relationship heightened by the ‘surplus antagonism’ with which this activity has been identified (Ortner, 2006, p. 20). Sparking bitter disagreements between proponents and opponents of cycling-friendly transport policies, Stehlin (2015) views this antagonism as a ‘metonymic condensation’ of wider processes of change. Yet the development of values associated with cycling do not emerge unshaped by the body pedagogic knowledge and techniques involved in learning to ride – they do not exist as ontologically separate factors within a wider assemblage of networked components – but are formed and re-formed through transactions with them.

**Learning to ride**

Surviving amid and adapting efficiently to the environments in which cycling occurs necessitates the acquisition of certain cognitive knowledge (Breivik, 2013). Verbal instruction from experienced others about the basic mechanics involved in cycling, breaking in the rain and road positioning can make the difference between safety and injury, while knowledge of road rules is important for those venturing onto public highways. It is also worth noting that learner cyclists are likely to hear opinions from more experienced counterparts about what types of cycling are desirable for what types of people.

Despite the role of cognitive knowledge, it remains notoriously difficult to apprehend with words what is happening during the development of body techniques central to cycling. Hopsicker’s (2010, p. 16) survey of historical and contemporary accounts of learning to ride explores this difficulty, while nevertheless uncovering regular themes of ‘weaving’, ‘tottering’, ‘uncertainty’, ‘slowness’ and ‘lumbering’, with cycling described as a ‘foreign world defined by an elevated center of gravity, a continuous service to balance, and... constant forward motion’. Polanyi’s (2009 / 1966 p. 4) account of tacit knowledge involving a pre-discursive response to anoetic kinaesthetic, proprioceptive and environmental stimuli (often resistant to conscious explication) reinforces this sense that learning to cycle involves acquiring newly found abilities which ‘frequently elude verbal explanation’ (Hopsicker, 2010, p. 16). Yet these experiences associated with cycling are integral to the environment in which Vélo values emerge.

Of particular note to the experiential exchanges central to cycling is the contrast they provide to the increasingly managed and deodorised ‘sensecape’ of western transport systems (Cook & Edensor, 2014; Sennett, 1994). Enfolded within a ‘carcoon’ (Wickham, 2006), or carried by a train while focused on an inner world facilitated by book, laptop or iPod, the driver or passenger is shielded from the surrounding environment. In contrast, a key characteristic of cycling that reoccurs in contemporary and past accounts of this activity is its tendency to promote an ‘elevated sensuousness between riders and their environment’, an ‘immersive’ experience opening individuals to the ‘olfactory signatures’ associated with contrasting ‘weather worlds’ (Cox, 2019; Hammer, 2015; Hopsiker, 2010, p. 24; Ingold, 2007). The sounds, tastes, odours, visions and touches transacted with while cycling stimulate what Larsen (2010, p. 31) refers to as a ‘tactile-
kinesthetic body’ that also requires learners to cope with the nervousness that can accompany these sensory experiences, a circumstance intensified when riding amid speeding cars and lorries (Aldred, 2013, p. 260; Horton, 2007; Jones, 2012).

The sensory elevation associated with learning to ride has particular significance for the development of values. As Durkheim (1912/1995, p. 213) argues – in an analysis which on this occasion resonates with Dewey’s pragmatist transactionalism – value change is most mobile during periods of effervescent experience. Such experiences are promoted by a heightened sensory responsiveness – stimulated by occasions ranging from the socially spectacular to inter-personal acts of recognition – during which people are receptive to absorbing particular accounts of why they belong to a cultural group. From this perspective, the stimuli associated with cycling can, when pursued amid the social relations characteristic of particular Vélo worlds, become a ‘hot spot’ for value development (see also Allen-Collinson et al., 2018).

The question of which particular values develop alongside the acquisition of cycling skills, however, requires analysing the precise transactions occurring within particular Vélo worlds. The development of the high-wheeled Ordinary (‘penny farthing’) during the 1870s, for example, was utilised mostly by able-bodied, monied young men whose dress was compatible with riding this challenging machine and who cycled as a means of ‘show[ing] off’ to observers (Bijker, 1995, pp. 19, 38). Learning to cycle here was to transact with a Vélo world characterised by public displays of bourgeois machismo suited to the challenges of ‘conquering’ the fear of riding these unstable machines (MackIntosh & Norcliffe, 2007).

In contrast, with the development of the safety bicycle at the end of the nineteenth century, cycling schools proliferated across Europe and North America, promoting riding as a social good and a means of extending mobility for all, despite the ongoing gendered dimensions to this practice (Bijker, 1995).3 Contemporarily, however, while cycling on the road in the Netherlands or Denmark is to engage in an act of citizenship as a socially validated means of transport, it is in the United Kingdom, United States, Australia and elsewhere often experienced as sub- or even counter-cultural in relation to the dominance of the car (Lenting, 2014). National differences in cycling, indeed, provide us with one of the best illustrations of how this body pedagogic practice involves the incarnation not just of skills and knowledge, but also of values.

**Cycling and national identity**

Historically, different national approaches to cycling have been associated with one of the most significant sources of Vélo values (Cox, 2015a, 2015b). Early twentieth-century cycling in the Netherlands and Denmark was an exercise in expressing nationalism, with a Dutch newspaper designating it ‘the most patriotic of all means of transport’ (Oosterhuis, 2016, p. 244). In the Netherlands, the royal family undertook staged outings on their bikes (Ebert, 2004). To be Dutch meant to cycle, and possessing a bicycle entailed owning a piece of material culture linked to the national community, an association especially potent until the Second World War yet which remains significant today (Pooley, 2017). In recent years, for instance, cycling lessons for immigrants have sought to facilitate the integration of ‘outsiders’ into Dutch society (Cox, 2019, p. 123; Kaplan
et al., 2018; Van der Kloof, 2015), while this two-wheeled form of transport remains for Kuipers (2012) integral to the national habitus.

The Netherlands and Denmark were not the only countries in which cycling culture transacted positively with national identity. From the early twentieth century, Vélo organisations in many Western countries promoted riding as a means of discovering the national landscape and reducing divisions between town and countryside. In so doing, they campaigned for better roads, cycle paths and signposting as expressions of ‘nationalist self-esteem’ and a means of enhancing social integration (Oosterhuis, 2016). This assumed different forms in different countries. In Germany, during national socialism, bicycles were designed with party insignia, while contemporary political leaders in Europe and Asia are again promoting bikes as expressions of national pride and environmental consciousness (Cox & Rzewnicki, 2015; Spinney & Lin, 2019). The experience of cycling in these countries may not be uniform but entails encountering this activity within environments of national identity that transact with the meanings people attach to it.

One of the most notable examples of how Vélo worlds permeate national identity involves the internationally famous Tour de France. This race has played an important role in linking riding’s popularity to ‘the traditional physical boundaries of the Franches of both the Ancien Régime and post-Revolutionary Republican eras’ (Dauncey & Hare, 2003, p. 3). The extensive media coverage devoted to this event undoubtedly seeks to stimulate people’s imaginations, with the risks associated with cycling in the Molochs, the Alps and Pyrenees portrayed as demonstrating ‘the legitimacy of France’s natural borders’ and resurrecting an ‘age-old image of France as a country defined by nature and defended by its own soil’ that regenerated following the provinces lost in 1870 (Vigarello, 1997, p. 475). Nevertheless, Kuiper’s (2012, p. 29) association of cycling with an ‘imagined community’, that is of obvious relevance here, needs qualifying: the strength and pervasiveness of such imaginations where they exist are contingent in part on the experience of cycling as a physical and sensory body pedagogy (Aldred, 2013). In the case of France, moreover, this experience is reinforced by a Vélo world in the form of the Tour consisting of 4,000 people and 1,000 vehicles that moves around the country and is watched by millions; a visceral spectacle that provides an effervescent reinforcement of national identity during an extraordinary collective event (Vigarello, 1997).

Exploring the relationship between national identities and Vélo worlds does not entail assuming that transactions inevitably result in the incarnation of specific values: class, gender and regional differences continue to permeate the exchanges involving this activity. This is clear in the case of cargo bikes (developed in the late nineteenth century to carry heavy loads of produce and becoming increasingly important during the World Wars). Enjoying a renewed lease of popularity as a means of transporting children as well as goods around towns and cities, cargo bike-friendly transport policies have, however, been seen as helping to displace the poor and marginalize women (Boterman, 2018; Van den Berg, 2017). Relatedly, and in stark contrast to the situation in most of twentieth-century Europe, and in more rapidly developing nations including China, the profile of cyclists in certain countries including the Netherlands has become increasingly middle class (Kuipers, 2012, p. 28). Displaced from the more desirable areas of cities as a
consequence of rising property prices linked to gentrification, significant sections of the working classes and precariat face having to use public transport for their commutes (Standing, 2011).

Despite these qualifications, it remains the case that those nations to have promoted cycling as an expression of collective identity intervene directly in the value-forming environment individuals engage with when participating in this activity. Yet if cycling has been a physical expression and experience of national identity in certain countries, Vélo worlds take on very different characters when marginalised. In English-speaking countries, and most of the rest of the West, cycling never achieved the status it gained in the Netherlands, and transactions between this activity and other elements of the environment resulted in very different value outcomes. In Germany, for example, despite earlier associations with national identity, the post-War standing of the bicycle was damaged by its increasing availability to the working classes, a situation that eradicated the distinction middle-class riders used to enjoy (Pooley, 2017, p. 364). More generally, while cyclists in the Netherlands paid tax toward the road system, identifying them as stakeholders in road planning (Ebert, 2012, p. 125), they were elsewhere often regarded as ‘free riders’ without claim on the transport infrastructure. This situation was exacerbated in the United States where car mass production had by the 1930s already relegated the bicycle to ‘a means of transportation for losers and eccentrics’ (Oosterhuis, 2016, pp. 244–245). In such circumstances, the values associated with cycling for those persisting with this activity assumed very different meanings within those cultures of automobility that became increasingly pervasive as the twentieth century drew to a close.

Vélo worlds in cultures of automobility

Heavily marginalised in favour of the car within contemporary Britain, the United States, Canada and Australia, Vélo worlds tend in such environments to be associated with recreational and sporting purposes more than utilitarian journeys, a situation that shapes the values encountered and developed while cycling. The difficult conditions that generally confront cyclists on Britain’s roads, for example, prompted Jones (2015, p. 815) to suggest that riding in cities can here be considered ‘deviant’. Developing this argument, Horton (2006, p. 41, 52) suggests that learning to cope with car-dominated infrastructures ‘tends to foster subjective experiences of resentment, alienation and marginalisation’ that can politicise daily life. As Aldred’s (2010) study into the formation of ‘cycling citizens’ in car-dominated contexts shows, bicycling has at times resulted in the rejection of dominant neoliberal national identities and an embrace of alternative, more environmentally friendly commitments.

Cycling experiences conducive to counter-cultural values are prime examples of how meanings emerge through transactions with the anoetic stimuli associated with car-dominated environments, though it is important to recognize that the experience of cycling in such hostile contexts frequently results in people eschewing this activity or having to engage in considerable emotion work as a coping strategy (Albert, 1999). Balkmar’s (2018, p. 723) study of Stockholm, for instance, highlights the ‘violent mobilities’ of aggressive (mostly male) car drivers, who challenge the city’s attempts to
increase cycling, revealing conflicts over who is considered a ‘legitimate road user’. The prevalence and gendered character of aggressive driving, indeed, is a frequently reported challenge facing authorities seeking to increase cycling in motorised cultures (Aldred, 2013).

The sub- or counter-cultural associations of cycling in the UK and other car-dominated countries has, at the level of day-to-day practicalities, much to do with the transport infrastructure. Responses to these conditions do vary, however, as evident from contrasting Vélo worlds that include not only sports and leisure cyclists but also activist groups and couriers. Bicycle messengers or couriers are in this context an unusual group in so far as cycling is key to their work and because their employment exists as a consequence of traffic congestion. Having to travel sometimes significant distances in busy cities and within tight time constraints, courier engagements with the constraints of the car, van and lorry filled environment transact with the demands of the job to promote ‘a certain amount of law-breaking and subversion of the “normal” flow of motor traffic [as] essential for self-preservation’ (Fincham, 2007, p. 221). The dangers of being ‘doored’ or driven into by cars turning at junctions, for example, contribute to strategies of riding in the middle of roads and anticipating traffic light changes.

In this context, it is unsurprising that Fincham’s (2006, 2007) and Kidder’s (2006, 2011) studies of couriers in the United Kingdom and United States suggest that these employees identify themselves as belonging to a subculture possessed of its own values, a situation reinforced by the disproportionately high accident rates they suffer (Fincham, 2007, p. 213). Experiencing a strong sense of esprit de corps with their colleagues, the lives of these couriers in and out of work are often permeated by ‘a distinct messenger lifestyle’ that values the ‘intoxicating thrills’ of edgework provided by the excitement and threats provided by ‘dodging cars as they speed through the city’ and extends to illegal messenger street races (Kidder, 2006, pp. 48–49).

The transactional experiences of city cycling also inform the values of activist groups that campaign to change the hostile urban conditions faced by pedal powered locomotion. Critical Mass is the best known of these groups and began in 1992 San Francisco with a large cycle ride that disrupted traffic and sought to promote ‘a new kind of public space and . . . a different way of being together in city streets’ (Carlsson, 2009; Stehlin, 2014, p. 25). It has since spread to cities across various countries. The transaction of cycling with radical politics, indeed, has a history that can be traced to the feminist rational dress movement and socialist politics of the late nineteenth century, to the 1960s Amsterdam based radical collectivist movement Provo who distributed white bikes when protesting against private property and car-based consumerism (Horton, 2006).

Drawing on Appadurai (2002), Stehlin (2014, pp. 25–26) refers to critical mass and related activisms as a form of ‘governmentality from below’ that seeks to widen the values of cycling beyond rationalised commuting or competition and to provide it with a central place in modern cities (Aldred & Jungnickel, 2012). Critical mass and other activist groups also provide a collective context in which the heightened sensory experiences associated with cycling are linked directly to political values, circumstances that for Durkheim (1912/1995, pp. 222–223) stimulate group energies that bind individuals within a culture.
While couriering and cycling activism may be seen as elements of Vélo worlds that confront creatively and directly, albeit in different ways, the dominance of motorised transport in seeking to adapt to the environment in which they travel, the radical, conservative or neutral impact of bicycling depends upon the precise transactions in which it is entangled (Hoffman, 2016). In this context, many cyclists in car-dominated societies choose to focus more narrowly on cycling for leisure as a sociable form of pursuing fitness through a temporary ‘being together’ with similarly motivated others (Maffesoli, 1996). O’Connor and Brown’s (2007) study of ‘capable sporting cyclists’ in Australia illustrates one version of this activity. Elsewhere, Falcous (2017) explores the middle-class characteristics of this cycling culture, in interviews with ‘serious leisure’ cyclists in New Zealand, among individuals who conceptualise it as a responsible way of enhancing personal health through sociable activity. Focusing on group rides in the United Kingdom, Aldred and Jungnickel (2012) emphasise how collective cycling can also contest and make more flexible transport spaces, exploring transactions between cyclists and the built environment that involve making claims on road space, engaging in mobile agency as well as dealing with environmental constraints (Aldred, 2013, p. 266). This finding is shared by Barnfield and Plyushreva’s (2016) analysis of the growing popularity of cycling in Sofia’s public space, yet it is important to remember that shared experiences of transport infrastructure do not necessarily result in similar values. Riding to work and cycling with others, for example, may involve ‘negotiating and maintaining being together’ as part of a ‘mobile with’, but some cyclists adopt aggressive and competitive attempts to dominate through speed others engaged in this activity (Jones, 2005; Larsen, 2018, p. 52).

The potential to cycle at speed, as a means of fitness and competition, is also shaped by legal considerations: early twentieth-century Netherlands, for example, prohibited any kind of street racing (Pooley, 2017, p. 359). It is also worth noting that this type of leisure cycling requires the resources to purchase quality road bikes and expensive clothing/gear and a regional location and knowledge facilitating access to suitable routes. Working in occupations that give one the flexibility to cycle during daylight hours is also important, especially in the winter months, as indeed is the amount of leisure time available to an individual. In short, the chances of enjoying leisure cycling are related closely to social class and gender.

Courier, activist and leisure Vélo worlds are distinctive, but for those with experience of cycling in heavily motorised contexts constitute contrasting responses to broadly similar anoetic or pre-conscious awareness of common stimuli, involving respectively an extreme engagement with, a political opposition to, or a selected relocation of conventional urban exchanges. It is not simply threats from motorised vehicles that determine these responses, but the active choices of social subjects. The experience of cycling within motorised contexts as ‘dirty work’ can inform the emergence of counter-cultural values, for example, or may simply prompt the decision to ride with others for reasons of safety, or for leisure purposes, at times and in places away from congestion (Kidder, 2006, p. 49). These stimuli do not determine the value responses of any cyclists but enter into those transactions through which emerges the sense of why someone becomes involved in this activity.
Conclusion

This article has sought to advance body pedagogic studies by focusing upon the incarnation of cultural values. Rejecting the over valorisation of symbols central to Anderson’s ‘imagined communities’ thesis, I developed Dewey’s writings on transactionalism by arguing that the social, material and intellectual processes involved in learning physical techniques entail a concurrent engagement with values and by applying this approach to the diverse norms associated with what I have referred to as contrasting ‘Vélo worlds’. This transactional approach to body pedagogics has particular strengths in accounting for the embodied incorporation of values: it takes seriously the overarching social/cultural/natural environment in which activities take place, recognises that the exchanges occurring between people and the parts of the environment shape without rendering redundant the properties of these transactors and thereby continues to recognise that humans are able to exercise agency rather than implying that individuals are determined by a wholesale internalisation of the social world.

Applying this approach to the cultural values developed within contrasting Vélo worlds enables us to engage with an activity possessed of an ambivalent relationship with the modern era. Cycling also provides a clear example of how transactions involving factors as diverse as the weather, pollution, transport infrastructure, conceptions of national identity and other people enter into the body techniques learnt when acquiring this skill and how values emerge through these exchanges. Long associated with promoting sensory openness and sensitivity, cycling can also be recognised sociologically as conducive to the mobility of values. It is not that Vélo values are determined by these contexts and the exchanges that occur within them, but that people through necessity have to engage with them in developing their own sense of why they cycle. The cultural values developed by courier riders, for instance, are clearly shaped by and emerge out of entanglements within traffic congested cities. They do not constitute a passive absorption of an environment, and their responses continue to be marked by the properties and limitations of bodies when cycling, but the meanings they attribute their work are forged through the creative exchanges taking place with their surroundings.

In supplementing concerns with knowing that one belongs to a culture and knowing how to participate in that group with a focus on knowing why one belongs to a community, cycling illustrates how learning the same set of physical techniques in different contexts can result in contrasting views on, feelings about and engagements with cycling depending on the precise exchanges that characterise this educational process. Vélo worlds provide us with an especially visible case of transactions through which emerge particular values: learning to cycle is not just a mechanical but also a social skill involving exchanges that inevitably entail developing an embodied sense of knowing why one engages in this activity. Yet this study also suggests that the transactionalist approach towards body pedagogics may be applied productively to, and developed within, other studies of cultural belonging.

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Notes
1. Dewey’s approach towards transactions that shape ‘conceptions of the desirable’ is shared by other pragmatists within the Chicago School. Mead’s (1924/1962) formulation of the I/Me relationship, for example, suggests that values arise as bodily selves engage in exchanges with each other and their material environment when seeking to survive and flourish through the cultivation of physical things (Mead, 1938). Elsewhere, it also has affinities with Merleau-Ponty’s (1969) focus on the reversibility of our embodied senses. While Merleau-Ponty (1969) acknowledges that values are implicated in broader processes wherein ‘touching’ involves us ‘being touched’, however, Dewey focuses more on how this reversibility contains a transactionality that effects change in those involved in this relationship.
2. There are important national variations in this general picture, as we explore later, indicated by the 1–3 per cent of journeys travelled by bikes in the United States and Britain, compared with the 19–27 per cent figures of Denmark and the Netherlands (Aldred & Jungnickel, 2012; Oosterhuis, 2016).
3. By the end of the Second World War, cycling was seen as a means of liberation for women used to the expanded roles and horizons they enjoyed during conflict, yet the reassertion of gendered stereotypes that followed was such that by the early 1970s, the existence of women only bicycle touring groups prompted outrage and condemnation (Cox, 2015b).

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