The lived experience of commuter cycling in Derby, England.

J. McKenna and Micheal Whatling

Department of Exercise and Health Sciences, University of Bristol, Tyndall Avenue, BRISTOL, BS8 1TP, England. Tel: 44 0117 331151, Fax: 44 0117 928 6861, e-mail: jim.mckenna@bristol.ac.uk

Summary

This paper explored explored the lived experience of urban commuter cycling (UCC). In semi-structured interviews, participants described day-to-day experiences of UCC in the city of Derby (UK). Verbatim transcripts were coded using the themes of time, space, body and human relations, and interpreted through the principles of hermeneutic phenomenology. The nine participants (inclucing two females) were aged 27 to 54. Each regularly commuted by bicycle three(+) times per week, and had done this over ‘18 months’ to ‘27 years’. When not cycling to work, cars were used. Strong influences on commuter cycling included the weather, daily tasks, cycling infrastructure, driver behaviour and the value of cycling for physical and mental well-being. UCCs made strong efforts to enjoy cycling, including adding extra distances to ‘home’ journeys to be in pleasant surroundings, especially in summer. Central to the UCC experience was the ‘contest’ for space. ‘Being in front’ of other vehicles was important, and contrasted with being the filling in the ‘cyclist sandwich’ of parked and overtaking vehicles. UCCs sensed they lacked respect (‘we are the alien race in our home town’), despite feeling that they were ‘embodying citizenship’ by enacting public policy. To describe the space he required, one person noted ‘if only they'd treat me like a man on a horse’. Even dedicated road space was readily ‘appropriated’ not only by cars, buses (‘all my boundaries seem negotiable to drivers…’), ‘stupid’ cyclists and ‘vacant’ pedestrians, but also from glass, prominent manhole covers and deep drains. Characterised by regular negative experiences, many UCCs were now willing to quit cycling and commute by car. This study addresses the untold day-to-day ‘lived experience’ of UCCs. Contemporary public policy may profit from focusing on how all road users interact during the rush hour.

Key words: commuter cycling, hermenutic pheneomenology, interviews.

Introduction

Modern urban life is afflicted by an epidemic of sedentary living, which is underpinned by an unfavourable gene-environment interaction (Booth *et al.,* 2001). In contemporary thinking, modern environments are toxic for being regularly physically activity. Nowhere is this better illustrated than for cycling in towns and cities.

Elements of cycling can be described through numbers; rates of injury, relative risk, levels of morbidity or mortality. For example, cycling for 1 hour (or for 25 miles) per week is associated with a 50% reduction in risk of dying from all causes over a 10-year follow-up period (Morris *et al.,* 1990). Further, cycling to work is associated with a 30% lower risk of mortality in both men and women (Vuori *et al.,* 1994; Andersen *et al.,* 2000).

Although numbers can clearly demonstrate the ecological sanity of regular cycling, they also demonstrate a dramatic shift in personal transport to a reliance on cars. Despite widespread ownership, fewer than 6% of the urban population regularly use their bicycles (Mutrie *et al.,* 2001). Worse, since 1985 the mean annual individual cycling distance has decreased by 10% (DETR, 1999), and an attempt to double 1996 levels by 2002 has been a noticeable failure; in 2000-01 cycle use fell by 4% (National Transport Survey, 2001). Accompanied by intense debates about traffic congestion, pollution, children's road safety and the effectiveness of helmets (Carnall, 1999; Jackson, 1999; Roberts, 2003), mean annual distance travelled by car has increased by 41% (DETR, 1999). Inevitably, this problematizing of 'the harm-that-cycling-can-do-to-you' strongly influences how individuals think about cycling, and their possible involvement in it.

The current focus on cycling has done little to arrest declines in levels of cycling among urbanites, to help lapsed cyclists to return, nor to recruit new cyclists. Neither has focusing on the long-term personal benefits, or wider societal benefits. We suggest that the public policy discourse, which houses cycling within 'transport', 'road safety' and 'health' has done little to shift attention from cycling to *cyclists,* and from numbers to experiences. Such a shift moves from attending to the

logistics toward the dynamics and meanings of everyday experiences, and may offer a fresh view on developing new interventions.

Purpose

This study focuses on exploring the lived experience of urban commuter cycling.

Methodology

The Phenomenological approach

With the objective of understanding internal meanings of carefully described first-hand experiences, phenomenology is the study of 'lived experience'. From such accounts, researchers seek to identify the essence, or essences, of a phenomenon (Jasper, 1994; Forsberg *et al.*, 2000), which can then be used to develop either descriptive, or prescriptive, theory (Meleis, 1997). Descriptive theory describes the circumstances, events, experiences and salient qualities of that experience, and is neither action-oriented nor concerned with propositions for change.

In hermeneutic phenomenology, additional attention centres on interpretation (Heidegger, 1962) and then presentation of accounts (van Manen, 1990). From the outset, researchers are required to identify and acknowledge the strong influences that may influence how they interpret provided accounts. The following section is positioned to reflect our understanding of the cycling literature before the interviews were undertaken, allowing readers to appreciate how these may have influenced the subsequent interpretation. Having chosen our approach, the review of cycling literature is based on the four themes that structure the analysis and interpretation of interview data.

Qualitative perspectives of cycling

Recent reviews have focused on the healthy bodily responses to cycling (e.g., Vuori *et al.*, 1994; Taylor *et al.*, 1997; Anderson *et al.*, 2000). Implicitly, this views the body as an impersonal

'subject', as might be controlled, treated and manipulated in an experiment. Qualitative researchers understand the body differently, and focus on the person whose body houses, or *embodies*, experience (Toombs, 2001). Clearly then, the 'urban embodiment' of commuter cycling is distinguishable to that of commuter drivers, pedestrians, or even leisure cyclists.

In the thinking of Heidegger (1962) and Merleau-Ponty (1962), accounts of experiences are dominated by existence 'in the body', which may dominate accounts of urban cycling. Bodies have their own reality, and are the vehicle for other elements of experience (Gallagher, 2001), while also communicating these, or alternative, features to others (O'Neil, 1989). Through our bodies we feel the qualities of our external environment (e.g., atmosphere, safety), and its immediate physical qualities (e.g., cold, wind), while the body also 'feels' its own inside (e.g., fitness, fear, excitement). The body is also a representational theme, and may be attributed many meanings, including 'Flesh' (vulnerability) and 'Prowess' (peak condition) (Ewing, 1996) that are relevant to cycling.

Urban space also contributes to the experience of commuter cyclists. In contrast to other transport users, urban cyclists do most of their miles (81%) on minor as opposed to major roads (Department of Transport, 1996). In Bordieau's concept of 'Habitus' (Bordieau, 1977), where the structures of the social order are internalized, the lived environment shapes cultural understanding. For social geographers (e.g., Taylor, 2001) space is intricately linked to the stigmatising forces of any society which enhance, restrict, or deny access to particular parts of cities or their services (Takahashi *et al.*, 2001; Skelley *et al.*, 2002).

Freund and Martin (2001) suggested that space has a forgotten, but essential, influence on transport policy (which consistently endorses the hegemony of the car). As such, space has a *political* and a *moral* reality, and the way people act in given spaces may make the notion of 'citizen bodies' (Bacchi and Beasley, 2002) appropriate for urban cyclists. A further element of the political understanding of space is that cycling policy may endorse 'segregating' cyclists from other road users (e.g., Lawlor *et al.*, in press). This may fuel perceptions of danger, which further reduces

cycling. In it's social interpretation 'segregation' may suggest that cyclists are being victimised for 'living' public policy, even though that policy is to make cycling easier and more preferable to driving. At a more immediate level, the 'incorporated critical gaze of the other' (Sartre, 1956) contributes to an individuals' sense of dignity and social acceptance of what (s)he is doing. Perhaps the ultimate 'critical gaze' in road use is being the focus of 'road rage'.

Finally, the focus on cycling as sustainable transport (National Transport Survey, 2001) implies a strong concern for time, particularly for the mid- and long-term future. More immediately, day-to-day commuting connects elements of time, such as leaving, or arriving, on time, or on being sufficient for the journey. More long-term, individuals may see cycling within their life trajectory and as a demonstration of a commitment to political beliefs (Bacchi and Beasley, 2002) that may include social or environmental well-being.

Methods

Having determined the philosophical stance of a study, researchers must then develop coherent methods and techniques. Although researchers may question the role of techniques in phenomenological studies, most agree the need to address preconceptions about the phenomena. Based on our training and professional lives (one and a lecturer, the other as an osteopath) we recognise our potential positive bias toward the interests of the cyclists and to positive exercise effects. However, neither author regularly commutes by bike, though JM does this involuntarily and episodically due to reduced parking availability through a university Transport to Work policy. His partner also recently experienced a serious injury while commuter cycling. MW holds an Advanced Drivers Licence and is increasingly concerned about how his three children can protect themselves on the roads in their recreational cycling.

We designed the study to gather information that would interest a particular professional audience - health promoters. Concern for the audience is central to hermeneutics (van Manen, 1990), and this account aims to be relevant, fruitful, authentic and credible (Giacomini & Cook, 2000 & 2000a;

Koch & Harrington, 1998; Elliott *et al.,* 1999) to that population. It will have been achieved if readers from that group demonstrate the 'phenomenological nod' (van der Zalm & Bergum, 2000), by nodding in silent acknowledgement.

Participants

To allow in-depth exploration, phenomenological studies typically recruit fewer than 10 participants (Polit *et al*., 2001), and volunteers were recruited through local posters. All participants were required to cycle to work at least 3 times per week and for longer than 6 months. There were no other restrictions on participation.

Interviews

To prepare participants to describe the everyday elements (concerns, feelings, priorities) of cycling, each was provided with an Information sheet (van Manen, 1990). This encouraged reflection on first-time experiences or events that especially illustrate that experience. We conducted semi-structured interviews, lasting up to 90 minutes, with each participant. This followed completion of an Informed Consent form. Discussion centred on everyday experiences of urban commuter cycling. Audio-taped interviews were supported by interviewer notes completed after each discussion.

Analysis and Interpretation

Verbatim transcripts were prepared and returned to each participant for checking. Van Manen's (1990) four dimensions of Time, Space, Body and Human Relations, were used to code the transcripts once they were confirmed as accurate and not breaching confidentiality. Individuals use these themes to describe everyday experiences, rather than as the subject of those descriptions. As such, they can help to manage researchers' preferences and biases (Madjar, 2001), and to focus on what may be overlooked through familiarity (Barrett 1996, p20).

Findings and Discussion

Consistent with the perspective that hermeneutic phenomenology is not complete without careful concern for the final account. For Cutliffe and McKenna (2002) the warrant of a qualitative study is that it shows the relationships that underpin 'knowing'. In this understanding, we first present our general 'knowing' of the participants (table 1). This leads into a summary account written in the first-person, to emphasise that the participants were individuals and people. The account reflects the range of experiences rather than a consensus account, and represents a summary of the data reduction undertaken for each individual interview, undertaken separately, and then collaboratively between the two researchers (table 2). Finally, a discussion shows how Time, Space, Body and Human relations featured within the interviews. Direct quotes are italicized while 'ways-of-speaking-are-shown-as-hyphenated-text'.

Participants

The nine participants (including two females) were all living and employed in Derby. Table 1 shows demographics and levels of cycle commuting. In their commuter cycling, they typically crossed residential, industrial, city centre and suburban locations, with speeds averaging 10 to 15 mph. None were executives, though six were graduates. Only one was restricted to commuting by bicycle. When not cycling, individuals used their cars for commuting.

Lived experience of commuter cycling

'…From getting up it's on my mind. I 'check-the-weather' to decide if I'll cycle: rain is usually the clincher. My bag is already packed with what I need for my day, and to keep me safe. That means batteries (for my lights), helmet, gloves, towel and spare work clothes. I use panniers because a rucksac will hide my reflective top.

As I wheel my bike into the road, past my parked car, I notice that it's often really cold – especially on my hands, but they soon warm once I get going. Usually I can predict when I will arrive at work.

Table 1. Experience and current daily commuter cycling

	A	B	C	D	E	F	G	H
Daily cycling; time and distance	'…half hour each way .. about five and a half miles each way..'	'…20 minutes…five miles…'	'…20 minutes... four or four and half miles..'	'20 to 25 minutes … about 3 and a half miles…'	'…20 minutes each way… four miles…'	'…two and a half miles..'	'…15 to 20 minutes… two and half miles…'	10 to 15 minutes… three miles…'
Experience as a commuter cyclist	5 years	3 years	18 months	27 years	2 years	2 years	22 years	10 years

Table 2. Summary of data reduction process

Time	Space	Body	Human Relations
Ecological sanity of urban cycling – *it is time for it* *Immediate* and drastic changes in risk (*FAST*), followed by *S-L-O-W* resumption of normality Have to be organised.. The decision to cycle is already made *before* I get up *Journey time* is predictable (usually) The journey is about *time (speed)* as geography *Minute-by-minute* progression of the jounrey Arrive *in time for* work – get changed. *Prepare to* cycle, then *prepare for* work. Comfort: *When* it's raining (and/or dark) *Began* cycling when…	The known-yet-still-strange environment …the city as a problem (structurally embargoed) I know MY *route* (not a generalised cycling experience) know *the worst spots* *Lack of physical space* on the road; it reduces further in near-misses I have *no protected space* that others respect … getting *in front* helps… They need to *see me*… Lorries and buses *physically overshadow and overawe* me… If I feel threatened *I stop and let them pass* … Threatening *venues* or manoeuvres: dual carriageways, intersections, turning right, roundabouts. Drivers who *don't signal turning left.* … Get away from idling traffic – a faceful of fumes (traffic lights) In *uncomfortable space* – gutters, manhole covers, pavement	Feel cold in the early morning when I'm starting out *Feel* vulnerable, *act* impregnable… *Body protection*r… *Being invisible* and *feeling* vulnerable *Eye-to-eye* contact with drivers Vigilance:*Looking* for a challenge (faster, better)… Things that *hurt* me can be unseen – this adds *menace* *Heavy breathing, tight legs*…. I have to be industrious to keep safe… Building *dread* as situation worsens… *Emotion* of the near-miss A *function* rather than a *pleasure* Body-altering: keeps me *fit, slim, alert* I *fear* for….(body/mind) Concern for *collision* not *fall*	This is *good for us all*, but *look how we're treated*. .. We are *the alien race* in our home town… Verbal abuse – *pedestrians and (car) drivers*… *remonstrations of drivers* I *establish how it will* be for the drivers, not vice versa –, so I make sure *they* can… *Drivers threatened by groups of cyclists* *Talk to colleagues* about my cycling - no recognition of the achievement – they assume I'm 'the type', rather than someone who follows-through with commitments *Duty of others* to keep me safe (not threaten me) balanced by no confidence that they will. No redress for *their mistakes*…. All my boundaries seem *negotiable to drivers* …Can't earn respect from *other road users or pedestrians* Most of my mishaps happen with *no-one else around* I have to care for my bike if it is to help me… I *can't trust other people* not to want to steal my bike

Hopefully I'll get there energized and 'ready-for-the-day'. It's brilliant when you 'get-a-good-speed-going', but more often its 'stop-start', and you have to 'have-your-wits-about-you' to take quick evasive action to avoid being knocked-off. Manhole covers, rough gutters or a bad road surface can cause me to make quick swerves that might put me 'in-the-way' of other, bigger and less-forgiving, road users. I feel vulnerable when I have to turn right to cross the traffic.

When people overtake too close I get 'wheel-wobble' even after all these years. Bad experiences mostly result from others being inconsiderate, focusing solely on their own needs, and 'not-seeing-me-until-it's-too-late'. My dread builds as I approach the really busy traffic. All the while I'm hoping that overtaking vehicles stay on course and don't flip me off (drivers who almost hit me, or who knock you off and then drive off 'make me really sick'). At busy junctions it helps me to know that drivers have seen me: if I can get eye contact with them, they will give me room. On the other hand some of my 'really-bad-experiences' were just accidents; I've fallen off when it's icy and 'there's-no-one-anywhere-near-me'.

At work, having bike sheds and a safe-space to leave my bike at work is important, but having a shower is even more important. Getting to work 'can-be-unpleasant-enough-as-it-is'; if there were no showers I'd take the car. It helps me to get comfortable once I arrive at work. At work I'm known for being one of the 'brave-but-barmy' cyclists'.

I hate putting on wet clothes to cycle home, but it encourages me to cycle faster. If its sunny I might take the 'long-route-home' to 'get-into-some-nice-country'. It's 'great-to-see' the foxes, birds, and the wide-open, green spaces. Having to 'walk-my-bike' (because of a punctured tyre) happens 3-4 times a year, but that's OK if I'm more than halfway home. A lot of the time I have to 'put-up-with' cycling home in the dark, but if I can make myself really visible drivers give me 'the-extra-room-I-need'. I need to do that during the day too…'.

Further Commentary

Our initial interpretation was that regular commuter cycling was dominated by a concern for better human relations. When cyclists are alone on the road the experience is essentially pleasurable. This experience 'unfolds' (Johns 2001) as others approach, and each cyclist had their own rules for navigating these physical and social obstacles. In effect, other road users created the dominating features of the cycling experience. Each participant adopted a range of protective pre-event behaviours (Runyan, 1998), including wearing helmets and reflective clothing and carrying working lights. During the cycling, heightened awareness of others and the surroundings, plus concerns for immediate road positioning dominated. Post-event behaviours included making bicyles secure, showering to prepare for work, talking to colleagues about cycling, and cycle maintenance.

Within this, the long-term decision to sustain cycling was seen as '*a way of thinking*', where cycling was the first option on any given day ('*…you have to think 'Bike' first.. '*). Immediate decisions about '*cycling today*' were influenced by weather conditions (wind, rain, ice, dark). Perhaps because cyclists each have a unique embodiment of 'the road' ('*I'm at a different height to the road… I have further and harder to fall… I feel the road surface more… I can't stop so quickly… I'm higher so I get a better view than them …*'), this individualizes their experiences. Already feeling segregated from others, including other cyclists, the physical vulnerability of the cyclist is compounded by occasional near-misses with bigger, faster and less forgiving 'neighbours'. Cyclists acknowledge the driver-domination of their commuter cycling, but are frustrated that cycling promotion rarely addresses driver behaviour.

Continual referencing to other more 'dominant' or 'powerful' road users shows the strong 'othering' (Levinas, 1962) of commuter cycling. With a sense of their certain vulnerability, cyclists in traffic adopt an on-going awareness of, and concern to predict, what any of these others might do in the immediate space. Pedestrians were also important here, since they could '*walk in the way*' and cause problems. This may be seen as a concern to be 'with' these other road users in a more

mutually respectful way.

However, cyclists felt that their immediate needs for space were frequently denied. The rush hour experience would be improved if road users acknowledged that everyone else was also ‘trying-to-get-from-A-to-B’. As eight contributors were also car commuters, this gives credibility to the potential of this suggestion.

All participants here acted to keep themselves safe, and this was a human relations issue; cyclists required help from others to feel safe. With support from *drivers* (many of whom were thought to need to change their driving around cyclists), ‘defensive cycling’ would become more effective. We note the distinction between drivers and cyclists in public policy; changing what individual drivers do is rarely the focus for change. Instead, the preferred options seem to be environmental, which emphasise sterile, uninhabited, concepts of space.

Revising our initial impressions of the role of the Human Relations concept, we now consider that elements of the space concept dominate the experience of daily commuter cycling. This sense of space reflects its psychosocial, euclidian and geographical interpretations. In an inert sense, space is appropriate to describe roads, since it is the dimension in which phenomena are distributed (Curtis and Jones, 1998). The equally inert concept of ‘transport’ was appropriate to describe the morning commute to work, which had to be timely and functional. However, returning home was qualitatively different. It was more likely to be a ‘journey’; this involved choosing longer routes because of their surroundings, especially if they were in ‘natural’, green settings, on sunny days.

Revising the idea that roads represent inert space, commuter cycling was dominated by the ‘contest of side-by-side sharing’. Although road space is dedicated to cyclists, this was often and readily ‘appropriated’ by pulling-in and parked cars, ‘*wide-boys*’, buses (‘*all my boundaries seem negotiable to drivers…*’), ‘*stupid*’ cyclists and ‘*vacant*’ pedestrians, and also from glass and deep drains. Noting ‘ownership’, one person felt that when ‘his’ space was appropriated, so was his sense of safety. As a suggestion for having more space, he said, ‘*if only they'd treat me like a man on a*

horse'.

With an awareness of their 'invisibility' to other road users ('…*sometime I can't be seen'*), cyclists sought to become visible by achieving eye contact with other road users, particularly approaching and then at junctions and roundabouts. Announcing one's presence helped cyclists to feel safe, often because powerful other road users may be uninterested in acknowledging that presence. Bright lights and wearing reflective clothing helped, but bells were noticeably absent. There was a concern that reflective clothing was not masked by rucksacs.

Staying away from the kerb-side also helped enhance visibility, but in the 'habitus' of the road, was seen as creating as many problems with drivers as it solved. When space in the middle of road was denied to them, cyclists had to stop in the gutter until that space became available. The term 'in the gutter' underpins the social significance of this experience

Perhaps because miost were also drivers, these cyclists understood that they threatened drivers by '*inside overtaking*'. '*Being in front*' of other vehicles was contested, even without driver remonstrations, but had a situated value. In the locale of the rush hour, cyclists sensed that they lacked respect, '*we are the alien race in our home town*', despite feeling that they were 'embodying citizenship' by enacting public policy (Bacchi and Beasley, 2002). Roberts (2003) noted that the introduction of congestion charging in inner London may be seen as a refreshing shift away from trying to change the behaviour of potential victims of traffic. These findings suggest that, for commuter cyclists, 'social space' is in the gift of other road users and can be allocated or denied minute-by-minute. Taking the congestion charging approach, these findings suggest the need to consider how other road users contribute to the experiences of commuter cycling. Characterised by almost daily exposure to the negative 'emotions of courage' (Putman, 2001), many cyclists were now willing to commute by car.

Conclusion

This study addresses the untold day-to-day experiences of UCCs, interpreted through the epistemology of Time, Space, Body and Human Relations. In contemporary dialogues of public policy UCC is seen in terms of environment, transport, infrastructure, access and provision, yet, our focus shows it is more dynamic, complex and linked to how others occupy road Space. Without a 'safe Space', UCCs felt there was 'no Space for me, and no Space for us' in the motorist-determined habitus of rush-hour travel. Until these day-to-day experiences change, involvement must be seen as fragile, even among the 819,000 (DETR, 2001) employed adults who regularly commute on bicycles. Without addressing these concerns the undoubted potential of commuter cycling - whether it is seen in terms of health, transport or environment - is unlikely to be realised.

References

Andersen LB., Schnohr P., Schroll M., Hein HO. (2000) All-cause mortality associated with physical activity during leisure time, work, sports, and cycling to work. Archives of Internal Medicine, 160, 1621-1628.

Bacchi CL, Beasley C. (2002) Citizen bodies: is embodied citizenship a contradiction in terms? Critical Social Policy, 22, 324-352.

Bordieu P. (1977) Outline of a Theory of Practice. Cambridge: University Press.

Carnall D. (1999) Cycle helmets should not be compulsory. BMJ, 5;318, 1505.

Creswell JW. 1998 Qualitative Inquiry and Research Design: Choosing among five traditions. Thousand Oaks, CA: Sage

Cutliffe JR. and McKenna HP. (2002). When do we know what we know? Considering the truth of research findings and the craft of qualitative research. International Journal of Nursing Studies, 39, 611-618.

Department of Health. (1999). Saving Lives: Our Healthier Nation. London: Department of Health

Department of Transport (1996) The 1993/95 National Travel Survey Report. London: HMSO

Department of Environment, Transport and the Regions (DETR) (1999) Transport statistics. Transport trends: walking and cycling in Great Britain. London, DETR.

Ewing WA. (1996). The Body: Photoworks and the human form. London: Thomas and Hudson.

Forsberg A, Bäckman L, Möller A. (2000) Experiencing liver transplantation: a phenomenological approach. Journal of Advanced Nursing 32; 327-334

Freund PES, Martin GT. (2001) Moving bodies: injury, dis-ease and the social organisation of space. Critical Public Health, 11:3, 203-214.

Gallagher S. (2001) Dimensions of embodiment; Body image and body schema in medical contexts. In Toombs SK. (ed.), Handbook of Phenomenology. Kluwer Academic; Dordrecht, pp 147-176

Heidegger M. (1962) Being and Time (Macquarrie J. & Robinson E. transl.). Blackwell Publishers, Oxford.

Jackson H. (1999) Cycle helmets. BMA report does not give the whole picture. BMJ, 16;319, 1071-2.

Jasper M A. 1994 Issues in phenomenology for researchers of nursing. Journal of Advanced Nursing 19; 309-314

Lawlor DA., Ness A., Cope AM., Davis A., Insall P., Riddoch CJ. (2003) The challenge of evaluating environmental interventions to increase population levels of physical activity: the case of the UK National Cycle Network, Journal of Epidemiology & Community Health. 57; 96-101

Leder D. (1990) The Absent Body. Chicago: Chicago University Press

Levinas E. (1969) Totality and Infinity. A Lingis (trans.). Pittsburgh: Dusquenes University Press.

Meleis AI. 1997 Theoretical Nursing: Development and Progress, 3rd edition. New York: Lippincott

Merleau-Ponty M. (1962) The Phenomenology of Perception (Smith C. transl.). Routledge, London.

Morris JN., Clayton DG., Everitt MG., Semmence AM., Burgess EH. (1990) Exercise in leisure time: coronary attack and death rates, British Heart Journal, 63, 325-334.

Moustakas C. (1995) Being-in, Being-for, Being-with. Northvale, NJ: Jason Aronson

O'Neill, J. (1989) The Communicative Body. Evanston: Northwestern University Press.

Polit, D., Beck, C., Hungler, B. (2001). Essentials of nursing research: Methods, appraisal, and utilization (5th ed). Philadelphia: Lippincott.

Roberts, I. (2003). Congestions charges and the walking classes (editorial). British Medical Journal, 326, 345-346.

Runyan, CW. (1998). Using the Haddon matrix: introducing the third dimension. Injury Prevention, 4, 302-307.

Sartre, JP. (1956). Being and Nothingness. New York: Philosophical Library.

Skelley AH., Arcury TA., Gesler WM., Cravey AJ., Dougherty MC., Washburn SA., Nash S. (2002). Sociospatial knowledge networks: appraising community as place. Research in Nursing and Health, 25, 159-170.

Takahashi LM., Wiebe D., Rodriguez R. (2001) Navigating the time-space context of HIV and AIDS: daily routes and access to care. Social Science and Medicine 53, 845-863

Taylor B. (2001) HIV, stigma and health: integration of theoretical concepts and the lived experiences of individuals. J Adv Nurs 35, 792-798

Toombs SK. (2001) Introduction. In Toombs SK. (ed.), Handbook of Phenomenology. Kluwer Academic; Dordrecht, pp 1-28

van Manen, M. (1990) Researching lived experience: Human science for an action sensitive pedagogy. London, Ont.: Althouse Press; Albany, NY: SUNY Press.

Vuori, IM., Oja, P., Paronen, O. (1994) Physically active commuting to work - testing its potential for exercise promotion, Med Sci Sports Exerc, 26(7), 844-850.

Table 1. Experience and current daily commuter cycling
