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Body pedagogics, transactionalism and vélo identities: Becoming a cyclist in motorised societies

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journals.sagepub.com/home/sor**Chris Shilling**

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Abstract

Sociological research into the body pedagogics of occupational, educational, religious and sporting groups focuses on cases in which the social and material environment reproduces these ‘ways of life’, yet devotes little attention to how cultures persist within circumstances *hostile* to their maintenance. Developing a transactionalist approach to body pedagogics, I address this lacuna by investigating the case of cycling within societies dominated by automobility. Cycling, in these contexts, requires individuals to engage creatively with challenging physical and environmental exchanges. Such exchanges frequently alienate but can involve the development of ‘outsider’ mobile status, have been reorganised into stable practices by vélo cultures, and highlight embodied processes relevant to general sociological investigations into marginalised cultures.

Keywords

body pedagogics, Dewey, embodiment, transactionalism, vélo cultures

Introduction

Sociological studies into the body pedagogics of occupations, religions, education and sports/leisure have, since the turn of the century, provided popular alternatives to the traditional disciplinary tendency to explain the reproduction of cultural forms as a matter of socialisation into ‘information high’ values (Parsons, 1978, pp. 366–369). Emerging from the field of ‘body studies’ that flourished from the 1980s and 1990s, this focus on the formal and informal embodied pedagogics central to the persistence of specific cultures was designed to facilitate empirical research and address criticisms that the sociology of the body had become overly abstract and philosophical (Nettleton & Watson, 1998).

Body pedagogic studies did not reject theory. Durkheim’s (1912/1995) concern with the internalisation of ‘social facts’, Foucault’s (1979) interest in discipline and biopolitics,

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Butler's (1990) analysis of gendered performativity, and cognate resources, were mined for what they could contribute to substantive investigations into the physical techniques, sensory awareness and practical routines associated with contrasting ways of life. This facilitated a large growth of varied research into cultural forms (e.g. Allen-Collinson & Hockey, 2020; Allen-Collinson et al., 2017; Andersson et al., 2015, 2016; Andersson & Risberg, 2018; Bell & King, 2010; Evans et al., 2008; Kelly et al., 2019; Kennedy & Johnston, 2019; McNarry et al., 2021; Mellor & Shilling, 2011; Nettleton, 2013; Rich et al., 2020; Saunders, 2007; Schaaf, 2019; Shilling, 2007, 2010, 2017, 2018, 2021; Shilling & Mellor, 2007; Stahl, 2020; Wacquant, 2004; Wignall, 2016). Underpinning this diversity, however, was a shared concern with the relationship between those social, technological and material *means* through which culturally inflected practices are transmitted, the contrasting *experiences* of those implicated in this learning, and their *embodied outcomes* in terms of emergent habits and techniques (Shilling, 2007, 2018).

Supplementing this convergence, these studies concentrated on cases where the social environment *contributed to* cultural reproduction, with novices experiencing synchronicity between modes of learning. Hockey's (2009) study into the 'ocular' and 'auditory' of military training, for instance, highlighted how complementary forms of sensory education contributed to 'switched on' patrols. Bell and King (2010) explored how the physical skills and norms associated with academic conferences reinforced male cultures. Maslen (2015) and Saunders (2007) interrogated how the instructions and materials central to medical apprenticeships aided successful diagnoses. Aalton's (2007) and Satama et al.'s (2021) investigations into dance examined how diverse practices promoted successful performances. While there were always individuals who failed to cultivate appropriate skills, unable or unwilling to assimilate into specific cultures, such studies focused on correspondences between norms, materials and training.

These commonalities can be illuminated further via Dewey's pragmatist transactionalism. Dewey (1896) rejected both the 'self-actional' Hobbesian view that internal appetites drive behaviour, and inter-actionist analyses that suggest subjects engage with others as independent beings, on the basis that neither accounted adequately for context, or the 'full situation of organism-environment' (Dewey & Bentley, 1949, pp. 119–120). In their place, he drew on Darwin in viewing individuals as *part of* the surroundings with which they make exchanges and to which there are pressures to adapt. Individuals do not remain within their skin but are part of, and to survive 'connect' with, 'what lies beyond' their 'bodily frame' (Dewey, 1934/1980, p. 13). The simplest illustration of this is breathing, involving exchanges of oxygen and carbon dioxide with the atmosphere, but cultural existence also involves exchanges of meaningful action enabling individuals to navigate their (military, medical or other) social milieu (Dewey, 2012; Roth, 2019, p. 28). These processes involve 'organic selections, rejections, welcomings [and] expulsions', eventuating for those who flourish in at least temporarily settled habits that routinise possible actions and strengthen links between individuals and their surroundings (Dewey, 1958, p. 298; 1922/2002, pp. 15, 26).¹

Viewed from this transactionalist perspective, body pedagogic research has focused on exchanges *supporting* cultural incarnation, when embodied selves forge 'adaptive' connections with their surroundings (Dewey & Bentley, 1949, p. 129). Crucially, these adjustments require compatibility between what Dewey and Bentley (1949) refer to as

anoetic sensation (the pre-conscious sensing and registering of stimuli within particular environments) and *noetic meanings* (emerging when stimuli permeate consciousness and are apprehended reflexively as significant) (Garrison, 2003). Here, cognition is inextricably embedded within embodied existence, constituting a mental register and experience that emerges from and ‘orders’ non-cognitive stimuli (Dewey, 2012, p. 80). In this context, the subjects of body pedagogic analyses develop capabilities and identities supportive of cultures because the social/material sensory stimuli they engage with exists in quantities and qualities that *reinforce* verbal instructions and cognitive understandings central to their specialisms (Dewey, 1934/1980, p. 15).

Body pedagogic studies continue to draw on various theoretical resources. Bourdieu’s (1979) approach to the social world’s incorporation into the habitus, Merleau-Ponty’s (1962) phenomenological writings on the reversibility of sensory engagement, and other perspectives remain popular (e.g. Allen-Collinson & Hockey, 2015; Barratt, 2011; Cox, 2019; Crossley, 2007; Kullman, 2014). Irrespective of the theoretical influences informing such analyses, however, they have generally explored the *reproduction* of social and cultural forms, rather than analysing those processes of change that concerned Dewey when experience resulted in crises and habits became obstructed (Dewey, 1922/2002, p. 53; Shilling, 2008, pp. 16–24). What body pedagogic studies have failed to examine comprehensively, from any theoretical perspective, are circumstances where the social and pedagogic context in which groups exist, and the anoetic stimuli and noetic understandings with which they engage, *mitigate against* cultural reproduction. How do individuals develop and sustain capabilities that place them at odds with the overarching environment, prompting them to search for, and sometimes construct, new environments?²

In addressing this question, I develop a transactional perspective towards the body pedagogics of cycling within societies dominated by motorised transport. This provides a sociological development of Dewey’s approach, extending his concerns to an environmentally important activity, and forges new concepts suited to exploring cultural transactions. Cycling is a timely case-study given its prominence within sustainability strategies (Pucher & Buehler, 2017), a prominence highlighted further during the pandemic. Despite being associated with certain mainstream cultural qualities (including exercise), however, cycling is frequently made unattractive due to those material, legal and normative infrastructures that favour automobility across much of the globe (e.g. Aldred, 2014; Joshi & Joseph, 2015).³

This article firstly explores how cycling in motorised contexts involves challenging sensory exchanges with the environment, while also analysing how persistence with this activity is associated with the development of body pedagogic techniques and coping strategies that make these encounters manageable and facilitate mobile identities (the dimensions of people’s sense of self associated with motility and transport) supportive of cycling. These mobile identities range from those who see themselves as reluctant ‘utility’ cyclists (commuting/shopping by bike because they lack alternatives), to those embracing cycling as a lifestyle choice, though all engage in an activity that positions them as ‘outsiders’ in relation to the norms of automobility. Becoming a cyclist does not preclude involvement with motorised transport – most cyclists in the UK, for example, drive cars – but suggests investments in *vélo* transport that minimally distance individuals from automobility as an exclusive mode of travel.

Cycling is not, of course, a homogeneous activity, and having discussed the general transactional challenges associated with motorised environs the second half of this article focuses on how four distinctive *vélo* cultures recalibrate and reorganise these exchanges. In line with this article's aim, my selections illustrate how cultures can be maintained, and flourish, despite a hostile broader environment. Moving away from 'reluctant' utility cyclists, 'green riders', bicycle messengers, 'serious leisure riders' and mountain bikers exemplifies how these exchanges can undergo an *ecologically epistemic revaluation*, a *radicalising reformation*, a *protected engagement* and a *reconstructive relocation*. These transformations consolidate outsider mobile identities and possess wider sociological relevance.

Cycling in motorised environments

Cycling possesses many forms – from children's first rides to elite competitions – resisting singular descriptions. Exploring how cycling persists in hostile environments, however, we focus on milieu dominated by automobility (including the United Kingdom and the United States of America) that, despite urban and intra-urban variations, are generally inimical to the use of cycles for commuting. These environments contrast with those, including the Netherlands and Denmark, more hospitable to *vélo* mobilities (Cox, 2019). While recent initiatives hold out the promise of alternative futures – with many cities committed to expanding cycling 'corridors' – the large majority of citizens in post-/industrial societies continue to live in motorised environs (e.g. Cadbury, 2020).

Cycling is, in these contexts, topical and controversial. Positive appraisals emerge from alternative transport strategies. By the twenty-first century congestion was costing the USA \$100 billion and the UK economy £20 billion annually, while there is increasing recognition of the ill-health and environmental damage caused by fuel particulates and the physical inactivity associated with car journeys (Vivanco, 2013). Addressing such worries, city and state-wide policies promoted cycling as 'safe and feasible' transport, initiating a limited 'renaissance' of this activity (Pucher & Buehler, 2008, p. 495). These plans have not undercut the dominance of automobility, but the bicycle's potential remains valued by supporters of 'convivial' technologies that harmonise with human needs (Illich, 1973, p. 24). From this perspective, cycling can stimulate social change: a view reflected historically by socialist and feminist endorsements of it as a disrupter of the status quo (Mackintosh & Norcliffe, 2007).

Cycling also faces challenges. In the UK, USA, Canada, and much of the industrial/post-industrial world, the twentieth-century expansion of car ownership limited alternatives. With more than a billion cars manufactured during this period, mass road building facilitated a shift from the socialised 'clock' time associated with railways towards higher velocity individualised time in which car travel became increasingly necessary (Urry, 2007, p. 120). Once viewed as quintessentially modern, cycling for utilitarian purposes was by the late twentieth century generally perceived as anachronistic, 'inferior, unsafe, [and] uncomfortable' (Oosterhuis, 2016, p. 245). This is reflected in the small percentage of journeys undertaken by bicycles: the 1–3% in the USA and Britain in the early twenty-first century, for example, is dwarfed by the 19–27% figures of Denmark and the Netherlands (Aldred & Jungnickel, 2012; Oosterhuis, 2016).

It is against this background that the body pedagogic transactions associated with cycling in motorised contexts warrant study, especially since its associated skills can be analysed as, paradoxically, *non* body techniques. On first appearance, this proposition appears misplaced. Surely cycling involves what Mauss (1979) refers to as ‘techniques of the body’? Balancing on two wheels requires dexterity and confidence – requiring the incorporation of technology into one’s body schema – and is initially difficult. Hopsiker’s (2010) review of novice cyclists, for example, highlights the repeated ‘involuntary dismounts’ resulting from interrupted exchanges between individual, technology and terrain. Cycling is, however, a skill acquired by most people with access to bikes. Learnt at home, taught to children, adult cycle schools extend further this ability (Hamilton & Palmer, 2014; Oosterhuis, 2016), while riding in traffic, groups, and amidst pedestrians requires additional skills that facilitate a ‘choreography’ of exchanges (Bunte, 2015, p. 156).

The transactions involved in learning to cycle appear, therefore, to constitute a body technique, involving an ‘education in composure’, requiring person-to-person, person-to-bicycle and person-to-road/pathways entanglements that instil habits ‘inhibiting disorderly movements’ allowing ‘coordinated movements setting off in the direction of a chosen goal’ (Mauss, 1979, pp. 101, 121–122). Nevertheless, if we focus on cycling within infrastructures of automobility, this activity is missing one attribute key to Mauss’s account. Body techniques for Mauss (1979, p. 104) must be ‘*effective*’, ‘*efficient in relation to . . . society*’, and adaptive in relation to their environment (Dewey, 1934/1980).

Transactional dys-ease and embodied reconstruction

Casting doubt on its adaptivity, studies suggest that the prospect/actuality of cycling in traffic alienates most from an activity involving transactional challenges that place embodied subjects in a *marginal position* of sensory sensitivity and physical vulnerability, entailing related engagements with environmental *dys-ease* (experiencing a dysfunctional relationship with one’s surroundings) (Horton & Jones, 2015, p. 65; Leder, 1991). As Nettleton and Green (2014, p. 245) note, this dys-ease is embedded within social and material milieux and can prevent embodied skills from becoming routine practices. For those who continue cycling, however, there is a tendency for ongoing exchanges to promote techniques and coping strategies that reduce dys-ease, while others engage more radically with these transactions in reshaping further experience and meaning. In these cases, it is possible to identify a *liminal* status passage resulting in the development of mobile identities that often accentuate positions of *outsiderhood* vis-a-vis the norms/practices of automobility (Cox, 2015; Turner, 1996, pp. 116, 134; Van Gennep, 1906/1960).

Conceptually identifying these four processes (marginality, dys-ease, liminality, outsider mobile identities) complements Dewey’s concern to extend analysis of transactional exchanges across social life (Dewey & Bentley, 1946, 1949). Given that these provide an embodied basis for understanding both the character of cycling and the maintenance of *vélo* cultures within environments of automobility, it is important to elaborate them.

Riding amidst cars and lorries, cyclists must firstly confront the challenge of occupying *marginal positions* – compared to the protection offered by automobiles – of sensory sensitivity and physical vulnerability (Hopsicker, 2010, p. 24; Jones, 2012, p. 646; Pooley, 2017). Sensory sensitivity emerges from cycling's capacity to intensify responses to surroundings: *vélo* mobility entangles individuals with the sounds, 'olfactory signatures', images and tactile contacts associated with the climate unavailable to those enfolded within a 'carcoon' (Hopsicker, 2010, p. 24; Jungnickel & Aldred, 2014, p. 246). Spinney (2007, p. 37) and Larsen (2010, p. 31) suggest that the cumulative impact of these anoetic exchanges affords cyclists 'extended touch' and a 'tactile-kinaesthetic' relationship with their surroundings. Emphasising their intensity, Jones (2012, p. 646) compares these experiences with 'illicit' activities that stimulate sensory overload. This is exemplified by Cook and Edensor's (2017, pp. 8, 13, 16) account of night riding, in which intimations of the 'supernatural' describe a 'descent' into the 'phantasmagorical'. Heightened 'sensescapes' are, however, frequently experienced as unpleasant, with Jones (2012) noting the 'polluting' effects of sweat and dirt in commuter cycling. In climates with unpredictable weather, riding on public highways can also be uncomfortable, raising the problem of what to wear (Kidder, 2006, p. 40).

These marginal sensations of 'noxious fumes, roaring engines, honking horns, and black exhaust' often stimulate feelings of physical vulnerability, associated with cycling amidst high tonnage cars and lorries, sufficient to alienate all but the dedicated and frequently resulting in a 'fear of cycling' (Aldred, 2013, p. 260; Horton, 2007; Larsen, 2010, p. 31; Ravensbergen et al., 2019). Focused upon physical safety, this fear can also encompass aversion to the 'hard work' of pedalling, and concerns that riding a 'stigmatised' vehicle might damage one's feminine or masculine identity. Such concerns are a major reason people decline to cycle or stop cycling; concerns occasioned by negative, sexist and racist interactions with drivers (Brown, 2016; Ravensbergen et al., 2020; Vietinghoff, 2021).⁴ Balkmar's (2018) discussion of 'violent mobilities' reinforces this picture. Aggressive driving in 'pervasive regime[s] of automobility' is commonplace, with cyclists confronting 'discrediting social interactions' occasioned by exchanges that ignore 'their vulnerabilities' (Aldred, 2013, p. 260; Balkmar, 2018, p. 718; Pooley, 2013, pp. 145, 147). These circumstances are not distributed equally, varying according to neighbourhood specifics (Jungnickel & Aldred, 2014), but can become major obstacles for those exposed to them. While those who have developed the aggressive self-confidence associated with hegemonic masculinity may be well placed to survive such marginality, this is likely to be more difficult for others.

If the first stage to becoming a cyclist entails confronting the marginality of sensory sensitivity and physical vulnerability, the second involves the related experience of environmental *dys-ease* as individuals layer anoetically sensed stimuli with the cognitive reflection that cycling is potentially dysfunctional. The pervasiveness of *dys-ease* is reflected in research suggesting even committed cyclists often seek increased safety through such strategies as wearing helmet cameras and 'getting off the road' when feeling threatened (Aldred, 2013, p. 260; Spinney, 2007, p. 41). As Aldred (2013, p. 260) adds, these strategies may seem partial, with individuals still expressing 'anxiety about their ability to manage cycling in traffic'. For Horton (2007) and Lee (2016, p. 405), this is exacerbated by public discourses depicting bicycling as 'inherently unsafe'. Expressed

transactionally, these discourses reinforce negative noetic interpretations of the anoetic experiences associated with cycling. As Radman (2014) notes, they can become physically internalised vocabularies of bodily risk, with cycling constituting a fractured experience which offers the feeling of being 'at odds' with one's surroundings (Dewey, 1958, p. 245).

Much of the above research suggests that marginality and dys-ease contributes to the low percentage of journeys undertaken by bikes. An additional possible reason for this aversion is that prospective vulnerability takes individuals too far from previous mobile identities (Urry, 2007). Cycling removes individuals from the speed, insulation, and comfort associated with cars and trains. As Mom (2020, p. 30) notes, the bodily sensoria involved in these modalities of transport differ sharply. No longer is it easily possible to arrive at work smart and sweat-free as when commuting by car. There are costs associated with developing new mobile identities.

Those who persist with cycling may, of course, simply be without access to automobility. Far from being a passive response, however, there can be creativity in engaging with 'the obduracy' of road infrastructure (Latham & Wood, 2015, p. 300). For example, Albert (1999) suggests many cyclists deliberately 'discount' the possibility of accidents. Latham and Wood's (2015) London commuter cyclists also pursue other strategies involving positioning bikes ahead of stop lines, clustering together with other cyclists, riding on pavements and using bus lanes. While cyclists remain marginalised, they can make transport environments more 'inviting' (Latham & Wood, 2015, p. 303).

Such coping strategies demonstrate how the anoetic and noetic transactions associated with utility cycling can be reshaped to make the marginality and dys-ease of riding in traffic sustainable. Other cyclists travel beyond creatively adapting their bodily orientations to the sights/sounds/smells/discourses of danger associated with cycling, however, by moving towards a third stage characterised by a *liminality* integral to embodied reconstruction.

'Liminality', central to Van Gennep's (1906/1960) status-transition model, involves individuals being separated from their previous (mobile) identities through exposure to extra-ordinary stimuli. The importance of these stimuli is recognised in Dewey's (1938/2015, p. 35) comment that such 'experience enacted and undergone modifies the one who acts and undergoes', while Durkheim (1912/1995) makes the complementary suggestion that identity change involves exchanges with the socio-natural environment which mark and *energise* the body (Shilling, 2005). Most individuals may find the prospect/actuality of cycling alienating, or simply integrate it into their utilitarian activities. Durkheim's (1912/1995, pp. 218, 222) comments, in contrast, relate to those for whom the sensory openness and entanglements associated with cycling 'spread[s] around' their embodied selves as a series of challenges that move beyond the experience of dys-ease to become positively exhilarating and meaningful; energising the individual to inhabit new mobile identities.

Cycling is just one activity contributing towards self-identity, but the transactions with which it is associated are key for many (Cox, 2019). Relatedly, the final stage of embodied reconstruction associated for some with becoming a cyclist moves beyond entanglements with sensory exchanges, vulnerabilities and constraints (that induce liminal distance from previous identity), *towards* the construction of a sense of self in which anoetic stimuli

combine productively with positive noetic understandings (Dewey, 1934/1980, p. 35; 1958, p. 261). This reconstruction does not entail reintegration into high-status positions (as in Van Gennep's model), but transition into a new mobile identity that goes beyond simply feeling positioned as an outsider. Aldred (2010), for example, explores the strong notions of outsider 'citizenship' among cyclists who persist with the transactional exchanges involved in cycling. Yet cycling identities are not homogeneous.

While marginality and dys-ease are commonly experienced within motorised environs, a cyclist's sense of themselves will depend on the precise exchanges occurring between their background and the wider environment (Shilling, 2021). The material and symbolic resources enabling people to cope with these environs vary according to such factors as familial support, gendered responsibilities, and social class (Nettleton & Green, 2014). Given our aim to examine how body pedagogic practices can survive and flourish amidst hostile circumstances, however, the second half of this article focuses on cases where anoetic and noetic transactions supportive of outsider mobile identities contribute towards, and are supported by, distinctive vélo cultures.

Cycling identities and cultures

Four vélo cultures have been selected that illustrate how the transactions associated with motorised environments can be transformed into thriving forms of cycling. 'Green riders' undertake an *ecologically epistemic* re-evaluation of cycling that reshapes their experiences of this activity. Cycle messengers engage in a *radicalising reformation* of exchanges through an approach to cycling as 'edgework' and 'flow'. 'Serious leisure riders' effect a *protected engagement* with cycling. Finally, mountain bikers facilitate a *reconstructive relocation* that embraces the heightened sensory experiences associated with cycling within off-road contexts.

'Green riders' engage in what I refer to as ecologically epistemic revaluations of cycling in urban and other milieux, a process in which noetic reflections inform, ameliorate and enhance the value of potentially unnerving exchanges with motor vehicles by taking as their primary referent the importance of environmental sustainability. This is evident in Horton's (2003, 2006) account of how UK respondents committed to green politics experience the physical transactions of cycling through a cognitive filter which identifies self-locomotion as an ethical good; a valuation which is increasingly international. Exploring the situation in India, Anantharaman (2017) notes that while cycling in cities such as Bangalore has declined steadily alongside a steep rise in automobility – and coupled with the view of many that the car rather than the bike represents progress – organisations have emerged that re-value cycling as a meritorious, green phenomenon (Ramakrishnan, 2020). The Ride-A-Cycle Foundation and the Go-Green Cycling Group, for example, have helped reframe the noetic meanings of cycling as 'cool, efficient and even enjoyable', an activity that addresses congestion, pollution and climate change (Anantharaman, 2017, p. 872).

Cycling in Indian cities remains a risky proposition – involving an urban infrastructure that has often encouraged automobility at the expense of pedestrian and rider safety – while cyclists also face the possibility of stigmatisation given the association of this transport with the underprivileged. Yet green riding has also become linked to discourses

of self- and environmental improvement, and ecologically epistemic re-evaluations of cycling have encouraged growing numbers of young middle-class riders (in the UK, India and far beyond) attracted by its promise of health, thrift and eco-efficiency (Anantharaman, 2017, pp. 872, 876; Horton, 2006).

Remaining with cycling in congested environments, bicycle messengers are an important part of the communications infrastructure in cities such as London and New York (a city in which more than 2000 worked by the twenty-first century) (Kidder, 2006). Delivering items that cannot be sent electronically, ‘threats of injury and death’ confront these cyclists who, under time constraints, weave through traffic, anticipate cars and lorries turning without warning, and remain vigilant for drivers who open parked vehicle doors without checking for oncoming riders (Kidder, 2006, p. 40). With accident rates high even for hazardous occupations (Fincham, 2007), messengers constitute a prime example of an outsider mobile identity involving ‘dirty work’ (Hughes, 1962; Pickering & Wiseman, 2019).

Engaging with an extreme version of the stimuli and vulnerability experienced by bicyclists in motorised settings, the transactions engaged in by couriers evidence a creative noetic reinterpretation of their working environment, entailing a *radicalising reformation* of the challenges associated with urban milieux. This is evident from their determination to ‘remake’ the layouts of roads and pavements by subverting the ‘normal’ flow of traffic and road laws, when ‘essential for self-preservation’, amidst high-risk exchanges with lorries, construction works, traffic lights and inattentive pedestrians (Fincham, 2007; Kidder, 2009).

This reformation of cycling is linked to two tendencies. The first involves bicycle messengers transacting with their environment as ‘edgework’. Lyng’s (1990) analysis of edgework suggested that dangerous activities involving heightened stimuli were pursued by many as breaks from mundanity, involving exchanges that revitalise identities. Kidder (2006, 2011) discovers edgework in the ‘exciting’ threats provided by ‘dodging cars’. Eschewing the idea work is routine, drawing on masculine values of autonomy, risk and control, forming noetic understandings of the stimuli with which they are engaged as exhilarating, this cycling can also stimulate a sense of flow, and this is the second way in which messengers reconstructed this activity as meaningful. As one of Kidder’s (2006, p. 45) respondents explains, ‘[it] demands one hundred percent of my attention. I’m in complete harmony with my bicycle . . . all fear and hesitation is gone’.

The transactional experiences involving edgework and flow are key to the outsider identities embraced by messengers (Fincham, 2007; Kidder, 2006); identities reinforced by those ‘moral guardians’ who designate them (from a perspective informed by the anoetic stimuli associated with *motorised* encounters with bicycles) irresponsible. Kidder (2006, p. 32) highlights this stigmatisation when analysing press coverage of messengers as ‘law-flouting, obscenity-spewing, bath-needing, wild-riding, pedestrian smashing madmen’. Far from being anomic, however, Fincham’s (2007) and Kidder’s (2006, 2011) studies of UK and USA couriers suggest that meaningful collectives emerge from these outsider identities (Shilling, 2021). Testifying to a vitalising group membership, strengthened by media abuse, these couriers evidence a distinct lifestyle aligned to an identifiable cycling culture that dissolves conventional work/life distinctions (Fincham, 2008; Kidder, 2006, pp. 48–49).

Serious leisure riders constitute a third group who embrace cycling, albeit by avoiding many of the hazardous transactions associated with commuting (Falcous, 2017, p. 248). While this cycling assumes distinctive forms, it usually pursues a *protected engagement* with motorised societies; engaging with certain transactions offered by this activity but in groups that provide a partial shield against, or in environs removed from, heavy traffic. As such, these cyclists move from potential experiences of dys-ease to safer engagements with exhilaration, enjoying fulfilling rather than fractured experiences.

These exchanges are exemplified by O'Connor and Brown's (2007, p. 83) study of how serious leisure cyclists in Australia gain identity and cultural belonging through the 'adrenaline-charged atmosphere of the weekend bunch ride'. Here, cyclists stake a collective claim on road space offering individuals some protection from motorised vehicles. Relatedly, Falcous's (2017) New Zealand 'coffee riders' view cycling as a sociable form of keeping healthy. Rejecting the idea that cycling was simply a utilitarian activity, these cyclists enjoyed the flexibility of group rides, valuing them as a leisured cultural form possessed of specialised dress codes and conventions (Falcous, 2017, p. 246).

Serious leisure riders will sometimes (re)locate to the countryside in pursuing 'green exercise' (Bamberg et al., 2018). Group cycling here becomes a means of enhancing well-being by de-stressing and feeling 'connected' to the environment within quiet rural routes (Glackin & Beale, 2018). This involves transactions including the rhythmic breathing produced by exercise, the smells of fresh air, meadows and animals, and the sense of 'stillness in movement' pedal power can produce. It is also valued as a means of cultivating mobile identities outside of motorised transport: cycling is here relief and escape (Glackin & Beale, 2018).

Reconfiguring transactions via immersion in the countryside foreshadows the final cycling culture explored here. Mountain biking (MTB) involves riding off-road, often over rough terrain, sometimes down steep pathways, representing a *reconstructive relocation* of the exchanges ordinarily associated with this activity. Growing in popularity from the 1970s, MTB became mainstream towards the end of the century. Instead of transacting with automobiles and urban roads, it facilitates immersion within a plurality of surroundings inaccessible to road bikes and is catered for by tourist/adventure markets (Buning et al., 2019). From gentle rides in woods, to high-octane downhill races, MTB has been viewed as a way of 'find[ing] silence and solace in the mountains and the woods', but also as a masculine 'conquering' of nature (Cessford, 1995; Huybers-Withers & Livingston, 2010; Skår et al., 2008; Wagner, 2008). Such observations highlight the distinctive ways in which mobile transactions can be organised when moved to off-road contexts and suggest MTB culture is best assessed in the plural.

MTB has been termed a 'lifestyle sport' especially important to self-identity (Dodson, 1996; Evers & Doering, 2019; Wheaton, 2004), a process reinforced by the capacity off-road travel affords for highly varied environmental exchanges. This is exemplified by Lowenheim's (2014) reflections on journeying along dirt trails and wadis in Jerusalem. Transacting with the fence between Israel and the Palestinians, the ruins of Qalunya, and the trail connecting the largest 9/11 memorial site outside the US, Lowenheim's account illustrates how cycling can generate a sense of emotional attachment and connection, but also confusion and estrangement. As in every type of cycling, it is the specific exchanges engaged in that impart distinctive meaning to these activities.

The cycling identities and cultures associated with MTB may be diverse, but this form of cycling has stimulated controversy. While utility cycling is often viewed as sustainable transport, MTB has generated concerns regarding the damage it does to national parks and nature reserves; concerns linked to the 'narrow' conception of it as a masculine domain (Hardiman & Burgin, 2013; Huybers-Withers & Livingston, 2010, p. 1204; Newsome & Davies, 2009). MTB has also become embroiled within 'struggles over appropriate ways to move one's body in nature' (Brown, 2015, p. 659), reflecting disagreements over whether cyclists and walkers should share an environment in which mutual transactions become unavoidable (Newsome & Davies, 2009; Taylor, 2010). These contestations suggest that 'alternative' cycling identities and cultures cannot be interpreted automatically as environmentally 'progressive'.

Conclusion

This article has addressed a gap in body pedagogic studies by developing a transactional approach that enables us to explore how cultural identities are maintained – albeit unevenly depending on people's resources and background – in hostile environments. Focused on cycling, those undertaking this activity within motorised contexts engage with exchanges associated with marginality and environmental dys-ease. Persisting with this activity, however, can result in a liminal embodied reconstruction towards positive outsiderhood mobile identities involving creative responses that routinise, reshape or relocate these engagements. Cycling motivations can be as prosaic as accepting the absence of alternatives, yet the circumstances in which bicycling remains popular illustrate how anoetic stimuli and noetic understandings can be recombined to maintain various vélo cultures.

In conclusion, it is important to note the wider sociological implications of this approach. I have not compared transactionalism with symbolic interactionism. Nevertheless, a Deweyan approach suggests that the dominant interactionist tradition in which sub/counter-cultural analyses have developed should include enhanced focus on the embodied foundations of, and the sensory and material exchanges that occur between, individuals and their surroundings (e.g. Dimou & Ilan, 2018). Explorations of cultures preoccupied with style and symbolism as linguistic signifiers are from this perspective marginalising other processes vital to personal identity and group existence (Worley, 2017).

Second, if we want to understand why cultural activities persist despite hostile wider environments, it is worth noting Dewey's (1934/1980, pp. 194, 260) argument that the relationship between anoetic stimuli and noetic understanding is key to the possibility of encountering unified and satisfying 'Experiences' that facilitate the development and sustenance of marginal identities. This relationship is central to the conditions that facilitate the development of 'integrated subjects', as opposed to a 'fractured subjects', and possesses sociological relevance beyond cycling.

Third, having emphasised the cultural potential of responding creatively to challenging transactions, it is worth exploring how these physically saturated engagements can remain entangled with the properties of the milieu they emerged from. In this respect, certain participants in the vélo cultures discussed here have been associated with a 'toxic

masculinity' (Montoya-Robledo, & Escovar-Alvarez 2020), yet this is itself linked to the aggression many riders experience when on roads. The broader implication is that even radical responses to hostile environments may carry with them dispositions shaped by previous exchanges. Just because cycling cultures reconfigure and relocate the transactions associated with motorised contexts does not make them politically progressive. Gendered inequalities, for example, can and have been 'carried over' from mainstream to marginalised cultures (Ravensbergen et al., 2019). While this point is not new, focusing on the transactions underpinning these outcomes helps explain their occurrence.

Finally, while this is not a policy paper, it does have implications for the pressing issue of sustainability in relation to reliance on motorised transport (Kasper, 2016). Getting more people utility cycling depends not simply on changing infrastructure – by way of such measures as bike lanes and traffic calming initiatives – but also on the more specific issue of restructuring the transactions anticipated and experienced by potential, novice, and experienced cyclists. For these to increase vélo mobility, close attention needs to be devoted to the social and material resources that help individuals to engage with and reflect on these exchanges as positive. This will inevitably entail confronting the puzzle of how to manage approaches to cycling that range from the tentative and uncertain to the aggressively masculine. Solving such conundrums may not be easy but exploring the exchanges relevant to them provides an important starting point.

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Notes

1. Dewey's transactionalism resonates in part with recent vitalist, performative, affectual and other theoretical developments, often associated with the 'new materialism' (Gamble et al., 2019), that emphasise the 'liveliness' of the environment in which people are embedded and explore the 'mutual constitution of entangled agencies' that follows from this situation (Barad, 2007, p. 33). One of the limitations of these latter perspectives, however, is that they sometimes conflate the properties of humans and other 'actants'; a move that can problematise sociological research (Devellennes & Dillet, 2018; Elder-Vass, 2015). The advantage of Dewey's approach, in contrast, is that his recognition of individual–environmental exchanges exists within an enduring concern with the creative capacities of humans to reproduce and change the environments in which they are embedded (Dewey, 1927). Individuals emerge from and make exchanges with their surroundings, but remain ontologically distinct, possessing their own identifiable properties, an approach well-suited to body pedagogic studies of cultural production.
2. This transactionalist approach towards body pedagogics rejects from the outset those symbolic interactionist foundations of subcultural analysis that struggle with the cognitive bias of Herbert Blumer's 'selective forgetting' of the pragmatist concern to forge a fully 'socialised

conception of nature and human biology for social theory' (Rochberg-Halton, 1987, p. 195). This article is not the place for a detailed comparison of transactionalism and symbolic interactionism, but the former is concerned with the foundational importance of the *physical* (with practices and identities grounded in the anoetic stimuli that emerges from material and sensory exchanges with the environment) for *noetic meanings*.

3. Despite increasing localised exceptions – associated with initiatives linked to decongestion, climate change and Covid-19 – most transport infrastructure still favours automobility within motorised societies.
4. Cyclists are not alone in dealing with negative interactions within environments built for others. As Smith's (2001) study illustrates, joggers must sometimes learn to manage and neutralise the harassment they face as 'deviant' users of pavements and paths.

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