"YOU COULD NEVER HAVE A THIRD PLACE IN A SAUSAGE FACTORY!"

Elinor Thomas

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ABSTRACT

In the face of climate crisis, we must take action to curb greenhouse gas emissions. One key strategy for doing this is to decrease travel by private vehicles through increasing the use of other travel modes like walking and cycling. However, children's travel by these active travel modes has decreased significantly in many western countries over recent generations. One of the main factors associated with this decrease is the proliferation of attitudes that constrain children's presence in public spaces, including those of their home neighbourhood. These attitudes can result in local parenting norms where children are habitually taken by car, even for short trips.

Apart from the contribution to traffic these attitudes and behaviour have, there are also a number of other benefits from active and independent travel that children miss out on. As well as providing a good source of physical activity, the experience of actively travelling through their neighbourhood equips children with a good knowledge of their local environment and can support a child's development towards being an active participant in their society.

This thesis aims to investigate whether child-led placemaking -where participants work collaboratively to take action in addressing a problem in their local area- can change these attitudes to increase children's use of public spaces and active travel. This research was conducted in partnership with a primary school. Data was collected during a co-researching process where 30 children designed and built places within the marginal public spaces of their neighbourhood. These places were designed to provide opportunities for the wider community to engage with these spaces and each other.

This study found that this placemaking process increased children's sense of connection to their neighbourhood and created opportunities for spontaneous informal social interaction. There was also some increase in independent and active travel, but this was mainly for boys.

Keywords: Active travel, children's mobility, placemaking, third place.

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1 INTRODUCTION

Urban transport presents a crucial problem as we look for ways to decrease global greenhouse gas (GHG) emissions, reduce air pollution, and ease traffic congestion. Moreover, public health workers have identified increased car travel as a public health problem, not just because of the effects of air pollution from exhaust fumes, but also the effects of a less active lifestyle. The benefits for public health and climate change have been used in tandem as arguments for increasing active and mass transit transports in future urban design. As urban centres intensify, problems with transport congestion are increasing. Government agencies around the world are taking action to reduce traffic congestion to reduce the negative effects of air pollution, curb GHGs, and increase efficient movement of people and goods. A key strategy in these efforts is the promotion of active travel, such as walking and cycling, for commutes and short trips. However, existing heavy traffic and urban spaces that are designed for the movement of cars rather than being pleasant spaces for people act as a barrier to increasing active travel.

In NZ the energy sector is the second largest source of GHG emissions and the source that has increased the fastest over the past two decades. In this time there has been an 81% increase in emissions from road transport (New Zealand Government, 2018). Amongst researchers there is considerable agreement that, if we are to reduce emissions then, as our cities grow we need to re-evaluate the way in which we design our residential areas and transport systems and promote active transport (Bean, Kearns, & Collins, 2008; Chapman, Howden-Chapman, Whitwell, & Thomas, 2017). Promotion of active travel is already a major strategy for addressing current transport issues and ameliorating the effects of future growth in New Zealand's major cities (New Zealand Government and Auckland City Council, 2018; Wellington City Council, 2015). However, active travel is continuing to decrease and New Zealand children have one of the lowest rates of active travel to school in the world (Ikeda et al., 2018).

Benefits of active travel for children

Apart from the issues relating to increased car use if children are driven everywhere, there are other good reasons for encouraging children to travel actively. Various studies have observed a link between the way that children usually travel and their ability to form maps of the area that they live in (Appleyard, 2015) or their road safety skills (Pfeffer, 2004), while other researchers view active travel as an aspect of their overall physical activity and play, or as playing a vital role in their social development. Moreover, there are benefits for communities if children are able to move freely as this means that most other people are also able to do so and children's presence in public spaces can help with increasing social connections.

Campaigns to promote active travel often highlight all of these benefits. However, the fact that this pattern of decline is found amongst children who live in areas which are free from the physical barriers that discourage children's active travel, for example major roads or a 'disordered environment' (Molnar et al., 2004) is a good reason to consider that social factors are also at play.

Children have been increasingly excluded from public space over recent decades (Blundell 2016). Gill Valentine (2004) argues that parental perceptions and social norms are involved. Popular notions of children and childhood view children as being out of place in public places, even in the suburban streets of their own neighbourhood. She and other researchers have shown that parental perceptions of safety can be the most influential factor in constraining children's use of their neighbourhood spaces. By considering children's travel to school as one aspect of their mobility and viewing this mobility within the context of children's participation in their local environment, it may be possible to better address the social norms that contribute to the ongoing decline in children's active travel.

Why study children's mobility?

This research came about through my experience of being a parent in the same neighbourhood where I grew up. Through the daily routine of my children's trips to and from school in our neighbourhood, I observed some significant differences

had come about since my own childhood. More noticeable than the lack of children making their own way to the school at the end of our street was the phalanx of vehicles lining the streets at the start and end of the school day.

Despite being relatively small, with only 200 children at the school, these typically narrow and winding Wellington streets were made even narrower. Sometimes the traffic caused by parents arriving to collect their children even make the roads impassable for other vehicles. Latecomers resort to leaving their cars parked across bus stops and driveways, or on the grass areas near the school. The chaos and danger seemed unnecessary to me, why didn't these children walk home? Although I was aware of the trend for parents choosing to travel further to a preferred school zoning surely that couldn't account for all of this traffic?

Gradually a number of reasons for children being picked up in cars became apparent to me, some of which required that I adjust my expectations of my role as a parent of school age children. I was surprised by the lack of autonomy that my children's peers were afforded. Not only were children escorted for most travel, I found that it was also the norm for parents to facilitate their children's social lives, arranging play times as well as providing their transport for these meetings. It was no longer acceptable for children to arrange their own after school play or find playmates by going out into the neighbourhood in their free time.

My experience leads me to believe that patterns in children's mobility are a manifestation of several elements of contemporary experience of childhood and parenting. I also believe that in some situations these elements can combine in ways that have far-reaching consequences, for example by increasing car trips which contribute to climate change, and so require us to understand them better if we are to achieve the changes we desire.

Research aim and thesis overview
Concerns about climate change underlie this research, with the study focusing on three main points. The first is that climate change is one of several global problems which will require collaborative and collective action to address. As

discussed by Bronwyn Hayward (2012), children's experience of their environment and environmental education can have significant consequences for how they understand large scale problems like climate change and their own role in addressing them. Children who received environmental education that emphasised the social aspects of environmental problems, or who had experience of community engagement with an environmental issue, had the best understanding of how collective action can be used to address 'big' problems. They also had the best understanding of their own ability to participate in this type of action.

Secondly, in line with other Western countries, increasing car use has led to a dramatic shift in children's mobility in New Zealand. Transport emissions are a significant source of greenhouse gas (GHG) emissions globally and have been identified as an area for potential emissions reduction in New Zealand. Private vehicle use is a significant travel mode in urban New Zealand, and GHG emissions from this source have been increasing. Aside from contributing to emissions, the reduction in children's active travel has implications for their development and physical health and compounds their exclusion from public space. This reduction in children's active travel is particularly significant for environmental problems due both to its role in childhood environmental experience which can influence pro-environmental action later in life and the importance of experiencing the local environment for the development of sense of place and self-identity which build a person's sense of self agency.

Thirdly, the social values that constrain children's mobility are relevant to their ability to develop into engaged citizens who value their community. It is concerning to think about how these values might play out in the face of increasing population density, and whether they will best equip us to cope with environmental stresses brought about by climate change. Children's mobility can be seen as a measure of the society that we are building (Malone, 2017).

This research rests on the understanding of children as capable agents. It tests the theory that some children are constrained in their use of their local environment by the locally accepted norms governing their use of local

neighbourhood spaces. Child-led placemaking guided by the concept of third place provides a framework for challenging this constraint and developing children's sense of ownership and belonging in these places.

Thesis Structure

Chapter two provides a review of the literature relating to children's mobility and use of public space. It focusses on Western views of children, childhood and parenting. I identify a gap in the literature regarding the use of social norms relating to children's use of neighbourhood public space to promote children's active travel and outline socially focussed strategies for bringing about behaviour change, in particular placemaking as a method for change. This chapter finishes with the formulation of the main questions that this thesis aims to address.

Chapter three outlines the methodology for undertaking this research, the rationale for choosing to use mixed-methods and participatory active methodology. It also gives information on the case group and participants. Chapter four outlines the findings of the qualitative research with a brief analysis, and the quantitative data collected through pre-and post-interventions surveys is contained in chapter five. These findings are synthesised and discussed in more depth in chapter six. The thesis concludes with a summary of the research finding and recommendations for further research.

2 LITERATURE REVIEW

Introduction

According to the United Nations the global population is forecast to reach 9.8 billion by 2050 (United Nations, 2017). With 70% of this population estimated to be living in cities by this time (Malone, 2017) the problem of how to accommodate more people in urban centres requires good planning. In many cities transport is a major source of greenhouse gas (GHG) emissions and transitioning to more sustainable transport modes is one action being taken to address climate change. As most of the growth in the global urban population is expected to be housed in suburbs (Forsyth, 2012), it is also important to understand the characteristics which make a suburb well-designed in terms of environmental impact from transport and the health and wellbeing of its residents. With 85% of New Zealand's population already living in urban centres (Statistics New Zealand, 2018), and many of these centres currently struggling with housing shortages and transport issues, urban planning and design is a familiar topic for many New Zealanders.

Decades of car-centric design and low-density housing development have created areas of suburban sprawl in many Western countries. This type of suburban form is inefficient with respect to transport emissions, energy use, and the loss of natural landscapes and ecosystems to a built environment. The design of suburbs is also important because of the way their spaces affect their inhabitants, not just in terms of mobility but also in terms of community cohesion and well-being. Well-designed neighbourhood spaces that support active forms of travel like walking and cycling, and provide areas for locals to linger, can offer opportunities for social interactions that foster social cohesion and increase social capital (Carmona, 2019). These in turn help to create strong local social networks that increase community resilience. Access to these types of spaces also makes a positive contribution to individual well-being (Wood, Hooper, Foster, & Bull, 2017; H. Woolley, 2006).

The community resilience that strong social networks and social capital provide for a community will also help to overcome the challenges that will arise because

of climate change and natural disasters. This resilience will become increasingly valuable as our population grows in both number and diversity, our urban centres densify, and we feel the effects of climate instability. However, the majority of suburbs do not reflect the diversity of people who live in them (Healey, 1997) meaning that some residents can feel excluded and isolated.

Children constitute one significant group who lack representation in urban design. Children are not only excluded from having a voice in how government responds to environmental issues, they also have no say in the development of their local environment. Changes in attitudes towards children and their care in recent generations means that they are also increasingly excluded from using public spaces (Valentine, 2004). Public space is generally thought of as adult space, and children are relegated to designated child appropriate spaces such as playgrounds and private gardens. This exclusion relies on constraining children's agency and comes at a developmental cost.

In his book *The Great Good Place,* Ray Oldenburg (1999) describes some inclusive public spaces and their role in society. Naming them 'third places' as they are not home - 'first place' - or work - 'second place', he argues that they provide opportunities for people of different backgrounds to interact. In Oldenburg's description third places are comfortable, neutral places which benefit society in various ways. Firstly, they expand knowledge that individual users have of their local environment and thus their personal connection to it. Secondly, because they create opportunities for people with different life experiences, they increase the building of the kinds of social networks that increase social resilience. Thirdly, these connections and conversations between people with different life experiences also increase social capital and help to create the conditions for a healthy democracy. Finally, they provide vital experience in the process of connecting young people to the community and society in which they live.

While Oldenburg's description has its limitations – it is more anecdotal than research-based and the examples given are specific to American culture – the concept of third place has been applied and expanded on by other researchers (Carroll, Witten, Donovan, & Kearns, 2015; Crump & Logan, 2011; Ducheneaut,

Moore, & Nickell, 2007; Soukup, 2006). Moreover, descriptions of children's use of urban spaces by other researchers fit the concept of third place even though they have not employed this terminology (Jacobs, 1961; Lynch, 1977; Ward, 1978). However, there is little existing research on third places in New Zealand and even less specifically on children's third places in New Zealand or anywhere else. More research is needed in order to understand where and how third places exist in New Zealand, what part they play in society and particularly in the experience of children.

There is a good body of research on children's independent mobility (CIM), and this shares many of the key themes of third space. Oldenburg (1999) identifies CIM as a key factor in children's ability to participate in their local environment and community and experience third place. For children, the ability to congregate in public space enables them to converse and play with their peers in an informal and unstructured setting. Experience of this kind has implications for lifelong health, wellbeing and attitudes to society and the environment. This is because it encourages key life skills such as the ability to negotiate with peers (Cook, Whitzman, & Tranter, 2015; Malone, 2007) as well as the ability to safely navigate the physical environment including roads (Pfeffer, 2004). These skills are developed through experiences which are also crucial for the development of a robust sense of self, of agency, and of belonging to a community (Chawla, 1999; Cook et al., 2015).

Despite the value of independence for the development of a child's sense of self, of place, and connection to community, as well as their general personal competence and physical activity, CIM is decreasing in several Western countries (Bhosale, Duncan, & Schofield, 2017; Carver, Timperio, & Crawford, 2008; Mackett, 2007). In urban environments CIM is heavily influenced not only by the built environment but also by popular beliefs about children and their appropriate use of public space (Freeman & Tranter, 2015) . Although children's participation in the society in which they live is widely accepted as a basic human right and has been demonstrated to lead to more inclusive and sustainable outcomes, children are underrepresented in urban planning and design

processes and increasingly excluded from public spaces (Bishop & Corkery, 2017; Valentine, 2004) .

In this review I will discuss the factors that constrain children's independent mobility in Western suburban environments, the implications that this has for their development and democratic engagement, and the potential for increasing their participation in their local environment.

2.1 Concepts and context

What is a child? - Conceptualising children
'A person's a person, no matter how small' (Seuss, 2008)

The research in this review takes the view that childhood is a social construct (Freeman & Tranter, 2011; James & Prout, 1990). Children are regarded as being biologically immature rather than simply less competent than adults. Although childhood is a universal experience, it is transient and subject to a wide range of variables that shape an individual's childhood experience for example gender and socio-economic status. For this reason, childhood cannot be understood separately from these other variables (Freeman & Tranter, 2015; Gillespie, 2013; James & Prout, 1990). In the United Nations Convention on the Rights of the Child (United Nations, 1989) and much of the literature reviewed here, children are regarded as people aged 0-17 years. Some studies use additional definitions of young people as being aged 12-17 and young adults being 15-25 (Dimoulias, 2017).

It is true that competency increases with age. When one is considering children's ability to participate in research or development projects this is generally accepted to be most relevant in terms of communication. Specifically this relates to a participant's level of skill and range in the ways they can communicate, for example by speaking or through reading and writing (Christensen & James, 2008). Children have been shown to be able to critically reflect on their own experiences (Kate Bishop & Corkery, 2017; Gillespie, 2013) and make decisions in their own interest (Alderson, Sutcliffe, & Curtis, 2006), including acting as gatekeepers of their own knowledge (Farrell, 2005). This means that children are

understood to be a diverse group with a broad range of experiences and are capable of contributing to research (Driskell, 2002; Farrell, 2005).

Social science research, including the field of children's geography, has made a substantial contribution to the research which has been influential in changing the view of children as objects or subjects in research to one of capable agents. Some examples are the work of researchers Colin Ward (1978), Roger Hart (1979) and Kevin Lynch (1977) who demonstrated children's agency by recording the actions of urban children in their communities.

Colin Ward's (1978) early work on urban children highlights their agency in negotiating the urban environment. The work by Kevin Lynch in the Growing Up in Cities project (1977), as well as subsequent research and publications stemming from this project by Linda Chawla (2002) and David Driskell (2002) illustrate the diversity of children's experiences and the value of their contributions to the communities in which they live. The early research contributed to international conventions aimed at promoting children's voice in social and governmental processes, such as the 1989 United Nations Convention on the Rights of the Child (UNCRC) and the 1996 United Nations International Children's Emergency Fund's (UNICEF) Child Friendly Cities Initiative.

This way of thinking about children is not necessarily the way in which most people think of children. People use the concepts that are widely accepted in their culture, and this shapes and constrains the ways that children are understood and talked about in popular discourse (James & Prout, 1990). As cultural constructions the notions of 'child' and 'childhood' are influenced by the other notions that are prevalent at any given time, for example those of safety and risk. It is possible for any or all of these notions to change over time and a particular view of childhood can become widespread (James & Prout, 1990). This also means it is possible that local attitudes towards children to give rise to the development of local parenting styles (Witten, Kearns, Carroll, Asiasiga, & Tava'e, 2013). Because of this tension between popular and localised perceptions, it is important that a critical discourse on the meanings surrounding children and childhood exists and that this discourse informs popular culture.

Western constructs of childhood

Despite the fact that they have informed international policies such as the 1989 UNCRC, which includes the right to participate in society, academic views of children and childhood have had limited impact on popular notions in the West. The contemporary popular notion of childhood in many Western societies such as New Zealand, Australia, the UK and US has been described as a 'walled-garden' (Malone, 2007). This stems from ideas that children are both innocent and lacking in competence and that 'good' parents must both nurture and protect their children by constraining their agency. This involves treating children as vulnerable and dependent (Gillespie, 2013; Mitchell, Kearns, & Collins, 2007), but also entitled to a childhood free from responsibility and dedicated to education and personal development (Gillespie, 2013). The attribution of these characteristics to children supresses their competency and legitimates children's position as an underrepresented minority. As well as ignoring the results of academic study these notions ignore the responsibilities that children have had in work and home both currently in many developing nations and previously in the West (Gillespie, 2013) and the fact that they may be a rose tinted portrayal of childhood experience (Malone, 2018).

The current Western institution of childhood emerged among the middle classes and was beginning to be promoted by the end of the 19th century (Gillespie, 2013; Read, 2011). Reforms to limit work and make schooling compulsory constrained children's independence in urban centres in part to reduce their exposure to unsavoury environments and experiences and thus improve the moral and physical quality of the population (Valentine, 2004). Popular depictions of 'good' parenting are predominantly of white, middle class culture. This continues in present day representations of the children of minority or poor mothers as being unruly or problematic (Read, 2011; Valentine, 2004).

In addition to the idea that childhood is a time that should be dedicated to carefree living and personal development romantic depictions that associated urban centres with moral and environmental pollution equated children's innocence with being close to nature. While rural environments were considered

'better' for children for practical reasons like cleanness and safety (Read, 2011), children were also thought to be closer to nature and therefore more suited to this environment (Ward, 1978, pp. 188-189). This association of children with nature became significant as urban centres became more densely populated and access to natural spaces decreased.

2.2 Suburban form and social values

"it is not just that the spatial is socially constructed; the social is spatially constructed too" (Massey & Allen, 1984, p. 6)

Soja (1999) states that in order to understand an individual or group's "being in the world" it is important to understand how their world came about – its history- and in doing so, to incorporate social and spatial perspectives on it. If this is correct then, in order to understand the mobility of contemporary suburban children, as well as understanding popular views of childhood it is also valuable to consider the forces which have shaped the suburban form that they live in.

The first suburbs came into being in the late 19th century as a result of epidemics that occurred amongst urban populations living in overcrowded, unhygienic and poverty-stricken conditions. At the time health and welfare problems were conflated with moral issues including drunkenness and criminality which could not be reconciled with middle class principles (Ferguson, 1994). Many who had the means left the cities for the countryside, as the view of cities as the seat of intellectual and cultural progress gave way to an image of cities as the site of sin and moral decay. However, exile to the countryside was not an option for everyone as many middle-class workers were tied to urban centres for a living. Suburbs provided a solution.

Suburbs were thought to offer a remedy to these problems because they could be planned to include natural spaces, parks and gardens. The inclusion of nature in urban spaces was thought to be better for everyone but one of the main goals was to improve the physical and moral quality of the nation's stock (Ferguson, 1994). Urban residents were subject to environmental and moral pollution that

could potentially shape their characters. In the urban planning of this time these views about the harmful effects of city life gave rise to the Garden City movement. Initiated by Sir Ebenezer Howard (2003) in the UK in the late nineteenth century the Garden City philosophy included planning for improved social and environmental outcomes. Residents of garden cities would not only live in pleasant surroundings but also be close to their place of employment and have access to communal resources.

The original colonial plan for New Zealand had been to establish a predominantly rural society. However, as towns and cities steadily grew, it gradually become apparent that this plan was not working (Ferguson, 1994; Mein Smith, 2011). The revelation of the poor physical condition of conscripts for WWI (Ferguson, 1994, p. 60) spurred the government of the day to abandon its original plan.

Because of the current concerns about the moral and physical dangers posed by towns, it adopted a strategy by which the 'rural dream' was reformulated into a 'suburban dream' (Ferguson, 1994, p. 24). Workers were to be enticed on to the path of individual endeavour and hard work by being offered a small estate of their own as a reward. The suburbs were comprised of a single dwelling on its own quarter acre section and homes were built more like rural cottages than urban residences in Europe (Mein Smith, 2011). With the potential for a garden and a degree of self-sufficiency this was like having a slice of the country in the city. Mein Smith (2011) states that from the outset some of the early colonial settlers aspired to owning a suburban plot rather than becoming farmers. The suburban dream gained popular support in the form of the garden suburb movement (Ferguson, 1994, p. 60).

Christchurch was the only New Zealand city to be designed along garden city principles and here, as in the UK, the more communal elements of Howard's Garden Cities were not realised. In New Zealand lobby groups constituted mainly of women argued for more communal suburban design at a town planning conference held in Wellington in 1919 (Ferguson, 1994, p. 77). These women also called for women to be included in the planning and design of cities. Neither of these points have been well realised. Ferguson (1994) also notes that the strong

emphasis on communal facilities in traditional Māori housing was also ignored. She argues that the eradication of traditional Māori beliefs regarding land use and occupation was an essential part of oppressing Māori land rights and legitimising colonial land acquisition. This was a key vehicle for undermining indigenous rights and culture and Māori remain poorly represented in contemporary New Zealand urban centres. Communal facilities were limited to parks and the private home as a source and symbol of personal advancement became the focus (Ferguson, 1994)

This historical focus on single family home residences persists in New Zealand today (Witten et al., 2013), with a rising demand for higher density housing currently unmet (Dodge, 2017). Addressing housing needs by converting rural areas to urban ones through greenfield development contributes to this increase, as these new residential areas are often located on city outskirts and residents have long commutes to work or facilities. The need to re-evaluate this model and the values that drive production of low-density suburban homes has been highlighted (Chapman et al., 2017; Dodge, 2017). Dodge (2017) describes planning and building regulations as having favoured the reproduction of this type of suburban form in New Zealand.

This design based on the ethos of individual family units and private ownership was no accident. The spatial arrangement of single dwelling based low density suburban form has been demonstrated to reinforce patriarchal social organisation (Hirt, 2008; Mein Smith, 2011). The role of women as housewife and mother was a key aspect of addressing the problems of public health and respectability (Ferguson, 1994, p. 60). As changing labour laws meant that children were no longer a source of labour or production in the national economy, the family unit became a valuable site of economic consumption (Ferguson, 1994, p. 60).

Significant social changes have taken place in recent decades which influence the way that life in suburbia is lived. The increased number of women in paid work means the suburbs are now lacking a significant group of people who worked to build community (Masotti, 1974). In recent years the privacy of suburban

properties has been enhanced by the trend for attached garages which allow residents to drive straight into their house (Malone, 2007). Malone (2007) argues that this trend for 'Mcmansion' development, where suburbs are characterised by fortressed properties with internal garaging and high fences are a barrier to children's interaction with their neighbourhood community.

Changing narratives of street use

Transport has always been an issue for suburbs. Ferguson (1994) notes that suburbs only really took off in New Zealand once they were adequately connected to cities by transport links. As cars have become more affordable, their uptake in the suburbs has been widespread, and several studies have confirmed that they have become firmly entrenched in daily suburban life (Dowling, 2000; Gilbert, Pieters, & Allan, 2017; Mackett, 2007). However, as I discussed at the beginning of this chapter, the collective costs are now a significant problem in many cities. This increase in traffic has also aggravated the inequalities of car dominated travel and urban form.

As Oldenburg (1999) observed the car-centric urban design poses a barrier for the mobility of anyone who does not have access to a car or the ability to drive. He decries the sprawl of suburbs which means that facilities are often a good distance from residents' homes and the consequence that those who do not have access to a car are more limited in their ability to use public facilities which are not within walking distance. Increased traffic is a more significant risk for children than adults due to the negative association of small body size with respect to visibility and scale of injury in accidents. Ward (1978, p. 11) observed that increasing traffic poses a threat to children's safety and this has been confirmed more recently by the World Health Organisation finding that road deaths are the leading killer of children (World Health Organisation, 2018), while for New Zealand children transport injury is the second most likely cause of death after illness (New Zealand Mortality Review Data Group, 2013). This seems to justify traffic being one of the major fears that parents cite as a reason for limiting their children's active mobility (Carver, Timperio, Hesketh, & Crawford, 2010).

The framing of streets as being the places for cars rather than people is the result of conscious action. Norton (2008) outlines the process as it occurred in the US in the early twentieth century. In order to maximise sales opportunities major car manufacturers combined efforts to reframe cars from luxury items to modern popular transport and establish their right to a place on urban streets. At this time drivers were often regarded as being at fault in accidents which was a limiting factor for prospective drivers. In order to change this newspaper editorials and opinions were manipulated to support vehicles as legitimate users of streets and the way of the future. This was also the beginning of framing road safety narratives which placed the onus of pedestrian safety on pedestrians themselves. By the 1920s the American Automobile Association was the main source of road safety education resources and national strategies and was effectively controlling the narrative of how streets should be used (Norton, 2008, p. 225).

Road safety messages for children generally place the responsibility for being safe on the children themselves and their caregivers. An example of road safety policy provided for schools by the New Zealand Transport Authority (New Zealand Transport Authority, 2016) states that "Road safety is a shared responsibility between the school, whānau, parents, caregivers, the children, the territorial authority, the NZ Transport Agency, and the New Zealand Police." There is no mention of drivers. The same policy also nominated controlled marked crossings – marked pedestrian crossings which are manned by an adult and children who have undergone road patrol training– as the only safe place for children to cross the street. It also suggests that children wishing to cycle to school should require permission from the school principal or a similarly high-level administrative staff member, and that children under year 4 (approximately 8 years old) should only do so with an adult.

This places pedestrians, and especially child pedestrians or cyclists, as subordinate to vehicular users in streets. It also places the onus of ensuring children's safety on caregivers and in doing so implies a need for children to be escorted by an adult in order to be safe. Road safety education tends to

emphasise that children should avoid the street and require adult accompaniment when they use it. This is in direct conflict with the promotion of CIM. However local government road user messages can take a more inclusive approach to road safety. Wellington City Council (2019) states that both motorists and pedestrians have a responsibility in road safety, and their information on road safety near schools does not frame children as unreliable and incompetent pedestrians.

One strategy for increasing active travel to school is supervised walking groups dubbed walking school buses (WSB). In their evaluation of WSBs in Auckland, New Zealand Kearns et al (2003) conclude that, while participation has some positive aspects, including asserting the right of children to walk in streets and increasing children's familiarity with the people and places in their local environment, the WSB model is accepting of the car-centric hegemony. They do little to improve children's position as street users or change views on their capability to use these spaces independently. Their success is also subject to social inequality as they rely on parent volunteers. However, a follow up study with past WSB participants found a greater receptiveness to walking as a mode of transport than in the mainstream (R. Kearns, Boyle, & Ergler, 2012).

2.3 Place as the context for Children's mobility -Children's use of public space
"How hard it is to escape from places. However carefully one goes they hold you."
Katherine Mansfield (1984)

Streets have been identified as important sites for the socialisation of urban children. Jane Jacobs includes a chapter of *The Death and Life of Great American Cities* (1961) on this topic entitled "The use of sidewalks: assimilating children". Colin Ward, Kevin Lynch and Roger Hart all record the rich experience provided by children's involvement in and use of their local urban environment. Crucial as these early works are in forming the foundations of research regarding children as capable agents and the best source of information on their own experience, their focus on children in inner cities and developing countries means there are some limitations to how they apply to suburban children.

In fact, several studies with suburban children have found they are not included in public life and the stimulating experiences this provides as described by Jacobs and others. Lynch's *Growing up in Cities* (1977), the product of the UNESCO programme Man and the Biosphere, was undertaken with children in four cities representing very different urban environments. The Melbourne, Australia group were the only ones whose experience was of a suburban environment. In Lynch's research these suburban children are described as being 'experientially starved'. They were able to meet friends in the streets of their neighbourhood but the environment "is almost perfectly unmanipulable by its children, except they can move through it…. They hope to be someplace else in the future." (Lynch, 1977, p. 48). These children were the most likely to express boredom with their surroundings.

This boredom, and the lack of accessible amenities for children and young people in suburbia, is discussed by Oldenburg (1999). Like Jacobs and Ward, he notes the stimulating and socially orienting experience available for children in inner cities and 'old' suburbs where a mixture of activities take place. He regards modern suburban form as constituting a shameful failure to connect children to the society in which they live, and ultimately the engagement required to prepare them to be active citizens. He criticises the car-centred design of modern suburbs, which places facilities for children and young people far from where they live. If there is a lack of public transport then children are dependent on being driven by an adult in order to use them. He also notes that the attitudes surrounding children's use of public spaces have trended towards seeing children as both threatened and threatening, meaning that they are often made unwelcome in the public spaces of suburbs.

Gill Valentine (2004) comes to similar conclusions about the exclusion of children from public space being as much a matter of the popular perception of children rather than physical characteristics of space. She notes that a dualism exists in the way that children are viewed as both under threat and as a threat in public space. She found that there is no link between the frequency of children's outdoor play and the provision of children's play spaces (Valentine &

McKendrick, 1997), bringing into question how significant the role of diminishing children's play space is in the shrinking of 'home range'. The concept of home range is a measure of the area within their local environment or neighbourhood that children use and contribute to knowledge about the significance of neighbourhoods for children (Gaster, 1995; H. E. Woolley & Griffin, 2015). It is often discussed alongside children's environmental experience and perceptions and has been shown to be decreasing (Fyhri, Hjorthol, Mackett, Fotel, & Kyttä, 2011; Loebach & Gilliland, 2016; H. E. Woolley & Griffin, 2015).

Another factor in the reduction of children's use of neighbourhood space is in this exclusion of children from public space generally. Valentine argues that since public space has come to be understood as adult space, children are more restricted to designated child spaces. Blundell (2016) notes that children lead increasingly isolated lives as they are shuttled between destinations. Bishop and Corkery (2017) also argue that children's involvement in urban spaces needs to be beyond "playgrounds and skate parks".

Children's mobility in suburbs

For many children car travel is the norm even for short distances[1] and regular trips. The journey to school, which is one of the main trips that children make (Bhosale et al., 2017; Malone, 2007), is often both of these . Child and education related trips are a significant proportion of increased traffic in NZ cities (Mitchell et al., 2007), and elsewhere (Tranter & Pawson, 2001). This contributes to pollution, congestion and traffic hazards. Due to its frequency increasing children's active travel to school is a focus in public health campaigns to address childhood obesity (Carroll et al., 2015), but there are other good reasons for increasing active travel to school. Childhood travel habits have been shown to influence adult travel habits (Johansson, 2005), meaning that increasing active travel by children is likely to have both immediate and long term benefits for individuals. If children's active travel is also made independently then this frees

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[1] Although there is no agreed definition on what distance a short trip is for children, research on the journey to school trip suggests that children living within 800m of school are more likely to travel by active means (Davison, Werder, & Lawson, 2008; Timperio et al., 2006).

up adults who would otherwise be chauffeuring or chaperoning (Tranter & Pawson, 2001).

Villa Gonzales and colleagues' (2018) review of campaigns aimed at increasing active travel to school concludes that they often have limited success. This is not surprising given the ongoing decline in children's active travel in many Western countries over recent decades. Children in New Zealand have one of the lowest rates of active travel to school in the world (Ikeda et al., 2018). Some researchers have used the journey to school as a measure for declining physical activity (Ikeda et al., 2018; Mitchell et al., 2007). However Malone (2018) and Hillman (2006) argue that it is a limited measure of children's mobility as different levels of independence may be granted for different journeys or destinations. To understand the decline in CIM we need to dig deeper into the factors influencing children's mobility. To date interventions that investigate the effect of exclusion from public space on children's travel is an under-researched area.

Parenting and safety
Aspiration to be a 'good' parent can (and often does) lead to parents engaging in practices constituting socially accepted norms of good parenting (Maguire & Shirlow, 2004; Tranter & Pawson, 2001; Witten et al., 2013). In some instances this can lead to local styles of parenting where certain practices become social norms. Several studies indicate that local parenting styles emerge in response to a variety of factors(Tranter & Pawson, 2001; Witten et al., 2013). Fears for children's safety is a major theme in this phenomenon and the main fears that influence parenting decisions have been identified and confirmed by a number of studies.

Some of these fears are the basis for parenting practices that directly influence children's independence and mobility (Bhosale et al., 2017; Malone, 2007). Two studies undertaken in New Zealand, Carver et al (2008) and Tranter and Pawson (2001), show that sometimes practices intended to keep children safe from danger actually contribute to that danger. They call such practices 'social traps'. Chauffeuring, the practice of driving children from location to location, in response to fears about children's safety in traffic is an example of this.

Chauffeuring is intended to keep children safe from the danger posed by traffic but at the same time this behaviour contributes to the amount of traffic and the danger it poses.

The second major fear held by parents that affects their children's access to the public realm is that of strangers. This too leads to a social trap with implications for CIM (Carver et al., 2010). As declining numbers of children are allowed out to play in the neighbourhood the lack of other children out playing leads to their not developing a social network of children living nearby and feeds this decline (Carroll et al., 2015). This also reduces the number of other local people children know. While this particular reason for restricting children's freedom is often attributed to misplaced fear of stranger danger there are some researchers who link it to the values of privatisation and individual responsibility espoused by neoliberal politics in recent decades (Hayward, 2012; Mitchell et al., 2007; Tranter & Pawson, 2001). These foster public attitudes that one should look after oneself and not "interfere in others' private matters", including sharing responsibility for children's upbringing and well-being (Tranter & Pawson, 2001).

Both of these fears have been attributed to the decline in New Zealand children's active travel compared with their parents (Bhosale et al., 2017; Witten et al., 2013), a pattern that is found in several other Western countries such as Australia, Britain, and the United States (Mackett, 2007; Malone, 2007).

CIM has been successfully maintained in some places, so should not be regarded as an inevitable part of urban living (Carroll et al., 2015). For example, Finland continues to have high levels of CIM (Blundell, 2016), and German children have been found to have higher levels of CIM than in New Zealand. This has been attributed to these countries placing a higher value on children's independence and a relatively lower prevalence of individualist ideology compared with New Zealand (Tranter & Pawson, 2001). Malone (2018) describes community based strategies in Japan, where parental fears are high, parents patrol for safety and shops and businesses enlist as safe places. These activities indicate that in these places CIM is valued and worth protecting.

The number of studies that find that both traffic and stranger fears influence CIM shows how prevalent concerns with safety are for both children and their parents (Alparone & Pacilli, 2012; Blundell, 2016; Carroll et al., 2015; Cook et al., 2015; Lin et al., 2017; Villanueva et al., 2013). However, there are some differences in how these fears are perceived by parents and children. Tezel's (in Blundell, 2016) investigation of gated communities found that children's use of the outdoor space within these communities is limited by parental fears about safety despite increased security and decreased traffic, suggesting that parent's fears are not simply dictated by features of the environment. In a now highly safety conscious society the period for which children are constantly supervised has lengthened (Bhosale, Duncan, Schofield, Page, & Cooper, 2015).

Valentine and McKendrick (1997) discuss how parents consistently overestimate the risk from both traffic and strangers. While traffic does certainly pose a risk, the chances of a child being abducted or harmed by someone they do not know are very small. Despite naming strangers along with traffic as a significant fear parents do acknowledge that the presence of these factors differs. In parents' discussion of limiting CIM because of safety fears they acknowledge that risk from strangers is unlikely but justify their action because the worst case scenario is so bad (Valentine & McKendrick, 1997). Evaluating risk is complex and parents are not necessarily able to make accurate assessments. Studies have found that perception of risk is heightened in parenting role (Eibach & Mock, 2011; Fessler, Holbrook, Pollack, & Hahn-Holbrook, 2014) while a recent investigation of UK parents found they considerably underestimated the risk to their children's health from air pollution (Laville, Taylor, Bengtsson, & Zapponi, 2017).

Performative Parenting
Valentine and McKendrick (1997) also explain the extremely risk-averse position adopted by many parents as the result of parenting as a performance. They argue that for many parents the role of parent is part of a constructed self-identity and the fear of being judged poorly in the event of something going wrong means that the default position for parents is to eliminate risk from anything that is perceived as unsafe. This argument is given weight by prosecutions of parents in

the US for child endangerment after leaving a sleeping child in the car for a few minutes (Brooks, 2018) and stories of parents providing 200 pairs of earplugs to the other passengers of an aircraft as flight 'goody bags' (Stuff, 2016).

While these examples are from the US, Witten et al's (2013) study involving parents in Auckland revealed they constrained their children's mobility in order to conform with the expectations of other parents and to avoid being judged as a poor parent. The notion of good parenting can also extend to making sure that children 'get ahead' so that they are well prepared for future competition, but this has also led to increased structure of spare time (Malone, 2007). Spending time in structured activities means more time spent under adult supervision and often leads to more chauffeuring of children as these activities often take place away from the neighbourhood where they live (Chawla, 2002).

While the impacts of long distances to amenities and the dominance of car-centric transport have been well documented as barriers to children's mobility (Sharmin & Kamruzzaman, 2017; Smith et al., 2017), Alparone and Pacilli (2012) conclude that parental fears and social norms such as the accepted rules around children's use of the outdoors, are vital factors to address when seeking solutions to the problems of children's mobility.

Children's perspectives on their mobility and the suburban environment

Although parents act as the gatekeepers of their children's mobility, as I have already said children themselves are not completely without agency. Like their parents, children identify traffic and other people as their main safety concerns or neighbourhood 'dislikes'. Nordstrom's (2010) research indicates that children's perceptions of safety are less dictated by the physical elements of their surroundings and more by their emotional and social connections. Children include teenagers as well as threatening adults and drunk people in the types of people they fear (Carroll et al., 2015) and it has been found that parental safety concerns are transmitted to children (Maguire & Shirlow, 2004; Tandy, 1999).

Cook et al.'s (2015) study with Australian children showed that a lack of destinations of interest to children in suburban neighbourhoods can lead to self-

imposed limitations on mobility as there is nowhere worth going. As previously discussed, Chawla's participants were bored by their surroundings. Children's boredom with their suburban environment, is a theme that runs throughout the literature (Cook et al., 2015; Karsten, 2005; Lynch, 1977; Oldenburg, 1999). This inability to find anything to engage with has been found to contribute to children's discomfort at being out in the neighbourhood (Carroll et al., 2015), which discourages them from wanting to be in this space.

There is no doubt that children who are able to participate in structured activities gain benefits from doing so. O'Brien (2000) too finds that some children are aware of and appreciate the range of experiences available to them through their structured activities. Hayward (2012) observes that the children in her research seem to enjoy their activities but also notes that those who live the most structured lives are the only ones to mention feeling 'stressed'. One participant in Cook et al's (2015) research commented that she was "too busy" to spend time playing outdoors.

Time spent in the car is often regarded as boring though, and several researchers have found that children would prefer to use more active modes for travelling or have greater freedom to use their neighbourhood (Cook et al., 2015; Mitchell et al., 2007; Tranter & Pawson, 2001). The reasons given for this are primarily for the social opportunities that active travel offers, the feeling that it would be a healthier way to travel, and the sense of responsibility that being allowed to travel without an adult would bring.

2.4 The importance of children's participation in neighbourhoods
'It is interaction, not place that is the essence of the city and of city life' (Webber, 1964)
Burdette (2005, p. 56) finds that despite the barriers to children's use of their neighbourhood the streets and yards around young children's homes can be socially enriching and cognitively stimulating spaces in which children can play. Matthews describes neighbourhood streets as liminal space, where children form their identities and grow their independence (Christensen & O'Brien, 2003), and Carroll et al (2015) documented New Zealand children's use of neighbourhood spaces as third places. The local neighbourhood can serve as an

entry point into the public realm and is a significant site for children's development into social beings (Chawla, 2002; Min & Lee, 2006; Sutton & Kemp, 2002).

Children's connection to their community is established and strengthened through participation (Sutton & Kemp, 2002). This contributes to self-identity (Kate Bishop & Corkery, 2017; Dimoulias, 2017) and wellbeing (Chawla, 2002). It can also extend general competence (Roger A. Hart, Fernanda Espinosa, Iltus, & Lorenzo, 1997; Sutton & Kemp, 2002), and is the source of many life skills such as negotiating social conflict, active citizenship, constructing mental maps of the local environment and knowing how to cross a road safely. Participation in or experience of the outdoors and nature is a key factor in the development of a connection to nature and action towards its preservation (Bonney, Dickinson, Fitzpatrick, & Louv, 2012; Chawla, 1999; Gilbert et al., 2017). This means that in order for children to develop into citizens who will take action on environmental issues, both the promotion of urban children's enjoyment of the outdoors and nature and the preservation of natural spaces and creatures living within urban areas are important in planning for more densely populated cities.

As discussed by Bronwyn Hayward (2012), children's experience of their environment and environmental education can have significant consequences for how they understand large scale problems like climate change and their own role in addressing them. She found middle class children were more likely to live highly structured and supervised lives, and as a result were less connected to their local physical and social environments. Children who received environmental education that emphasised the social aspects of environmental problems, or who had experience of community engagement with an environmental issue, had the best understanding of how collective action can be used to address 'big' problems. They also had the best understanding of their own ability to participate in this type of action.

It is possible that living in a neighbourhood where there is little for children to interact with may also reduce the development of their social agency, the ability to think of oneself as a participant in society. Similar to the suburban Melbourne

children living in "unmanipulable" suburban streetscapes depicted in Chawla's research (Chawla, 2002), Cook et al (2015) found that the middle suburban children in their study lacked a connection to their local area. These children had trouble with the task of imagining their own perfect city, which the researchers attribute to the inability to meaningfully engage with the public spaces in their neighbourhoods.

It is not the case that this lack of engagement is due to a lack of playgrounds or child focussed spaces. Children have been found to prefer 'unprogrammed' space, for example areas of nature or vacant lots, over planned playgrounds precisely because these types of space are more malleable and open to accommodating whatever their imagination dictates (Mårtensson & Nordström, 2017). The types of spaces that children use are often marginal, 'inbetween' or transitional spaces such as vacant lots or walkways (Blundell, 2016; Carroll et al., 2015; Skantze, 1995). Unfortunately, they are often discouraged from using these spaces as this does not fit with adult perceptions of appropriate use of these spaces or children's play.

One powerful element of stimulation is risk. The benefits of risky play are found in increased self-confidence, resilience and physical ability. The UK organisation for public space design CABE stresses the importance of using risk as a positive element in public space design in order to create quality public spaces (CABE, 2007). They argue that as cities densify having access to good quality public space, which is accessible and attractive for a wide variety of users, will keep urban living bearable. Playing it safe and eliminating risk so that designs address the worst-case scenario means that the huge potential for public spaces to stimulate and entertain users is lost.

Roger Hart (1992, p. 5) explicitly links participation and democracy. He uses participation to mean "the process of sharing decisions which affect one's life and the life of the community in which one lives. It is the means by which democracy is built and it is a standard against which democracies should be measured." Excluding children from using a space on grounds of their age, as described by Valentine, limits their ability to participate in this space. By

occupying these spaces children can lay claim to them. As stated by Kearns et al (2003) in the case of walking school buses (WSBs), children's presence in the street can help to legitimate their use of this space. In this way the use of space is a form of participation and can be an act of placemaking (Unwin, 2019) as it is a form of engaging with the discourse relating to that space. So not only does children's use of this space contribute experiences which aid their development as social agents it is also a way that children can assert themselves as political agents (Valentine, 2004).

Cook et al (2015) also recommend that urban design practitioners provide children with spaces that they can engage and connect with. To achieve this they advocate involving children in urban design processes wherever possible. Valentine and McKendrick (1997) conclude that while children need to be provisioned with play spaces with which they can interact' it is more pressing to address the parental fears that constrain the children's ability to access public space.

Children's participation in urban design
Recently there has been a shift in urban planning informed by "communicative and interpretive epistemologies" that better serve the diversity of city dwellers (Gillespie, 2013). Nevertheless, despite this shift and the ratification of the UNCRC by all but two countries, children's participation in governmental and design processes is not commonplace (Freeman, 2006). While some local governments and organisations have produced plans or toolkits for child participation (Auckland Council, 2014; UNICEF, 2018; Victorian Local Governence Association, 2014), and there are several instances of successful child participation in urban development projects (Kate Bishop & Corkery, 2017; Carroll & Witten, 2017; Derr, Chawla, & van Vliet, 2017), barriers to children's participation remain (K Bishop, 2017; Driskell, 2002).

The most common of these barriers are summed up by Driskell (2002). Outright opposition is generally based on the notion that participation would be burdensome for children and impact the carefree freedom that is their right to experience and the duty of adults to protect. Also, some adults, as ex-children,

The Ladder of Participation

8. Child-initiated, shared decisions with adults
7. Child-initiated and directed
6. Adult-initiated, shared decisions with children
5. Consulted and informed
4. Assigned but informed
3. Tokenism
2. Decoration
1. Manipulation

Degrees of participation
Non-participation

Eight levels of young people's participation in projects. (The ladder metaphor is borrowed from the well-known essay on adult participation by Sherry Arnstein (1969); the categories are new).

Figure 1 Hart's ladder of participation. Reproduced from Hart, 1992.

feel they can supply a child perspective without the additional cost and effort of including children.

Even if child participation is viewed as desirable practitioners are seldom trained or resourced for working with children and it is easy for inclusion to slip into tokenism rather than genuine participation. Hart's (1997) ladder of participation is adapted from Sherry Arnstein's work on citizen participation (figure 1), is widely referenced by those working in this area as a reliable model for considering the role of children's participation within a project.

Child-friendly cities

The term child-friendly city (CFC) is used broadly to mean urban design that takes account of children's needs and perspectives, often in the context of including children in urban design processes. UNICEF's CFC initiative is a framework that aims to support local government bodies to adopt and implement child-friendly principles. Although the guiding principles of the CFC initiative focus on human

rights and do not emphasise the environmental gains of child-friendliness, the environmental benefits of child-friendly urban design have been clearly outlined. In Bishop & Corkery's *Designing Cities With Children and Young People* (2017) the intersections between resilient cities (urban design with an ecological focus) and child-friendly city discourses are mapped out by Derr, Chawla & Van Vliet (in Bishop & Corkery, 2017, chapter 2), and Malone (2017) argues for a redevelopment of the United Nations Sustainable Development Goals around the CFC initiative principles.

Child-friendly urban design aims to be user-friendly and inclusive for children, in doing so it is also user-friendly and inclusive for other groups of people. For example, when applied to the area of transport, since children cannot drive, a CFC would be walkable and well-served by safe and affordable public transport. This implies a shift away from the car-centric forms that dominate most urban areas today. This transport model is also user-friendly for other groups of people with reduced mobility, for example people with physical disabilities or low-incomes. Apart from improved mobility the benefits of multi-modal transport and the promotion of active and mass transit modes offer a number of other benefits such as reduced transport emissions, improved amenity of public spaces, and the health and social benefits of more active transport.

Where children have taken part in urban design projects they have been found to be capable designers (Kate Bishop & Corkery, 2017; Carroll & Witten, 2017; Dimoulias, 2017; Sutton & Kemp, 2002). They are able to make connections across sections of a design problem, take an inclusive approach, and weave nature into urban settings. Often the priorities that children have in urban design projects are of benefit to wider society, for example improved safety and ability to travel actively. Their reasons for prioritising these elements are the same as adults (Chawla, 2002; Mitchell et al., 2007). Their involvement in the development or redevelopment of youth facilities can lead to participants being more closely engaged with the design outcome (Dimoulias, 2017).

While this type of formal inclusion of children in urban design has clear benefits for design outcomes, participation at the level of urban development processes

will always be adult facilitated and potentially inaccessible to some children. At present being involved in a 'high level' urban design project is not a typical childhood experience, and even many adults such as women, people with mobility disabilities, and colonised indigenous minorities, are not well represented, and the move to representative design will require considerable change. Adults, however, have the advantage of freer access to public consultations and submissions processes. At present the disconnect that some children experience with their local environment, and the lack of opportunity to act as agents hampers their ability to understand and engage with broader social processes. While it is important that this high-level change occurs, I believe it is not the only way that children can participate in urban design. According to Foucalt (1980) power is exercised at several levels within society, from broad political strategies to grass roots movements. Fostering informal participation by children in the marginal public spaces of their own neighbourhoods is a potentially valuable site for increasing children's participation and social agency.

2.5 Chapter summary

As the number of people dwelling in cities overtakes the halfway mark and is forecast to reach 70% by 2050, urban childhoods are now the norm (Malone, 2018) and children's local environment will increasingly be an urban environment. The effects of the environment on child development and lifelong health are clear and as long-term residents of cities, children can be considered as key stakeholders in urban development. Like adults they will benefit from transitioning to sustainable transport modes. Engaging in more active travel will also bring health and social benefits for individuals, communities, and the environment.

The notions of 'child' and 'childhood' are social constructs. This means that they are malleable and subject to change and influence from other popular notions which are in a constant state of flux. For some children at present childhood is a 'walled garden' and fears for children's safety have led them to being constrained in their freedom to participate in their local environment. This constraint has a measurable effect on levels of independent use of their neighbourhood and

active travel. Increasing risk aversion and changes in the way that 'good' parenting is popularly defined means that children are more closely supervised and have more structured leisure time than in previous generations. For some suburban children this means that the social space of their local environment is not only out of bounds, but also non-existent.

There is good evidence that children build a variety of skills through participation in their neighbourhood environment, including that of active citizenship and social connection. Children's participation in urban design processes in particular can lead to more inclusive and sustainable urban spaces. This inclusivity and sustainability provide broad social benefits, including offering opportunities for social interactions which build social capital and community resilience.

Marginal public spaces within a neighbourhood can offer sites in which children are able to exert their agency and negotiate the development of their self - identity. Allowing children's use of these areas legitimates their position as members of their society and participation in the public sphere. My research will focus on using these spaces to assert children's right to be in them, support their ability to engage in active and independent travel, and in doing so create opportunities for them to form personal connections with their local environment.

3 RESEARCH DESIGN AND METHODOLOGY

Introduction

My main research question asks whether framing suburban public space as potential third place could work as an intervention to disrupt the norms governing children's use of the neighbourhood and increase their independent travel to and from school. The factors that influence children's mobility and independent travel are complex. Viewing children's journey to school separately from its context of children's use of streets as public space is an attempt to take as many of these factors into account as possible. This project aimed to create a network of both people and places within a case study neighbourhood. Third place provides a framework for understanding children's engagement with these spaces but not the model for making a change. Child-led placemaking underpinned by participatory action research (PAR) methodology offers the process for creating child-friendly places within the car-dominated space of suburban neighbourhoods.

The change of behaviour sought in this project relies on the genuine engagement of participants with the spaces of their neighbourhood. If children are to be recognised as "experts and agents in their own lives"(Carroll & Witten, 2017) then the research design needs to reflect this. Shared decision-making has also been found to increase children's engagement with a project and result in feelings of ownership and connection to its outcome (Carroll & Witten, 2017; Dimoulias, 2017; Driskell, 2002). For these reasons I adopted (PAR) as the methodological approach of this research.

This research took the form of a case study and addressed the under-researched area of incidental play and socialising in the public space of suburban neighbourhoods and how this influences active travel. My research aimed to investigate experiences as well as a change in behaviour, utilising mixed-methods in the collection of data. This study follows the embedded mixed method design described by Creswell (2017, p 227-28), with the qualitative research nested within the quantitative.

In this chapter I will outline the structural framework, approach and methods used to collect data. I will also describe the research aims and provide details of the case study area and participants.

3.1 Structural Framework and Approach

The concept of Third Place

Oldenburg's (1999) concept of third place links the central themes of this research: children's independent mobility (CIM), car-centric urban design, provisions for children in the suburban environment, children's agency, children's exclusion from neighbourhood public space, and the notion that communities must be continually and actively created are all discussed as interconnected issues in his chapter on youth and third place. Because of this the concept of third place offers a view of CIM as embedded in both the physical form and social values of the environment.

Oldenburg (1999) describes car-centred suburban design and a shift in attitudes towards exclusion of children from public space as highly detrimental to children's access to third places. For children and young people access to third place is directly linked to independent mobility. He identifies both expansive low-density residential areas, sparsely appointed with communal facilities and poorly served by public transport, and the increase of traffic due to these features as contributing to children and young people's exclusion from the public spaces of their neighbourhoods. This exclusion from public space is also caused by a broader social trend which views children as problematic in these spaces because they are either unsafe or a threat (Chawla, 2002; Oldenburg, 1999; Valentine, 2004). It seems that children themselves can still see the social possibilities that these spaces offer as this is one of the main reasons they give for wanting to use more active modes of travel. Despite overall decline in children's active travel and free play in their local area neighbourhood streets and public places have been confirmed as third places for New Zealand children (Carroll et al., 2015; Witten, Kearns, & Carroll, 2015).

The fact that third places are essentially a social phenomenon means that it is not possible to simply manufacture them. However, Oldenburg does go into

some detail of the spatial characteristics that are conducive to third space. These are accessibility, inclusiveness, comfort, and providing opportunities for social interaction. The latter is broadly described by Oldenburg as conversation, which I will return to in my discussion chapter.

Placemaking

As discussed in the previous chapter, the idea that social change can simply be induced through spatial organisation has been shown to be false. In order for it to effect a genuine positive social change spatial transformation needs to be part of a collaborative social process. Placemaking is just such a process and has been used in urban planning to address change in community development. While it can be an everyday process enacted by individuals, it can also refer to the conscious process of constructing a discourse to shape a collective view of a place (Paulsen, 2010). Often controlled by elites, conscious placemaking has also been used by minority groups seeking to provide places that reflect their own identities (Paulsen, 2010; Toolis, 2017).

With its roots in the work of Jane Jacobs , principally the view that cities should be made as places for people (Kiddle, 2018), this concept also embodies the active and community-based elements which underpin the concept of third place and this research. Critical of the 'modernist' idea that environmental change can eliminate social problems (Schneekloth & Shibley, 1995, p. 197), placemaking emphasises that it is the engagement of participants and creation of a collective knowledge that are the crucial aspects of placemaking rather than any physical change.

They argue that it is the former which is the source of social change (Schneekloth & Shibley, 1995, p. 147) and talk about 'sustained and shared public dialogue about who we are and where we want to live' (1995, p. 142). Friedmann (2010) states that placemaking should not just be for elites but should be a people-centred planning process. His view is that it can be a method for marginalised people to re-establish their presence in urban environments.

This emphasis on the value of the process of engagement rather than end goal of projects means that change in CIM is only one measure of success in this study since genuine engagement with the process and the creation of places themselves can also be considered a successful outcome. This engagement provides experience and skills for the participants and can contribute to the community by way of creating social and place connections as well as helping to develop a critical viewpoint.

Sutton (2010) states that placemaking can be a beneficial experience for children in these ways as well as being an inclusive experience for those who may be marginalised in more traditional educational contexts. The philosophy of placemaking echoes Harvey's (2007) view of community as being constructed through social process and Hayward's assertation that the conditions that support democracy must be "recreated by every generation" (Hayward, 2012, p. 155) .

Toolis (2017) argues that for placemaking to truly contribute to democracy it must seek to overcome the homogenising effect of concentrating on commonality and aim to address social inequality and the diversity of histories within a given place. As children are underrepresented in urban design and suburban environments, facilitating their use of these spaces is a political statement emphasising their right to inclusion and participation. For this process to be genuine, the children need to have decision-making powers and the agency to fully express themselves within a project.

3.2 Participatory Action Research
In order for this placemaking to be an authentic expression of children's perspective, their views need to be prioritised and they should have as much agency within the project design as possible. Addressing the power of child participants in any research is important, but for this study it is a central part of the research design and is significant in a number of ways. Firstly, the participants themselves need to feel that they are in control of their participation as a matter of their wellbeing. In the context of working with children this issue has received much attention (Farrell, 2005). As children are not legally able to give their own

consent to participating in research parental consent is required. This might mean that some children who would choose to participate are not able to and can have implications for how groups of children are recruited (Alderson, 2005).

It also highlights the importance of gaining the consent of child participants independently from their parents. Farrell (2005) discusses the importance of establishing the child participant's own consent separately from parental consent as a way of building rapport and addressing the balance of power within a research project. Rather than signifying a transfer of power it should be viewed as the opening of a conversation (Farrell 2005). It has been established that children as young as four are able to understand the concept of consent and make decisions in their own interest (Alderson et al., 2006), and retain ownership of products of the research process (Farrell, 2005; O'Kane, 2000). Participatory Action methodology values the experience and insights of children, as well as being useful in establishing the processes and addressing the power balance of a research project (Groundwater-Smith, 2015).

Participatory Action Research (PAR) aims to create knowledge through a transformative process (McNiff, 2010) and has been increasingly employed in social and environmental science research (Kindon, Pain, & Kesby, 2007). It refers to both a methodological framework and range of methods and how they are used within this framework. As in placemaking, participants in PAR are viewed as co-researchers, they have a high level of input in the research design and methodology and active methods are used to create and explore research questions. The process is collaborative and does not conform to researcher-as-expert models. However, this does not mean that adopting a PAR approach bypasses the issue of power within a research project. One of the main criticisms of PAR has been that it ignores existing contextual hierarchies. Kindon et al (2007) suggest that if it is accepted that PAR is 'enmeshed in power' then researchers are forced to be mindful of the power relations and hierarchies that are present in the research context (Kindon et al., 2007). Aiming for a reflexive understanding of the power balances and hierarchies can be seen as a strength of PAR methodology.

The limitations of applying PAR in this study

In this study the ability to enable child participants to fully take on the role of co-researchers is limited by a number of factors. The first of these derive from this study being part of my work towards a Master's thesis. Not only is the study initiated by me, an adult and relative stranger to this group of children, but one of the main goals of the research is to collect data for my thesis. Traditionally the work for a Master's thesis is undertaken by an individual and is not a collaborative enterprise. This prohibits the input of co-researchers in the writing up of findings. To challenge this academic model lies outside of the scope of this research topic, so acceptance of my position as primary researcher is necessary. Similarly, the academic convention of requiring ethics approval prior to recruiting participants further limits the ability to include them in the initiation and early research design stages of the study. The practice of de-identifying children in research as a stipulation of ethics approval has been noted by other researchers as contributing to their invisibility and inclusion in academic research (Cook et al., 2015). Again, it is not within the scope of this project to challenge this model and this observation is not a criticism. I agree that a stringent ethics process is important in research, but it is important to acknowledge this as another parameter for the inclusion of children's views which undoubtedly shaped the project as a whole.

In order to address this as much as possible the research design was informed by findings from similar studies with children and the assumptions made in the design of this research were evaluated with the child participants once they were recruited. The combination of time constrains posed by the university ethics process and the school timetable also made the collection of data by some methods more difficult than others. For example, had the children chosen walking interviews as their method for providing data then I would have had to add this to my ethics application, providing specific dates and locations, and would not have been able to start this until it was approved. On the other hand the school timetable meant short times available to work in. The combination of these factors means it would have been difficult to undertake this method in a way that provided meaningful data.

The second limitation for applying PAR in this study is parental licence. Although parental consent was granted for participation in this study the participants' ability to make actual changes to their behaviour is subject to ongoing, and potentially variable, consent from their parents (Freeman & Tranter, 2015). If the main aim of this research was to confront parents with information on the possible consequences of excess supervision and restricted mobility, then a very different approach would have been taken. Instead, this study is more interested in how children might develop their agency by challenging current norms controlling their use of their neighbourhood. The first step is for them to assert their right to use this space by engaging in placemaking but sustained change in use is not solely the children's decision.

Thirdly, the use of neighbourhood public space is subject to rules set by the Wellington City Council (WCC) who are the caretaker of the spaces in question. The use of these spaces is subject to a number of rules which needed to be adhered to in order to ensure the acceptability of our placemaking. Again, the focus of this research is not to attempt to alter these rules, but to investigate what it is possible to do while working within them. As the primary researcher and facilitator of the placemaking I thoroughly acquainted myself with the WCC District Plan (Wellington City Council, 2013) rules and zoning in the case study area. These rules were readily accepted by most of the child participants but, as I will explain in the findings section, were questioned by some members of the wider school community after our places were made.

Restrictions imposed by time and budget were also accommodated by participants and for many were in fact a major consideration during the design process. Although a few children expressed the desire to create places that were not possible due to the limitations above, they were all able to negotiate these boundaries and come up with designs that satisfied their needs and were possible to make.

The limitations imposed by the academic model do not mean that PAR is not appropriate for this research. Hart's (1997) ladder of children's involvement (see figure 1, p24) places adult initiated and facilitated research at rung six, which he

describes as 'true participation' despite limits to children's participation. The ability to include child participants in decision-making and research design of the 'placemaking' phase of this project was greater and is described in more detail below. In this phase of this research children took the lead in decision making and creation of places and should be considered co-creators of the knowledge generated in this process.

For the purposes of writing this thesis these restrictions in the initiation and initial design of the project and my personal ownership of this thesis mean that I have chosen to refer to the children involved in this study as participants rather than co-researchers. This stance is reflective of the contested position of children in Western society. As discussed in my literature review, the viewpoint that children are competent agents in their own lives and can be viewed as experts in their own experience is widely accepted by researchers specialising in children's issues and is gaining hold in policy but is not always the stance taken by parents or society at large. Although this research is child-focussed with child-participants central to the project, CIM is largely under parental control meaning parents are a significant participant group as well. In my description of this research I will use 'participants' to mean the child participants, and references to information relating to parent participants or all participants will be identified as such. I use the word 'group' when referring to the child participants, myself and the teacher.

3.3 Research objectives, design and methodology

The main aim of this research was to investigate the relationship between third place and CIM, with a focus on whether the latter can be increased by using a placemaking process to further develop agency amongst children. This placemaking, guided by the concept of third place, challenged the parenting norms that constrain children's use of their neighbourhood spaces by asserting children's right to use these spaces through their development of spaces into places. The study used mixed methods with placemaking working as an intervention and source of qualitative data, and quantitative methods used to measure change. The 'main body' of the research – child-led placemaking was carried out as an educational unit at a primary school which participants worked

on over the course of a school term and utilised a range of active methods for investigating these spaces and informing the design of spaces.

Qualitative data on this experience and children's perspectives on the neighbourhood was collected through unstructured interviews with small groups where children shared their thoughts and experiences. These discussions took place at two points in the project, at the early design stage and as a reflection on the project post installation. These sessions were recorded and transcribed. I also kept a diary of significant events or communication outside of these points which included participant-initiated discussions, communication with people within the participant group and wider school community, and members of the public. All of this qualitative data was analysed in Nvivo using the method for analysing qualitative data described by Cresswell (Cresswell, 2014).

As the gatekeepers of the children's mobility parents need to be involved in any efforts to change CIM (Alparone & Pacilli, 2012) In this study they were included in the quantitative data collection and participants were encouraged to discuss what they were learning about and doing with their parents. Parents were also informed on the key concepts and issues in the information sheet accompanying their parental consent form, at an afternoon tea during which children presented their work, and through newsletter updates.

As well as measuring change the pre- and post- intervention survey was used to collect demographic information and establish how the case group compared to groups described in other research. It measured perceptions of neighbourhood safety, social connectedness, travel and use of public spaces in the neighbourhood, and the level of structure and supervision of children's travel and out of school time. The second survey also asked for participants to comment on whether involvement in the project had led to any changes in how they felt and used neighbourhood spaces (appendix 1). Due to the small sample size it was not intended to gather data that was generalisable, but rather to provide more information on the attributes and experience of the case group than the qualitative data provides. The survey was completed by parents and children separately which allowed comparisons to be made between parent and child

responses, as these have been found to be different (Carver et al., 2008). This may have helped offset any bias due to self-reporting as children and parents have different outlooks (Freeman & Tranter, 2015).

The survey drew on several findings of other studies of CIM and children's geographies. Assumptions were that the case study group would live highly structured and supervised lives; car travel would be the dominant mode of travel both to school and within the neighbourhood; traffic and strangers would be the main safety fears that constrained these children's mobility (Carver et al., 2010); and that children would aspire to higher levels of active travel and freedom to use their neighbourhood (Mitchell et al., 2007).

This research takes the view that the commute to school is just one element of the way children live in their neighbourhood, so all participants were also asked about children's wider travel habits and independent use of the public spaces of their neighbourhood. Focus on the journey to school has been used successfully as a measure of CIM by other researchers (Carroll et al., 2015; Mitchell et al., 2007), but it is not necessarily reflective of overall travel (Malone, 2018).

Participants were also asked about how socially connected they felt in their neighbourhood. As the discussion of social traps in the previous chapter demonstrates, lack of social connectedness can be a barrier to CIM, where the absence of a social network within the neighbourhood leads to less time out and about and therefore fewer opportunities for social interactions (Carroll et al., 2015).

In the second survey participants were also invited to comment on whether their involvement in the project had changed their perceptions or use of the neighbourhood. The survey was constructed and analysed using Qualtrics. I was present while all the child participants completed the first survey, and with most of the children for the second survey. The children who were in year six at the beginning of the study were provided a link to do the second survey online. Twenty-nine children and 24 parents completed the first survey and 28 children

and 27 parents the second survey, with two of the year six children not responding.

The size of the case study group meant that more places were made than were originally proposed. Because of this qualitative data collection was confined to two specific points in the research. The reasons for this were to comply with ethics approval, to be clear to the group when formal data collection was happening, and to manage the amount of material collected. In order to maintain an even gender balance qualitative data was not collected from every child. According to Chawla (2002) the original *Growing Up in Cities* framework suggests collecting qualitative data from a minimum of 10 girls and 10 boys, while similar studies have comprised of smaller case study groups (Carroll & Witten, 2017; Sutton & Kemp, 2002). In this study data was collected from a total of 22 individuals, so is comparable to other studies. The two data collection points were during a strengths, weaknesses, opportunities and limitations (SWOL) analysis in the participant's design process (22 children, 10m, 12f) and reflections after the places had been installed (18 children, 9m, 9f). These children were a representative subset of the participant group, and the ideas and experiences they articulate are indicative of those expressed by the wider group.

3.4 Research assumptions

As I have mentioned previously, limitations due to the ethics process meant that the participants could not be included in the early stages of designing this project. This meant that a set of assumptions drawn from other studies was relied upon. The data collected in the survey enabled an evaluation of how accurate these assumptions were.

After adopting the position that children are experts of their own experience and competent co-researchers, this research assumed that the child participants would hold aspirations to use the public spaces of their local environment more, and in different ways than they currently did. This was confirmed by participants opting-in to the project and their responses in the survey. The issue of recruiting from within a larger class was managed by offering an alternative community-focussed inquiry unit for those who did not want to join this project. This also

meant that it was possible for participants wanting to leave this research project could join in with another group in the class, which one child chose to do. Having around one third of the class choose to join the project was an indication that this topic was of interest to these children. Staff also commented on how the project was talked about by the class as it progressed, with many children feeling that they would have liked to be part of it. This led the teachers to decide that this inquiry topic would be extended on in the next school year both to enable some of this project's participants to continue to develop the outcomes of this project and to allow others to be involved in placemaking.

The second assumption made was that the mobility of the case group would more or less conform with findings for children of a similar socio-economic background in other research. Specifically, that car travel would be the dominant form of transport, barriers to CIM would be the same as in other research, and that these children would typically have high levels of supervision and structure in their day to day lives but aspire to more active and independent travel (Malone, 2007; Mitchell et al., 2007).

Based on observation, it was also assumed that the neighbourhood in which the case study took place was a safe environment with low incidences of the physical and social elements that are identified by children and parents as barriers to CIM. CIM is strongly influenced by parent and child perceptions of neighbourhood safety, and it is possible for these perceptions to have a significant basis in perceived risk and the notion that 'good parenting' involves reducing risk by providing children with near-constant supervision by adults rather than actual level of risk present in the environment (Blundell, 2016). This can contribute to the development of 'local' parenting styles, with highly risk averse parenting being found to be most prevalent in middle to high-income families. The urban environment can hold several risks for children with pollution, heavy traffic, having to navigate crossings at busy roads, and the absence of footpaths all negatively influencing CIM. The presence of strangers or groups of teenagers, litter and graffiti are also viewed as negative neighbourhood factors that can affect children's use of their neighbourhood(Molnar, Gortmaker, Bull, & Buka,

2004). The case study took place in a neighbourhood with low incidence of these negative features and will be described in greater detail below.

This question of whether challenging the norms governing how children use their local neighbourhood can change their use is central to this research. Building on the idea that 'good' parenting is a social construct and that local parenting styles can develop and change I have drawn on Malone's (2018) description of attitudes to CIM in Japan. She states that the value of children's independent mobility is recognised and there has been a conscious effort to maintain it. As discussed in my literature review it has been suggested that current traffic safety education which reconfirms the primacy of cars rather than people on streets contributes to parent's impression that the street is unsafe for children. Making sure that parents are aware of the benefits of CIM, so that these are included in their consideration of how they allow their children to use their neighbourhood, has been put forward as one way of addressing the decline in CIM (Alparone & Pacilli, 2012; Witten et al., 2013).

This project aimed to use child-led placemaking in the neighbourhood to directly challenge existing attitudes to children's use of the local public spaces of their neighbourhood. I also ask whether a greater involvement with these spaces can lead to an increase in participant's CIM. This research assumes that CIM is as much a social issue as one of the physical environment. While the journey to school was used as the measure of CIM, perceptions of safety and social connectedness were also measured.

3.5 Active Methods in Environmental Research with Children
Active methods are regarded as suitable for research with children as they usually find them engaging, and they can be adapted to individual abilities (Driskell, 2002). The use of active methods such as walking interviews, mapping and drawing exercises can aid communication by participants who prefer them to textual or verbal methods (O'Kane, 2000). Although this can apply to some research situations with adults, it has been found that this is often the case with younger children (Driskell, 2002; O'Kane, 2000). Active methods have also been found as preferable to more passive forms of communication (eg verbal) for

children in middle childhood (O'Kane, 2002). Locating environmental research in place has also been shown to provide opportunities for the emergence of non-dominant discourses (Milstein, Anguiano, Sandoval, Chen, & Dickinson, 2011). Creswell (2014, p. 185) notes that a natural setting encompasses the key characteristic of qualitative research, for example multiple sources of data (enabling communication by children in a range of modes), focuses on participants' meaning, and supports emergent and holistic research design.

Participatory action methods have been widely adopted for teaching of environmental issues for many of the reasons given above (Eames, 2010; Larri, 2015; Percy-Smith & Burns, 2013). The link between environmental experience and pro-environmental behaviour has been demonstrated by a number of researchers (Chawla, 1999; Kollmuss & Agyeman, 2002), and Jensen and Schnack (2006) argue an active approach should be central to environmental education because of the link between action and experience, and because it foregrounds the social roots of many environmental problems. Hayward (2012) found that children who receive environmental education based on active involvement are better equipped to understand the social aspects of environmental issues and how they can play a role in addressing them.

3.6 Applying Participatory Action Research (PAR) in this study

As already mentioned, the use of PAR in this research was limited by several factors but still proved a valuable method. Early in the research process the teacher and myself lead a group discussion of PAR methodology and the range of methods that could be used to begin thinking about the public spaces of the local environment, how these spaces are used, and how we could collaborate in sharing and creating knowledge. The group decided to use a mapping exercise to identify liked and disliked areas and combined the results of this to decide on the route for a group walk. The children took photographs on their walk to aid them in reflecting on what they saw. We also decided that I would formally collect data using small group discussions at two points in the design stage, a session utilising a SWOL method (example in appendix 2), and later on in reflecting on the project. During this discussion the methods for formal data collection were decided upon

by vote and it was at this point that we discussed consent and participation and formalised the child participant's consent on a form separate from their parental consent. The group was least keen on using interviews, including walking interviews, and focus groups methods.

3.7 The Case Study

The wider neighbourhood

Partnering with the school meant this research was carried out during school time and on school grounds. The school has a blanket permission to take children out of school grounds up to a distance of 1km as long as they are accompanied by a member of staff. This area by default became the neighbourhood that we worked in, and in fact most of the participants did live within this area.

Although there are no main arterial roads or routes that could be described as heavy traffic within this area traffic congestion at the school gate is an issue at pick up time. Parking is also a problem at pick up time and after school events which the whole school community is invited to attend. At these times the streets around the school are lined with cars, usually parked over bus stops, private driveways and in Council-owned green space. Buses are frequently prevented from being able to pass due to parent's parking, and residents often call to complain about blocked driveways.
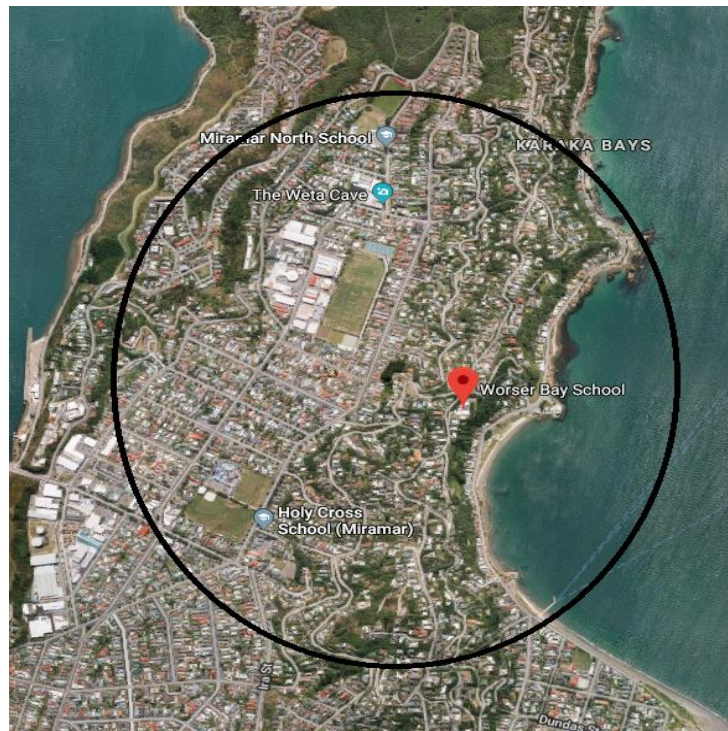
Figure 2 Map of the neighbourhood

The school itself is situated at the top of a hill but, although topography has been identified as a limiting factor for CIM, the position of the school zone running along the ridgeline and the fact that the school makes frequent use of the beach at the bottom of the hill meant it was assumed that this was not a major barrier to CIM in this case. The topography means that not all properties have a roadside verge or a clear line of sight from the house to the street. The area itself overlooks the harbour on one side and the greater suburb on the other. Comprised overwhelmingly of stand-alone dwellings, it is an established suburb with abundant greenery and mature trees and footpaths but few marked pedestrian crossings. Graffiti and rubbish are negligible as are disturbances from people's unruly behaviour, described elsewhere are contributing to a 'disordered environment' which negatively effects physical activity (Molnar et al., 2004).

The School

The school is classed as decile 10, meaning that it is located in a mid- to high-socioeconomic area. It is a relatively small school both in student population (around 200 children from new entrants to year six), and school grounds. However, the nearby beach and playing fields are utilised for school events and

recently students have been planting and maintaining native bush at nearby Council owned areas.

The school is organised into two main teaching areas, the junior class (years 1-3) and senior class (years 4-6), with several staff co-teaching in each area. The school's charter promotes inquiry lead and collaborative learning while the co-teaching arrangement means that the children are used to working in different groups and with different people. They change groups several times a day for different subjects and new groups are formed for school outings or purposes such as sports events or student council. Several groups working independently will often be in the same classroom space meaning children are encouraged to manage themselves and take responsibility for knowing which group they are in and what they are supposed to be doing and take leadership roles. Children address the teachers by their first names and although they may be assigned to a particular staff member for a particular subject, the emphasis of the overall learning experience is on collaboration and membership of the group as a whole.

The involvement of the wider community is also welcomed, and parents frequently come in to share expertise or assist with activities. Other people with special knowledge also visit for example to teach drumming or share local Māori history at Matariki. The philosophy of the school, organisation and use of space all lend themselves well to this project. This learning environment meant that apart from the paperwork of consent forms and being able to develop their designs past a prototype stage, being part of this research group didn't involve anything particularly out of the ordinary for the child participants.

A positive of this research was that I was already a member of the school community. Although my own children attended this school they were not in the year groups involved in this study and I was unknown to the majority of the child participants. I was known to the staff and familiar to some of the parents. This meant that I was received with trust and was able to build on an existing community (Hayward, 2012, p. 23). Shared place knowledge also helped my communication with the child participants as we worked together.

Participants
The Child Participants

To recruit my participants, I made a presentation on my proposed research to approximately 90 children who make up the senior class and invited them to be involved. This class was chosen because the findings of other research indicates that more independence is granted from age eight (Gilbert et al., 2017). The children who were interested took information sheets and parental consent forms home. Alderson (2005) raises a possible issue in recruiting from within a class where children who want to participate are not granted parental consent. This was considered and plans made to accommodate anyone in this situation however all of the parents provided consent and the participant group was 30 children, about one third of the class.

The children in the participant group were a fairly even balance of genders (17f, 13m) and a good representation of the ethnicities and abilities in the wider class. Two of the children in the group had hearing disabilities, one as part of a sensory processing disorder. The participants were aged 8-11 with an average age of 9. The number of children in each year group was uneven with half of the group being in year 5 and year 4 and 6 making up a quarter each. Although these proportions of the different year groups does not perfectly reflect that of the wider classroom this does not present any immediately obvious limitations for this research.

Parent and caregiver participants

Each child had one parent or caregiver who completed the surveys. These were mainly women, only five of the thirty parent/caregiver participants were male. Parents took the two surveys and received three communications during the project.

The study as an educational unit

I made an initial research proposal to the head teacher in the senior class and the school principal to do a short project involving children coming up with designs for places which would then be constructed and installed by a builder as directed by the child participants. The school responded that they were planning a community-based inquiry for the fourth term and felt that this research aligned well with the learning goals and the strategic goals in the school charter (figure 3, below) and proposed that this research be used as the basis for teaching a line of inquiry to be worked on by children over the course of a term. I then worked with another teacher in the senior area to develop the research project into an inquiry unit to take place one or two afternoons per week for twelve weeks. The original proposal was informed by my previous research on environmental education, and remained fairly unchanged in terms of methods, issues and guiding principles. The teachers felt that having the children make and even install the places would be a beneficial educational experience. This was also beneficial in terms of this research as it provided the opportunity to follow placemaking process more closely. As the longer time frame made this possible the project design was amended accordingly.

Figure 3 School charter - strategic goals. Retrieved from
https://drive.google.com/file/d/1hbbUVp8ETy1KlUuUJQFXcrXhgT1XJirl/view

I also developed two presentations and formulated plans for the different methods that were offered to the group. The first presentation described the key

ideas in the project – an introduction to urban design, transport modes, and the concepts of social cohesion, social capital and third place - and was used to recruit participants. The second presentation was given to the participant group to suggest how the spatial characteristics of third place could be used in placemaking and initiate a group discussion on third place experience. In order to describe these characteristics succinctly and in a way that is accessible for children I adopted the terms 'sticky places' – those places that are comfortable, interesting and attractive and make you want to stick around (Toderian, 2014) - and 'bumping places' which attract users to one spot and in doing so create opportunities for interacting (Reynolds, 2017).

Apart from enabling the child participants to fully engage in placemaking, having more time also meant that a good rapport developed within the group. Adapting the research for a term long inquiry project did mean a slightly larger participant group than anticipated but the school setting made it easier to form a stable group and made it easier to gather as a group. This setting provided a familiar place for the research to take place and meant other trusted adults were present. Teachers provided advice on the information and surveys given to the children and parents as well as expertise on group management and communication for the project. School communication systems were used to communicate with parents and the wider school community about the project during its duration and afterwards.

Children need outdoor experience but also environmental education that provides information for them to understand wider issues (Hayward, 2012, p. 53). By partnering in this research, the school benefitted from having a well-defined inquiry topic, knowledge on this subject provided by the researcher, and a budget with which to build items. The principal commented that it was also pleasing that children's work would contribute to the wider body of knowledge rather than staying 'inside the classroom'. Child participants benefitted by being involved in a topic which interested them as well as making changes to their local environment that were of immediate benefit rather than 'future children' as is often the case with larger and longer-term projects (Alderson, 2005)

The school environment may also have contributed to some of the limitations of this project. It is adult controlled, and other studies suggest that school based studies may influence participants' responses (Honkanen, Poikolainen, & Karlsson, 2018). In their updated review of CIM intervention studies Villa-Gonzalez and colleagues (2018) found that schools were frequently involved in research on CIM.

4 FINDINGS

Introduction

In this study child-led placemaking provided the qualitative data through an action research approach. Its main objective was to explore how children would use placemaking to make the streets of their neighbourhood more social places. This process involved the development of a tangible research output and acted as an intervention for reframing these neighbourhood streets as appropriate places for children. Pre-and post-intervention surveys provided quantitative data on the case study group's characteristics, perspectives and travel modes. The overarching research question was whether claiming children's right to use the public spaces of their neighbourhood through placemaking could address the social norms which govern their use of these spaces and influence their active and independent travel. Since parents are the gatekeepers of children's independence and travel, they were included in the intervention formally by way of information delivered through newsletters and a presentation. Children were also encouraged to talk about the project with their parents.

In this chapter I will provide descriptions of the places that were made, an analysis of the key themes that emerged in this process, and how it was received by the wider community. This is followed by an analysis of the quantitative data collected by the pre- and post- surveys with summaries of the most significant patterns. Quotes have been edited for clarity and parentheses indicates a word has been supplied.

4.1 Qualitative data – placemaking

As discussed in my methods chapter authentic engagement with the placemaking process is as important as the goal of the placemaking project. Inasmuch, the placemaking aspect of this research serves two purposes, to provide qualitative data on children's placemaking in their neighbourhood and also as an intervention for increasing children's independent mobility (CIM). This data was collected in two main sessions – firstly at the strengths, weaknesses, opportunities and limitations (SWOL) analysis stage of design and secondly as a

reflection at the end of the placemaking stage. Additional observations, communications, and events were also recorded in a project diary on an ad hoc basis and included in the thematic analysis. Working from the question of how to increase third place in our neighbourhoods, this thematic analysis looked at two main areas- What did the children create and why? and What did children gain from their placemaking experience?

With respect to the first question, the children's designs addressed the question of 'How can we increase third place in our neighbourhood by making changes to existing spaces?' Their discussion was analysed to answer the questions 'What do children add to the public spaces of their neighbourhood to create space which could support third place?' and 'What factors do they consider in their design process?'

To aid them in their designing the group discussed the concept of third place and the interplay of spaces and social interactions. It was agreed that third places cannot be simply manufactured as they require sustained informal participation from a number of individuals. This meant it was necessary to break down the concept of third place to concentrate on the characteristics of physical space which encourage social interactions. We employed the concepts of 'bumping places' – space designed to encourage the likelihood of local people bumping into each other regularly- and 'sticky places' – public places which are attractive and encourage users to linger. Both of these concepts relate to how physical space can encourage spontaneous informal social interactions. When this placemaking is led by children it challenges the perception that these spaces are not appropriate places for children.

4.2 Places made by children to increase third place in their neighbourhood

When considering what to add to the neighbourhood the children began by thinking about what was already there. They made maps of the area and marked liked and disliked places. The group then discussed their thoughts and planned a route for a group walk around some of the most significant sites they had identified in the local area. This was followed by a brainstorming session where

the participants made suggestions for things that they could make. Once participants had an idea of a design and or location which they wanted to work on they formed smaller groups in which to work together.

The group had developed the concept of third place during group discussions, using the ideas of 'sticky places' and 'bumping places', and applied these ideas to the public spaces in their neighbourhood. Once participants had formed small groups with a particular design focus, they undertook a SWOL analysis to evaluate their design. The data collected during this elicited some clear themes that will be outlined in the findings section.

The WCC District plan dictates that resource consent is required for any item to be fixed in place. As the consents process can be difficult and costly to navigate and likely to pose a barrier for children this was accepted as one of the limitations of the space. As a result none of the items were permanently fixed in place, they were loosely tied with rope or simply placed. The exception is the native trees which were permanently planted in an area of open space B, as 'planting' is a permitted activity in this space (Wellington City Council, 2013).

Map of placemaking sites

Figure 4 Neighbourhood places: 1 & 2 Birdhouses, 3 Fidget Board, 4 Swing, 5 Mini-library, 6 Native Plants, 7 Chess Set, 8 Fairy Door and Swing, 9 Dream Postbox and Lost Property, 10 Mini-library, 11 Teepee, 12 Theatre Curtains

Neighbourhood Places

In total twelve places were made. The following section provides a photograph and description of each with a brief rationale of the design. Numbering relates to the position on the neighbourhood map provided.

1 & 2 Birdhouses

These two houses are placed in separate locations. The rationale behind this design was that encouraging birdlife will lead to more opportunities to watch birds, an activity that is accessible to a wide range of people.

Figure 5 Birdhouses 1 and 2

3 Fidget Board

A painted wooden board with a variety of items attached (wheel, light switch, beads, chalk holder and blackboard area) for children to play or 'fidget' with. The creator of this board observed that there is not much for small children to engage with in the neighbourhood. It was intended to go on a wide roadside verge to attract children away from the road.

Figure 6 Fidget board

4 Swing

This swing was created by two participants but the idea for having a swing here was supported by a number of the participants. This area of open space was described as boring by the children who wait here for their after-school care arrangements. Several children expressed a dislike of parents parking on the grass here after school. The swing adds an activity to an otherwise unengaging location.

Figure 7 Swing

5 Mini-library

This library is located at the bus stop adjacent to the open space. The rationale for this design is that people waiting for a bus might be bored so this will provide them with something interesting to do. Users are able to borrow the book for as long as they want or keep it if they donate another book.

Figure 8 Mini-library at bus stop

6 Native Plants

A variety of native tree species were planted in this grassy open space. Like the bird houses, this place is designed to encourage birdlife and will ultimately become a relaxing space for people. These participants are working on a booklet containing information on native plant and bird species found here through which they can share their knowledge with the community.

Figure 9 Native Plants

7 Chess Set

Originally a three-drawer cabinet with a chess board painted on top and instructions and chess pieces stored in the drawer, this place was the only one to be vandalised. This group had a partially completed second set which was then finished and placed at the same site. This consisted of a single drawer with chess board on top, and pieces and instructions stored inside drawer. This set was loosely tied to a bench so that it could be placed on the bench to use and stored underneath at other times. This design adds interest to this site by offering an activity and the opportunity for social interaction through playing or learning chess.

Figure 10 Chess Set

8 Fairy Door and Swing

This place consisted of a tyre swing and fairy door in adjacent trees. Added to a site that has good amenity in the way of public toilets and tables the participants perceived this area as being underused. The placemaking items adds entertainment for users.

Figure 11 Fairy Door and Swing

9 Dream Postbox and Lost Property

Comprised of a wooden box on long legs, the box has a mail slot on one side and a lift-up flap on the other. This place provides a landmark for lost property to be left at and the dream post box assists members of the public to articulate their aspirations.

Figure 12 Dream Postbox and Lost Property

10 Mini-library

This was made from a converted cabinet and stocked with books. This library aims to address the fact that adult beach-goers are often there to supervise children and could enjoy their time in this place more if they have something to read.

Figure 13 Mini-library

11 Teepee

An open canvas tent with bamboo poles. Eight to 10 year olds are poorly provisioned for at this playground. The play structures are mainly designed for younger children and although it has a popular tree hut in the adjacent undergrowth area this is mainly used by older children and teenagers and is out of bounds for many of the participants in this group.

Figure 14 Teepee

12 Theatre Curtains

These transportable fabric curtains can be hung in different spaces acting to transform the space into a place for putting on a show. Opportunities for social interaction arise through devising, performing, and/or watching a show.

Figure 15 Theatre Curtains

4.3 Key themes in the design process

Once the items were in place observation and communications relating to them were recorded in a research diary as they arose. The items all had a note explaining that they were a temporary installation and were part of a research project, this note also had an email address so that members of the public could get in touch. The email address was provided in case any problems arose with the items, in the hope that any concerned members of the public would contact the researcher rather than the council. It transpired that no issues were reported this way but several members of the public did use this to give positive feedback. The analysis below incorporates the feedback associated with a particular theme.

Inclusiveness

Although this research was presented to the participants as aiming to address children's use of their neighbourhood, the children themselves were concerned with how their designs could be used by a wide variety of people. For example, the design of swings was carefully considered to make them suitable for the widest possible range of physical abilities.

"But it would be something that the elderly people can sit in." (9 year old girl)

"It would be something for all ages I think." (10 year old girl)

Some of the designs addressed a perceived need for a particular demographic, for example an activity board for preschool children, or books for parents

"Yup. 'Cos when I go to the beach I rarely actually see the adults playing or anything. They're just sitting there." (9 year old girl)

This concern with catering for those who were otherwise poorly served by the neighbourhood spaces fell into two types; building on an existing place to give it wider appeal or addressing a perceived lack.

Building on existing places

Within the neighbourhood area there were pre-existing signs of other people's placemaking. Several of these were mentioned by participants as 'liked' places in discussions about the neighbourhood and some were visited on the neighbourhood group walk. These places offered inspiration for the participants ideas and some groups wished to engage directly with them.

Figure 16 Inspecting the 'Fairy corner' on the group walk

Interviewer: "So we could build on what other people have done?"

C: "That's what I thought! [That's what] I was wanting to do!" (9 year old girl)

There were a few places around the neighbourhood which were described as favourite places by multiple members of the group. One of these is the nearby beach which is well used by the school as an extension of the school grounds,

and well used by school families as well as the wider community. The beach has public toilets, picnic tables and a large grassed area, making it a comfortable public space which some children identified as being a third place for them. However, three groups identified items that they felt would give this place wider appeal and enhance its potential as a third place.

One group felt that, although the area was well appointed, it could be better used if there was a bit more on offer:

> "'Cos it's just like a beach with toilets and benches, but not a lot of people use it a lot. But because we are adding a swing more people might maybe go there and spend the qualities that they already have." (10 year old girl)

This participant is pointing out that there are useful facilities provided in this area but that it is not an attractive place because it lacks interest. In her opinion the public would get the most out of the facilities if there was also a swing here to add entertainment.

Figure 17: Young children using the swing

This group added a swing and a fairy door to an area of grass near the picnic table and toilets but at a distance from the water. The rationale was that their item would add attractiveness to a space that already had good amenities but was underused. The design of the swing was carefully chosen so that it could be used by a wide variety of people, and particularly so that it would be suitable for smaller children to use. The placement of this activity away from the water was viewed by the group as creating a safe place which would make it easier for child minders.

This place was well received by the community, with one member of the public sending an image of her pre-school children using it (pictured, figure 17) along

with a message of appreciation. Over the summer a birthday party was held at this spot precisely because of the amenities that it offered (Parent participant, personal communication, 4 February 2019)

Another group felt that the beach area was a good third place for children but that it was lacking in interest for accompanying adults. Adding a library to this place means adults would have something to do and children would get to spend more time at this place.

> "We know that the beach is really cool but … sometimes the adults or some people might not want to particularly do that type of stuff." (9 year old girl)

Contributing to the community

One participant was inspired to improve this popular area by providing a location for lost property to be collected at after observing that there were often items left behind at the beach. However, his design also had a second purpose and was described as a 'lost property and dream mail box'. The posting of a dream was intended to help members of the community to identify an action that they want to take, and through that process, make them better able to take action. This idea of increasing capacity within the community was also a theme in other groups' work.

Some of the participants felt that by adding something that wasn't there before they could attract a wider variety of people to use an area and also add skills to the community.

> "We chose that place because it didn't seem.. that interesting. Some people go there just for the view, but we could make a bit more people come if we added something new there. So we had the idea of doing a chess board. So people can interact with other people and learn how to play chess, if they wanted to learn." (10 year old boy)

The theme of addressing a lack or providing something which people could use was also discussed in the context of other people in the community mis-using our

places. In one group's SWOL analysis of adding an edible garden to an open space area, the participants discussed how the community could use it:

M: "If they're fruit plants then people can steal the fruit."

A: "But why is that a bad thing?"

E: "But that's not a bad thing. The point is that people can look after themselves."

A: "And use them."

E: "Yeah, and use them." (9 year-old boys)

Here we see the participants articulating their understanding of how their place could be used by other members of the community. As part of the brainstorming session on potential things to make the group as a whole discussed the possibility that places could be mis-used or stolen and decided to accept this as a risk. As mentioned earlier items were loosely fixed in place by tying with a rope to a fixed object or simply placed.

Design limitations

The realities of how other people might use or mis-use a place was just one of the factors that participants talked about when trying to come up with a realistic design. Safety of users and budget were both factors that were considered by the participants. Overall participants were well-aware of the limitations in which they were they were working. Although a few shared fantasies, this was often accompanied with a comment that they knew that this might be unachievable.

"Talking about chair-bombing.. made me think something. [What] if somebody got an armchair and attached it to ropes and it would be like an arm chair swing (laughs). Except that it probably wouldn't work because the ropes would have to be very, very, very strong!"
(9 year-old girl)

The few individuals who had an idea that wasn't going to be possible were able to reach this conclusion on their own as they worked through the design process.

These participants managed to find an alternative design which satisfied their wider goal. Often this adjustment was made with the help of a peer, for example the 9 year-old girl who gently pointed out to her workmate that planting bird-attracting native tree species would be a more realistic and longer-lasting way for them to increase the native bird populations in the area than releasing pairs of birds.

Some initial ideas were not compatible with the district plan rules, but these rules were accepted and remembered throughout the design process by at least some participants. For example, during a discussion of how to make sure people found their place, one 10 year-old boy recalled that there were restrictions for signs.

> M: "People in cars, they'll just drive past them… So maybe we could do a sign saying 'Play chess for free here!'"
>
> C: "Come and play chess!"
>
> B: "'Cos didn't you say we could have a sign up for a little while?"
> (10 year old boys)

Safety

The safety of users was a high priority for many of the designers, who considered how to make their design safe for a range of different users. For example, in both the placement and design of a swing:

> "The younger ones could play on it, instead of going too far to the beach…. And it's closer to the ground so it's not too high up in the air." (10 year old girl)

Some groups also discussed how to ensure that the area they were adding to would remain safe once their design was in place.

> B: "We could weed out the bottom bit so it's like a little bit of hill."
>
> A: "But that will encourage people to go down there."
>
> B: "Oh yeah, I don't know if we really want that. So maybe a fence would be a good idea. Or you could not even need a fence, you

could just write a sign saying 'watch out!'" (9 and 10 year old boys)

Some participants considered their own safety and ability to install their design and elected to employ a builder to help. They provided explicit instructions on their design in the form of a letter and were present to oversee the swing being installed.

Budget

The project had a budget for materials and the group was aware of this. Participants were conscious of the realities of budgeting, although some design groups doubted others.

> "I think some of these people aren't thinking about their
>
> budget as much." (10 year old boy)

In fact, the cost of materials, in particular quality materials, and use of materials was considered by several of the design groups.

> "No nice strong rope is cheap. The thing is, I tried to find the
>
> cheapest rope and none of it was that good." (9 year old girl)

> "That would take too much resources" (9 year old boy)

Current users

How the design could potentially negatively affect current users was another common theme. For some this meant considering how to make their design in a way that added another use to the space without detracting from how it was currently used. In the example of adding a chess set to a lookout, the designers were concerned that their installation did not clutter up the place for those simply wishing to enjoy the view.

> "Some people might just like sitting down. If people come to sit
>
> down the chess boards will be in their way." (10 year old boy)

Others considered the opinions of residents and whether they had any special rights over the use of public space next to their home. For example, the Fairy Door and Swing group considered residents opinions when discussing potential

problems with placing their swing.

> I: "Private property because peoples' houses are in front of that area."

> C: "And, no, but it's across the road."

> I: "Which they might, which they might prefer not to have a swing there, so you'd have to ask them."

> C: "but technically it's on the beach side so people…"

> M: "But we might need to make sure they're fine with it." (9 and 10 year old girls)

Another group took the opposite view, wishing to address a current use that they identified as problematic, and using their installation to change the way in which some members of the community were using a space. This example is discussed in detail in the next chapter.

Trees and more-than-human thinking

The participants gave several reasons for the importance of trees. These reasons could be categorised into two main types. Firstly, the place of trees within ecosystems, and secondly the provision of benefits offered by trees such as shade and places for swings. Two participants explicitly linked trees with the concept of third place. One participant was emphatic about trees as an essential feature for third place, using the example "you would never have a third place in a sausage factory!". Another participant used her observations of birds in a particular tree when clarifying how she understood non-human life related to the concept of third place.

> "What I thought is that there is this tree right in the school playground. Usually if there are not that many people around, maybe one or two, you can see a lot of little birds hopping from branch to branch. I just saw that and I [thought] well, what happens if we made that for animals? And how would we do that is [to] make it more like places where there's not so much motion [and] electricity and more like just greens and a lot of trees so it just

means more animals come there…People might want to go places

to just look at the animals."   (9 year old girl)

In her understanding, third place for humans could be encouraged through the development of animal habitats, in a sense offering spaces that could be animal third places. By developing these places for animals more animals will be present, which offers an attraction for humans who may also be able to experience third place when they visit these places.

This participant was not alone in viewing the cultivation of the natural world as the basis for creating a neighbourhood environment that is conducive to third place. As noted above, the groups who put up bird houses and planted native trees did so with long-term benefits in mind.

Extending the concept of third place

As the above examples show, the participants in this research were able to both break down the concept of third place in order to understand the spatial characteristics of third place and how these might be created, and to take a long-term view of this as a process. The participants also extended the concept through the inclusion of non-human life. However, these findings indicate that the element of conversation that is part of Oldenburg's concept of third place is also apparent in these designs. Many of the places made invite written communication by writing a dream or a message on a chalkboard, or simply interaction with the place by using it.

4.4 Key themes from reflections

The process of reflecting is an important part of the PAR method. It provides an opportunity to evaluate the engagement of participants in the process as well as the understandings that have come out of it.

Personal satisfaction

Participants were generally positive about their experience in this project. They enjoyed the freedom to come up with their own ideas and also to be able to carry them out. In describing how they felt about the project the children used the words 'fun', 'happy' and 'proud'. This was equally true for children who thought

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being part of the project had changed the way they used the public spaces of their neighbourhood as those who did not.

> "It was really fun to be honest. Way fun making it and painting. Fun
>
> to play chess." (10 year old boy)

> "I was proud of the swing and stuff that my old school made." (10
> year old girl)

Personal connection

When asked to reflect on whether the project had changed the way that participants felt about the places we had used, many agreed that it had.

> I: "Just because you have put this much effort into it.."

> C: "You have to put your heart into it. You can't be like "I guess I
>
> will""

> I: "Yeah. It has to be something that you personally want to do and
>
> you personally want to put your effort into." (9 and 10 year old girls)

This personal connection and the sense of satisfaction that was expressed as resulting from it suggest that this project contributed positively to the participant's well-being.

Social Connections

Through this project several of the children reflected that it had led them to think more about the social connections that they had in their neighbourhood.

> "After this I've really started thinking, I've been thinking about..
> Because my mum said that.. she's been telling me stories about
> when she was little. And she would go around the neighbourhood
> and she'd know everybody in the neighbourhood. Now, because
> of all the technology, you don't really know anyone in your
> neighbourhood."   (9 year old boy)

Others felt that their connectedness and social opportunities in the neighbourhood had increased.

> "I have definitely felt different and I think my community has been
> stronger. There was even a Birthday party there 😁" (10 year old
> girl)

Critical view of their neighbourhood

Several children remarked the way they thought about their neighbourhood had changed.

"[This project] shows that our community was lacking a bit in this sort of stuff. Just with where we walked there was so much empty space. So much less stuff than I would've expected. And it definitely showed a lack of third places and things to do. In [neighbouring suburb] I can see it a lot more.. there's the park in the middle, there's the park on the outside, there's the beaches. It's all really well used" (11 year old boy)

A: "I didn't really think of it as a bad neighbourhood until now."

Interviewer: "Do you think it's a bad neighbourhood now?"

A: "No." (8 year old girl)

This second quote expresses the participant's process of considering the positive and negative aspects of her neighbourhood and coming to the conclusion that she lived in a good place.

4.5 Community engagement with this placemaking

There were also conversations with members of the wider community sparked by these places. Some of these I was part of and others were reported to me by participants or members of the school community.

Most of the places had a tag with my email address on it. This was so that I could be the first point of contact if members of the public had any complaints but in fact the three of the four messages I received were from people who said they liked a particular place. As I was checking on places I also met a few of the residents who lived adjacent to them. As I was making adjustments to the swing by the beach two men came over to ask if I needed any help. They remarked that their children used the swing a lot and were surprised when I said that it was part of a research project I was doing. They had seen me as someone looking after a

place that they valued and were willing to help me with this. The residents who lived next to the Awa road open space were very supportive of our placemaking and joined in by caring for the plants. Because of this they had conversations with myself as well as other parent participants.

Both of the swings needed a bit of adjusting once they had been up for a while and it was apparent that I was not the only person doing this at the Awa road swing. Someone else made some changes to the rope length and the way that the tyre was attached. The tepee also had some obvious attention. Apart from being taken up and down it acquired some written messages including "My name is Sebastian. I am an entity of my own right. Be kind to me."

It was possible to observe community of some of the places by seeing how the books in the libraries or lost property changed. Some items were added to our places, like children's furniture at the beach library. This was used by beachgoers for a few weeks and then disappeared. At Christmas time some small containers labelled 'inspiration and fun' were added to the Awa road library. These contained ideas for things to do like 'sing your favourite song' or 'watch some birds'.

Figure 18 Furniture and games were added to this mini library

A transformation of space to place

While the changes discussed above indicated that the wider community was engaging with the place it does not mean that there was necessarily a change in how the space was used. However, there was one place where a noticeable transformation occurred. On our group walk several of the participants agreed that a particular tree, positioned on a gentle slope with a nice view and lots of sun and just across the road from the school, would be a good place to hang a swing. The site itself was not used by people except for at the end of the school day

when it was used as a parking space by some parents. Many of the children expressed their concerns and dislike of this behaviour as they felt it created a dangerous situation for the children leaving school. As the cars had to cross broken yellow lines and a footpath at an intersection which is busy at this time of day, these concerns seem valid. As this area is classed as 'open space B' in the WCC District Plan it is illegal to park here.

The school itself shared the same concerns and had tried to discourage parking on this site by placing messages in the school newsletter and, on occasion, contacting parking enforcement officers. There had also been some consideration of addressing this problem by doing some placemaking on the site. The school is situated on the site of *Whetukairangi Pa* [traditional Māori village] and would like to better acknowledge this. There had been a plan to place a *pou whenua* [Māori land marker post], but these plans had become complicated and were put on hold because *iwi* [local Māori] had not yet been consulted and urgent structural work arose which used up the funds (J. Pentecost, personal communication, 29 August 2018).

Two of the participants decided that they would work on putting a swing here and duly come up with a design that they felt would be good for this space. It was put in place on the same day as another group's native plants were planted at the same site (they were careful to plant away from where the swing would be). The residents who lived adjacent to this site were very supportive of the group's placemaking activities in this area and expressed a hope that it might discourage the illegal parking. These residents subsequently joined in the placemaking by tending to the plants, staking and tying them up, as well as offering the use of their outdoor tap for watering.

The swing group were pleased with their idea but concerned that, by placing the swing in an area used for car parking, they could be creating a hazard. To address this they decided that parking here was the problem and it should be discouraged. To do this they made a sign that read 'No Parking, Keep Kids Safe' and erected it on the site. The initial school community reaction to this was mixed. Some parents respected its message straight away and were observed going to park there and then moving their car on seeing the sign. However, a few others continued to park there. In order to reinforce their message, the swing-makers made their own parking tickets which they placed on the cars and put a notice in the school newsletter (pictured, fig 19) during the final weeks of the school year.

Figure 19 'No Parking!' notice that appeared in the school newsletter. The children are holding the parking tickets they made.

This claiming of space appears to have been successful. At the time of writing this, six months after the placement of the swing, staff and students have reported that they have not observed any parking in this space at all. Instead there is often a gathering of people in this area using the swing and chatting. The swing is used by the wider community and has been added as a local orienteering checkpoint (Participant parent, personal communication, 20 June 2019).

This placemaking is an example of successful PAR achieveing a change within a community. These participants identified a particular problem in this space and used this project to address the problem. Placemaking enabled the participants to use their agency in articulating the problem, producing a counter-narrrative to challenge the norm that was operating and reiteratating this narrative to effect a change in how the space was used. Engagement by the wider community added to this reiteration and enabled a change from space to place to occur at this site.

Figure 20 Before the placemaking- heavy traffic and cars parked in open space

Figure 21 After the placemaking -people using open space

4.6 Summary of qualitative data

This data shows that the participants understood the concept of third place and were able to relate it to their own neighbourhood. The consideration they put into their designs, and the success of the places they made show that they engaged well with the project.

The participants reflections also indicate this and that they gained a sense of achievement, greater personal connection with the spaces of their neighbourhood, and a more critical view of their neighbourhood through their placemaking.

5 SURVEY RESULTS

Introduction

The survey was used to collect demographic information and establish how the case group compared to groups described in other research. This enabled an evaluation of how accurate the assumptions made in the initial research design were. It measured perceptions of neighbourhood safety, social connectedness, travel and use of public spaces in the neighbourhood, and the level of structure and supervision of children's travel and out of school time both before and after the placemaking intervention. In the second survey participants were also asked to comment on whether involvement in the project had led to any changes in how they felt and used neighbourhood spaces. In this chapter I will outline the main themes that emerged from this data.

Participant perceptions of neighbourhood safety

In the pre-intervention survey overall children and their parents reported that they regarded their neighbourhood as being a safe place. Most respondents said that their neighbourhood was either safe or very safe, with only one child and one parent responding that it was unsafe or somewhat unsafe. Although this seems to confirm that the participants considered the neighbourhood to be a safe environment, other findings from the survey suggest that perceptions of safety are not simple or completely coherent.

When asked if there were any things in the neighbourhood that were unsafe the speed of vehicles was the major factor chosen by both children and parents. Volume of traffic and difficulties in crossing roads safely due to the characteristics of the roads (narrow, winding, no pedestrian crossings, large intersections) were other major issues for children. Taken collectively issues relating to traffic represented about 60% of the safety issues for children. Perceived traffic hazards have been identified as a barrier to CIM (Carver et al, 2010; Tranter and Pawson, 2001)

The second most significant issue identified by parents was 'natural hazards'. For both groups 'strangers or bad people' were not considered to be a significant

risk. Children regarded this as more significant than their parents but equal to 'not knowing many people'. All participants were able to name as many risks as they chose, and on average parents appeared to perceive higher levels of risk than children choosing 2.26 to their 1.38 in the pre-intervention survey. There was little difference depending on the gender of the child.

When comparing the pre- and post- surveys there was no real change to how safe children or their parents perceived their neighbourhood to be with most participants describing it as safe or very safe in both surveys. However, there were some changes to the perception of which things in the neighbourhood were presented as a risk. In the second survey both groups identified fewer safety issues, and the variety of safety issues also decreased. This could be because taking part in the project caused participants to think about their perceptions of safety and how their experience fitted with these perceptions.

Traffic issues were viewed as the biggest risk and made up a bigger proportion of the responses for children in the second survey. More children responded that it was a problem that they did not know enough people than that there were dangerous people around. Parents did not view 'not knowing many people in the neighbourhood' as a safety risk.
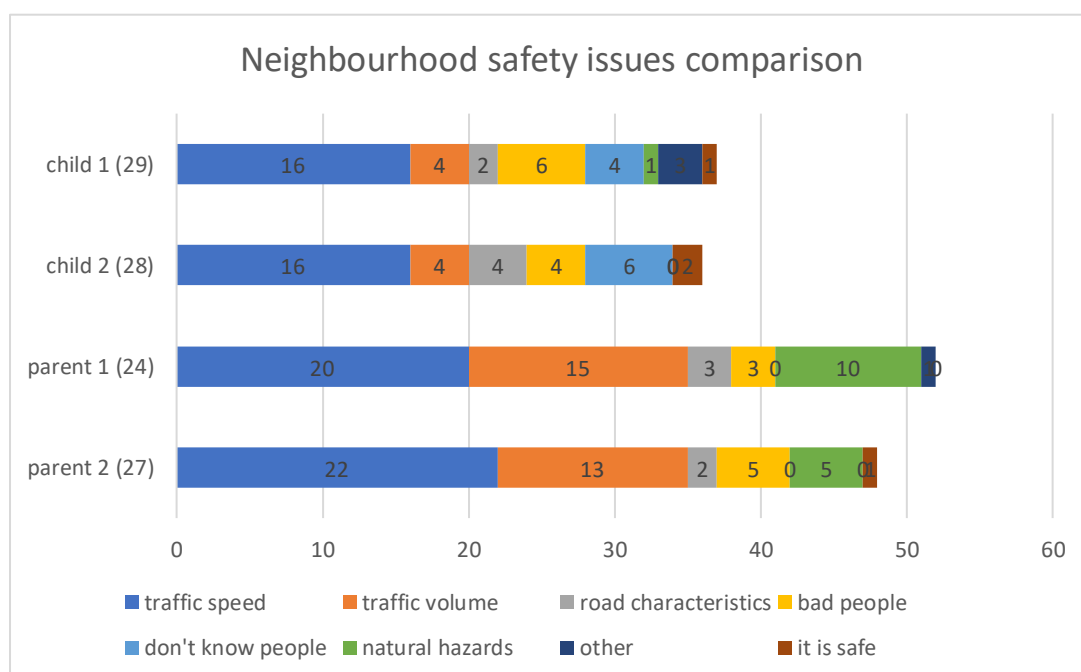

Figure 22 Identification of neighbourhood risks by group in first and second surveys. The number of respondents is shown in brackets

Transport mode and child independence

As expected, car travel was the dominant mode for these children. In the pre-intervention survey over half the children (55%) and their parents (65%) reported that the car was the way that children travelled both for the journey to school and around the neighbourhood. Car travel was the way that most parents travelled as well, with 82% of parents naming this as their primary transport mode.

As has been found in other studies the children in this group aspired to more active modes of travel with 86% initially responding that they would prefer to travel by walking, bike or scooter and only 11% nominating the car as their preferred means of travel. Public transport use was fairly low with only 14% of parents usually taking the bus and no parents or children reporting any child use of the bus in the first survey. The second survey showed some of the children who had moved on to intermediate school now used the bus.

Although active travel was clearly preferred by children, 21% wanted to travel with an adult. Independence from adults was aspired to by more than half the children however, with 46% of those who wanted to use an active transport mode wanting to do so just with friends and 14% alone. In this first survey only 5 respondents reported usually travelling to school without an adult.

At the end of the project the car remained the main way that children travelled but there was a slight increase in active travel reported by both children and their parents. In the first survey child and parent responses both indicated that a third of child participants travelled to school using active transport (33.5%). After this project children reported a slight increase in active travel to 38% but parents responded a larger increase to 44%.

The level of independence in the journey to school changed more significantly than the level of active travel overall. In the second survey the number of children who reported usually travelling to school by active means without an adult increased to 35% (from 16%). In terms of the number of children this is a change from 5 to 11. This change was mainly in the behaviour of boys. This increase

appears to come from boys who previously travelled by car. The girls reported a slight increase in independent travel despite an overall decrease in active travel.

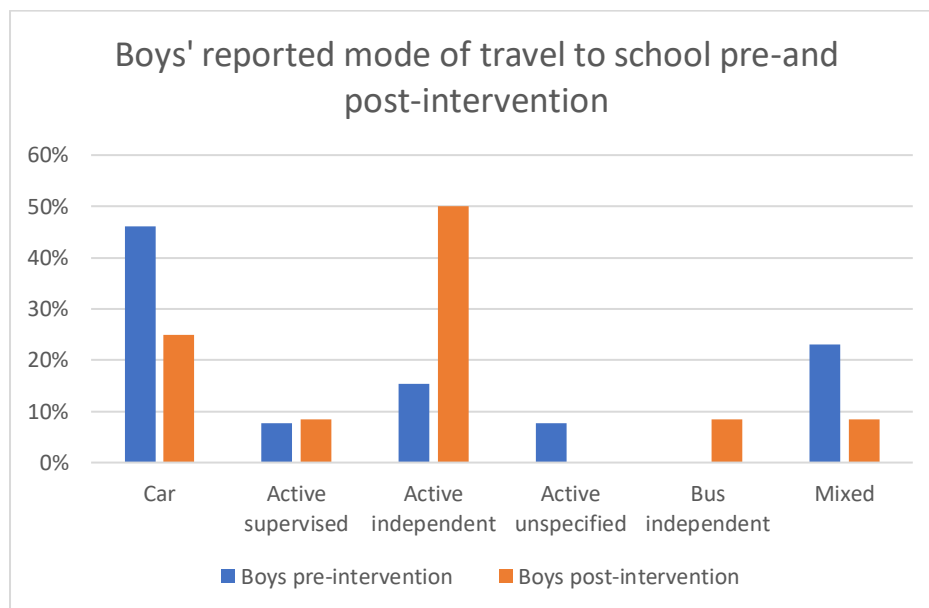**Figure 23 Boys' reported mode of travel to school**
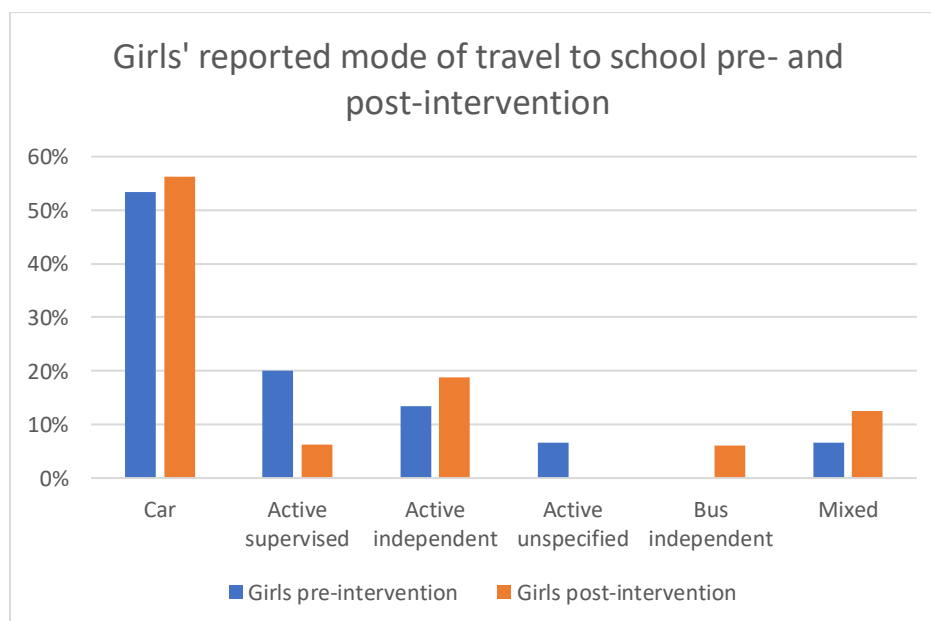
Figure 24 Girls' reported mode of travel to school

The travel modes that parents report in the second survey indicated an increase in active and independent travel for boys and girls. But as shown on the previous graph (figure 23) the girl's responses only corroborate an increase in independence rather than an increase in active travellers.
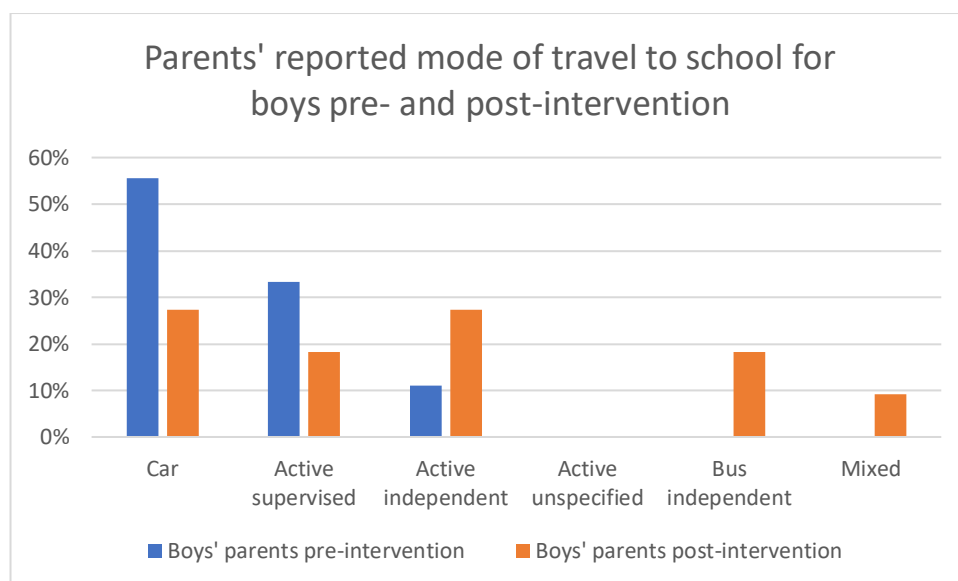
Figure 25 Parents' reported mode of travel to school for boys
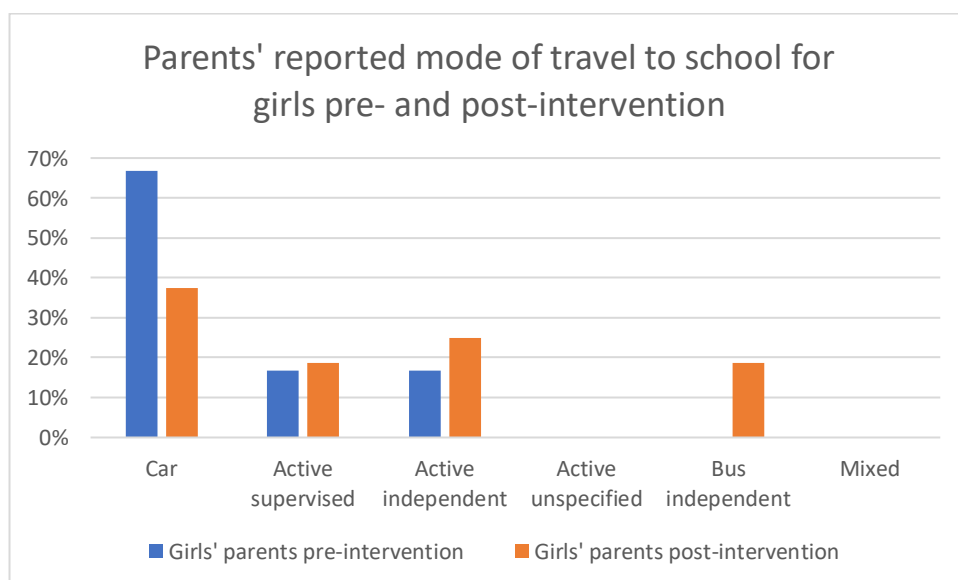
Figure 26 Parents' reported mode of travel to school for girls

In terms of independent use of the wider neighbourhood, initially 82.14% of the children reported that they sometimes went to places within their neighbourhood without an adult. However, their response was much higher than the parental response to this question with almost half of parents saying they never let their child travel without adult supervision.

Figure 27 Level of independence by age from pre-intervention survey

Gender made a difference to the children's responses to this question with 75% of girls and 92% of boys saying they sometimes went unaccompanied at first, but in the second survey this dropped to 65% and 62% respectively. As noted parent responses did not corroborate the children's responses in the first survey or the second survey. Parents initially reported that 50% girls and 60% boys were allowed out at least sometimes, which increased to 80% girls and 70% boys. Although there appear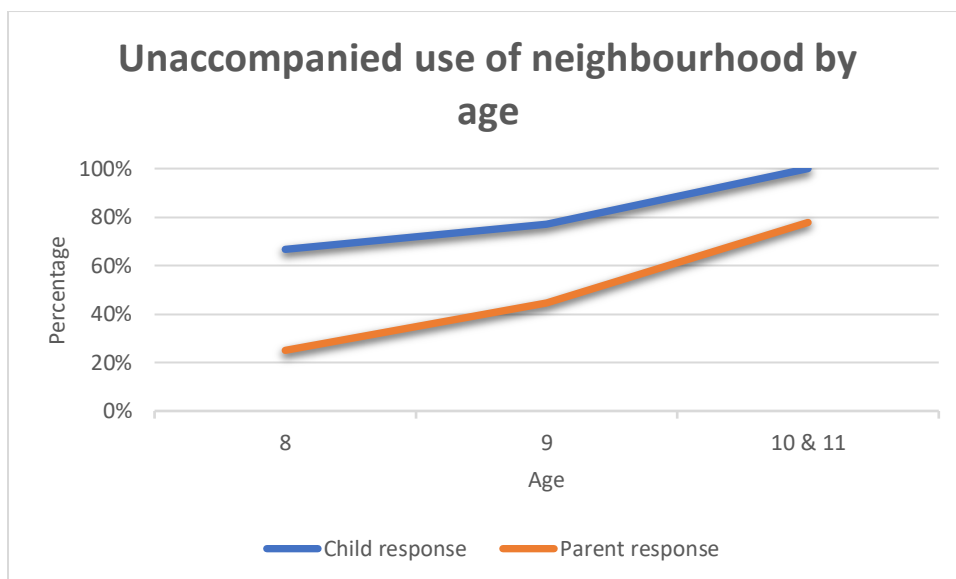ed to be a correlation of increasing independence with age in the first survey these mixed responses mean it is unclear how much independent access these children really have to their neighbourhood.

One explanation for this could be that child participants developed a more accurate understanding of their constraints while parents came to value independence more and were more open to allowing their child greater freedom at the end of the project.

Of the children who were routinely accompanied by an adult on the journey to school more than half were allowed to travel or play independently within the neighbourhood. The different allowances for independent travel to school and around the neighbourhood supports other findings that the journey to school is not a complete measure of child independence.

Supervised play and structured leisure time

This pattern of adult accompaniment or supervision in travel appears to extend to the location of children's play and structure of leisure time. When asked where children usually play private houses were the main location for play both at the beginning and end of this project. Parents reported higher levels of play at either the child's own home or that of a friend or relative than children. Children in the case study also did a number of out-of-school activities, with girls participating in somewhat more of these than boys. On average the children had activities on three days a week but 42% of children were reported to have activities on four or more days.

The results of the second survey showed the number of days on average that the children had activities remained at three. There was an increase for boys while girls stayed the same. The boys' level of structured activity increased to 64% having three or more days with activity which was still significantly lower than the girls 81%. This change was corroborated by child and parent responses.

The places that children played did show some change. The average number of places that each gender named inverted. On average girls named 1.93 places in the first survey and this increased to 3.13 in the second, while the boys named 3.15 at first and this dropped to 1.36 in the second survey.

Social connections within the neighbourhood and power in social issues

When asked if they know people in their neighbourhood the children's overall response showed a slight decrease in how socially connected they felt. When broken down by gender there was actually a slight increase in girls' connectedness and a slightly larger decrease in boys' connectedness. Parents also reported a slight decrease in how connected they felt but no change in how connected they felt their children were. It is possible that involvement in this project made participants more aware of the importance of social connections and so they were more likely to choose this option. This reported decrease could be part of a more critical awareness of their position in the neighbourhood. In the second survey girls were more likely to say that they had met someone new

or got to know someone through making these places so this could explain their increase in social connection.

Children also reported a decrease in how much power they felt they had with regard to broad social issues. This decrease was the same for girls and boys. This conflicts with comments made by the children indicting that the project had demonstrated children's ability to make meaningful change in their community.

Gender differences

While the sample size is too small to reliably demonstrate a gender bias, there were consistent differences in the responses given by girls and boys. All of those who said they would like to travel alone were male and all of the children who chose car as their preferred transport mode were female. The levels of perceived safety of the neighbourhood were also higher for boys, who were also more likely to play somewhere other than their own or a friend's house. As well as having a bigger variety of play spaces and using more public spaces for play boys apparently had less structured play time with only 40% of boys initially reporting structured activities on three or more days -the average for the group- while 60% of girls were above this average.

While the number of activities for boys did increase in the second survey, the girls' level of structured leisure time remained higher. Boys were also significantly more likely to choose the top response to the question "how much power do you feel you have to work with other people on big issues such as homelessness or ocean plastic?". While none of the children chose the lowest option, this indicates that boys are more confident in their feelings of agency.

When these findings are considered together it appears that the girls in this case study were more constrained in their use of the neighbourhood and had more structured leisure time. They also reported feeling that they knew fewer people in their neighbourhood and were less confident thinking of themselves as social agents. As noted above, although girls' level of active travel may not have increased as much as boys they continued to aspire to it.
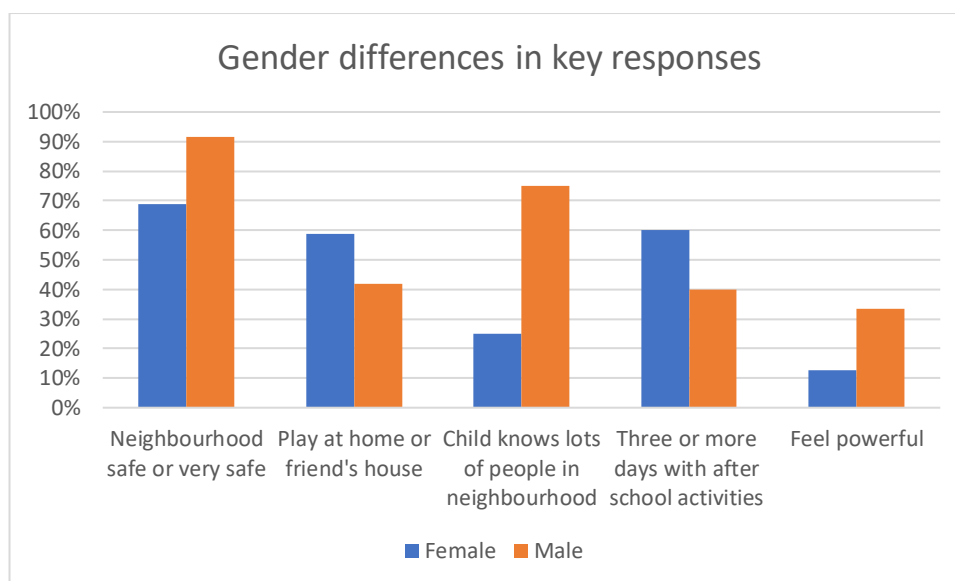
Figure 28 Gender differences in key responses pre-intervention

After the placemaking intervention girls were more critical of how the narrow and windy roads with large intersections and few pedestrian crossings added to traffic risk. But they were also more likely to assert that their neighbourhood was a safe place. More girls stated that this project had changed the way that they felt about their neighbourhood and that they had met someone new through the project. This could explain the increase in their feelings of social connectedness.

Participant corroboration of answers

Collecting child and parent responses separately allowed for comparison of data. While this produced some mixed results, it may have helped to offset any bias due to self-reporting. The small size of the case study group means that any anomalies in the data add to these mixed results.

Children's responses about cars as the dominant mode of transport and traffic speed the biggest hazard in the neighbourhood were corroborated by parents fairly closely. The view that this was a very safe neighbourhood for children was also agreed on however parents felt this more strongly with 87% of parents and 79% of children reporting that the neighbourhood was safe or very safe. Location of play and number of activities were also collaborated.

Parents generally reported less child independence than the children themselves did. As noted above in the first survey increasing independence with age was

reported by parents and children but the level of independence reported by parents was lower. This was particularly true for the difference between boys and their parents as 91% of boys reported being allowed to go places without an adult at least sometimes but only 50% of their parents made the same response. This difference could be explained as children wishing to seem more independent, parents wishing to seem more attentive or a combination of both. Parents also gave a higher response for their child 'knows a lot of people in their neighbourhood' at 86% while only 46% of children gave this response.

Having separate parent and child responses on key measures was useful even given the small number of participants. It was useful to be able to compare responses, noting where responses were similar or contradictory. Generally, child and parent responses corroborated each other but in a few instances they produced a mixed result.

Parent reasons for using the car

The main reasons given for using the car for the school trip were time and distance. In the second survey convenience was named as a third main reason. Safety was not a major reason parents gave for using the car for this trip either before or after this project, with weather being given as the reason as often as safety.

As discussed earlier the neighbourhood in which this study took place was assumed to be a safe environment due to a lack of the main physical barriers to CIM. The surveys confirmed that the participants shared this opinion. The initial survey also indicated that despite this perception that their neighbourhood was a safe place, the children in this study had high levels of car use for their travel and were fairly constrained in their independent mobility and use of neighbourhood public space. This finding is in keeping with the profile described in the literature relating to other studies of CIM, which shows that children from higher-income families are often more closely supervised than other socio-economic groups.

Parents reported that friends, other parents and media were the main sources of information on children's safety in their play and travel. While two parents responded that they got information from their own observations or work experiences, no parents directly mentioned public service campaigns or public information programmes as a source of information. Schools are often used to deliver these programmes but only three parents gave school as a source of information.

Parent views on increasing CIM

When asked what would make parents more willing to let their children use their neighbourhood the most common responses were the child being older and reducing traffic hazards. The child having increased life skills and competencies was the next highest response. The fact that skill and competency was ranked lower than age as a factor for granting more independence indicates that this group of parents placed more emphasis on the age than their level of experience or capability. This would mean that they may overlook the importance of gaining experience and skills in road safety when deciding how much independence to grant their child, instead assuming that competency simply increases with age. While child's age and traffic hazards remained the most common reasons in the second survey traffic hazards increased significantly as the major factor for constraining children's use of their neighbourhood.

Additional information from the post-intervention survey
As in the qualitative reflection on the project, children were asked if involvement in the project had changed the way they felt about their neighbourhood and if it had changed how they used their neighbourhood. If they answered 'yes' they were asked to comment why. They were also asked if they had met any new people through the project.

Both boys and girls said that this experience had changed the way they felt about their neighbourhood with 86% answering 'yes' and giving reasons such as:

"yes, it made me feel more connected." (9 year old boy)

"a lot because of all the cool places I did not know about before"

(10 year old girl)

"yes, because I know there's other people who live near me"

(9 year old boy)

When it came to whether involvement in the project had made a difference to how they used the public spaces of their neighbourhood fewer children reported a change. But this was still over half the participants. In this instance 67% of boys reported a change, which was higher than girls' 56%. This finding is consistent with the different findings for change in travel mode for girls and boys. Alternatively, the problem of self-reporting may be apparent in this question as six girls indicated that they weren't sure if they used neighbourhood places differently while only one boy did. It may be that girls are less willing to assert that a change has happened if they don't feel that they have a reliable measure to base it on.

More girls than boys responded that they had met someone new through the project with only four boys and 7 girls responding yes. As noted above this is consistent with increased social connectedness reported by girls.

Parents were asked whether they thought children's connection to their neighbourhood was linked to their wellbeing and whether active travel was linked to their development of life skills such as being able to cross a road safely or make a mental map of the area. For both of these questions, more parents of boys answered that they were closely linked. The significantly lower response from parents of girls suggests that girls' use of their neighbourhood was not viewed as being so important by their parents.
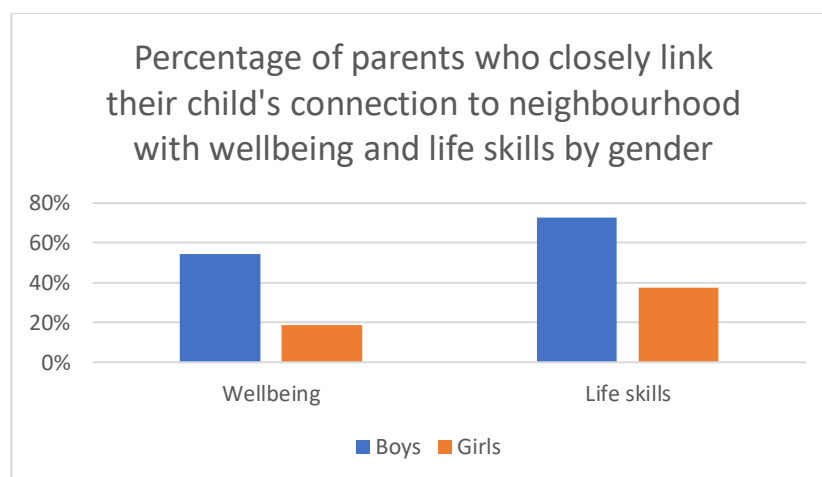
Figure 29 Percentage of parents who closely link their child's connection to their neighbourhood with their wellbeing and development of life skills

Parents general comments about the project were positive. Several remarked that being part of this had changed the way they valued their children's use of their neighbourhood, with just over half of parents saying they now valued active and independent use more. This response was similar for parents of both genders.

> "This has been an empowering project for my child and has deepened his understanding of kaitiaki in our neighbourhood and local environment. Has encouraged me to support my child more in taking ownership of his local community and that his actions can have positive outcomes for everybody." (Parent of 10 year old boy)

5.1 Summary of survey findings

The surveys confirmed that generally the assumptions made in the initial research design were accurate. As expected children's mobility in the case group was dominated by car travel. This was confirmed by both children and their parents. In accordance with other research children of both genders aspired to more active travel, with boys showing a stronger preference for more independence in their mobility.

Boys reported higher levels of active travel after this intervention. Independent travel also increased for boys and slightly for girls.

Boys generally spent more time in the neighbourhood, reported feeling safer and had more confidence in their agency. Girls had less independence and more structured leisure time, with their parents placing less importance on their neighbourhood experience for their well-being and development of life-skills.

Parent and child responses generally confirmed each other but parents reported lower levels of children's independent use of their neighbourhood despite feeling that their children's safety and social networks were higher than their children reported. The main sources of information on safety and independence in children's travel for parents were informal with parents relying on media reports and peers for this information.

6 DISCUSSION

Introduction

My main research question asked whether framing suburban public space as potential third place could work as an intervention to disrupt the norms governing children's use of the neighbourhood and increase their independent travel to and from school. Inspired by Lynch (1977) and Chawla's (2002, p.64) remarks on the situation of suburban children who live in an environment that is "perfectly unmanipulable" (Lynch, 1977) or so devoid of interest that it is perceived to be a "wasteland" (Kyttä, 2004), and as a result boring and unattractive to them, this project aimed to enable children to engage with the public spaces of their neighbourhood in a way that would then also engage the wider community. The child participants' travel habits and attitudes towards their neighbourhood were measured before and after the placemaking intervention by way of a survey.

Children's connection to the people and places in their local environment is developed both by using these spaces and drawing others into doing so. This process also legitimises children's presence in these spaces and as active members of society (Valentine, 2004, p. 111). As parents are the gatekeepers of children's mobility (Alparone & Pacilli, 2012), they were included as participants in this process by filling out surveys and being informed of the children's placemaking through a presentation and newsletters. Interactions and engagement with the public were recorded in a research diary.

In this chapter I will discuss the main themes that came out of this research in relation to the existing literature. Firstly, how the placemaking project worked in relation to Hart's ladder and as an example of Participatory Active Research (PAR), and the main themes that emerged from the participants' experience.

Secondly, I will discuss the places made by the children and how these were received by the wider community.

Thirdly I will set out an argument for how the previous two items support an extension of the concept of third place.

Fourthly, I will discuss the parents continued perception that traffic poses a threat to the children in this neighbourhood and whether these findings suggest placemaking could be an effective intervention for increasing children's independent mobility (CIM) and active travel.

And finally, I will discuss how gender emerged as a factor that influenced these children's travel and experience of their neighbourhood.

6.1 The placemaking project

As Kindon et al (2007, p. 13) and Schneekloth and Shibley (1995) state, genuine engagement by participants in PAR process is as important as the project's outcomes. The placemaking that came out of this research is the result of the participants' genuine engagement with the project. Moreover, the quality of the places that were made and their success in appealing to other people resulted in an authentic transformation of these spaces from marginal spaces into places of real community value.

The genuine engagement of the child participants, and their share in decision making in how the research took shape places this research at step six of Hart's ladder of participation (figure 1). This is considered genuine participation, rather than a form of non-participation such as tokenism. Although the research was adult-initiated, the children held a degree of autonomy and decision-making that that meant they were able to express their ideas and act on them.

What participants gained form the placemaking experience

The physical act of creating something was fulfilling for many of the participants. They enjoyed the opportunity to take their ideas beyond the prototype stage and found the process of making their place a positive experience. They expressed satisfaction at seeing their own and other places in the project and felt proud that they had been made by children.

> M: "It shows that kids can do stuff as well. Change things."
>
> B: "And.. it shows that people shouldn't underestimate kids just because of their age." (10 year old boys)

Placemaking worked well as a method for the child participants to take action in changing their local environment. After electing to participate in this project they were able to contribute their ideas and understandings in group discussions, organise themselves into design groups and take the lead in constructing the places they designed. Within the case study group there were a variety of approaches taken. One participant worked on his own and seemed to be fairly uninterested in the project during school times. He did not contribute much to group discussions and was often not on task in the design sessions. Despite this apparent lack of interest in the project at school he participated in the project on his own terms by constructing the *Dream Postbox and Lost Property* at home.

This contrasted with the *Fairy Door and Swing* group who were especially proactive in elaborating on the design and construction processes as they saw fit. At one design session this group stated to me that they thought it would be valuable to get the opinion of their peers as to what type of swing to make since they wanted it to be as popular as possible. They suggested to me that they needed to do a survey. I had reservations about this as I envisioned these participants spending hours making tally marks on a clipboard. After deciding to encourage them to make the choice themselves I returned to the group to offer my opinion only to find that they had already prepared a survey, emailed it to all 90 or so of their classmates and were asking the teachers to remind everyone to fill it out. The results of this survey helped them to decide the type of swing to make.

They were also very proactive about the swing installation. It was decided that, since these swings were being installed in public areas, it was important to ensure they were as sturdily constructed and installed as possible. A builder was engaged to do this, but the group provided thorough instructions on the location, construction, and appearance of the final product in a letter (appendix 3).

The appearance of the places was important to all of the groups. Some children developed or learned new skills, for example sewing (*Teepee* group) or using a cordless drill (*Mini-library* and *Fidget Board* groups) in constructing their places. Painting was a good way for the participants to transform their items. Although

some of the items needed to be painted so that they could withstand the weather better, for many the painting of their item was an important aspect of the process of making it look the way they wanted it to. Several items that were already durable were painted with different colours and designs. When instructed by the teacher to use the white paint to make his *Dream Postbox* more watertight, its creator was horrified. His item was intended to look a certain way and white paint would not do. Instead we got some clear varnish for his item, which he was satisfied would not detract from his design.

As well as having the agency to make changes to their local environment the children were just as pleased to see other people using them.
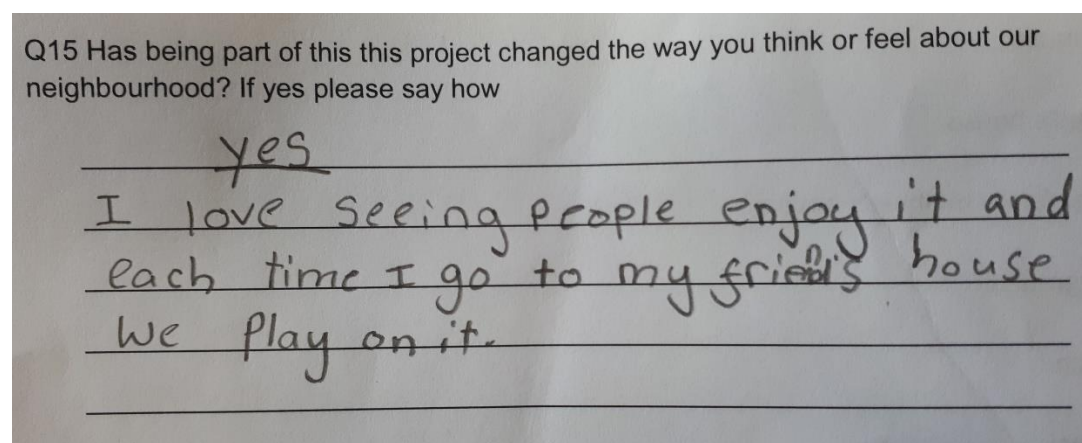
Figure 30 Yes. I love seeing people enjoy it and each time I go to my friend's house we play on it." (10 year old girl)

Some commented that they felt both personal satisfaction and a personal connection with the place they had made and several remarked that the latter extended to all of the places made in the project, not just the one they had worked on. The connection to these places seems to extend to the participant's wider families in some instances, with one parent commenting:

> "All three children are proud of the contribution [N's] project
> made. It has been pointed out time and again, and we travel
> now specifically to play there." (Parent of 10 year old girl)

Through this project new networks were created for the children. These were both social and spatial. Children commented that they now knew where other people lived, noticed people and places more, and felt connected to more places.

Figure 31 "Yes. It made me feel more connected." (9 year old boy)

The new places also serve as landmarks for the wider community. For example, the local orienteering club has included the Awa road swing as one of the checkpoints that must be visited on their course.

The children reported an increase in the number of places that they went to in their neighbourhood. It is a limitation of this study that the mapping exercise that the participants undertook at the beginning of the project was not repeated at the end. This would have provided a quantitative measure of whether familiarity with the area had increased.

Children's interest in their neighbourhood increased too. They visited new places and met new people.

> "Well I've seen lots of new places that I don't really go to often.
> I've seen some places that I've thought 'Oh yeah! There's some
> stuff there. I'll go there easily'." (9 year old boy)

Figure 32 "Definitely, because now I notice people more on the neighbourhood swings beaches and other stuff." (9 year old girl)

This increased connection seemed to be part of an ongoing relationship with these places as participants made comments about habitually looking for the places that were made through this project or taking actions such as watering the plants.

Being part of this project also helped the participants to think about their neighbourhood in a new way. They formed a more critical view of their neighbourhood. The main criticisms of the neighbourhood concerned the roads and how they were difficult to cross, for example naming a lack of pedestrian infrastructure or large intersections.

> "I always thought our neighbourhood was really safe but now I think about it with this project there are things that could be improved." (9 year old girl)

The lack of local places that were interesting or good for socialising was also commented on.

> "[This project] shows that our community was lacking a bit in this sort of stuff." (11 year old boy)

As well as seeing problems in a lack of places to socialise, participants were critical of behaviours such as screen time replacing time spent outdoors. These issues were not mentioned in the information given to the children at the start of this project, but several children gave this as a reason why people do not know as many people in their neighbourhoods as in the past. This has also been given as a reason for the decline in children's outdoor play by researchers (Bhosale et al., 2017; Carver et al., 2008). The expression of ideas that were not initially part of the information given to the participants indicates that they were extending the scope of the concepts they were using and thinking analytically and forming a critical viewpoint of this subject.

The ability to form a critical viewpoint of the public realm has been linked to the ability to be an active citizen (Cook et al., 2015; Hayward, 2012) and encourages participation in democratic society. It is developed through participation in a

social process where the learner actively engages in problem solving (ten Dam & Volman, 2004).This critical mindset was apparent in children for whom there was no change in mobility as well as those who did report a change.

It is possible that this kind of placemaking can go some way to ameliorating the lack of experiences in the public realm that independent and active travel provide. Kearns et al (2003) suggest that the walking school bus could be a way of recovering some of the recent loss in children's mobility and goes some way towards maintaining their right to occupy streets as pedestrians. This study suggests that placemaking projects could be a way to develop children's connection to and sense of place in the public space of their neighbourhoods.
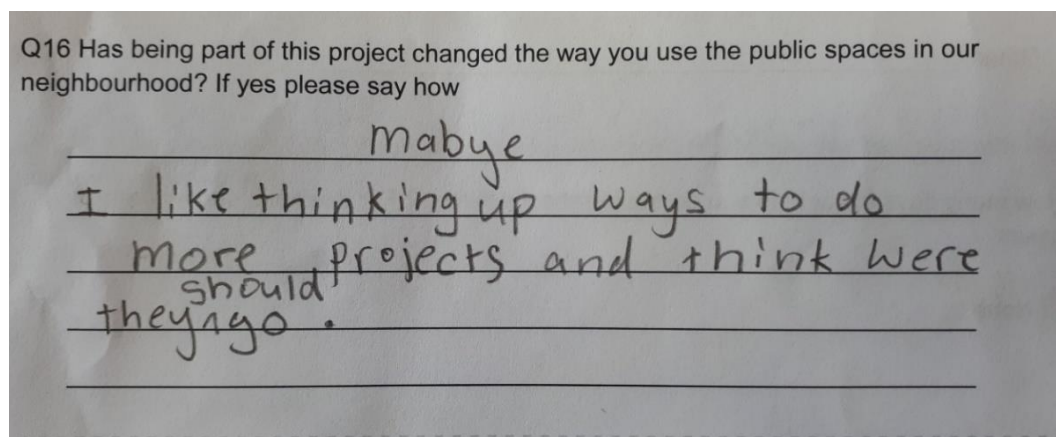
Figure 33 "Maybe. I like thinking up ways to do more projects and think where they should go." (10 year old girl)

6.2 Our placemaking as third places

The data collected from the children's design process showed they were considerate of the diversity of people and uses of these spaces and aimed for inclusive designs. They also responded to existing public facilities and community placemaking in the area. They were able to use the concept of third place and apply it to their placemaking to make inclusive and comfortable places.

The *Fairy Door and Swing group* are one good example of this. In their discussion of the location that they had chosen the participants considered not only the existing amenities at the site, which has public toilets and picnic tables, but also how their design could encourage people to use this space more. They drew their inspiration from three nearby examples of community placemaking.

Some of them had enjoyed spotting 'fairy doors' in the suburb of Titahi Bay, and they all admired the local 'Fairy corner' (see figure 16, p 61). This group were keen to extend this fairy theme by making doors but they also wanted to add something that was more interactive. A nearby swing was another popular spot for many participants, so much so in fact that many complained of long waits in order to have a turn. This swing is so popular that the tree it hangs from was exempt from felling when those around it were removed by the council for safety reasons (George, 2018). The participants designed a swing that could be fun for people of a variety of ages and physical abilities to use.

This space was subsequently used for a children's birthday party because of the addition of the swing (Parent participant, personal communication, 4 February 2019). These designers showed a better understanding of the need for third places to be inclusive and comfortable than the designers of the 'experimental sidewalk parks' criticised by Jacobs in Life and Death (1961, p. 82). These experimental parks were ultimately unsuccessful as their lack of toilets and places to sit limited the people who could comfortably use them. Seats were purposely left out of these parks in order to discourage people who were not from these areas and "might not fit in" from staying. Their lack of comfort and facilities meant that the nearby residents might be expected to provide these things at their houses, which would create the need for hosting. If someone must play host then the place cannot truly be 'neutral ground' and this prevents a third place from developing (Oldenburg, 1999, p. 22). This lack of comfort meant that these parks did not become popular even with locals. The *Fairy Door and Swing* designers saw that this particular area had many of the facilities that were needed for people to be comfortable but there was nothing to interest users in the area.

As I have described in section 4.5 it was possible to observe community use of many of the places by seeing how the items at them changed, or the place was altered by other people. Although there was no formal measurement of community engagement in this study these observations along with messages from members of the public and participants showed that people were

interacting with these places and each other because of them. The use of these places by the public shows that the children in this project were successful in engaging the wider community in their placemaking. They were able to read their community well and respond in ways that added to their local area and contributed to community.

6.3 Expanding the concept of third place

The concept of third place has been expanded by other researchers. For example, in Ducheneaut et al (2007) and Soukup's (2006) application to virtual social space and Carroll et al (2015) addition of friend's houses as children's fourth places. The findings of my research suggest another way of extending the third place concept with respect to the way in which it supports conversation.

As I have said earlier third places have a crucial social function. Because they are accessible and comfortable for a broad range of people they are used by a range of people with a diverse range of experiences and perspectives. They enable the social interactions that Oldenburg (1999) calls 'conversation'. While Oldenburg clearly means face-to-face conversation I argue that the important interactions that occur in third places include more than talk or even playing games. Oldenburg himself says that the conversation that takes place in third places involved a lot of "knowing when not to talk" (Oldenburg, 1999, p. 28). In order to be part of a conversation you must firstly be able to occupy the space where it is going on, and secondly you must be able to communicate with the others in that space.

Simon Unwin (2019) describes placemaking as non-verbal communication and provides a typology of meaning in children's placemaking. He asserts that it is through placemaking that children make sense of their place in the world and that there is an interactive relationship between person and place in the placemaking process (Unwin, 2019). Placemaking is an assertion of agency and a powerful act. Unwin (2019) writes about the importance of manipulating space in order to create place in the process of creating one's identity.

If this is true, then the placemaking undertaken by the participants in this project can be thought of as a type of conversation. The design of places was responsive to the existing users and use of the spaces and, in turn, the wider public responded to these places by using them. This supports Schneekloth and Shibley's description of placemaking as a 'sustained and shared public dialogue about who we are and where we want to live' (Schneekloth & Shibley, 1995, p. 142).

Why should children have access to their neighbourhood streets?

Children are not well represented in democracy (Cook et al., 2015; Valentine, 2004, p. 104). Being active in public spaces is an important way for them to share in the public realm. This helps them to be represented as members of society and provides individuals with experiences that are valuable for formal democratic participation later in life (Chawla, 2002; Hayward, 2012; Sutton & Kemp, 2002).

The neighbourhood is recognised as playing a significant role in children's development (Carroll et al., 2015) as they move beyond the private realm and gain experience of public life (Matthews & Limb, 2001). For children neighbourhoods can provide an accessible introduction to the public realm. Being close to home they are ideal for gaining experience of being outside the private space of the family home and increasing independence. The public space found in neighbourhood streets can function as liminal space partly because they are transitional and not a destination in themselves. The use of liminal space by children (Berg & Medrich, 1980; Carroll et al., 2015), and its role in development of self-identity (Bhabha, 1994; Matthews & Limb, 2001) and gradual increase of confidence and life skills has also been demonstrated (Skantze, 1995).

Rethinking suburban public spaces so that it contributes to public good

In their article *Where learning happens* Carr and Lynch (1968) argue that urban spaces should be purposefully used to promote community benefits. Their suggestion is that policy could be used to make more space available for communal activities and that this would help to build social capital. They also suggest that one of the benefits of doing this would be increased political engagement. Carr and Lynch use the term 'open space' to mean any space found

within the city, whether natural or built, that is not currently being used for a productive purpose. They give the examples of empty offices being made available for community groups, or vacant lots being used as temporary playgrounds where children can be active in building their own playscape.

Janine Benyus (2015) approaches the idea of beneficial public space from a biological background and argues that cities should be designed in order to provide a net benefit. Benyus's (2015) conceptualisation of the 'generous city' is that it provides as much in the way of ecosystem services as any natural environment. While her vision is ecological, her argument can be applied to the social ecology of cities, too. One of the main goals of urban design is also to provide a net social benefit, but in recent times the focus has been on efficient movement of vehicles through these spaces.

It is not enough that public space is merely present within urban areas. People also need to be able to engage with this space. It is through the process of engagement or interaction that we derive stimulation and create active citizens who are capable of engaging with the public realm. Just as placemaking is a process where members of a community engage with an issue taking place in their local area, community itself is formed in response to this engagement and participation (Harvey, 2007). This idea of the importance of participation or engagement also underpins Hayward's argument that we need our children to become active citizens in order to recreate the conditions of democracy for each generation (Hayward, 2012, p.155). Children cannot participate in this process if they are excluded from the space in which it occurs- the public realm. Their abilities to act as engaged citizens are built through the experience gained through participation rather than bestowed by age. In their reflections on being part of this project the children expressed a sense of satisfaction at having led change. Although it was not evident in the quantitative data, several children also remarked that they felt more connected to other people who lived nearby.

6.4 Parents' ongoing view of traffic as a barrier to children's mobility

Although the placemaking aspect of this research increased the participants' connection to their local environment, they do not have the ultimate power over

their own mobility. The case study group were high car users, which could be the result of local norms for using the car to transport children. The parents reported other parents as a main source of information about children's safety in travel, which could act as a mechanism for establishing and maintaining a local norm. This could also explain the contradictory findings about perceptions of neighbourhood safety, that it is a safe neighbourhood, and risk, that traffic is a significant neighbourhood hazard for children. It could be that parents overestimate the risk from traffic in order to rationalise conforming with the norm. This study did not aim to explore parental perceptions in any depth, but these contradictory findings suggest this is an area for further research.

The quantitative data collected from parents suggests that placemaking had a limited effect as an intervention for increasing CIM for this case study group. The placemaking did not change parents' view of the threat of traffic to their children's safety in this neighbourhood. The data collected on the children's mobility indicates there was some change for the boys in the group but not so for the girls.

Car use and conditions that would increase children's independent travel

Car travel dominated the participant's travel for both the journey to school and other neighbourhood travel. The extent to which children in this case group travelled to school by car was greater than children in other studies. The levels of independent travel for the participants in this case study were also lower than in other studies.

In the pre-intervention survey 55% of the children reported usually coming to school by car, which was slightly lower than the 65% reported by their parents. Mitchell et al (2007) found that 39.7% of the Auckland children in their survey travelled to school in a car and found that there was a difference in levels of independent travel by age group and socio-economic background. However, the higher level of car travel found in this case group could be due to a general increase in car travel over recent decades. Ministry of Health figures (in Witten et al 2015) indicate that there was an increase in New Zealand children's travel to school by car over the period 2007-2013 of 31% to 58%.

Only 13.8% of participants in this case study said they travelled independently. This is lower than in Mitchell et al's (2007) study where 25% of juniors (aged 6-7) at a primary school in a high-socioeconomic area travelled to school independently. Carroll et al (2015) also found that 25% of the middle socioeconomic suburban children (aged 9-12) in their research travelled to school without an adult. The group of children in this case study were aged between 8 and 11 with an average age of 9 at the beginning of the research so sit within the ages of the children in these two studies.

As in similar studies, many of the children in this group express a preference for active travel and higher levels of independence for the journey to school. At the beginning of this study 46% of children responded that they would prefer to travel to school by active means with other children. This is consistent with findings of other studies (Cook et al., 2015; Mitchell et al., 2007). When parents were asked what conditions would make it more likely for them to let their child have more independence in their neighbourhood play and travel, their child asking to be more independent was one of the least common responses.

Local parenting norms
The parent participants' views on the neighbourhood were fairly similar. They generally regarded the neighbourhood as being safe, felt that their children were socially well connected, and that traffic speed was the main hazard. In light of the general feeling that this is a safe neighbourhood and the high level of car use and low level of independence that they afford their children, the findings of this study support the argument that in some places perceptions and social norms are more significant in determining travel behaviour than urban form (Bean et al., 2008).

Child safety was not a significant reason parents gave for driving their children to school, unlike in Pawson and Tranter's (2001) description of the driving 'social trap'. The high rate of driving also means it is unlikely that this group experience social pressure to avoid car use for the trip to school as was found among Bean's (2008) participants. Parents in this study were most likely to select time and distance as the reason for driving to school.

Around two thirds of the participants lived within 800 metres of the school, a distance which has been found to increase the likelihood of active travel (Davison, Werder, & Lawson, 2008; Timperio et al., 2006). The school sits on the top of a hill and having to negotiate the uphill was given as a reason for one child being driven. The low incidence of topography as a reason for driving suggests that it may not be a particularly significant factor for the group as a whole.

The higher car use for children living close to school in an area where the major physical barriers to children's active and independent travel makes the findings of this research different from those of similar studies. As I have already stated, this study was very limited in its investigation of parent's reasons for using a car to transport children. However, these findings support the idea that the link between car use and 'good' parenting is innately local and different in different places (Cook et al., 2015; McLaren, 2016).

The fact that other parents were one of the main sources of information on children's safety and travel indicates that the parents in this group are responsive to the behaviours of their peers. This has also found to be the case in other studies of children's travel and independence (Bean et al., 2008; Witten et al., 2013). This could explain how local norms become entrenched but also suggests that parental networks are a key aspect of promoting active travel for children.

After reducing traffic risks and their child being older parents gave 'more children being out' as the condition that would be most likely to encourage them to let their children out in the neighbourhood more. This could mean that the fact that few children in this area walk to school or play out in the neighbourhood contributes to few children being allowed out to do these things.

Most parents said that involvement in this project increased their perception of how capable children could be in leading projects (57%) and how much they valued their child's use of the neighbourhood (54%). However only 39% reported that it had changed the way their children actually used the neighbourhood. The responses from the second survey indicate that the traffic fears that are behind parent's reluctance to let their children use these spaces independently were not

changed by this placemaking but did increase their perception of the capabilities of children as agents.

Placemaking in urban streetscapes

The movement of traffic dominates the design of urban areas. This is problematic for non-drivers, especially in sprawling neighbourhoods with amenities often too far to walk to comfortably (Kate Bishop & Corkery, 2017; Oldenburg, 1999). The children and parents in this study regarded traffic as the biggest risk to children in this area. Children disliked having to cross wide intersections and noted a lack of pedestrian crossings which would help them to negotiate this landscape.

Norton (2008) attributes the marginalisation of pedestrians on urban streets to capitalist forces, specifically the rise of the private automobile. While other researchers attribute it more generally to the effects of increasing individualism and privatisation (Malone, 2007; Mitchell et al., 2007) stemming from the rise of neo-liberal ideology (Gleeson & Sipe, 2006; Witten et al., 2013). All of these factors have contributed to the loss of neighbourhood streets as a vital part of the public realm.

The decline of CIM in developed countries is not uniform. Japan, Finland and the Netherlands have maintained relatively high levels of CIM, and have done so because they see a value in it (Carroll et al., 2015; Malone, 2018; Mårtensson & Nordström, 2017). This suggests that making changes that address the social norms relating to streets as well as changing the physical environment of the transport network to better suit the needs of children may be required in order to increase children's active travel in New Zealand. Applying the concept of third place to neighbourhood spaces is a way of reframing streets as places for people.

Limitations of the placemaking intervention

The small sample size for this data means that it is not possible to make general statements about whether placemaking is an effective intervention for increasing CIM. There some factors that may have also contributed to the changes observed.

The two surveys were conducted during summer terms to reduce the possibility that seasonal differences would influence the data.

Age is a key factor in children's mobility. While the average age of the child participants in this research only changed slightly from 9.13 years to 9.75 years, the second survey took place at the beginning of a new school year. This means that all of the participants were a year group older for the second survey and 25% moved on to Intermediate school. Although independent mobility increases with age it is possible that this is link is not solely incremental, and that reaching milestones such as beginning year five could mark the start of greater independence.

A possible example of this can be seen in this data from the second survey, where some of the older participants use buses to get to school. This particular example could also be explained by the new school being further away, or a combination of both of these factors.

Although children are not without agency in negotiating the boundaries to their mobility that their parents set for them (Brown, Mackett, Gong, Kitazawa, & Paskins, 2008; Mitchell et al., 2007), parents have been described as the gatekeepers of their children's mobility. In this study parents were not involved in the placemaking itself. This means their experience of it was limited to hearing about it from their children and potentially using the places themselves. They also received some information on the value of CIM in the form of a newsletter so it is possible that this had an effect on their responses to the survey.

6.5 Gender differences

Gender differences were not anticipated to be a significant aspect in this research. Because of this the literature on gender and children's use of public space and CIM was not included in the literature review for this thesis. However, the gender-based differences found in this study mean that it is important to include gender in this discussion. There are large bodies of research on the role of gender in childhood experience (Baylina, Guitart, & Ferret, 2010; Brown et al.,

2008) and on gender and public space (Holloway & Valentine, 2000; Karsten, 2003). I will cover a few main points salient to my findings.

Research on gender and mobility indicates that it is one variable that influences a child's mobility but does not always mean a difference (Brown et al., 2008). Girls have been found to be more restricted in their use of urban space in New Zealand studies (Tranter & Pawson, 2001) as well as those conducted overseas (Karsten, 2003; O'Brien et al., 2000; Spilsbury, 2005). Karsten (2003) found that girls were found to be more constrained in the area of the playground that they used and the time that they spent there. Girls typically played in ways that used less space and were not likely to be at the playground past late afternoon, unlike their male counterparts.

Gendered patterns in the use of space have been found to affirm gender norms in the use of school playgrounds (Paechter & Clark, 2007). In Karsten's (2003) study children's use of playgrounds in Amsterdam reinforced the gender norms that were prevalent in wider society but within this pattern individual children were able to challenge gender norms and act to suit their own preferences and circumstances.

Holloway and Valentine (2000) found that although streets were important venues for girl's social interactions, their presence in these spaces had been overlooked by previous researchers. They also found that girls were active in negotiating their mobility by going places with friends. Brown et al (2008) also emphasis that gender differences in children's mobility should be viewed as resulting from differences in interests and socialising rather than parents simply granting girls less independence than boys. In their research girls had a limited range when walking but were more likely to use public transport. This meant that overall girls travelled over as large an area as their male counterparts.

The girls in this case study reported having less independence in their travel and play than the boys did. They reported lower levels of active and independent travel in the pre-intervention survey and less change in these things than the boys did in the post-intervention survey. They also had higher levels of

supervision in their places of play, playing mainly at their oven or friend's houses and had higher levels of structured activity. Most of the girls in this study expressed a preference for travelling to school using an active mode, despite being less likely to do so than the boys. They also reported knowing fewer people in the neighbourhood than boys did. As I reported in chapter five (page 84), there was also a difference in how parents of girls valued their child's access to their local environment.

These gender-based differences were most noticeable in the quantitative data. There was no notable difference between girls' and boys' participation in the project or design process. The girls in this study were also very successful placemakers, and their designs resulted in some real changes in the way that spaces were used by the wider public. They reported feelings of satisfaction and increased connection to people and places from being part of this project and showed signs of forming a critical mindset that will help them to build their sense of self-agency.

The neighbourhood has been established as playing a key role in a child's developing self-identity and well-being (Carroll et al., 2015; Witten et al., 2015). It is a problem if girls feel that their access is constrained and, as a result they are less able to benefit from making meaningful connections with their neighbourhood. As well as making a difference for the girls themselves, if widespread, this difference could have an impact on wider society. Karsten (2003) suggests that the full participation of women in the public domain would be encouraged by supporting girls to have the same access to play in public spaces as boys do.

However, it is important that gender-based differences in mobility are not simply thought of as girls having a more constrained version of boys' mobility (Brown et al., 2008). Instead we need to understand whether the differences observed in children's mobility are due to different levels of constraint or preferences and behaviours of the children themselves.

While this case study did not aim to explore how a child's gender influences their parents' attitudes to granting their child independent use of the neighbourhood, these findings suggest that gender can be associated with differences in children's mobility. The existing literature also suggests that studies which provide children's perspectives on their own mobility are needed to build a gender specific approach to understanding children's mobility.

6.6 Summary

The placemaking undertaken in this research proved to be a good method for children to take an active approach to gaining an understanding of how community interactions can be increased in suburban public space.

Placemaking provided these participants with some of the key experiences that children gain from active travel and independent use of their neighbourhood. This led to increased connection to places within the neighbourhood. For some of the participants this led to a change in their mode of travel for the trip to school.

The parents were secondary participants in this research. They did not have an active role in the placemaking. While the amount they valued their children's use of the neighbourhood did increase, this did not alter their perception that the traffic in the neighbourhood posed a risk to children that justified constraining their independent mobility.

There was a bigger change in mobility for the boys in this study than the girls. More research is needed to build an understanding on the factors that influence girls' mobility, particularly studies that convey girls' own perspective.

7 CONCLUSION

Children's mobility is a complex issue. The decline in active travel over recent generations is a result of both social and spatial factors. This decline reduces the opportunities for children to travel independently, and to practice agency in their participation in the public realm.

It was possible to use the concept of third place – which highlights the social value of children's use of the streets of their neighbourhood - to guide placemaking that was effective at transforming space to place and building community interactions This was a successful example of Participatory Active Research and increased the participants' knowledge of and connection to their neighbourhood.

This placemaking had a limited effect as an intervention to increase CIM. The child participants in this study were constrained in their mobility because of their parents' beliefs about the danger traffic posed to children in the public space of their neighbourhood. The reasons that parents gave for their high levels of car use were different from those described in the literature, supporting the theory that local parenting styles vary from place to place. The prevalence of social media and the advice of other parents as the main sources of information on children's safe travel for the parents in this case study suggest that it may be possible that addressing local norms could be a key aspect in changing travel behaviours. The difference between girls and boys use, and parents differing perceptions on the importance of their child's use of their neighbourhood, warrant further research.

Media reports, social traps and local norms skew public perception about children's safety in public spaces. This can mean that car use is favoured and may also work as a feedback loop to further increase car use. There is little in the way of counter-framing for parents to turn to in order to balance the view that it is unsafe for children to travel and play in neighbourhoods or to inform them on the positive aspects of participation in these spaces. These positive aspects are largely reliant on being able to engage with this space and other people in it. It is possible that a more sustained placemaking intervention, where parents are

actively involved could be successful in making a bigger change to perceptions of neighbourhoods as places for their children to use.

The values which underlie our urban forms and public spaces need to be clearly articulated through a process which authentically engages with and represents the diversity of people who live in them.

Q15 Has being part of this this project changed the way you think or feel about our neighbourhood? If yes please say how

yes becus I saw how think 'lucy we are to have this nebourhood

Figure 34 "Yes because I saw how lucky we are to have this neighbourhood." (9 year old boy)

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Survey 2 - for child participants

Q1 Do you think you live in a neighbourhood that is safe for children? Big smile for very safe, very sad face for not safe at all.
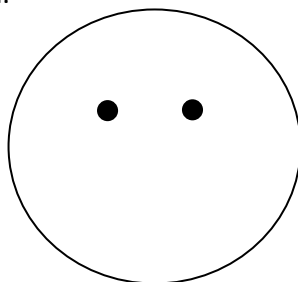
Q2 Are there any things that make your neighbourhood unsafe? Select as many answers that apply.

- ☐ Bad people

- ☐ Fast cars

- ☐ Don't know many people

- ☐ Too many cars

- ☐ Other _____

Q3 What is the main way you move around your neighbourhood? Choose one.

- ○ In a car

- ○ Bike, walk or scooter with an adult

- ○ Bike, walk or scooter without an adult but with friends

- ○ Bike, walk or scooter by myself

- ○ Bus by myself

- ○ Bus with an adult

- ○ Other _____

Q4 How do you usually get to school?

- ☐ In a car

- ☐ Bike, walk or scooter with an adult

- ☐ Bike, walk or scooter without an adult but with friends

- ☐ Bike, walk or scooter by myself

- ☐ Bus by myself

- ☐ Bus with an adult

- ☐ Other _____

Q7 How would you most like to get to school?

○ The same way I do now

○ On my own by walking, biking or scootering

○ With friends walking, biking or scootering

○ With an adult walking, biking or scootering

○ In a group of children and adults walking, biking and scootering

○ Bus by myself

○ Bus with an adult

○ Other _____

Q6 Do you ever go to places within your neighbourhood without an adult? For example, walk over to your friend's house or a playground

○ Yes

○ Don't know

○ No

Q8 Do you feel that you know some of the people in your neighbourhood? For example, are there people you could go to in an emergency who aren't your family. Big smile if you feel you do know people, very sad if you feel that you don't.
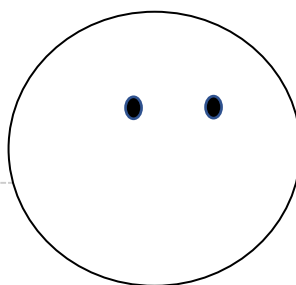
Q9 Do you have a favourite place in your neighbourhood?

☐   A treehouse

☐   Playground

☐   No

☐   Library

☐   Beach

☐   A shop

☐   Other _____

Q10 Are there any particular places in your neighbourhood where you can meet new people?

☐   Playground

☐   No

☐   School playground

☐   Friend's house

☐   Beach

☐   Other _____

Q12 Where do you usually play?

- [ ] My house

- [ ] Friend's house

- [ ] Other family member's house

- [ ] Playground

- [ ] Beach

- [ ] School

- [ ] In my neighbourhood

- [ ] Other _____

Q13 How many days a week do you do activities? For example, soccer, netball, art classes.

- ◯ None

- ◯ 1

- ◯ 2

- ◯ 3

- ◯ 4

- ◯ 5

- ◯ 6

- ◯ 7

＊

Q15 Has being part of this this project changed the way you think or feel about our neighbourhood? If yes, please say how.

_____

_____

_____

_____

_____

＊

Q16 Has being part of this project changed the way you use the public spaces in our neighbourhood? If yes, please say how.

_____

_____

_____

_____

_____

Q17 Have you met or got to know any new people through this project or while using the things we made?

○ Yes

○ Maybe

○ No

Q14 How much power do you think you have to work with other people on big environmental or social problems - for example homelessness or plastic in the ocean?

○ None

○ A little

○ Some

○ Could be powerful
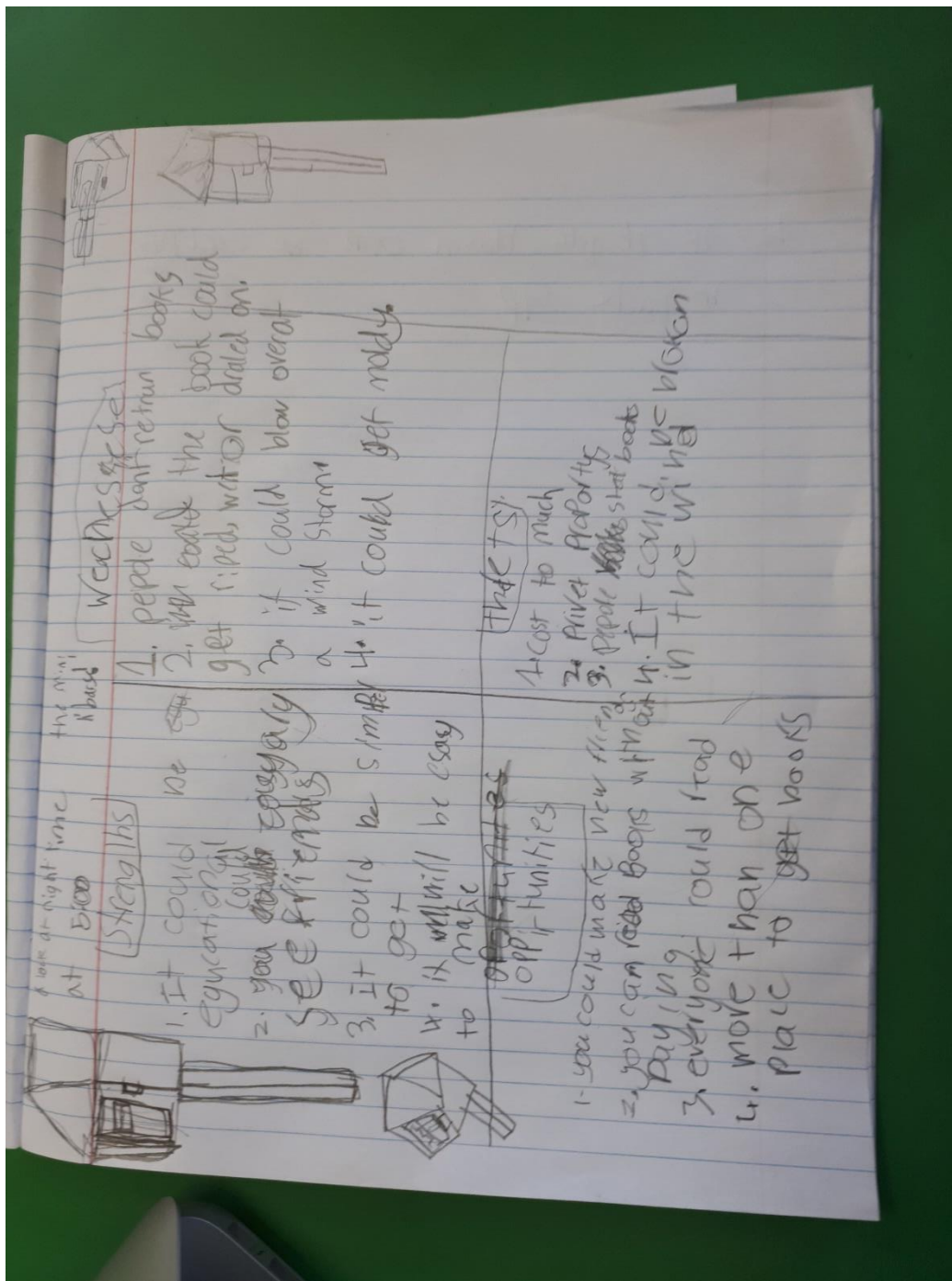
○ My actions and voice are as important as anyone else

Q10 How old are you?

○ Under 7

○ 7

○ 8

○ 9

○ 10

○ 11

○ 12 or older

Q11 Are you

○ a girl

○ a boy

○ please enter your own description:

_____

(handwritten SWOL/SWOT analysis)

for an at night time the mini book shed — wachhouses

Strengths
1. It could be educational
2. You could make freinds
3. It could be simpler to get
4. It will/mill be easy to make

Weaknesses
1. pepole don't return books
2. the book could get riped, wet or draled on.
3. it could blow over at a wind storm
4. it could get moldy.

Opportunities
1. you could make new frinds
2. you can read Boos without paying
3. everyone could trad
4. move than one place to get books

Threats
1. cost to much
2. privet property
3. pepole steals books
4. It could get broken in the wind

Dear Builder,
We have started making a tyre swing (as you possibly may know.) And we would really appreciate it if you could put the tyre swing up in the place we have circled below

We will need blue rope, however we know that Elinor has the rope that we will need. Also she will give you the specific bolts and a video on how to attach it. We were thinking that the swing will be attached with three ropes like the below.

Thank you for helping out. From the W.B.S tyre swing group, ███████████████████ ██████████████████.