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# Nuances of neighbourhood: Children's perceptions of the space between home and school in Auckland, New Zealand

Hannah Mitchell, Robin A. Kearns \*, Damian C.A. Collins

School of Geography and Environmental Science, The University of Auckland, Private Bag 92019, Auckland, New Zealand
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#### **Abstract**

This paper examines primary school children's experiences of travelling between home and school within three neighbourhoods. Our investigation is set in Auckland, New Zealand, where parental practices such as chauffeuring are commonplace, yet are increasingly recognised as limiting children's physical fitness and environmental awareness. Drawing on children's voices, writing and photographs, we investigate how children currently travel to school, how they would like to travel, and how their perspectives on neighbourhood space vary by age, socio-economic status and school location. Findings reveal that over half of the participants did not like the way they travelled to school. Most desire to travel independently within public space, but are limited in their ability to do so, given the fears and obstacles that prevail within their neighbourhoods. We contend that restricted use of public space diminishes children's agency in inner suburbs. Our analysis reveals that children favour 'active travel' for many of the same reasons as health professionals and transport planners. We conclude that as long as children are seen as innocents in need of protection, they will have limited agency in travel decisions and highly contingent access to public space.

Keywords: Children; Neighbourhoods; Mobility; Pedestrians; Photovoice; Auckland

1. Introduction

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The recent flourishing of literature on children's geographical experience has highlighted children's competency as social actors (Matthews and Limb, 1999; Fielding, 2000; Prout, 2002; Barker, 2003). This recognition of agency is significant given that young people are among the most regulated groups in western societies (Scott et al., 1998). Moreover, the widespread adoption of chauffeuring behaviours by parents is leading to children being denied opportunities to use and explore their neighbourhoods. This denial occurs notwithstanding the fact that "young people are constantly engaged in risk assessment, actively creating and defining hierarchies premised upon different discourses of risk as 'normal' and acceptable or 'dangerous' and out of control'

(Green et al., 2000, pp. 123–124). Children, in other words, appear to bring capacities for agency to urban life even if parentally-imposed structures neutralise it through control and surveillance.

Recent Australian and New Zealand studies have considered the experience of children in urban areas, focussing especially on the journey to and from school, and associated safety concerns (Collins and Kearns, 2001a; Collins and Kearns, 2005; Kearns et al., 2003; Tranter and Pawson, 2001; Veitch et al., 2006). However, children's voices have only been partially represented in this work. This paper reports on research that employed *child-centred* methods to investigate primary-school aged children's attitudes towards mobility in public space, and their experiences of neighbourhood life, specifically in terms of the agency they can exert within journeys from home to school. In accessing children's perspectives through a range of methods we contribute to an understanding of the emotional geographies of home and neighbourhood within the context of the

<sup>\*</sup> Corresponding author.

E-mail address: r.kearns@auckland.ac.nz (R.A. Kearns).

autocentric city (Davidson et al., 2005). We contend that restricted use of public space has diminished children's capacity to act and assess the local environment, and that this, in turn, potentially inhibits their personal and social growth.

A rationale for our study is that while public space may play an important role in children's personal development, physical exploration and social growth (Freeman et al., 2004; Kearns and Collins, 2006; Loukaitou-Sideris, 2003), there is a common perception that they are out of place in public space, especially when unaccompanied by an adult (Collins and Kearns, 2001b). Trends towards privatizing and supervising many aspects of children's lives run contrary to claims that children need the ability and freedom to explore their neighbourhoods and to do things on their own (Franklin, 2002; Holloway and Hubbard, 2001).

Building on these contentions, we address three empirical objectives. First, we seek to understand how children currently travel to school in Auckland City. We focus on this trip as it is typically direct, whereas after-school journeys are often complicated by extra-curricular activities. Second, we attempt to ascertain the ways in which children desire to travel within their neighbourhoods, and identify the constraints on realising these desires. The rationale for this goal is that identifying constraints might provide a platform for increasing children's agency and opportunities for experiencing local environments. Third, we seek to investigate how children's perspectives of their neighbourhoods vary by age, socio-economic status and school location. The literature suggests that these variables are significant influences on children's lives. For example, children tend to be granted more independence as they grow older (Hillman, 1993; Tranter and Pawson, 2001) and, accordingly, their environmental experience increases with age. At the same time, higher socio-economic status is generally associated with greater access to cars, and households having a greater propensity to drive children to school, which reduces opportunities for children to explore their neighbourhoods. School location may also influence children's experiences, with parents being more likely to adopt chauffeuring behaviours when schools are sited near busy roads (Tranter and Pawson, 2001).

This study builds on other work in children's geographies (e.g., Valentine, 2004) in its attempt to understand lived experience as a means of enhancing our picture of children's views of public space. We conceptualise the journey from home to school as reflecting wider societal attitudes towards children, particularly those which seek, to greater or lesser extents, to provide protection or promote freedom. We assume that if children are not travelling to school free of adult supervision, it is unlikely that they will be travelling elsewhere in public space independently.

The remainder of the paper is structured as follows. First, we review the literature on children's experiences of urban neighbourhoods, and the ways in which these experiences are structured by adult fears and decision-making. We then outline the contexts for our research, describing

both Auckland City and the three neighbourhoods in which the study was based. The third section identifies the three main data collection methods used, the order in which they were employed, and the nature of the classrooms included in the study. In the following results section we focus on children's transport preferences and their perspectives of danger at the neighbourhood level. Finally, we reflect on our attempt to see the world through children's eyes and the implications of adopting this perspective.

## 2. Children's experience of local urban environments

Walking between home and school enables children to learn about the environment. Playing or hanging out with friends may therefore be activities that are unremarkable in adult eyes, but they are part of the experience of childhood (Cunningham et al., 1996). As Hardin (2000) argues, the immediate neighbourhood potentially serves as an important 'local' space that sits midway between the imagined safety of home and the perceived dangers of public space. This said, the 'local sphere' (or neighbourhood) is arguably being reconstructed as a landscape of risk through such factors as fear of strangers and increases in vehicular traffic. Being driven or constantly accompanied by an adult in public space may prevent the simplest of outdoor activities from promoting individuality, and compromise the development of autonomy. Children acting autonomously in public space arguably build skills and attitudes which may continue into adulthood (e.g., social competency in public places; desires for active and sustainable travel) (Collins and Kearns, 2001a; Tranter and Pawson, 2001).

The presence of children in public space may also have wider societal benefits, contributing to a sense of community, feelings of trust, and mutual support (Franklin, 2002). Tranter and Pawson (2001) assert that communities can be enhanced through encouraging the use of public space by children, as their presence often helps to break down barriers between adults, and makes the streets more interesting, liveable and communal. However, such claims potentially underestimate the strength of the proverbial exhortation 'don't talk to strangers', which strongly discourages children from interacting with – or even acknowledging – unknown adults in the public domain. In addition, children need opportunities in which to meet and socialise with *each other*, separate from places controlled by teachers and parents (Simpson, 1997).

Arguably the first barrier that children encounter in exploring their neighbourhoods stems not from issues of design, or potential risks, but rather from the prevalent social construction of children as dependent, vulnerable and in need of constant adult guidance and supervision. This is the underlying basis for limiting children's spatial freedoms, and their exclusion from decision-making and planning processes (Hill et al., 2004). Adult(ist) decision-making creates barriers to children's mobility and can lead to children feeling out of place in their 'own' neighbourhoods

(Christensen and O'Brien, 2003). Parental restrictions on children's activities - in the name of safety, convenience and/or local expectations - are one dimension of this displacement, as Dowling (2000) found in her study of mothering and car use in Sydney, Australia. Moreover, the time and space available for children to explore on their own or interact with others appears to be progressively shrinking in developed nations (Loukaitou-Sideris, 2003). Thus children's geographies are dually limited, in terms of both access to space and access to people: children rarely meet each other outside of school and family relationships. The children's geographies literature has shown that these limitations potentially keep younger children shut off from the wider world, and from opportunities to socialise and experience a variety of ideas, spaces and people (e.g., Valentine, 1996a; Rissotto and Tonucci, 2002).

The growth and intensification of urban areas, together with increased car usage, have coincided with child pedestrian accidents becoming a leading cause of injuries and fatalities in New Zealand (Collins and Kearns, 2001a, 2005). As individual parents can do very little to improve the hostile traffic environment for the benefit of all children, many respond by seeking to protect their children from perceived dangers. A similar approach prevails in schools: in New Zealand, for example, police officers are brought into primary schools to teach children how 'to cross the road safely' - in other words, to deal with the adult world of traffic. This process does not address the problem of adult drivers being given priority over children. Health educators "... want to teach children to be careful and to be scared, rather than look into limiting the traffic" (Davis and Jones, 1996, p. 109), ignoring the fact that these education measures have proven to be less effective than anticipated (Roberts et al., 2002).

Returning to our earlier theme of agency, the location and spatial extent of adult responsibility for children is a recurring theme in public policy and debate. Children are given responsibilities in some areas of their lives, such as chores around the home, and these duties promote power and responsibility (Such and Walker, 2004). However when it comes to being accountable *for* their own lives there is often a retraction of responsibility as children continue to be viewed by parents and caregivers as 'vulnerable innocents' (Valentine, 1996b). In prevalent Western adult understandings, children are almost invariably seen as being unable to make (sensible) decisions for themselves, and as vulnerable to dangers in unsupervised environments.

By way of example, Loukaitou-Sideris' (2003) study of four urban sites in southern California found that only 16% of seven year olds were allowed to go further than a block without an adult, and 30% of 11–12 year olds had not visited a public space on their own. Further, Cunningham and Jones (1999) discovered that only 6% of Australian children played outside within their own neighbourhoods. As the built environment continues to become more intimidating, children are becoming more marginalised, with diminished

access to safe places to journey within and explore, due in large part to parental restraints. This trend has been observed in a range of studies in Australia (Dowling, 2000), New Zealand (Collins and Kearns, 2001a; Tranter and Pawson, 2001) and the UK (Valentine and McKendrick, 1997; Valentine, 1997a,b; Hillman et al., 1990), demonstrating that children's independence is being fundamentally compromised to create the appearance of good parenting. Tranter and Pawson's (2001) study of four schools in Christchurch, New Zealand, noted that this social pressure was strongest in the school neighbourhood with the highest socio-economic status, where a particularly protective parenting culture had developed.

One reported result of this trend is that children develop an 'island geography' comprising locations that they are chauffeured to and from, effectively preventing first-hand experience of what Hardin (2000) called the 'local sphere' in between such destinations. As Tranter and Pawson (2001) claim, while children may be *seeing more*, as passive passengers they are *learning less*. Parents, realising they have placed spatial restrictions on their children, often respond with additional extra-curricular activities, and by accompanying their children to specific recreational destinations such as parks. Travel to these destinations is typically by car.

Secondly, chauffeuring limits children's opportunities to learn how to function safely in the urban environment (Timperio et al., 2004). Children often realise that there is a world they are being deprived of, and articulate desires for opportunities to explore and learn more about it (Tranter and Pawson, 2001). This said, O'Brien et al. (2000) discovered that a highly protected life does not *necessarily* lead to impoverished peer relations or unhappiness. Indeed, some children can be content with this lifestyle. However, the very act of chauffeuring does lead to a restriction on children's experiential geographies (Valentine, 1996b). Passive transporting (rather than active mobility) may also impact upon adult life, as the 'chauffeured child' potentially becomes another car dependent adult.

At least partially as a response to adult fear, children are also being increasingly placed in adult-supervised afterschool activities, contributing to lives of near-constant surveillance (Smith and Barker, 2000, 2001). O'Brien et al. (2000) link a new culture of indoor play to the embedded cultural orientation of the family: specifically, the interiorisation of children's leisure is connected to a pervasive privatism. A recent Auckland study revealed parents in one suburb to be reluctant to have neighbourhood children into their home for fear of theft or disruptive behaviour (Witten et al., 2003). In summary, the lack of parentally acceptable unsupervised play spaces, a fear of strangers and traffic dangers, and the unwillingness of parents to encourage their children to play outdoors have, in combination, created a generation of children who are largely unfamiliar with their local neighbourhood and dependent upon the car - something that is readily apparent within our study site, Auckland City.

## 3. Research setting

Auckland City (population 405,000) is one of the four constituent cities within the Auckland metropolitan region (population 1.3 million – 2006 est.). Between 1991 and 2006 the City's population grew by 32.2%. Auckland's growth has prompted a 'suburban squeeze,' with widespread infill housing and increasing residential densities catering to the increased population. These trends have contributed to a loss of outdoor play spaces for children (Kearns and Collins, 2006). The traditional 'quarter-acre' suburban property, for example, is rapidly becoming an historical artefact.

Auckland City has a related reputation for traffic congestion, which causes considerable political debate and demands for government action. On an average weekday, nearly 50% of morning peak journeys are work-related and another 40% are attributed to schools or other educational institutions (Auckland City Council, 2004). Walking has long been poorly regarded by planners and municipal politicians in Auckland (Bean, 2006). This view has become inscribed in Auckland's infrastructure with, for example, variable upkeep of older sidewalks and a lack of safe places to cross many busy roads. This situation is slowly being addressed with a new local government focus on promoting walking and cycling, although traffic remains, from the perspective of many parents in particular, an extreme hazard for children. As a result, many parents rely on private motor vehicles for transporting children. This situation suggests sedentary lifestyles and lost opportunities for children to explore their local neighbourhoods.

To pursue our empirical objectives, three Auckland primary (elementary) schools were selected as study sites, and work was undertaken by the first author with children in two classes at each school. In the hope of gaining a broadbased understanding of children's experiences of neighbourhood, we first determined that the selected schools should represent a range of positions on the socio-economic scale (in terms of the New Zealand school system, this meant schools from deciles 1, 5 and 10). Letters outlining the study were sent to the principals of five randomlyselected schools from each of the chosen deciles, giving them the option to agree to or decline the opportunity for involvement in the research. The initial response rate was low, and only two acceptances were received. Non-responding schools were then contacted by phone, and personal contacts were used to assist recruitment. Ultimately, a willing school at each level was identified.

The participating primary schools were Maungawhau Primary School (decile 10), Mount Roskill Primary School

(decile 5), and Waterview Primary School (decile 1). Maungawhau Primary is set in Balmoral/Mt. Eden, a central-west neighbourhood of Auckland. It takes its name from a nearby volcanic cone, the highest on the Auckland isthmus. The neighbourhood has undergone extensive gentrification since the 1980s. Subsequently, the area has an established reputation as a desirable location for families to purchase residential property and ensure access to what is regarded as a high quality public (state) school. Although bounded by two busy arterial roads, the streets within this suburb are relatively quiet; all have footpaths, and many have trafficcalming measures. There are also a number of parks and diverse retail sites within the area. Students are primarily of New Zealand European ('Pakeha') background.

Mt. Roskill Primary is located in the suburb of the same name, also taken from a distinctive volcanic cone, and is in a high-traffic area with five major arterial routes nearby. In the 1950s and 1960s the suburb of Mt. Roskill epitomised the New Zealand 'quarter-acre' dream (see Ferguson, 1994), with ample lot size, and appealing streets and footpaths. Located approximately 10 km from downtown Auckland, it is now one of the most ethnically diverse areas in the region, and home to many international students, migrants, and refugees (Lawrence and Kearns, 2005). Roads in the immediate vicinity of the school are acutely congested, and widely regarded as dangerous for children.

Waterview Primary School is set within a residential area characterised by public housing, close to the North-Western Motorway. However, aside from one major arterial road running through part of Waterview, local streets are relatively quiet. It is a poorer area, reflected in a number of boarded-up shops. Waterview Primary is the smallest of the schools included in the study, and most of its pupils are of Polynesian descent.

## 4. Research process and methods

Once permission to carry out the research at their schools was gained, principals were asked to nominate two participating classes, one junior (pupils aged 6–7 years) and one senior (pupils aged 10–11 years), and to gain the consent of relevant teachers. Each class had a minimum of 15 children participating in each research activity. Data collection activities were carried out both within the classrooms and within small discussion groups of five to eight children. The teachers of the nominated classes were asked to invite children to participate in the discussion group. In accordance with ethical requirements, information sheets about the study were then sent to the parents and children verbally agreed to participate.

We deemed story-writing activities to be a useful way to collect both narrative and enumerative data from the class-room. Creative writing is a central component of children's learning in New Zealand primary schools and we sought to capitalise on children's familiarity with this concept. Two writing activities were conducted in each participating class over consecutive weeks. The first author was present during

<sup>&</sup>lt;sup>1</sup> All New Zealand state-funded schools are ranked according to the socio-economic characteristics of the areas their pupils live in. Decile 1 schools are the 10% of schools with the highest proportion of pupils drawn from areas of low socio-economic status, while decile 10 schools are the 10% of schools with the fewest such pupils. A proportion of government funding is linked to this classification system, with Decile 1 schools receiving the most assistance, and Decile 10 schools the least.

all activities, introducing the topics to the children and prompting them with questions to further understanding of the topic.

Topic One, entitled "My journey to school", was aimed at addressing the first study objective by gathering data about the modes of transport used by children and who, if anyone, they travelled with. It included the question, "What do you see along the way?" which was intended to assess whether children's understandings and experiences of neighbourhood varied according to their mode of travel (cf. Tranter and Pawson, 2001). Topic Two addressed the second research objective and asked children to complete a sentence about the way they would like to come to school, explain their reasons, and comment on if they were unable to meet this aspiration. The children were asked to keep their transport preferences to realistic ways of travelling (discouraging the proposed use of magic carpets, flying horses, etc.). Both topics also yielded information relating to our third objective, as they were conducted in two different classes at each of the three selected schools, which were separated by significant spatial and socio-economic distances.

These writing activities constituted an initial method employed to generate a broad picture of the range of children's views. A deeper understanding was subsequently sought via discussion groups. As in focus groups (Cameron, 2005), while there were general topics to be discussed, the children guided the conversation themselves and set their own agenda, with only occasional prompts and requests for elaboration from the researcher. Each of the discussion group sessions ended in general dialogues about participants' neighbourhoods, their perceived dangers and any aspects they would like to change. Sessions were audiotaped, with consent, and then transcribed.

We addressed the aim of gaining insight into what children perceived to be dangerous for people their age through use of photovoice (Wang et al., 1998), an actionresearch methodology which is underpinned by the idea that people are 'experts' on their own lives and therefore should be empowered to play a prominent role in research about them. Photovoice typically involves providing marginalised individuals with a camera "... so they can record and represent their everyday realities" (Wang et al., 2004, p. 75). As the approach intentionally attempts to empower participants with little money, power or status, young people can potentially benefit from engaging with photovoice (e.g., Aitken and Wingate, 1993; Kroeger et al., 2004; McAllister et al., 2005; Strack et al., 2004). The photovoice activity occurred in the first week of contact with each school and involved walking with children around their immediate neighbourhood and asking them to record whatever they perceived as dangerous using disposable cameras.

The cameras were shared between the participating children (juniors: three cameras per six children; seniors: two cameras per six children), and each took turns at taking photos. The researcher and participants were accompanied

by a teacher's assistant in order to meet ethical requirements, as well as to ensure the peace of mind of any potentially concerned parents. Both adults avoided input into decisions as to what to photograph. One week later, the participating children were invited to gather around the photos and discuss the dangers they saw in them. These discussions ended in general conversation about the children's neighbourhood, its dangers, and the aspects they wished to change.

With the approval of the school administrators and teachers of the classes, the writing, which was completed at each of the case study schools, was collated and photocopied. The numbers of children varied slightly between classes and activities, with 131 children participating in writing activity one and 136 in writing activity two. There was an even representation of junior and senior contributors. Gender and ethnicity were not recorded, as this study's focus was on the ways in which travel and use of public space varied according to the children's age, and the socio-economic status and location of their school.

## 5. Children's experiences of home-school travel

Of the 131 children participating in the first activity (which involved writing about the predominant way in which they travelled to school), 55.7% made the journey accompanied by an adult, either by private car (39.7% of all participants), walking (14.5%), or some other means (1.5%). A total of 44.3% of children travelled independently or with peers (14.5% and 29.8%, respectively) (Table 1).

While the majority of the study participants reported being accompanied en route to school, almost 45% travelled by themselves or in the company of other children only. Many Auckland children, then, appear to enjoy a measure of independence and autonomy. This trend was not uniform across different age groups, but nor was it as different as one might expect given the differences in maturity levels involved: 40% of juniors travelled unaccompanied by an adult, compared to 48.5% of seniors. Adult accompaniment of pupils was particularly marked at Maungawhau Primary (in the most affluent neighbourhood), where 75% of juniors and 55% of seniors travelled to school with an adult. The lowest accompaniment rate was at Mt. Roskill, where 50% of both juniors and seniors travelled with adults.

Table 1
Participants' modes of travel and accompaniment (all schools)

Mode of travel	Mode of accompaniment						
	Parent	Family (parent and sibling)	Peers	Independent	Total		
Walk	8	11	39	17	75		
Cycle	1	0	0	2	3		
Bus	1	0	0	0	1		
Car	25	27	0	0	52		
Total	35	38	39	19	131		

In conversation, children who did not walk were well aware that they were missing out on learning opportunities. Consistent with trends observed in Norway (Sjolie and Thuen, 2002), Britain (Hillman et al., 1990), and elsewhere in New Zealand (Tranter and Pawson, 2001), the boredom of being chauffeured was a common theme in the children's writing.

"I do not like coming to school the way I do, because you can't do anything. You see the same things every time"  $(MJ - Car)^2$ 

"I don't like travelling to school in a vehicle because it's boring inside a car" (RS – Car)

By contrast, children who walked to school, either individually, or with peers or parents, were particularly positive about this journey. While some complained of getting tired, respondents at all three schools valued the social nature of walking. Thus, one student commented "I really like the way I get to school, because I don't get lonely and me and my friend can talk to each other" (MS). Socialising with their peers is a primary need and desire of children (Baraldi, 2003; Driskell, 2002); walking to school helps this to be achieved (see also Neuwelt and Kearns, 2006).

Exercise and exploring the environment were also perceived advantages of walking:

"When you're walking, you don't need to hop in the car... you get to play hide and seek and chase and you get energy and fit" (MJ – walks with peers)

"I like walking to school because it's fun and the sun shines bright. I don't get bored" (MJ – walks unaccompanied)

"It gives you energy and is good for your bones" (WS – walks with parent)

These type of comments were commonly offered and reflect an internalisation of health promotion rhetoric which has emphasised that children need regular exercise to keep healthy. It appears that curiosity keeps children interested in walking between home and school, despite the 'sameness' that might be identified by some adults. Children invent and play games during their walk home and investigate interesting sites along the way.

Through their writing, some children gave examples of exercising, and negotiating agency. These participants appeared to be challenging, at least implicitly, the structures constraining their everyday lives, by making their own decisions about travelling to school – and opting for walking because of the independence and experiences it brings.

"I tell my mother to let me go in the car today and tomorrow I can go by walking and the next morning I said "let's go by walking" (RJ – Walks with parent).

"She [mum] asked me if I wanted to go by car but I said 'no' so I walked to school." (WS – Walks unaccompanied)

As well as highlighting desires to walk to school, these comments also contribute to the idea of children and parents negotiating 'licences', which specify the nature and extent of children's spatial freedoms (Hillman et al., 1990; Tranter and Pawson, 2001; Valentine, 1997c, 2000).

Of the three case study schools, Mt. Roskill students demonstrated the highest levels of independent walking to school (i.e., without an adult): 65% were accompanied at Maungawhau, 53% at Waterview, and 50% at Mt. Roskill. This finding was surprising, given that Mt. Roskill Primary is located in the most heavily trafficked area. However, further investigation revealed that, compared to the other schools, a larger proportion of children from Mt. Roskill Primary were travelling in the company of other young people - not only children of their own age, but also siblings attending the adjacent intermediate (junior high) and high schools. While a campus with more than one school can be perceived as negative (e.g., due to the concentration of vehicular traffic), benefits can be seen with younger children being given greater opportunities for active travel. Maungawhau and Waterview Primary pupils do not have the same opportunity to be accompanied by significantly older siblings on the journey to school.

## 5.1. Children's transport preferences

Of the 136 children participating in the second writing activity (how they would like to travel) 20 expressed a desire for unrealistic means (despite exhortations to avoid such alternatives). These responses were therefore left out of the analysis. The remaining results are recorded in Table 2. Of the 53.4% of children currently walking to school, half (i.e., 25.9% of the total) were content with their mode of transport. Respondents reported that they enjoyed walking to school because of the social interaction, perceived health benefits and the pure 'fun' of it. According to one, "it's nice to walk with my brother because we can talk about stuff" (MS). A desire to avoid the traffic jams and the boredom of being trapped in a car were additional reasons quoted by Mt. Roskill senior children. Seeing the traffic chaos outside their school every morning and having the ability to walk faster than the travelling cars appeared to give these children first hand experience of the disadvantages of private transport and benefits of walking (cf. Kearns et al., 2003).

While few children reported cycling to school, all of those who were cyclists wished to persist with this form of transport. They stated that cycling was fun and faster than walking, and less boring than private transport. One child

<sup>&</sup>lt;sup>2</sup> Narratives are attributed as follows: M, R or W as a prefix represent Maungawhau, Mt. Roskill or Waterview schools, and the suffixes J and S represent junior and senior students, respectively.

Table 2
Current practice vs. desired modes of transport to school

Current practice	Desire	Desire						
	Walk	Cycle/roller skate	Public transport	Private automobile	'Practice' total			
Walk	25.9%	12.1%	3.4%	12%	53.4%			
Cycle/roller skate	0	2.6%	0	0	2.6%			
Public transport	0	0	0	0	0			
Private automobile	14.7%	5.2%	6%	18.1%	44%			
'Desire' total	40.6%	19.9%	9.4%	30.1%	100%			

added that it was "friendly to the environment" (RS) recognising that cycling is a zero emission form of transportation.

Over half (53.4%) of children who wrote about their travel preferences stated a wish to change their current mode of transport. We now explore the explanations offered by these children. Of those currently being driven, almost half (45%) expressed a desire for a more active travel mode (i.e., walking or cycling/roller skating), and an additional 13% favoured public transport, which typically offers some opportunity for exercise in the form of walking to and from stops. Several themes emerged to explain this desire to step out of the car and into public space, the first being an enthusiasm for exploring the local environment. As Valentine and McKendrick's (1997) research in northwest England found, many children have a strong urge to explore their surroundings and experience things first hand, rather than through the passive interactions that private transport offers:

"I would really like to walk the whole way, even if it was raining. Nature is beautiful and I love to look at it... overall I love walking, it's fun and special in it's own wonderful way" (MS – practice: car, desire: walk)

"I can feel the breeze on my face ... see beautiful flowers, dogs and cats, but I can only do that if I ride my bike" (MS – practice: car, desire: cycle)

"I want to see stuff" (RS – practice: car, desire: walk)

By expressing that she wants to walk, even in the rain, the quoted Maungawhau senior displays a deep desire to change the way she travels to school. She wants to enjoy walking, an act which for many adults in 'autocentric' Auckland is highly marginal, seldom engaged in as a form of everyday mobility (Bean, 2006). Another child stated, with frustration "you don't get to see much in a car" (MS). Despite the simplicity of their words, these children realise that they are missing out on exploring opportunities by being transported in private vehicles. However unremarkable, activities such as picking up leaves and pinecones and merely "seeing stuff", are all actions which work towards giving children an understanding about their environment and, ultimately, a sense of place (Cunningham et al., 1996).

Social interaction was a second common theme to emerge in children's writing. A desire to interact with

friends and others on the street was mentioned as a primary reason why they wanted to change from their current mode of transport:

"I would be able to say hello to people and get to know people" (MJ – practice: car, desire: walk)

"I would rather bike because then I can talk to my friends" (MS – practice: car, desire: cycling)

"You get a good view from the bus and your friends might be there" (RS – practice: car, desire: public transport)

While some children imagined themselves travelling with a small group of friends, others dreamed on a grander scale, envisioning all children catching the same mode of public transport to school:

"I would like to come to school by going in a bus with all my friends because I like talking and laughing with my friends" (WS – practice: car, desire: public transport)

"It would be cool if there was a tram that went from Mt. Eden to a meeting point. And every kid would walk or run to the meeting point and the tram would take them to school" (MS – practice: car, desire: public transport)

Significantly, these comments show children's willingness to travel by public transport. It is plausible that their perceptions stem from partaking in school trips, during which a whole class travels together on one bus, making it an enjoyable, if noisy, trip for all. Any notion that public transport is anti-social (whereby passengers sit silently side by side) is clearly not evident to children.

A third theme children articulated was a desire to use a more active form of transport as a means to stay healthy, both physically and mentally, and increase their fitness levels.

"I would like to get energy, get healthy and brainy" (WJ – practice: car, desire: walk)

"I want to walk because it's fun and when you come to school you have a good mind" (RS – practice: car, desire: walk)

"I could get more fresh air than from being stuffed in a car" (MS – practice: car, desire: cycle)

Children are aware that exercise is necessary for a well-balanced life. They have likely picked this concept up from a number of sources: their parents, the news media, and school. Children not only absorb health-promoting messages, but also want to take steps to enact them, realising the benefits which can be gained (Kearns et al., 2003). The cognitive benefits perceived by two of the pupils quoted above may relate to the popular idea (in New Zealand) that, in walking to school, children arrive more alert than would be the case if they had been driven, thus making walking good for mental as well as physical health (see Neuwelt and Kearns, 2006).

The theme of the 'need for speed' also featured throughout this part of research, with children frequently expressing a preference for transport that would be faster than driving in a congested city:

"You can dodge traffic" (RS – practice: car, desire: cycle)

"I've always been in a car since I was little, so I would like to cycle, it would be faster" (WS – practice: car, desire: cycle)

It seems that children desire to investigate their environment both deeply (e.g., looking at plants, experiencing the elements, on their journey) and broadly (e.g., seeing and covering as much space as they can). In summary, writing activity two showed that 60.5% of the surveyed children expressed a desire to use an active mode of transport, and an additional 9.4% favoured public transport. The number of children who, at the time of the research, walked or cycled/roller skated is slightly lower (59.5% in writing activity one; 56.0% in writing activity two), while almost no children presently use public transport for their journey to school.

# 5.2. Children's perceptions of barriers and dangers

As many children express a desire to utilise active modes of transport on their journey to school, but are unable to act upon it, the question remains: what is stopping them from travelling as they would like? The children who answered this question offered one unmistakable theme: "I'm not allowed". While parentally-imposed barriers to children's active travel may be motivated by a wide range of factors, they are most often explained to children in terms of safety concerns. This was particularly marked for children attending Mt. Roskill Primary, which – as noted above – is located in a highly congested area:

"I can't because I'm not allowed to be by myself" (RJ – practice: car, desire: walk).

"Mum doesn't let us near dangerous things" (RS – practice: car, desire: walk).

"My mum says it's too dangerous when it's not. She worries too much about me. I am 11 years old, old enough to look after myself" (RS – practice: walk, desire: cycle).

The case study children were all too aware how their parents felt about them using public space, with most being specific about their parents' fears vis-à-vis both traffic and stranger dangers. While children desire to use other modes of transport, restrictions from parents frequently prevent this. Consequently, congestion around the school gate and traffic on the roads continue to increase as parents chauffeur their children. The other common issue constraining children's ability to utilise active transport was the simple fact that they lived too far away from school to utilise their 'preferred' transport options, given limitations of time and stamina.

In addition to eliciting comments regarding the journey between home and school, we also considered children's perspectives on neighbourhood dangers more generally, particularly via the final research activity – a researcher-led walk around a block considered representative of each school's neighbourhood. During this activity children were asked to photograph whatever they thought was 'dangerous' to children of primary school age. The most pertinent discovery was the existence of clear differences between the schools: children attending Waterview Primary were most concerned about strangers and being alone in a public space; Mt. Roskill Primary pupils highlighted roads and traffic; and Maungawhau Primary children were troubled by lower-order issues that might be dismissed as trivial.

Overall, frustration with traffic and road dangers was the most frequently recorded complaint (see Table 3). Over half of the photos featured road traffic related phenomena, which were also preoccupations of the children in the writing and discussion activities. Traffic-related fears and complaints were widespread, but featured most with the Mt. Roskill juniors. This observation confirms the view that children perceive traffic to be the greatest threat to children of their age, aligning with parental fears and academic research (Collins and Kearns, 2005; Baraldi, 2003; Christensen and O'Brien, 2003; Tranter and Pawson, 2001; Valentine, 2001). One picture taken by a Mt. Roskill junior is significant for its illustration of just how threatening a car is to a child of primary school age, who cannot see over the roof or through the windows (see Fig. 1).

When the young photographer was asked what it represented to her, she answered

"Cars can run over the kids when they come out of school. There's parked cars as well, so you can barely see. I took the photo because you have to stick your head behind the cars to see the road and they could hit you" (RJ).

Mt. Roskill seniors also commented on the intense congestion around their school, such as in this dialogue during a discussion group:

Table 3
Perceived dangers recorded with 'photo-voice'

Dangers		Class						
		MJ	MS	RJ	RS	WJ	WS	Total
Roads/traffic	Cars/trucks	5	9	13	3	8	8	46
related	Road/drives	2	1	19	3	12	8	45
	Cracked pavement	2	4	4	4	1	0	15
	Drains	2	1	0	0	1	0	4
	Holes	1	0	0	0	0	0	1
	Construction/repair	5	3	0	0	0	0	7
								124
Litter	Broken glass	2	1	5	4	4	4	20
	Rubbish bins	4	1	0	0	0	0	5
	Other rubbish	1	4	4	7	1	6	23
	Dog waste	0	1	0	0	2	0	3
	Graffiti	0	0	0	1	0	2	3
								54
Private	Fences	1	6	4	2	0	0	13
Property	Toys	1	0	4	3	0	0	0
	Stairs	1	0	0	0	0	0	1
	Shops	0	0	0	0	2	3	5
								18
Other	Power box/pipes	3	5	10	9	3	5	35
	Power lines	2	2	8	0	0	0	12
	Public Reserves	0	0	0	0	2	4	6
	Rocks	1	0	4	1	0	0	6
	Trees	0	0	1	1	1	0	3
								62

RS Boy 1: Too many adults come to school and work by car causing too much pollution and traffic jams.

RS Boy 2: There's too much traffic on [the] road so children are late to school.

RS Girl 1: There are too many cars and not enough pedestrian crossings.

RS Girl 2: Yeah, and the traffic is just zooming... without slowing down or stopping.

Speeding cars were also discussed by the children. There was particular concern that the drivers, especially near the school, were not cautious enough about looking out for children and obeying the road rules.

"Cars are always driving past (the school gate), especially before school and after school and it's really dangerous for kids" (RJ).

"Speeding cars run over children and if you don't realise that a car is coming and try to cross over you could get squished, and if you don't die you would be in a lot of pain" (MS)

"The cars are going way too fast and they don't stop at the lights" (WS)

All the participants were aware that, because drivers are not as careful as they should be, children need to take responsibility for themselves. This internalisation of responsibility may be interpreted as reflecting a degree of competence among children in terms of independently negotiating the dangers of public space, but perhaps also points to the possibility of children blaming themselves in the event of an accident (see Roberts et al., 1997, 2002). An example of self-blame was seen in a conversation during the Maungawhau Primary senior discussion group, when a child spoke of a waste truck that was observed (and photographed) reversing around a corner near their school dur-



Fig. 1. Height of a car from a six year old's eye – picture by Mt. Roskill Junior.

ing their neighbourhood walk. The children recognised the waste truck as a hazard that children have to encounter and cope with, and added that if an accident happened, the child was most likely to blame.

While the streets were viewed as hazardous, children viewed their school as a safe zone. School was generally cast as a place of refuge where they were away from the dangers and hostilities of the outside world, thus suggesting its centrality (along with, for most, home) to their emotional geographies of neighbourhood (see Davidson et al., 2005). This was highlighted through written comments such as "we safely cross the road and head to school. We are safely in the school grounds" (RS). This view of the school as a 'safe haven' aligns with one of the original intentions for schooling, which was to keep children from being exposed to the 'evils' of the world (Eekelaar, 1986; Prentice, 1977). This interpretation of public space as a negative influence in children's lives has continued, manifesting in the minds of children as well as adults. When children were asked "what is school like compared to outside?" they responded unanimously that "it's safer". Another girl commented "sometimes I get scared walking to school because I walk with my little brother who is 7 years old. I feel scared because someone might kidnap my precious brother" (RS).

In some children fear of public space was not the primary concern, but rather a lack of opportunities to use it. Others expressed frustration about the difficulties and ambiguities of public space. Children, especially from the high socio-economic status Maungawhau Primary, wanted the opportunity to use public space but felt they could not. The root of this problem was the lack of urban spaces tailored to children's recreational needs:

"When you're riding your bike the law says that you have to ride your bike on the road, but parents would never let you do that. But the footpath is just as bad, cars are on the road and on the footpaths, because they are backing out of their driveways" (MS).

"The footpath is too narrow to ride bikes on and pass people" (MS)

Both of these children express frustration at the inability to ride their bikes in dense suburban areas. Cyclists are not supposed to travel on the footpaths (which in any case are by no means free from danger), while the risks of cycling on the road are irrefutable (and feature prominently in the minds of many parents). A third option, increasingly common in Auckland, is shared cycle/bus lanes. These did little if anything to address the problem:

MS Girl 1: "When you're riding your bike, it's fun, but the roads are too wide and the footpaths are like this small [indicates with hands]. There's bike lanes on a couple of roads around here, but you can't ride in those because your parents won't let you, because a car might swerve and hit you

MS Girl 2: "And the bike lanes... they have buses travelling in them! Bikes are so small and buses are really, really big, like 2000 times bigger. Lots of kids get freaked out if they get near a bus"

While safety was a concern for children from a higher socio-economic background, the Maungawhau Primary pupils were more concerned about recreational activities and having social time with their friends. Although children retain the ability to make and shape space, even under adverse conditions – indeed, this is a prominent theme in the international literature on children's geographies (Jones, 2000; Swart-Kruger and Chawla, 2002) – the combination of chauffeuring, privatised recreational activities, and parental prohibitions on independent play and travel may have largely removed children of higher socio-economic backgrounds from inner Auckland public spaces. In the case of Maungawhau, children appeared resigned to the fact that the situation in their neighbourhood was not going change and they would continue to be confined to play in 'safe' private space.

In addition to the principal fears of traffic and public space, children discussed other aspects of urban life which they considered dangerous. Uneven pavements were commonly mentioned, with children expressing concern over tripping on the cracks and lumps as they walked (or ran) in public space. "The front of your foot could fall into it and you could get a big bruise and lots of scrapes" (MJ – see Fig. 2). Others commented that the uneven and broken pavement was "all dirty and you could fall over. It doesn't look very nice" (RJ).

Litter was also a frequently-photographed phenomenon. While children acknowledged that some litter was not necessarily 'dangerous', they commented that it was unsightly and that they would prefer a clean and tidy neighbourhood. The case study children took notice and commented on almost everything they passed throughout the walk around the neighbourhood. Even specks of glass did not go unnoticed, presumably because Auckland children commonly walk in bare feet.

A 'danger' which only featured in the (gentrifying) neighbourhood of Maungawhau was that of houses being refurbished. The houses pictured in Fig. 3 were on a road bordering the school. Both construction sites blocked the sidewalk, one with setting concrete and the other with a large hole and a token cone warning of its presence. They were seen to be a danger to the safety of those walking to and from school, although sometimes this concern became fanciful.

"These people are doing concrete on the driveway and they've got these four wooden things and two trucks... and if kids get stuck in the cement they could stay there for ever and ever and die" (MJ).

While a general wariness of traffic and strangers was identifiable across all schools, specific fears permeated some groups of children more than others. Waterview children,



Fig. 2. Cracked pavement – picture by Maungawhau Junior.



Fig. 3. Renovating house – picture by Maungawhau Senior.

for instance, expressed concerns about stranger danger, recounting stories of people to be feared in their area, and the places they are known to frequent. Yet, despite the fear of strangers, the Waterview neighbourhood displayed a degree of social connectedness that was not shown within the other case study schools: for example, the children knew and spoke of people who lived in the area who were not part of the school community.

Mt. Roskill pupils were primarily concerned with the road and traffic danger. This fear permeated the school

community and the school's attitudes and teachings. This is because the school is sited in a heavily trafficked area and the children are continually warned and reminded of the danger that lies outside their school gates. As a result the children of Mt. Roskill, in particular, recognised the school as a safe haven, away from the dangers of public space.

Maungawhau Primary students, on the other hand, were less fearful of traffic and strangers and more concerned about access to play areas. These children felt the loss of such areas due to the increased density of their neighbour-

hood, and the way in which construction impinged on their ability to explore public space. Complaints about traffic reducing their quality of life, and about constant parental surveillance, were common. The Maungawhau children also desired the closeness of friends because proximity would result in more play encounters.

## 6. Conclusion

Our paper's key contribution has been to see the nuances of neighbourhoods through children's eyes. We investigated how children feel about travelling to school and how they perceive the local public spaces of their neighbourhoods. Few studies have investigated primary school-aged children's perspectives of home-school journeys, and fewer still have delved into examining how children would change their journey if they were able. Our research invited children to answer these questions through a mixed methodology involving writing activities, photovoice and discussion groups. Following earlier applications (e.g., Aitken and Wingate, 1993) we found photovoice to be particularly useful in portraying what children perceived as dangerous in their neighbourhood, while the discussion groups yielded detailed insights into children's perceptions of neighbourhood space more generally.

The paper sought first to understand how children currently travel to school in Auckland City. At our case-study schools, over half made the journey accompanied by an adult, and the vast majority of these trips were by private car. Adult accompaniment was most common within the most affluent neighbourhood. Second, we sought to ascertain the ways in which children desire to travel within their neighbourhoods, and their views on why they are often unable to realise these desires. We found that over half of the children who wrote about their travel preferences wished to change their current mode of transport. Of those currently being driven, almost half (45%) expressed a desire for a more active travel mode, with many expressing an enthusiasm for exploring the local environment. Third, in response to calls to acknowledge difference in children's experience, we investigated how children's perspectives of their neighbourhoods vary by age, socio-economic status and school location. Our data showed that, in addition to well-researched parental fears and restrictions, children's own fears limit their use of public space. However there were clear differences across the schools, reflecting local circumstances.

Our Auckland case studies revealed that many children desire to travel independently within public space but are constrained in their ability to act on this desire. In the emotional geography of neighbourhood in Auckland, the 'local sphere' between home and school appears increasingly ambiguous: while many children find it appealing, they also recognise it as a site of risk and uncertainty – in contradistinction to the school itself, which they universally imagine as 'safe'. This ambiguity did not translate into widespread enthusiasm for travelling by car: child passengers were gen-

erally negative about this transport option, complaining of boredom and the inability to experience their local neighbourhood. The children who walked, however, were mostly positive about their journey, echoing other recent research in Auckland (Neuwelt and Kearns, 2006).

Those participants who expressed a desire for more active forms of travel offered reasons that were consistent with findings previously noted in the children's geographies literature: the desire for social interaction, spatial exploration and perceived health benefits. However in contrast to this literature, which focuses on recommendations from professionals, our research provided an opportunity for children to convey their own opinions about everyday transportation. Our analysis revealed that children recognise many of the reasons for change towards 'active transport' advocated by health promoters and transport planners. This observation was consistent across the socio-economic levels represented within the case study schools. However, a range of fears and obstacles appear to block children from adopting their desired modes of travel.

As long as children are seen as 'innocents' in need of protection, they are going to have limited agency in travel decisions and highly contingent access to public space. This social construction presents an ongoing challenge to travel planners and children's advocates. The challenge is all the more pressing, given the growing recognition that child friendly cities are better cities for children *and* adults (Gleeson and Sipe, 2006). Our research has offered evidence of children seeking, and in some instances exercising, agency with respect to their routine mobility. It reveals them to be actors whose daily lives incorporate active negotiation of the constraints prevailing within their households and neighbourhood contexts.

To this extent, our example of school travel illustrates a pervasive and mundane example of the structure/agency dynamic and the way that individual and collective action is invariably constrained, yet holds capacity to be transformative (see Dyck and Kearns, 2006). This dynamic is worked out through parents being the bearers and interpreters of two related sets of structural impediments to children's independent mobility: anxiety around safety, much of it media-fuelled, and employment-generated routines which mean that adults are driving to work at the same time as children are making their way to school. Here we see our work concurring with that of Barker (2003): rather than being mere passengers, children have the capacity to contest being driven, and in so doing participate in the micro-politics of household life. This agency is significant in part because of its capacity to map onto neighbourhoods in terms of activity patterns. While the discourse of parents protecting their children from strangers and traffic by offering them safety within vehicles remains socially powerful, this research with children has revealed an alternative set of voices that value active travel, outdoor environments, and the ability to navigate one's own path to school.

#### References

- Aitken, S., Wingate, J., 1993. A preliminary study of the self-directed photography of middle-class, homeless and mobility-impaired children. Professional Geographer 45 (1), 65–72.
- Auckland City Council, 2004. Transport: getting around Auckland. <a href="http://www.aucklandcity.govt.nz/auckland/transport">http://www.aucklandcity.govt.nz/auckland/transport</a>.
- Baraldi, C., 2003. Planning childhood. In: Christensen, P., O'Brien, M. (Eds.), Children in the City: Home, Neighbourhood and Community. Routledge, London, pp. 184–205.
- Barker, J., 2003. Passengers or political actors? Children's participation in transport policy and the micro political geographies of the family. Space and Polity 7, 135–151.
- Bean, C., 2006. Walkable Auckland? Investigating urban form and walking and driving cultures. MSc thesis (Geography), School of Geography and Environmental Science, University of Auckland.
- Cameron, J., 2005. Focussing on the focus group. In: Hay, I. (Ed.), Qualitative Research Methods in Human Geography, 2nd ed. Oxford University Press, Melbourne, pp. 116–132.
- Christensen, P., O'Brien, M., 2003. Children in the City: Home, Neighbourhood and Community. Routledge, London.
- Collins, D., Kearns, R., 2001a. The safe journeys of an enterprising school: negotiating landscapes of opportunity and risk. Health and Place 7, 293–306.
- Collins, D., Kearns, R., 2001b. Under curfew and under siege? Legal geographies of young people. Geoforum 32, 389–403.
- Collins, D., Kearns, R., 2005. Geographies of inequality: child pedestrian injury and walking school buses in Auckland, New Zealand. Social Science and Medicine 60 (1), 61–69.
- Cunningham, C., Jones, M., 1999. The playground: a confession of failure? Built Environment 24 (1), 11–17.
- Cunningham, C., Jones, M., Barlow, M., 1996. Town Planning and Children: A Case Study of Lismore, New South Wales, Australia. Department of Geography and Planning, University of New England, Armidale, NSW.
- Davidson, J., Bondi, L., Smith, M., 2005. Emotional Geographies. Ashgate Press, Aldershot.
- Davis, A., Jones, L., 1996. Children in the urban environment: an issue for the new public health agenda. Health and Place 2 (2), 107–113.
- Dowling, R., 2000. Cultures of mothering and car use in suburban Sydney: a preliminary investigation. Geoforum 31, 345–353.
- Driskell, D., 2002. Creating better cities with children and youth: a manual for participation. United Kingdom, United Nations Educational, Scientific and Cultural Organization and Earthscan Publications.
- Dyck, I., Kearns, R.A., 2006. Structuration theory and on: a view from feminist and health geography. In: Valentine, G., Aitken, S. (Eds.), Philosophies, People, Places and Practices: An Introduction to Human Geography. Sage, Thousand Oaks, pp. 86–96.
- Eekelaar, J., 1986. The emergence of children's rights. Oxford Journal of Legal Studies 6 (2), 161.
- Ferguson, G., 1994. Building the New Zealand Dream. Dunmore Press, Palmerston North.
- Fielding, S., 2000. Walk on the left! Children's geographies and the primary school. In: Valentine, G., Holloway, S. (Eds.), Children's Geographies: Playing, Living, Learning. Routledge, London, pp. 230–244.
- Franklin, J., 2002. The New Handbook of Children's Rights: Comparative Policy and Practise. Routledge, London.
- Freeman, C., Aitken-Rose E., Johnston, R., 2004. Generating the Future? The state of Local Government Planning for Children and Young People in New Zealand. Department of Geography. University of Otago, Dunedin.
- Gleeson, B., Sipe, N. (Eds.), 2006. Creating Child-friendly Cities: New Perspectives and Prospects. Routledge, London.
- Green, E., Mitchell, W., Bunton, R., 2000. Contextualising risk and danger: an analysis of young people's perceptions of risk. Journal of Youth Studies (2), 109–126.
- Hardin, J., 2000. There's no place like home: the public/private distinction in children's theorizing of risk and safety. Childhood 7 (1), 43–59.

- Hill, M., Davis, J., Prout, A., Tisdall, K., 2004. Moving the participation agenda. Children and Society 18, 77–96.
- Hillman, M. (Ed.), 1993. Children, Transport and the Quality of Life. Policy Studies Institute, London.
- Hillman, M., Adams, J., Whitelegg, J., 1990. One False Move ... A Study of Children's Independent Mobility. Policy Studies Institute, London.
- Holloway, L., Hubbard, P., 2001. Place images and mental maps. In: Holloway, L., Hubbard, P. (Eds.), People and Place: Extraordinary Geographies of Everyday Life. Prentice Hall, Essex, pp. 48–55.
- Jones, O., 2000. Melting geography: purity, disorder, childhood and space. In: Valentine, G., Holloway, S. (Eds.), Children's Geographies: Playing, Living, Learning. Routledge, London, pp. 29–47.
- Kearns, R., Collins, D., 2006. Children in the intensifying city lessons from Auckland's walking school buses. In: Gleeson, B., Sipe, N. (Eds.), Creating Child-Friendly Cities. Routledge, London, pp. 105–120.
- Kearns, R., Collins, D., Neuwelt, P., 2003. The walking school bus: extending children's geographies? Area 35 (3), 285–292.
- Kroeger, S., Burton, C., Comarata, A., Combs, C., Hamm, C., Hopkins, R., Kouche, B., 2004. Student voice and critical reflection: helping students at risk. Teaching Exceptional Children 36 (3), 50–57.
- Lawrence, J., Kearns, R., 2005. Exploring the 'fit' between people and providers: refugee health needs and health care services in Mt. Roskill, Auckland, New Zealand. Health and Social Care in the Community 13 (5), 451–461.
- Loukaitou-Sideris, A., 2003. Children's common grounds: a study of intergroup relations among children in public settings. Journal of the American Planning Association 69 (2), 130–144.
- Matthews, H., Limb, M., 1999. Defining an agenda for the geography of children: review and prospect. Progress in Human Geography 23, 61–90.
- McAllister, C., Wilson, P., Green, B., Baldwin, J., 2005. "Come and take a walk": listening to early head start parents on school-readiness as a matter of child, family, and community health. American Journal of Public Health 95 (4), 617–625.
- Neuwelt, P., Kearns, R.A., 2006. "Walking is good for my health!" Perceptions of the benefits of walking school buses in Auckland, New Zealand. Children, Youth and Environments 16 (1), 120–140.
- O'Brien, M., Jones, D., Sloan, D., 2000. Children's independent spatial mobility in the urban public realm. Childhood 7 (3), 257–277.
- Prentice, A., 1977. The School Promoters: Education and Social Class in the Mid-nineteenth Century, Upper Canada. McClelland and Stewart, Toronto.
- Prout, A., 2002. Researching children as social actors: an introduction to the children 5–16 programme. Children and Society 16, 67–76.
- Rissotto, A., Tonucci, F., 2002. Freedom of movement and environmental knowledge in elementary school children. Journal of Environmental Psychology 22, 65–77.
- Roberts, I., Carlin, J., Bennett, C., Bergstorm, E., Guyer, B., Nolan, T.,
  Norton, R., Pless, I.B., Rao, R., Stevenson, M., 1997. An international study of the exposure of children to traffic. Injury Prevention 3 (2), 89–93
- Roberts, I., Mohan, D., Abbasi, K., 2002. War on the roads: the public health community must intervene. British Medical Journal 324, 1107– 1108.
- Scott, S., Jackson, S., Backett-Milburn, K., 1998. Swings and roundabouts: risk anxiety and the everyday worlds of children. Sociology 32, 689.
- Simpson, B., 1997. Towards the participation of children and young people in urban planning and design. Urban Studies 24, 907–923.
- Sjolie, A., Thuen, F., 2002. School journeys and leisure activities in rural and urban adolescents in Norway. Health Promotion International 17 (1), 21–30.
- Smith, F., Barker, J., 2000. Contested spaces: children's experiences of out of school care in England and Wales. Childhood 7 (3), 315–333.
- Smith, F., Barker, J., 2001. Commodifying the countryside: the impact of out-of-school care on rural landscapes of children's play. Area 33 (2), 169–179.
- Strack, R., Magill, C., McDonagh, K., 2004. Engaging youth through photovoice. Health Promotion Practice 5 (1), 49–58.

- Such, S., Walker, R., 2004. Being responsible and responsible beings: children's understanding of responsibility. Children and Society 18, 231–242.
- Swart-Kruger, J., Chawla, L., 2002. 'We know something someone doesn't know.' Children speak out on local conditions in Johannesburg. Environment and Urbanization 14 (2), 85–96.
- Timperio, A., Crawford, D., Telford, A., Salmon, J., 2004. Perceptions about the local neighbourhood and walking and cycling among children. Preventive Medicine 38 (1), 39–47.
- Tranter, P., Pawson, E., 2001. Children's access to local environments: a case study of Christchurch, New Zealand. Local Environment 6 (1), 27–48.
- Valentine, G., 1996a. Children should be seen and not heard: the production and transgression of adults' public space. Urban Geography 17, 205–220.
- Valentine, G., 1996b. Angels and devils: moral landscapes of childhood. Environment and Planning D: Society and Space 14, 581–599.
- Valentine, G., 1997a. A safe place to grow up? Parenting, perceptions of children's safety and the rural idyll. Journal of Rural Studies 13 (2), 137–148.
- Valentine, G., 1997b. 'My son's a bit dizzy'. 'My wife's a bit soft': gender, children and cultures of parenting. Gender, Place and Culture 4 (1), 37–62.
- Valentine, G., 1997c. 'Oh yes I can.' 'Oh no you can't': children and parents understandings of kids' competence to negotiate public space safely. Antipode 29 (1), 65–89.

- Valentine, G., 2000. Exploring children and young people's narratives of identity. Geoforum 31, 257–267.
- Valentine, G., 2001. Social Geographies: Space and Society. Prentice Hall, Harlow.
- Valentine, G., 2004. Public Space and the Culture of Childhood. Ashgate, Aldershot.
- Valentine, G., McKendrick, J., 1997. Children's outdoor play: exploring parental concerns about children's safety and the changing nature of childhood. Geoforum 28 (2), 219–235.
- Veitch, J., Bagley, S., Ball, K., Salmon, J., 2006. Where do children play? A qualitative study of parents' perceptions of influences on children's active free-play. Health and Place 12 (4), 383–393.
- Wang, C., Yi, W., Tao, Z., Carovano, K., 1998. Photovoice as a participatory health promotion strategy. Health Promotion International 13 (1), 75–86.
- Wang, C., Morrel-Samuels, S., Hutchison, P.M., Bell, L., Pestronk, R., 2004. Flint photovoice: community building among youths, adults and policymakers. American Journal of Public Health 94 (6), 911– 913
- Witten, K., McCreanor, T., Kearns, R.A., 2003. The place of neighbourhood in social cohesion: Insights from Massey, New Zealand. Urban Policy and Research 21, 321–338.