

**PUBLIC STREETS**  
**FOR**  
**MULTICULTURAL USE**

**Exploring the Relationship between Cultural Background,  
Built Environment, and Social Behaviour**

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## **ABSTRACT**

Public space is the domain of interest for urban planners and designers and the most important type of public space is streets. Public spaces, and particularly busy streets in urban centres, provide opportunities for people to meet, often by chance. As cities become increasingly multi-cultural in population the use and nature of public space reflects this. The best public spaces cater to the needs of all who use them and in multicultural societies this also means they must meet the expectations of people from different cultures.

Many scholars have challenged the tendency for streets to be conceived of as movement channels, often at the expense of their use as social space. Streets have traditionally catered to a broad array of activities including walking, cycling and standing. Streets that facilitate such activities are preferred by the public. Streets in multicultural societies are also where people from different ethnic backgrounds find opportunities to interact.

When public spaces are successful, they will increase opportunities to participate in communal activities. Spatial design is a critical success factor for streets; a goal for urban designers must be to create spaces where people from different social and cultural backgrounds value the public spaces they have access to. As cities become more multicultural the challenge is to design and manage spaces that appeal to the breadth of cultures that are represented in the population. Such public spaces are described in the literature as being more public. However, there is presently little information to help planners and designers to realise streets that appeal to people having different socio-cultural backgrounds. The research aims to identify those characteristics that will promote and maintain cultural diversity in the context of neighbourhood commercial streets in New Zealand's multi-cultural society.

The research is undertaken in two stages. "Stage One" makes use of ethnographic fieldwork as a basic method, complimented by structured field observations using a behavioural mapping procedure, and surveys of users of the streets. This stage provides data on specific streets and their usage through three case studies. Stage "Two" utilises online surveys that generated data in relation to street visualizations. This stage seeks to understand what design characteristics and furniture arrangements are associated with stationary, social

and gathering activities of people and to define design characteristics of footpath spaces preferred by each cultural group and all groups collectively.

The main conclusion from this research is that retail activities remain the main concern of people in multi-cultural streets. Management and higher level planning of retail activities on the streets could encourage and motivate possible tenants in order to enrich the retail assortment of the street and provide a means for social and cultural diversity. In addition to business activities, spatial design characteristics are found to have an influence on people's behaviour and activity. The findings of this research suggest that retail and business activities, together with the design and skilful management of the public areas, could support a broader range of static and social activities among people of various cultural backgrounds. The thesis makes recommendations for urban planners and designers based on the findings of the research.





*To my dear family;*

*Masoomeh, Saeed*

*Mina and Amir Hossein*



## **Preface and Acknowledgements**

Living and studying in Tehran, a metropolis in which lack of attention to human factors in urban design is transforming it into an unfamiliar city for its habitants, I came to New Zealand with a predominant goal to understand how design and management of streets could turn them into places that improve the quality of human life rather than simply accommodating the movement of vehicles from place to place. Since my arrival, New Zealand has been an enriching intellectual experience for me. As an international student, soon after arriving in Wellington I fell in love with the multi-cultural vibe of the city. Social encounters with people of different cultures became part of my daily urban experience. I began making comparisons between streets in my hometown, and streets here, realizing more and more differences every day. My previous interest in streets as public spaces and my own experiences as a stranger in the new environment arranged the scene for this research.

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# 1 Chapter One: Introduction

## 1.1 Introduction

*The street is the river of life of the city, the place where we come together, the pathway to the centre*

*William H. Whyte*

There has been a sustained focus to improve the design and management of urban spaces in cities around the globe. Due to the phenomenon of migration, **cultural diversity** in world cities is increasing, and today cities constitute a mix of people with different social and cultural backgrounds. New Zealand is one of the countries where ethnic diversity is increasing at a rapid pace. According to the 2013 census data, “*New Zealand has more ethnicities than the world has countries*” (Statistics New Zealand, 2013). Māori, Pacific and Asian people are estimated to comprise over 40% of the population by 2026 (Swarbrick, 2012).

With an increasing cultural diversity, a possibility that different cultures share the public spaces of the city has indeed increased. A key challenge is to design spaces that appeal to the breadth of cultures that are represented in the population. A current concern in the area of urban design is to design spaces consciously so that different groups of people with different socio-cultural backgrounds can gather in them. This will help ensure a physical environment with social and psychological significance for citizens (Carmona, Tiesdell, Heath, & Oc, 2010; Low, Taplin, & Scheld, 2005). The best public spaces cater to the needs of all who use them and in multicultural societies this also means they must meet the expectations of people from different cultural backgrounds, providing opportunities for everyone to relax, recreate, and socialise. Such public spaces are considered in the literature to be more public (Low et al., 2005).

**Streets** represent the most significant and ubiquitous part of urban public open spaces of cities and are considered as most significant symbols of the public realm. Streets are considered as relevant behaviour settings that afford a range of functional, cultural, social and leisure needs. Most public life in cities takes place on streets (Mehta, 2007, 2013). Social interpreters suggest that the public’s image of a city is of its streets;

*“Think of a city and what comes to mind? Its streets, if a city’s streets look interesting, the city looks interesting, if they look dull, the city looks dull” (J. Jacobs, 1961, p. 29).*

Many scholars have challenged the tendency for streets to be conceived of as movement channels, often at the expense of their use as social space. Streets have traditionally catered to a broad array of activities including walking, cycling and standing. Streets that facilitate such activities are preferred by the public. Streets in multicultural societies are also where people from different cultural backgrounds find opportunities to meet and interact. The daily interactions taking place on streets give people the chance to experience intimacy and personal growth; this would also help to break the social boundaries that often divide them (Knapp, 2009) and support and strengthen a sense of community (Mehta, 2013). In addition, most street activity takes place when the environment becomes convenient and appropriate for a larger number of pedestrians and enables them to use the street in a variety of ways (Moughtin, 2003).

Although the importance of people being present in a public space is supported in studies conducted by scholars such as William Whyte (1980) and Jan Gehl (1987), there is a tendency to “*see urban design as dealing with the visual rather than the spatial aspects of the environment*” (Madanipour, 1996, p. 99). Many urban designers still try to create public space as they aim to produce “a work of art” which must stand alone (Francescato, 1994; Rapoport, 2005). Currently, few studies have tried to understand the importance of planning and design characteristics to an urban space design from the users’ perspective. Users’ preferences for the design attributes of urban open spaces could make a difference in the evaluation of success (Lo, Yiu, & Lo, 2003). This is more obvious when it comes to multicultural societies, where designers, planners and decision makers may not pay attention to the patterns of lived experiences among different users. Their assumptions may consider only a specific cultural group situated in a specific geographical location and try to extend it to different parts of cities around the world. In this manner, some cultural groups might be excluded in considerations of urban design and planning decision-making processes.

There has been a continuous and increasing interest in the topic of culture and a growth of the consciousness of its importance in different disciplines besides environment and behaviour studies (Carmona et al., 2010; Madanipour, 2007; Rapoport, 1982, 2005). The phenomenon of culture is fundamental in environment-behaviour research in order to understand how humans interact with built environments. The perception of each society is nurtured by culture; it influences the ways that a society would picture and organise the physical environments it inhabits. Therefore, culture and built environments are closely linked, where culture has an important role in understanding and designing environments and has become a necessary part of urban design. It has been argued that “*understanding the*

*relationship between people [‘society’] and their environment [‘space’] is an essential component of urban design” (Carmona et al., 2010, p. 133).*



Figure 1-1: A traditional street in Yazd, Iran, a relatively ethnically homogenous city. Source: author, 2012

Figure 1-2: Queen Street in Auckland, New Zealand, an ethnically diverse city. Source: author, 2012

From the perspective of environment-behaviour research, *“the relation of people and the environments is the result of complex interactions among cultural, environmental and perceptual variables”* (Rapoport, 1987, p. 81). This also applies to the specific set of activities that occur in the environment called streets. Rapoport is of the opinion that in general, walking and other street activities (static activities) are mainly a function of cultural and physical variables (1987). Although the importance of culture has been emphasised and is well supported in environmental-behaviour research, Rapoport (2005) goes on to explain that the importance and role of culture in built environments such as streets cannot be assumed or proclaimed. Instead, it must be tested empirically. Later he asserts that in studying culture-environment interactions and designing based on cultural variables, numerous lifestyles and groups need to be considered. There is an increase in the number of lifestyle groups and revival of cultures, such as Māori in New Zealand. He also notes that **an increase in the number of immigrants with different levels of acculturation must be taken into account** with the rapid cultural transformation (Rapoport, 2008). Culture-specific preferences and space use might become more critical when different groups intend to use the same environments. In this vein, Madanipour states that;

*“There will be many occasions when the conflict is so powerful that no bridge can be built between different positions and interest groups. The choice appears to be between battling it out and trying to negotiate to find a solution. Such negotiation can only take place through an inclusive process of city design and development in which as many views as possible need to be involved. Desire for exclusivity goes hand in hand with social*

*inequality, and so it is only through inclusive processes that the possibility of creating accessible and shared places increases” (2010, pp. 239,240).*

Publicness is a quality that evaluates the public character of public spaces. Publicly accessible places are where all members of the public engage in different types of activities (Mitchell, 2003). Few studies in urban design address the subject of culture-related social behaviour with reference to the street. This thesis interrogates the idea that streets are public spaces capable of fostering multiculturalism. But what are the characteristics of streets in multicultural societies that make them become more or less public? Is there evidence to suggest that different ethnic groups in multi-cultural societies use streets in different ways? If yes, then the second question is how to acknowledge cultural differences that co-exist in the melting pot of public spaces? These are some questions that influenced the present study.

In order to understand how streets meet the goal of publicness in multicultural societies, there is a need to clearly understand how various populations use streets and whether streets are equipped and managed with supportive mechanisms to allow differences in space use and activities. This research empirically examines the role of culture in people’s perceptions and preferences of street environments, influencing the ways they organise and use them for lingering and social activities. Fostering suitable urban environments is important to sustaining static and social behaviours for different cultural backgrounds. Thus, this study examines streets in urban settings in order to understand what attributes of street design are associated with stationary, gathering and lingering activities of people with different cultural backgrounds, especially optional and social activities that makes the streets more lively. It focuses on determining relationships between physical characteristics and uses, their management, and people’s patterns of static and social activity on streets in multi-cultural societies.

An interpretative, culture-based approach is utilised to define the factors that sustain people’s use of the street environment. The terms ethnic group and cultural group are used interchangeably in this research, without untangling the multiple intellectual histories of the terms.

## **1.2 Aims and Objectives**

**The research aims are:**

1. To contribute to the body of knowledge of streets as public spaces.

2. To raise awareness of cultural diversity on urban streets in multicultural societies and its significance in urban planning and design and intervening design related decision making.

**The research objectives are:**

1. To identify those characteristics that will promote and maintain cultural diversity in the context of streets in New Zealand's multicultural society.
2. To examine how publicness is manifested through the relationship between the built environment and social behaviour at street level in the public realm.
3. To propose guidelines that promote and maintain cultural diversity in streets in multicultural societies as well as policies on the effective management of street spaces in order to enhance equity in the use of streets.

### **1.3 Study Significance and Implications**

There has been little research that looks at how landscape and urban practitioners should respond to different cultural groups in streets in multicultural societies. Madanipour (2010, p.11) cautions that “*if public spaces are produced and managed by narrow interests, they are bound to become exclusive places*”. There is a need for landscape architects, urban designers and urban managers to be aware of how places are understood and used in different ways by different cultural groups, in order to work towards publicness, especially in the context of streets as primarily public open spaces. There is presently little information to help planners and designers realise streets that appeal to people having different socio-cultural backgrounds. Cultural diversity remains a neglected area of research in urban design and this study has the potential to make a significant contribution to knowledge on the meaning and multiple uses of streets. Streets are one of the primary places where diverse cultures come together. The carefully framed methodology proposed in this study will generate a wide range of original data, from which the research objectives can be met. It is anticipated that through rigorous analysis of the data, this study will shed light on the factors that make successful democratic/mixed-life streets and enable the researcher to produce guidelines for the planning and design of streets. Thus, this research will identify design, planning and management techniques that will encourage, support and maintain cultural diversity in the context of streets as a social space.

## 1.4 The Chapters to Follow

This thesis is organised in seven chapters. Chapter One is an introduction, which provides a general overview of the research study. The literature of the study has been divided and categorised into Chapters Two and Three. In Chapter Two, broad concepts of culture and public space are discussed, main issues in various fields of research are briefly summarised. The researcher brings the concepts and studies in different fields of research together at the end of this chapter to explain the gap of knowledge. Chapter Three builds a platform for going to deeper and more detailed literature that creates the framework of the study. The concept of publicness in the context of streets is discussed in Chapter Three. This chapter identifies and explores specific characteristics of public space and streets that accommodate user needs and support static, leisure and social behaviour based on the three facets of land-uses and business activities, design attributes and management strategies. Chapter Four presents the methodological approach and research design employed in the study, which consists of mixed-methods, incorporating both qualitative and quantitative research approaches. Chapter Five examines and analyses a range of streets in a range of environments with different ethnic population ratios, using the methodology presented in Chapter Four which leads to a collection of data that can be logically analysed and evaluated. Chapter Five reports and discusses the results based on the data (observations and interviews) drawn from field research conducted in three New Zealand streets. This chapter proposes planning and design guidelines for promoting publicness in streets, and the findings of this chapter inform development of quantitative and scale-measured questions for the second stage of the study. Chapter Six describes the methods and research design for the second stage of the study and describes the results based on the data. The chapter concludes with proposing design guidelines and recommendations for planners and designers. Chapter Seven summarises and concludes the main findings of the research, discusses the limitations of the study and provides suggestions for future research.

## 2 Chapter Two: Multicultural Public Spaces

*“The city is that human settlement in which strangers are most likely to meet”*

*Richard Sennett*

### 2.1 Introduction

This chapter builds on the main concepts of multiculturalism and public space and the integration of the following concepts provides a general image to the context of the study. Culture and multiculturalism in urban planning and design are explained under the sub-chapter of “Multiculturalism” and the definition of public space in the context of this research, threats to contemporary public spaces and the concept of publicness are described under the sub-chapter of “Public Space”. The following section (section 4) bridges “Multiculturalism” and “Public Space” together, bringing different examples of the interactions between culture and public space, threats and current approaches towards cultural diversity. The chapter then deals with streets as public spaces and interactions between streets and culture in order to bring different concepts and fields of studies together and explain the gap of knowledge and opportunity for research. The research gap lies in the relationships between publicness, and cultural diversity, in the context of streets.

## 2.2 Multiculturalism

Global migration is not a recent phenomenon and has been part of history since the beginning (Castles, de Haas, & Miller, 2014). However, since 1945 and especially since mid-1980s, migration has found a significant growth (Sandercock & Kligler, 1998a). The total number of international immigrants increased from about 100 million in 1960 to 155 million in 2000 and then grew to 214 million in 2010 which comprises 3.1 percent of the world's entire population (Castles et al., 2014). Cities around the world are increasingly becoming more diverse and complex due to the phenomenon of migration and as the pace increases. People migrate in order to receive better living, work and study opportunities. Oceania, mainly comprising Australia and New Zealand, has the highest population of immigrants (Castles et al., 2014), and New Zealand is one of the countries in which ethnic diversity is rapidly increasing. When people from diverse cultures migrate to another country, they bring many characteristics of their culture with them. Thus, the culture becomes "*a symbolic legacy of the previous situation*" (Lang, 1987, p. 80). In order to understand multiculturalism, first, we need to understand the concept of culture.

### 2.2.1 Culture

The relation between culture and environment is a give-and-take process. Culture contributes to and is supported by the built environment. The concept of culture is essential in understanding how humans interact with built environments. On one hand, people's choices, decisions and preferences in the built environment are based on their cultural values and schemata. On the other hand, built environments support or inhibit human behaviour associated with cultural backgrounds (Barker, 1963; Rapoport, 1976a). The perceptions and choices of each society are nurtured by culture; it influences the ways that a society would picture and shape the physical environments it inhabits. Cities are different from each other because of the differences between cultures that have created them (Mumford, 1961). Culture is a theoretical construct and one of the most extensively discussed subjects in academic research (Rapoport, 2005; Sasidharan, 2002). The concept and definition of culture have been determined by numerous researchers especially in the field of anthropology. Anthropologists have an agreement on the centrality of culture for humanity (Rapoport, 1980). From an anthropological point of view, culture is described as a "... *particular way of life, which expresses certain meanings and values not only in art and learning, but also in institutions and ordinary behaviour*" (Williams, 1961, p.41) cited in (Carmona et al., 2010). According to Rapoport, the concept of culture is considered excessively broad and too abstract to be used

in relation to environmental design (1980, 2005). Furthermore, Rapoport introduces a more tangible, operational model for analysing the concept of culture. In this model, culture relates to environmental design by being dismantled into more observable and operational components (Rapoport, 1977, 1980, 2000, 2005). Each component of culture can be studied separately, establishing associations with particular aspects of the environment. In other words, particular aspects and components of the environment are parallel with and supportive of lower-level components of culture. In this model, culture is defined as a group of people's world views (a particular way of looking at the world) that creates a communal value system among them. These values are transmitted and communicated to different members of the group by means of enculturation. Values are often expressed through ideals, images, schemata and meanings that embody the values and lead to certain choices as shown in Fig 2-1.

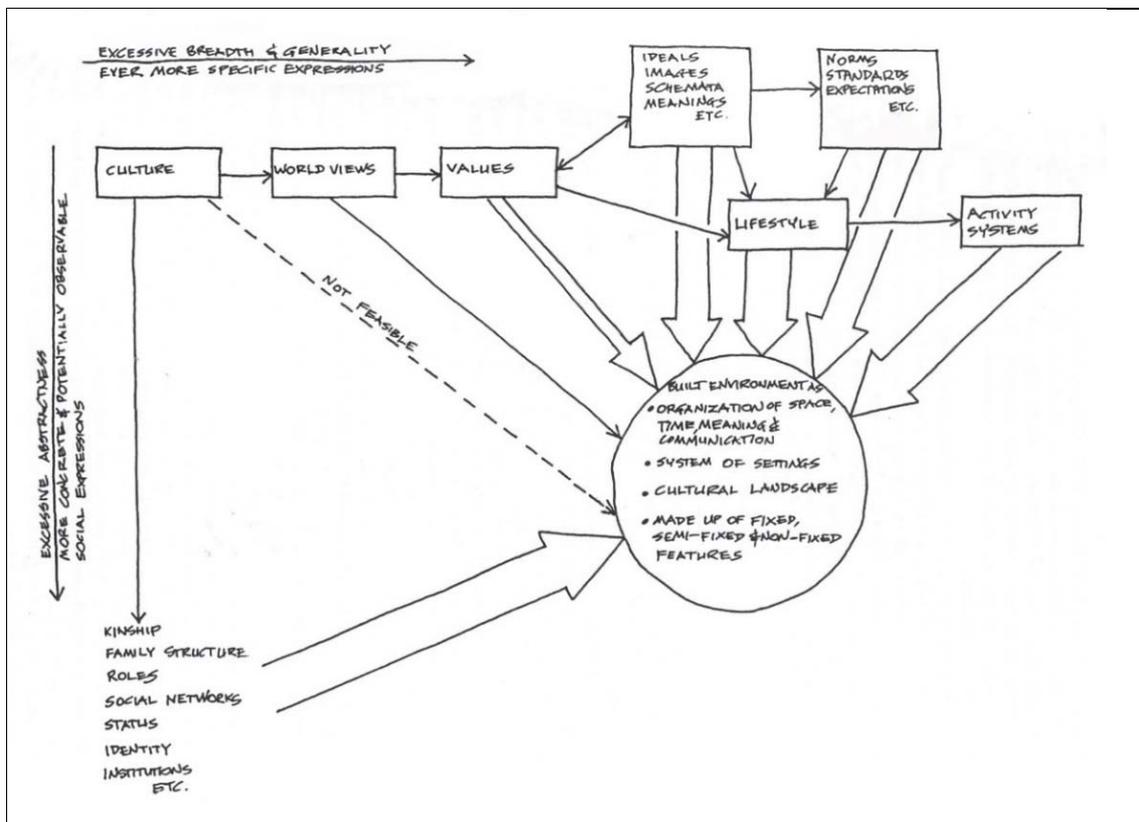


Figure 2-1: proposed model by Amos Rapoport relating the expressions of culture to the built environment' adapted from (Rapoport, 2000, p. 129).

These also create a basis for social norms, standards and expectations of the group that plays a significant role in the evaluation of the environments. Additionally, values affect particular lifestyles shared by the group of people and which distinguish them from others. Lifestyle leads to activity and activity systems; the communal lifestyle of the group influences the ways in which they engage in different type of activities introduced as activity systems (as

different activities might be linked together). Together lifestyles and activity systems are important aspects that help to analyse and design the environment.

Activity systems are more specific aspects of lifestyle that relate culture to built environments through human behaviour. Built environments are a result in the following model and are defined as organisations of space, time, meaning and communication, systems of settings, and cultural landscapes. Rapoport (1977) argues that cultural landscapes are the tangible outcomes of human activities that arise through the choices people make. They are the most important communicator of various urban and social characteristics, a reflection of people's value systems, environmental attitudes and preferences. The aspects comprising these entities are made of fixed and semi-fixed elements and occupied by non-fixed elements. Additionally, Rapoport describes the environment as a form of "*nonverbal communication*" where users have the means to decode it. The environment will not communicate if the code is not shared or understood by its users (Rapoport, 1976b). Very public landscapes "*where many social worlds meet, tend to have a great deal of shared connotative meaning*" (Duncan, 1976, p. 394). It has been argued that "*understanding the relationship between people (society) and their environment (space) is an essential component of urban design*" (Carmona et al., 2010, p. 133). Cultural values give us an understanding about use or disuse, place attachments and symbolic meanings of public spaces. They are the best indicators to realise how people think and feel about public spaces.

*"Cultural values' refers to the shared meanings associated with people's lives, environments, and actions that draw upon cultural affiliation and living together. These value judgments, usually expressed as liking or disliking some person, place or object, provide information about underlying unspoken cultural assumptions, beliefs and practices. Similar to cultural identities, they [cultural values], are not necessarily definable attributes that can be measured or codified, but they must be understood as negotiated, fluid, and context dependent"* (Low et al., 2005, p. 15).

Culture and cultural values influence the preferences of people and the choices they make in different environments. Adopting a "*culturalism*" approach has helped several researchers in the field of social sciences to discuss and explain social behaviour (Sasidharan, 2002).

Ethnicity has been one of the primary variables of culture that influences outdoor recreation and leisure activities. Ethnicity is a socially structured concept that relates a person to a social group based on mutual ancestry and culture (Sasidharan, 2002). An '**ethnic community**' is defined as "*a named human population with myths of common ancestry, shared historical*

*memories, one or more elements of common culture, a link with a homeland and a sense of solidarity among at least some of its members”* (J. Hutchinson & Smith, 1996, p. 6). Ethnic identity is considered a dynamic concept; people can change and shift their ethnic identification in between their original culture and the host culture (Sasidharan, 2002). Acculturation could affect ethnic identity as will be further described.

## 2.2.2 Multiculturalism in Urban Planning and Design

Multicultural issues have been defined as those that deal with race, gender, ethnicity, class, internationalism and disability (S. Sen, 2000). There have been three phases where cultural diversity has been addressed, since the profession of urban planning has been developed (table 2-1).

| The Culture-Planning Continuum Timeline |   |   |
|---|---|---|
| Approximate Time Frame                  | Conceptual Framework  | Planners' Response  |
| 1900-1960                               | Assimilation<br>Amalgamation<br>Cultural Pluralism<br>Universalist Planning | Monistic planning<br>Rational Comprehensive<br>Unitary Public Interest<br>Planner as Technician<br>City Practical             |
| 1961-1980                               | Integration   | Pluralist Planning:<br>Equity Planning<br>Advocacy Planning<br>Trans-active Planning<br>Feminist Planning<br>Radical Planning |
| Since 1981                              | Multiculturalism<br>Holistic Planning                                       | Holistic Planning<br>Unified Diversity  |

**Table 2-1: Three phases of cultural diversity since the evolution of urban planning; adapted from (Burayidi, 2000, p. 40).**

The first phase named as the “assimilationist phase” started at the establishment of the profession at the beginning of the twentieth century and lasted until 1960. The profession of urban planning at this phase had a monistic approach and was based on policies that facilitated the assimilation process. During this process, ethnic minority groups would lose their diverse characteristics and amalgamate and blend into the dominant [American] culture and gain its values (Burayidi, 2000). The role of urban planners was to improve the physical conditions of the urban environment as operators. Modernists believed in the idea that a society based on science and universal values is truly free. Thus, little attention was paid to the accommodation of the diverse cultural groups in the Age of Enlightenment (S. Sen, 2000). Planners were not much concerned about how different ethnic and cultural groups were influenced by their decisions.

At this phase of urban planning, urban ethnic neighbourhoods and enclaves were seen as unattractive transitional units where planners did not intend to legitimise and sustain them

over time. Rather, the purpose was to blend these neighbourhoods in through modern and “universal style” of architecture and urban design. The monistic approach in planning was criticised as it did not succeed in addressing the problems of marginal neighbourhoods. This approach could not respond to the needs of different ethnic and cultural minorities whose “worldviews” and “value systems” were different from the dominant [American] culture (Burayidi, 2000).

The second phase of planning which is called the “*Pluralist phase*” stretched between 1961 and 1981. It shifted from the phase that assimilated ethnic cultures into the dominant culture to the acknowledgement of diversity. It was initiated with minority community movements for acknowledgement of their cultural identity and political representations. These ethnic revival movements affected planning in different ways, such as an *increase in race issues in planning, concern and understanding for social justice, and the rise of the feminist movement*. The Model Cities program initiated in the “integrationist” period had a more comprehensive approach; it also addressed social and economic issues rather than just considering physical modifications of the built environment (Burayidi, 2000).

The third and current phase, known as the multicultural approach in urban planning practice began in the middle of 1981. Unlike the integration period, where ethnic groups had the opportunity for political victory, in the multicultural period all cultural groups have equal opportunity for their position to be represented in the political environment. In the multicultural period, culture has become an important component of planning. The approach is “culturally sensitive” and called “holistic planning” as it pays attention to the influences of planning on issues of race, gender and class. This phase has a participatory planning approach (Burayidi, 2000).

There are several differences between holistic planning (also known as the salad bowl approach) and Universalist planning (also known as the melting pot approach). Modernism and scientism have cultural biases and prescribed values of the society, assimilating different racial and cultural groups. Holistic planning criticises the Universalist planning approach and its Universal standards. In the holistic planning approach, there is not any set of standards and prescribed universal norms for different communities to follow in the planning process. Rather, it acknowledges the cultural diversity which exists among beliefs, practices and customs and within communities, encourages their expression and is “***responsive to a diversity of worldviews and cultures***” (figure 2-2).

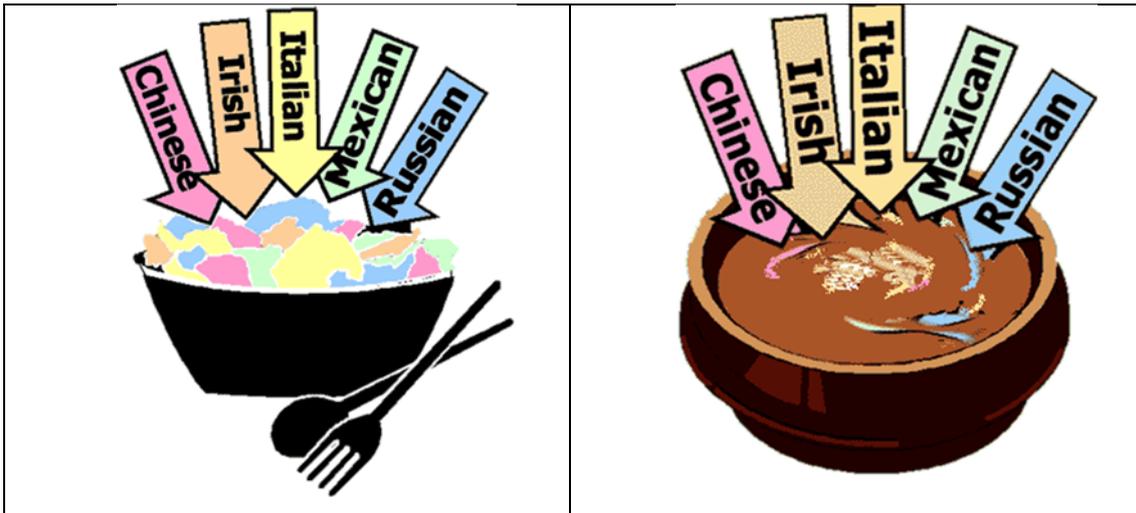


Figure 2-2: The “salad bowl” and “melting pot” approaches. Adapted and modified from: <http://www.regentsprep.org/regents/ushisgov/themes/immigration/theories.htm>

The holistic approach acknowledges that each culture has its behaviour and attitudes that are entirely rational and normal to that culture, although they might seem irrational and absurd in the viewpoint of other cultures. In the current approach, planners need to be knowledgeable and cautious at the time they are planning with different cultures. They act as a partner or facilitator in the planning process which helps communities to make their own plans (Burayidi, 2000; Qadeer, 1997).

Following the holistic approach, Hannerz proposes “*seven arguments for diversity*” to explain why cultural diversity is important.

1. *the moral right to one’s culture, including one’s cultural heritage and cultural identity;*
2. *the ecological advantages of different orientations and adaptations to limited environmental sources;*
3. *a form of cultural resistance to political and economic domination by elites and power asymmetries and a way to counteract relations of dependence;*
4. *the aesthetic sense and pleasurable experience of different worldviews, ways of thinking, and of other cultures in their own right;*
5. *the possibility of confrontation between cultures that can generate new cultural processes;*
6. *a source of creativity; and*
7. *a fund of tested knowledge about ways of going about things* (Hannerz, 1996, pp. 56-57) cited in (Low et al., 2005, pp. 16-17).

Low and her colleagues (2005, p. 17) add another characteristic to this list that suggests that cultural diversity *Leads to community empowerment, expanded citizenship, and the involvement of people* in an area. Thus, cultural diversity develops the concept of “*individual rights of citizenship*” by conserving one’s culture or cultural group.

There has been a trend towards urban policy practices based on daily discussions of differences in order to bring people with different backgrounds in the same spaces. Amin (2008, p. 16) argues for the juxtaposition of diversity through inclusive multiplicity, which he describes as “*the product of overlapping interests and informal reciprocal arrangements among the occupants of public space*”. Cultural diversity that is developed in an affective and authentic manner, where all [cultural] groups are treated equally, will lead to a more democratic practice between people within an area (Low et al., 2005). Madanipour declares that “*designing a multicultural city is the same as designing a democratic city, in which the residents [...] shape their future toward working together, whoever they are and from whatever background*” (2007, p. 145). Public spaces are arguably the most recognisable aspect of cultural vitality in cities; therefore, they have an important role in multicultural and democratic societies. The next session discusses public spaces.

## **2.3 Public Space**

Over the past few decades, public spaces have become the main concern among urban planners and designers (Carr, Francis, Rivlin, & Stone, 1992; Madanipour, 1996; Moudon, 1987; Townshend & Madanipour, 2008). The values and benefits of public spaces in cities are well documented. Public spaces provide a range of values for societies; from an arena for political representation to symbolic and representative functions. Public spaces are considered as the most perceptible and recognisable aspect of public life and cultural vitality of cities (Pugalis, 2009b). The role of public space for the enhancement of social cohesion and social integration of underprivileged populations is well understood. The quality of public spaces has become a precondition for the economic health, economic development and competitiveness of cities. Public spaces could also create a sense of community and mutual trust between the users by the values and norms they share within the community (Madanipour, 2004; Mulgan et al., 2006; Pugalis, 2009b). Among all the characteristics mentioned, public spaces offer a ground for sociability, becoming a setting for unplanned communications and social interactions both between friends/family members and strangers (Kohn, 2004; Mehta, 2013; Thomas, 1991; Varna & Tiesdell, 2010).

### **2.3.1 Definition of Public Space**

Scholars of various fields address different political and cultural definitions of the public realm. Similarly, the term public space has different meanings in various fields; political scientists and geographers are usually concerned with public space in terms of the civil rights of individuals and groups in a civil society. Sociologists think of public space in the context of social dynamics. On the other hand, urban designers think of it as a physical space (Mehta,

2014). The common features of all fields are that the openness of public space is important to democratic life (Goodsell, 2003). The connection between public space and the public realm is well established in literature where public space is the *spatial subset* of the public realm (Thomas, 1991) and has a crucial role in expanding and sustaining the public realm (Parkinson, 2012; Sennett, 1971; Thomas, 1991). This study focuses on public space as a physical subset of the public realm and is mainly concerned with people-space relationships. However, it situates the physical space into its social, cultural and political context.

In his theory of urbanism, Louis Wirth (1964, p. 69) describes the city as a “*melting-pot of races, peoples, and cultures, and a most favourable breeding-ground of new biological and cultural hybrids*” where individual differences could not only be tolerated but also rewarded. This requires civility, a term that Sennett (1977, p. 264) describes as an “*activity which protects people from each other and yet allows them to enjoy each other’s company*”. In other words, civility is related to building social associations and temporary connections between strangers while respecting their social distance (Carr et al., 1992; Sennett, 1977). One of the major roles of cities is to provide a means for such social encounters for citizens (Cullen, 1961; Mumford, 1961). Urban theorists such as Mumford (1961), Sennett (1971), Berman (1986), Low (2000), Zukin (1995) and Sandercock (1998) have suggested that there is a strong relationship between well-functioning urban public space and the promotion of urban civility, democracy and civilizing social life. Public spaces are considered to be an important aspect of democratic societies. According to Mitchel (2003, p. 130), “*Public Space occupies an important –but contested-ideological position in democratic societies*”. The spatial and cultural dimensions of democratic political practices could be valued through the “*making and remaking of public spaces*” (Low, 2000, p. 247).

Public spaces are known as the “*theatre of everyday life*” where individuals and groups can observe and encounter other people beyond their normal circle of acquaintances, people who might have different customs, behaviours and cultures (Berman, 1986; Shaftoe, 2009; Walzer, 1986; Young, 1990). “*Differences are constructed in, and themselves construct, city life and spaces*” (Bridge & Watson, 2000, p. 251). Thus, public spaces become areas for learning and education as they encourage the progress of maturity and enhance as well as enrich personal growth (Franck & Stevens, 2006; Sennett, 1971, 1994; Shaftoe, 2009; Young, 1990). Hence, they help people to engage with differences, and to go further than their personal defined boundaries, to confront, tolerate and resolve conflict.

The certain amount of anarchy and disorder (casual encounters with the unknown) experienced in public space will lead to a tolerant society (Lofland, 1998). Such an ideal model could lead to the idea of a democratic society; *“The linkage between public space and the globalizing political economy deserves closer scrutiny because societal mobilization about public space influences the shape of civil society and, by extension, democratic participation”* (Low, 2000, p. 238).

Therefore, a central role of public space is to offer a ground for sociability. In order to allow for a civilizing social life and social encounter among citizens, public spaces need to be open and inclusive to a wide range of people.

The definitions of public space are distinguished by ownership, control, access and use in the urban design literature (Mehta, 2014). Some define public space as a space that is not organised by the private sector;

*“Space that is not controlled by private individuals or organizations, and hence is open to the general public. This space is characterised by the possibility of allowing different groups of people, regardless of their class, ethnicity, gender and age, to intermingle”* (Madanipour, 1996, pp. 144-145). In other definitions, public spaces are considered public as they are accessible to different groups of people, allowing them to intermingle. In this vein, public spaces are traditionally differentiated from private spaces in relation to their

*“uncontrolled nature over access, entrance and rules of using a space, ... Whereas private space is demarcated and protected by state-regulated rules of private property use, public space, while far from free of regulation, is generally conceived as open to greater or lesser public participation”* (Low & Smith, 2006, p. 4). For the purpose of this study, public space is considered as an area that is both publicly owned and is open and accessible to the general public (Carr et al., 1992; Ruddick, 1996).

While the relationship between public space and the public realm is well understood, it has been suggested that some spaces are more public than others in terms of being accessible in terms of use (Ruddick, 1996). In this vein, the erosion of the public character of public space has become commonplace in the current literature as discussed below.

### **2.3.2 Threats to Contemporary Public Spaces**

Many simple activities such as walking, talking, people watching, eating and sports can give public spaces a diverse life but unfortunately, public spaces are becoming *“endangered*

*species*” as the “public” nature of many is rapidly becoming “privatised” spaces (Iveson, 1998; Kohn, 2004).

Banerjee (2001, pp. 19-20) asserts that public life is increasingly “... *flourishing in private places... in small businesses such as coffee shops, bookstores and other such third places*”. Many public spaces today have become commodity environments run by economic prospects rather than enhancing the quality of life (Lloyd & Auld, 2003). In recent years consumption-dominated spaces such as shopping centres and other third places have been replacing streets as gathering spaces. Shopping malls differ from real public spaces due to their private ownership. Carmona et al. (2010) categorise them as “*external and internal quasi-public space*”, where the primary public behaviour is regulated and controlled by the landlords and owners (Shaftoe, 2009) and “*nominally public due to their regulations in access and user behaviour*” (Carmona et al., 2010, p. 139). The primary purpose of shopping malls is to maximise the benefit from consumers (Latham, 2003). Thus, they often accommodate those with sufficient funds and lead to the exclusion of non-consumption public (Lloyd & Auld, 2003; Shaftoe, 2009). The existing regulations and management priorities in privately owned public spaces sort and filter users according to predetermined appropriateness of behaviours and use (Davis, 1992; Németh, 2012). Thus, the development of privatised spaces such as shopping malls does not coincide with the concepts of inclusion and democracy (Kohn, 2004; Németh, 2009; Németh & Schmidt, 2011). Rather, “*the concept of privatization suggests a past publicness is being eroded*” (Iveson, 1998, p. 22). In addition to issues of democracy, some scholars claim “*air-conditioned malls do not qualify as streets; they are buildings*” (Rudofsky, 1969, p. 20). However, the increasing trend in the decline of shopping streets and the popularity of shopping malls duplicates the importance of attending to the public. Paddison & Sharp (2007, p. 92) recommend, “*as neo-liberal regeneration redefines more and more spaces as private, it becomes ever more important to attend to the public*”. Therefore, the value of the social aspects of traditional main street shopping areas is now well understood by scholars (Goodman & Coiacetto, 2012). It has also been argued that in improving the quality of life of public leisure spaces, professionals and decision makers must be more concerned about the social implementation of the place rather than its profitable aspects and spatial structures (Lloyd & Auld, 2003).

The changing nature and mainly the privatisation of public space has been widely reflected in addressing the public character of public space in the current literature. Therefore, commentators have proposed the concept of publicness as one of the characteristics by which the quality of public space is measured and evaluated. The next section describes the concept of publicness.

### 2.3.3 The Concept of *Publicness*

Urban designers such as Kevin Lynch (1960), Jacobs and Appleyard (1987) have addressed the issues of equity, justice and access in their writings. Many years ago, Lynch raised questions about the physical and psychological accessibility as well as openness of open spaces (Lynch, 1972). Later, in his book, *A Theory of Good City Form* (1981) Lynch proposed five forms of spatial control: presence, use and action, appropriation, modification, and disposition. Presence is one's right to access to a place, use and action build on one's ability to use a space, appropriation allows users to claim symbolic or real ownership of a place, modification relates to the right to change a space to enable use. Disposition is the potential to shift/convey one's use and ownership of public space to other users. These five forms of spatial control have strong psychological values such as satisfaction and pride, and their lack could contribute to anxiety (Francis, 1989). Following Lynch's framework, Francis develops a primary definition of control in public spaces: "*Control is the ability of an individual or group to gain access to, utilise, influence, gain ownership over, and attach meaning to a public space*" (Francis, 1989, p. 158). Following on the conceptual definition of control, Jacobs and Appleyard (1987) claim that good urban spaces should be accessible to all citizens where all citizens have minimal levels of identity, control and opportunity. Many aspects of control and qualities of public space have a high degree of commonality with principal dimensions of publicness.

The concept of publicness is tied with issues of equity, justice, and access. "Publicly accessible" spaces are defined as spaces that "*serve as the material location where social interactions and public activities of all members of the public occur*" (Mitchell, 2003, p. 131).

Publicness is a subjective concept and the extent that public spaces could become truly public is a matter of debate among academic researchers. Most of them believe that a "genuinely democratic space is virtually extinct" (Davis, 1992, p. 156). While a public space might be considered and conceived public for user A, it might not necessarily be deemed as public for user B. For example; while a space occupied and used by homeless people might be understood as truly public from one view point, it might exclude others from using that space (Nemeth, 2012). As public spaces are never homogenous, such an ideal public space is hardly possible and the extent that spaces are public differs from one case to another (Low & Smith, 2006; Mehta, 2013, 2014). The notion of an ideal public space, that is inclusive and accessible to all members of the public, nevertheless, is worthy and desirable to pursue (Mehta, 2013). Scholars have therefore suggested the concept of "multiple publics", where a

range of separate and single public realms, based on different aspects of gender, socio-economic status and ethnicity, overlap with each other in public spaces (Iveson, 1998; Varna & Tiesdell, 2010). Kurt Iveson questions: “*What might a model of publicness that does not assume the existence of a single public with shared values look like?*” *The first step...*” he explains, “*...is to redefine the public sphere not as a single universal sphere with a set of universal values, but as a sphere where there is more than one set of values or more than one public*” (Malone, 2002, p. 162). The public spaces become more public for multiple publics and increase levels of publicness. While achieving 100% of publicness in public spaces might seem impracticable in reality, we can move towards the boundaries. Making a space more public would increase the chance than a greater range of people share the place and therefore, increase the chance for a civilizing social life and encounters;

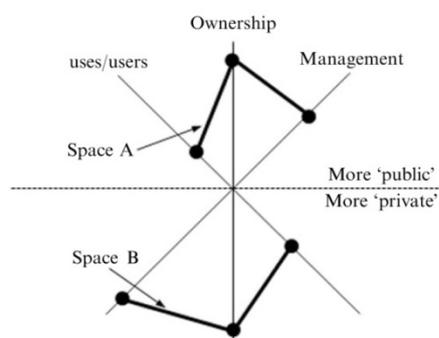
*“Public space is the common ground where civility and our collective sense of what may be called “publicness” are developed and expressed. [...] Our public environment serves as a reflection or mirror of individual behaviours, social processes, and our often conflicting public values”* (Francis, 1989, p. 149).

Scholars and urban practitioners have developed specific dimensions to assess and evaluate the publicness of public spaces. But what makes public spaces “public”? The next section describes different dimensions and qualities of public space that can make them more or less public.

The term public space is generally used in an instinctive and unreasoning manner by city officials and developers, where the publicness of public spaces is often taken for granted. However, there are often gaps between their ambitions and objectives outlined as creating top-quality public spaces and high-level public realms and results obtained in terms of the publicness of places. Furthermore, publicness is often considered through single viewpoints, based on considerations of public/private ownership and management/control (Varna & Tiesdell, 2010). On the other hand, scholars suggest that reducing the quality of publicness to a single-dimensional continuum should be avoided and that publicness is a multi-dimensional and “*cluster*” concept that must include several, interrelated explanations (Franck & Paxon, 1989; Kohn, 2004; Langstraat & Van Melik, 2013; Parkinson, 2012; Varna & Tiesdell, 2010). The main dimensions of publicness have been defined by various commentators. There is a high degree of congruence among these dimensions and with definitions of public space, as this term includes the concept of publicness. In this vein, Kohn (2004, p. 11) identifies “*ownership*”, “*accessibility*”, “*inter-subjectivity*” as the main dimensions of

public space. The term *inter-subjectivity* relates to the types of encounters and interactions that are supported in the place. Franck and Paxon (1989) claim that the publicness of public spaces is based on a range of characteristics, which include design, location and provision/management. Madanipour (1999) further develops a framework provided by Benn and Gauss (1983) and highlights “*access*”, “*agency*”, and “*interest*” as the main dimensions of publicness. Access refers to having access to a place and activities within, agency relates to the consequences of control and decision making of an agent (acting privately or on behalf of a community), and interest refers to the targeted recipients of particular engagements impacting on a place. Del Magalhães (2010) suggests rights of access, rights of use and ownership/control as the dimensions that determine the public character of public spaces.

Other scholars and urban practitioners have developed multi-faceted models based on various dimensions to assess the publicness of public spaces. Nemeth and Schmidt (2011) propose a model that categorises publicness as the interaction between ownership, management and uses/users of a space. Their model is based on three main axes. Each of these axes represents the relative publicness of a specified facet; ownership (from public/government to private/corporate), management (from inclusive and open to exclusive and closed) and use/users (from diverse/collective to homogeneous/individual)(Varna & Tiesdell, 2010). These three axes intersect to suggest a range of more public to less public situations. A point is plotted on each of these three axes associating it with a “more public” or “less public” classification; if the plot lies above the horizontal line it is more public than a plot that falls below the line. The relative publicness of each space could be assessed and compared with other spaces by linking these points together to enclose an area (figure 2-3).



**Figure 2-3: Nemeth & Schmidt’s tri-axial model of Publicness; space A is considered as more public than space B. Source: Nemeth and Schmidt (2011)**

The size of the enclosed shape and what proportion of it is located on the upper section of the horizontal line (more public) indicates how public a public space is. For example space

A is considered more public as its plot is above the horizontal line than space B, which is plotted below the line (Nemeth & Schmidt, 2011).

In their proposed star model, Varna and Tiesdell (2010) provide a more in depth and situated exploration of publicness of public spaces. They identify ownership, control, civility, physical configuration and animation as the five key dimensions of publicness. Each dimension ranges from more public to less public. Ownership refers to the legal status of a place. The dimension of control refers to the presence of an explicit control; civility refers to the management and maintenance of a space; physical configuration refers to macro scale design-oriented dimensions of publicness and animation is a design oriented dimension which regards micro design of a space (figures 3-3 and 3-4). Firstly, this dimension considers whether human needs are supported by the design of the space and secondly, whether different individuals and groups use the space actively. Each of the dimensions described can support “*publicness of a place that is, a place that is, more public for more publics*” (Varna & Tiesdell, 2010, p. 586).

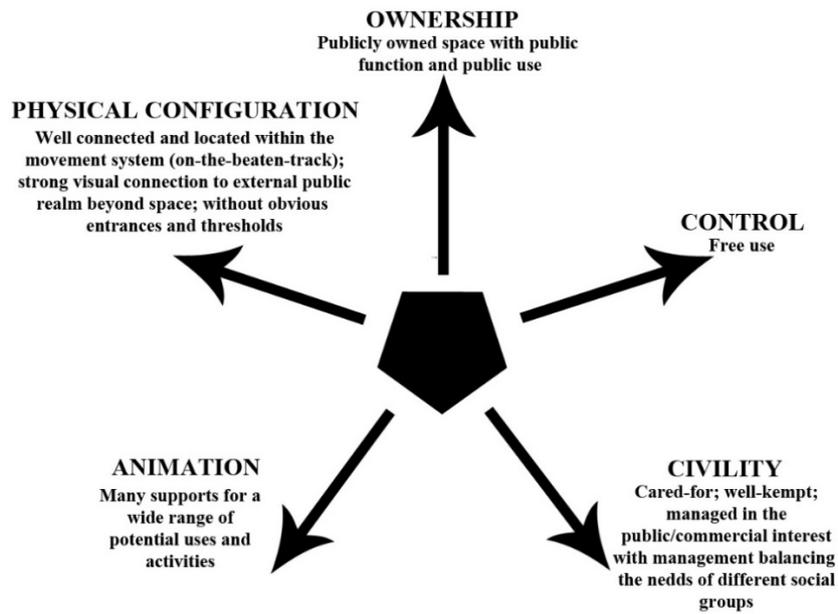


Figure 2-4: Characteristics and attributes of more public places; Varna and Tiesdell, 2010, p. 589

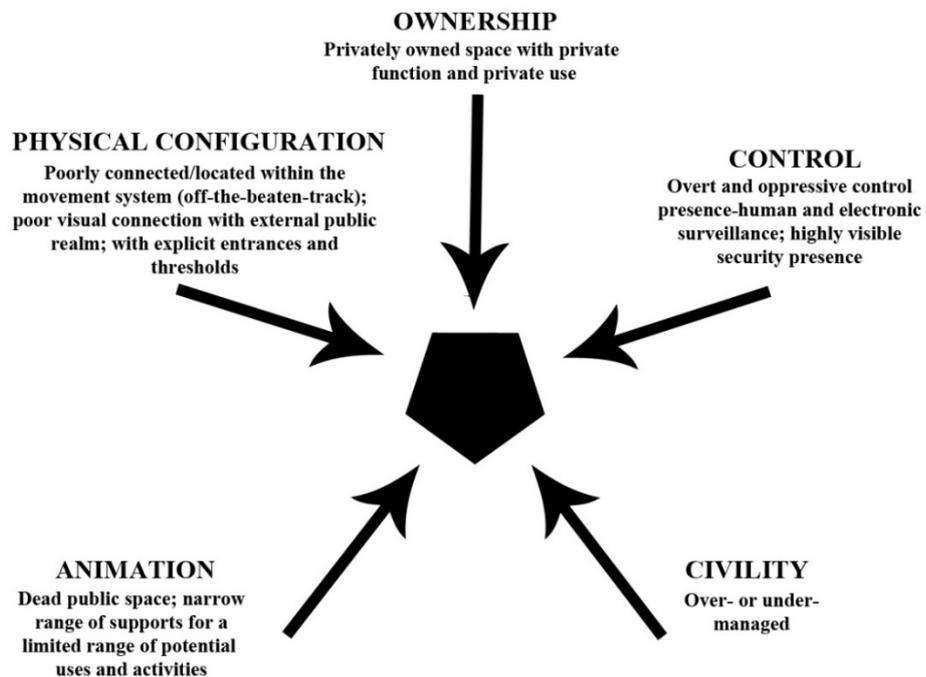


Figure 2-5: Characteristics and attributes of less public places; Varna and Tiesdell, 2010, p. 589

Finally, Langstraat and Van Melik (2013) provide the OMAI model. They summarise the main indicators of publicness as Ownership, Management, Accessibility and Inclusiveness. (ie OMAI). Ownership refers to the legal status of a place. Management refers to maintenance and civility of a space; it also comprises the practices of control such as the presence of CCTV or security guards. Accessibility refers to the physical connectivity of a place as well as the design of the place itself. Inclusiveness is about the level that the needs of different individuals and groups are met in the place.

The benefit of these models is that they are all based on a multi-dimensional interpretation of publicness rather than limiting it to a single continuum. There are important similarities within the discussed models, however, the terminology is often different among some dimensions. Ownership is considered to be a major dimension of publicness in all models. How a place is managed is also an important component of publicness. Management includes civility and control in the star model. Accessibility in the OMAI model is related to Del Magalhães' (2010) right of access, physical configuration in the star model, and access in Benn and Gauss' (1983) and Madanipour's (1999) frameworks.

Inclusiveness in the OMAI model is closely linked to Kohn's(2004) inter-subjectivity and the animation dimension in Varna and Tiesdell's (2010) star model and relates to meeting human needs in public spaces(Langstraat & Van Melik, 2013). It also relates to uses/users in the tri-axial model. The OMAI model provides a comprehensive framework for publicness based on the previous models and definitions of publicness.

Most of these models have been developed in order to analyse and compare pseudo-public spaces<sup>1</sup> on their own or together with publicly owned spaces. There is a presumption of publicness in municipally-owned public spaces. But how public are publicly owned and managed public spaces in reality and how can these models help to gain an understanding of publicness in such spaces?

Furthermore, empirical research on publicness of public spaces has been discussed mainly on the perspectives of ownership (Nemeth & Schmidt, 2011; Varna & Tiesdell, 2010) and management/control (Low, 2000; Nemeth & Schmidt, 2011).

The concept of *publicness*, however, needs deeper investigations and analysis across its different dimensions rather than solely ownership and management/control. The current

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<sup>1</sup> Spaces that serve a public function but are owned or managed by the private-sector (Tribid Banerjee, 2001).

models provide narrow definitions of the dimensions; for instance, accessibility named as physical configuration in the star model is more about physical connectivity of the space and how much effort it takes to enter a space. Accessibility in the OMAI model includes the design of the public space such as entrances as well as physical connectivity. However, urban design literature considers other forms of accessibility; visual, symbolic, and economic. These will be further described in section 3.2.

Moreover, the current models do not describe any possible relationship between the dimensions of publicness. For instance; civility/management is the level that a place is cared for and well-kept and inclusiveness is about meeting human needs. Could day to day maintenance of a public space be part of meeting the needs of its users in order to generate a welcoming ambience?

The next section describes the role of public space in multi-cultural societies and how publicness relates to cultural diversity in public spaces.

## 2.4 Public Space in Multicultural Societies

*“Crossing of borders is no longer solely about traveling from one nation to another, but rather a part of everyday encounters in the city.”*

*Hou, 2013b, P. 13*

Public spaces are intercultural places (platforms) where people from different cultures and ethnicities can encounter and interact with each other (Hou, 2013b; Mehta, 2013; Velden & Reeves, 2010). One of the basic assumptions of Western multi-cultural democratic societies is that every person has the right to equitable access and enjoyment of public spaces (Thompson, 2003). This coincides with the democratic nature of public spaces. With increasing cultural diversity, the possibility that different cultures will share a city’s public spaces has indeed increased. Good quality public spaces are known as spaces “*where ethnically and culturally diverse groups can co-exist peacefully*” (Mulgan et al., 2006, p. 28). Designers have become aware of the fact that designs should not be based only on the needs of the dominant culture. Culturally appropriate design has become an issue of importance among designers given that one design might not be appropriate for all cultures with different values. Urban planners should understand what makes a public space appropriate for different uses of people with different cultural backgrounds.

*“The assumption is that the society is made of a homogeneous majority and a number of marginal minorities needs revision. We cannot think of an urban design for a culturally homogeneous majority that needs to be adjusted to incorporate the needs of cultural minorities. We have to talk about a sensitive urban design that tries to understand who it is working for and what needs it is addressing” (Madanipour, 2007, p. 145).*

In diverse multicultural societies the design of public space becomes more challenging since people from different ethnicity, age and socio-economic backgrounds have special space requirements for their preferred activities (Carr et al., 1992) and “*symbols are neither fixed nor shared*” between different cultures (Rapoport, 1982, p. 45).

Good quality public spaces are known as spaces that are multicultural “*where ethnically and culturally diverse groups can co-exist peacefully*” (Mulgan et al., 2006, p. 28). Leisure activities play an important role in creating ethnic bonds and subcultural identities in multicultural societies (Floyd & Gramann, 1993). Urban designers believe that successful public spaces do not only allow the co-existence of different cultural groups but also are spaces where they

can gather and share the experience of their presence in the place supporting a communal sense of pleasure;

*“When public spaces are successful [...] they will increase opportunities to participate in communal activity. [...] In the parks, plazas, markets, waterfronts, and natural areas of our cities, people from different cultural groups can come together in a supportive context of mutual enjoyment. As these experiences are repeated, public spaces become vessels to carry positive communal meanings” (Carr et al., 1992, pp. 343-344).*

There has been a sustained focus to enhance the design and management of urban public spaces (Carmona et al., 2010; Madanipour, 1996). *“In general texts on sustainable development, social needs are usually discussed in terms of equity, ethics and human rights. In the urban literature, the emphasis tends to be more on the qualities of the physical environment, rather than on the rights of urban dwellers”* (Manzi, Lucas, Lloyd Jones, & Allen, 2010, p. 200). The strategic role of public space has been understood by many initiatives with the intent to promote social inclusion and social cohesion in urban areas. The Department for Communities and Local Government in the UK is looking for means to ensure that communities are supported by clean, safe and attractive public open spaces that are also inclusive and sustainable (Dines & Cattell, 2006). A current debate is how to make sure that public spaces respond to the needs of diverse users (ODPM, 2002, 2003). Good urban design is meant to be sustainable, which itself comprises the concepts of equitability and inclusiveness (Carmona et al., 2010).

Cultural diversity *“refers to maintaining and enhancing the diverse histories, values, and relationships of contemporary populations”* (Low et al., 2005, p. 5). *“Cultural diversity provides a way to evaluate cultural and social sustainability, and is one observable outcome of the continuity of human groups in culturally significant places”* (Low et al., 2005, p. 8). Low et al. state that one way to promote social tolerance of diverse communities and peaceful relationships between people is to ensure that urban spaces where all diverse groups join each other and mingle remain public, which affords spaces for everyone to learn, recreate, and relax, as well as open so that *“interpersonal and intergroup cooperation and conflict can be worked out in a safe and public forum”* (Low et al., 2005, p. 3). Policies seem to be moving from assimilationist perspectives and *“melting pot society”* to a *“de facto multiculturalism”* (Loukaitou-Sideris, 2002 b). Ward Thompson (2002, p. 60) asserts that we need the *‘salad bowl’* rather than *‘melting pot’* in our urban public spaces *“where different cultures can find individual expressions”*. Thus, *“it would be incorrect to assume mixing everyone together will result in a happy hybridity. Cities are sites where difference rubs against difference”* (Eldridge, 2010, p. 192).

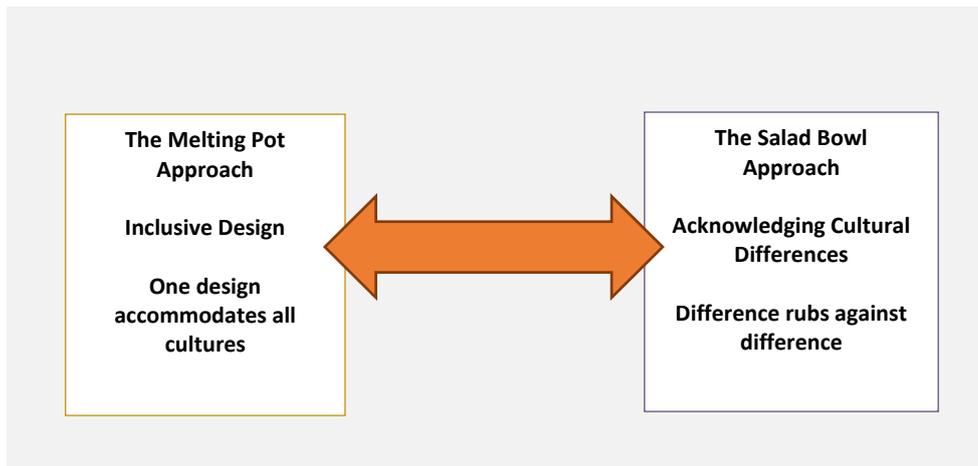


Figure 2-6: Different approaches regarding public space in multi-cultural societies. Source: author

Low and her colleagues (2005, pp. 4-5) propose six lessons for promoting and managing social and cultural diversity in urban parks and heritage sites;

1. *If people are not represented in historical national parks and monuments or, more importantly, if their histories are erased, they will not use the park.*
2. *Access is as much about economics and cultural patterns of park use as circulation and transportation; thus, income and visitation patterns must be taken into consideration when providing access for all social groups.*
3. *The social interaction of diverse groups can be maintained and enhanced by providing safe, spatially adequate territories for everyone within the larger space of the overall site.*
4. *Accommodating the differences in the ways social class and ethnic groups use and value public sites is essential to making decisions that sustain cultural and social diversity.*
5. *Contemporary historic preservation should not concentrate on restoring the scenic features without also restoring the facilities and diversions that attract people to a park.*
6. *Symbolic ways of communicating cultural meaning are an important dimension of place attachment that can be fostered to promote cultural diversity.*

As a part of democratic societies, public spaces are places where the rights of ethnic and other minority groups must be protected beside the domination of the majority (Carr et al., 1992). Public spaces can sustain activities and offer opportunities for different cultural groups of society. As noted, they offer the opportunity for differences to co-mingle, and this has been recognized as one of the characteristics of successful public spaces. Mark Francis argues;

*“A successful public space is one where users of different backgrounds can coexist without one group dominating another” (Francis, 1987, p. 29).*

In this vein, Michael Walzer (1986, p. 470) distinguishes between two kinds of public space; single-minded space, designed by planners or entrepreneurs who have only one thing in mind, and used by similarly single-minded citizens and “*the open-minded space, designed for a variety of uses, including unforeseen and unforeseeable uses, and used by citizens who do different things and are prepared to tolerate, even take an interest in, things they don't do*”.

Some scholars have discussed the role of public space in deepening public understanding of racial integration (Walzer, 1986). Worpole and Greenhalgh (1996, p. 22) claim that: “*public space, we would argue, is now of central political importance to questions of sustainable, equitable and enriching urban life*”.

Based on Mitchell's (2003) definition of publicness, publicly accessible spaces in the context of this study are where public activities and social interactions of different cultural groups happen.

#### **2.4.1 Research on Cultural Diversity in Public Spaces**

Each culture has its public-private outline and public spaces in various societies reflect their prevalent and major public and private values. The emphasis that each society gives to each and the values they express help to describe “the differences across settings, across cultures and times” (Carr et al., 1992, p. 22). These values develop from a complex interaction of physical, social, political and economic factors. They replicate different levels of recognition of the needs, rights, and the quest for meaning of their members (Carr et al., 1992). It is argued that “the role of public space often is to symbolise the community and the larger society of culture in which it exists” (Carr et al., 1992, p. 23). Public spaces have different meaning and values in different societies, places, and times (Low & Smith, 2006).

Several studies in social sciences and leisure studies have been undertaken to understand how different ethnic and cultural groups relate to public spaces in multi-cultural societies (Dines & Cattell, 2006; Gobster, 2002; R. Hutchinson, 1987; Loukaitou-Sideris, 1995; Low et al., 2005; Rishbeth, 2001). The combination of social patterns, preferences for various activities and attitudes defines leisure patterns of different cultural groups (Floyd, 1999).

Loukaitou-Sideris (1995) examined four parks in ethnically diverse neighbourhoods in Los Angeles, comparing how they were used by Caucasians, Hispanics, African-Americans and Asian groups. She found some noticeable differences between patterns of use among

different ethnic groups and the meanings these groups associated with park features. Hispanics often frequented the parks in larger groups and their social gatherings often included food. The social and relaxation characteristics of the park were highly rated among them. African-Americans were more likely to be involved in sports, and they also had high preferences for the relaxing and social benefits of park use. Caucasians mostly used the park for individual activities, such as walking or jogging. The aesthetic qualities of the park were highly valued by them. In comparison to other groups, Asians were observed infrequently, the exceptions were a number of older Chinese men who socialised with each other and played Tai Chi. Similarly, Gobster (2002) found differences between the social group size, composition, patterns of use and preferences among ethnic groups in Lincoln Park, Chicago's largest and considerably used park. Whites often visited the park as individuals or couples whereas minority groups (Blacks, Latinos, and Asians) came in larger groups. Surveys also showed the importance of family groups in the social pattern of these users. Whites were mostly involved in active-individual sports such as walking, jogging, and bicycling. On the other hand, all minor groups were more likely to participate in passive social activities such as talking and socialising, compared to Whites. All groups participated in active-group sports and water-oriented activities, however, the type of preferred activities differed between groups; Whites and Latinos were more involved in swimming whereas Asians were more active in fishing. There were also differences among the favoured park characteristics among cultural groups. While many participants mentioned natural features, Asians stressed the park's scenic beauty more frequently. The cool refreshing "lake effect" was favoured among Latinos and Whites mentioned the trees and other vegetation. Blacks, on the other hand focused on aspects of facilities and maintenance and said less about natural features.

Such studies then support different policies, planning strategies and programs that meet the needs of different ethnic groups. For Lincoln Park, strategies based on ethnic differences might include those that maintain and improve the passive landscape as well as strategies that enable social interaction (providing picnic areas, seating, and the side-lines of sport fields). Planning and management that allow differences between groups might also include table and seating arrangements that accommodate larger groups and the location and maintenance of restroom facilities in order to arrange for safe and clean access. Upgrading and maintaining natural landscape characteristics such as trees, water bodies, and beaches supports the needs of all cultural groups and therefore, should be sought as a priority.

Rishbeth (2001, pp. 356-352) studied the similarities and differences in the use of parks by ethnic minority groups and immigrants in England within a number of case studies. She

suggests that the design responses in multicultural societies are based on three provision approaches; “*symbolic reference*”, “*experiential reference*”, and “*facility provision*”.

Symbolic reference is to symbolise another culture and its distinctive identity by placing its simplified cultural elements in the public spaces of a new setting. This landscape then acts as the most identifiable response to the presence of an ethnic minority. For example, most Chinatowns could be considered as a symbolic reference as they insert visual characteristics to give users a perception of Chinese culture. The imported images of the origin are often visually overstated or idealised in the public spaces of the new setting, but there is often a superficial relationship between the designs of both environments. The use of visual symbols could be understood as strength or as a weakness. Due to the emotional reactions they provoke they could be seen as both inclusive and exclusive. The use of symbolic elements might cause a tension between different groups with historical conflicts or when special attention has been paid to a specific culture or nation.



Figure 2-7 and 2-8: Central park in New York attracts a diverse range of users. Source: author, 2013

Experiential reference does not rely on visual cues and symbols as cultural objects; instead it aims to consider landscape as an “integrated whole” which reflects users’ experiences of different cultures. Experiential approach is generally achieved in natural landscapes, where exotic planting would evoke a memory of a landscape in a particular location. However, “*it can also be found in the scale, texture and density of an urban street*”.

The facility provision approach is one that does not differentiate between different groups of people or define specific spaces for specific groups, but develops a set of design guidelines which reflect the specific cultural needs of different user groups. Facility provision does not focus on visual characteristics of spaces and, rather, it tries to understand how different cultural groups use a space in order to provide facilities that accommodate their needs. The current approach acknowledges the concept of inclusive design that is to design environments that as many people as possible can use. Facility provision does not seek

specific spaces for cultural minorities as their leisure needs could be accommodated without affecting the perceived benefit of the majority.

The “*facility provision approach*” is an inclusive approach which does not differentiate between different groups of people or define specific spaces for specific groups but develops a set of design guidelines which reflect the specific cultural needs of different user groups (Rishbeth, 2001). Often, there is not enough space in the city’s spatial network where appropriate settings for various activities of each different group can be provided (Carr et al., 1992). Limited space is often a constraint in considering the needs and preferences of different cultural groups. So, “*the creation of multi-use settings is a more common solution*” (Carr et al., 1992, p. 256).

Past research has shown that multiculturalism embodies even small details. Qadeer (1997) explains how people’s preferences are influenced by their cultural background by citing an example of how different ethnicities have different landscape preferences in neighbourhoods in Canada. While Anglo-Saxons preferred tall and leafy trees in order to block views to and from the neighbourhood, Italians and Portuguese favoured short trees which gave them a better view. Chinese people believe trees in front of a house bring bad luck.

Other studies have shown that people with different socio-economic background have different behaviours and attitudes towards streets and public spaces. A study conducted by James Duncan (1976) revealed that people from different social classes in India use a single street in considerably different ways and at different times. Duncan divides the landscape into “paths” used as pedestrian paths and “places” defined as gathering spaces. The paths tended to be shared by both social groups while the places were segregated by social class.

Researchers have pointed out that the difference in use and perception of space and public spaces is also related to other factors such as age, gender, income differences, and life-cycle stages (Burton & Mitchel, 2006; Dines & Cattell, 2006; Duncan, 1976; Franck & Paxon, 1989; Layne, 2009; Malone, 2002; Moore, 1987; Rapoport, 1977).

The following examples suggest the importance of research on cultural diversity in public space in order to integrate different needs, use patterns, preferences, and perceptions of ethnic groups into the current planning and design instead of planning for the majority.

## 2.4.2 Successful Examples of Cultural Diversity in Public Spaces

Community gardens and markets are known as successful examples of equitable public spaces which bring different groups of people together in order to use public open space. Literature of public space introduces markets as the primary examples of inclusionary public spaces (heterogeneous and diverse), providing the possibility for different social and cultural groups to co-mingle (Watson, 2009). Markets are known as “*inclusive sites of everyday routines*” where people from different backgrounds co-mingle and exchange ideas in a manner that might not take place elsewhere. In a study conducted by Dines and Cattell (2006), the market was understood by many people as the ‘*multicultural heart of the borough*’, not just because of the variety of goods on offer which attracted a range of different users, but as it encouraged chance social interactions between different cultural groups who would otherwise not encounter one another.

*“People tolerate each other when they are in the market. You might bump into each other....It doesn’t matter. You move on. In that sense you get to know people....We meet different cultures. I might be buying vegetables that I don’t know how to cook, and the lady from another part of India will tell me how to cook it” (Dines & Cattell, 2006, p. 33).*

Markets are also places that offer a variety of international goods for people to buy as well as sell their familiar goods and they could attract a range of different cultural backgrounds where they become places “*for everyone to experience different and hybrid cultures*” (Ehrenfeucht & Loukaitou-Sideris, 2010, p. 467).

Community gardens are known as one of the socially pleasant spaces where different groups of people share public open space (Francis, 1987b) and are one example of ‘diversity juxtaposed’ shared by many ethnic and social groups (Amin, 2008). Community gardens have many advantages; they connect ethnic minority groups and immigrants with outdoor spaces, are used as social space where cultural groups meet and, talk to others, enjoy the fresh air and do some exercise and hold community events (Rishbeth, 2001). Also, they increase a sense of place and sense of well-being as they allow immigrants to make decisions in their community. Users plant and raise familiar vegetables in a different cultural context (Ward Thompson, 2002) and gain financial benefits as these gardens reduce their need to buy expensive exotic vegetables (Rishbeth, 2001).

While past studies show differences in use patterns, preferences, and perceptions of different ethnic groups in public spaces, cultures have also been subject to changes. The following section investigates such changes towards cultural diversity.

### 2.4.3 Threats towards Culture and Multiculturalism

When members of different cultures migrate from one point to another they take their culture with them. Many of these cultural norms and characteristics are also transmitted from one generation to another (Lang, 1987). However, culture is also dynamic and evolves (Lang, 2005). There are a number of threats to the unique characteristics of a culture.

#### **Globalisation and Homogeneity**

Today's global processes guide the world towards a new direction in which geographical differences, variety of languages and cultures, and political boundaries are reaching their minimums. With the increasing pace of globalisation, extreme and rapid changes of culture are occurring and questioning the concepts of ethnic belonging. “Mass culture” is the outcome of globalisation where cultures and places around the world are losing their local distinctiveness and becoming more and more alike (Carmona et al., 2010).

Urban design seems to be deliberately used as a tool for the economic growth of cities in a competitive environment caused by globalisation. It appears that similar ideas have been applied in the regeneration process and the creation of urban environments of cities around the world. The universal style through the modern movement has attempted to create international style urban environments that look similar no matter where they are located (Townshend & Madanipour, 2008). New public spaces in the city are often designed for commercial reasons (Carr et al., 1992) and developed for public cultures which mostly describe the collective identity of those who create and build them. There is a risk of giving way to a visually attractive, privatised public culture by accepting these public spaces that have been created by economic and political powers (Zukin, 1995). The standardisation of place has reduced levels of local distinctiveness, that contains one of the major criticisms of homogeneity (Townshend & Madanipour, 2008). In this regard, cultural diversity is threatened by the “universal style” where cultural differences have been neglected, and activities have been excessively generalised. Urban design guidelines follow the same formula everywhere and enforce an “*unreal*” homogeneity between people of various cultures. Thus, ethnic minorities and marginal groups are excluded from urban environments as their

specific requirements have not been met (Franck & Stevens, 2006; Rapoport, 1980; Young, 1990).

The similarities between urban environments and streets could occur due to the dominance of the same retailers in their land use activities (type of shops), to the type of buildings (architecture) and the materials used to shape the space (for example; pavement materials) (Townshend & Madanipour, 2008). Public culture is socially based on the public spaces of cities in which people have the potential to experience public life such as streets, shops and parks. Zukin (1995) rejects the theory that cities have one single urban culture or various subcultures. She points out the fact that cultures are negotiated in the central and modern public spaces of cities such as streets, parks, restaurants, museums and shops. She defines “*public culture*” as *a process of negotiating images that are accepted by large numbers of people*” (Zukin, 1995, p. 10). In this atmosphere, “*urban design requires a more sensitive approach to issues of cultural diversity as processes of globalization threaten to overwhelm and undermine cultural diversity. It is increasingly important to respect the cultural diversity that continues to exist, because this permits authentic local distinctiveness*” (Carmona et al., 2010, p. 50).

### **Assimilation and Acculturation**

It should be noted and understood that ethnic groups are not homogenous entities. Socio-cultural processes could lead to behavioural differences within ethnic cultures (Heywood & Engelke, 1995). Ethnic minorities might adapt and live with the culture and regulations of host communities (Madanipour, 2004). Studies have been undertaken using assimilation theory to understand the relationship between ethnicity and recreation behaviour. Assimilation refers to “*the process of boundary reduction that can occur when members of two or more societies meet*” (Yinger, 1981, p. 249). Acculturation is the term *used for cultural assimilation*. Cultural assimilation is the process whereby the minority groups of a society acquire the cultural characteristics and behavioural patterns of the mainstream. However, the difference with complete assimilation is that people tend to partly maintain their ethnic characteristics as well (Floyd, 2001; Gómez, 2002). The level of being acculturated and the extent that one preserves their cultural identity is vice versa; the strength of acculturation is often associated with the weakness of ethnic identity (Phinney, 1990; Sasidharan, 2002); “*Acculturation is inevitably accompanied by a weakening of ethnic identity*” (Phinney, 1990, p. 501). Studies regarding recreation and ethnicity increasingly address concepts of acculturation and assimilation (Gómez, 2002). Studying public space in East London, Dines and Cattell (2006) found differences between different Asian generations in choosing their

favourite spaces for social interaction. While immigrants considered certain areas to have an important role for their ethnic communications, the second and third generations did not consider those areas as significant social spaces.

While the importance and role of culture in understanding and designing built environments is well established in the literature, Rapoport (2005, 2008) cautions that culture might have become excessively emphasised. He refers to the rapid cultural change and that the importance of culture in relation to other human characteristics remains an empirical question. He further suggests that empirical research is needed to understand cases in which culture has more or less importance. He asserts that the role of culture might differ with different types of environments, over time, for different groups, and in various conditions and settings.

#### 2.4.4 Current Approaches towards Multiculturalism and Built Environments

While a multi-cultural approach has been taken into account since 1981 and “*maintaining cultural diversity*” has been seen through many multicultural societies, many commentators believe cultural diversity has not been applied in planning and design. Very few studies have been made on urban design issues that incorporate cultural diversity and multiculturalism (Hou, 2013b; Low et al., 2005; Sandercock & Klinger, 1998b). Currently, most research conducted by human geographers, politicians, policy makers and planners is ethnocentric, reflecting the view of a “*homogenous public*” which is perceived as “*White*”, “*Western*”, “*male*”, “*native*” and “*protestant*” (Loukaitou-Sideris, 2002 a; McGuinness, 2002). Knowledge, as a form of authority, has been organised and produced in Western society. Dyer states that “*White domination is reproduced by the way that white people colonise the definition of normal*” (Dyer, 1988, p. 45).

Scholars argue that the needs of different cultural groups have not been considered in the development process of planning and design and guidelines are usually based on the aesthetic needs and values of the Western population. Rather, the social patterns of different cultural groups are usually taken-for-granted (Sandercock & Klinger, 1998a). In other words, the design of spaces is not “*culture-specific*” (Rapoport, 2005) where public spaces are not designed based on the leisure and recreational habits and activities of diverse populations (Sandercock & Klinger, 1998b). It would not be a great achievement to provide urban design primarily for a homogeneous population.

Many urban commentators point to the fact that cultural values must be taken into account in planning and design practices (Appleyard, 1976; Burayidi, 2000; Lang, 2005;

Madanipour, 2010; Rapoport, 1980, 2005; Sandercock & Kliger, 1998b). However, only a few them address the ways in which norms or values could be taken into account in order to enhance accessibility and equity in terms of use (Lynn A. Staeheli, 2011). While these scholars challenge the ethnocentric character of the current urban planning and design, they usually ignore the dynamic process of cultural change in cities and issues of globalisation, assimilation, and acculturation.

Others argue that similar to other aspects of urban design, multiculturalism has also been overshadowed by aesthetic issues in the field of design (S. Sen, 2000). Multiculturalism has mostly had a “*tokenistic*” approach in public spaces where different ethnicities have been expressed using stereotypical and cliché symbols (Sandercock & Kliger, 1998b).

Additionally, the recent and most successful urban public spaces have been located in urban areas with homogeneous demographics. Therefore, the users of these public spaces shared a collective meaning, despite their economic and social differences. Ethnic, cultural and economic diversity within populations threatens the meaning shared between different cultures (Carr et al., 1992).

There is a need to confront and gain understanding on the characteristics and differences of “Non-whiteness/Blackness” within urban spaces, which has been the issue of postcolonial geographers (McGuinness, 2002). According to Rapoport (1980), culture plays an important role, even at the level of basic needs such as sitting. However, activities have been overly generalised; cultural differences have been neglected, and only their apparent aspects have been considered. Lang (2005, p. 16) suggests that reducing the models for designing the built environment “*to a number of universal paradigms has proven to be a costly error*”. Urban planners and designers have become aware of the fact that designs should not be based only on the needs of the dominant culture. Culturally appropriate design has become an issue of importance among designers with the realisation that one design might not be appropriate for all cultures with different values. There is a need for a cross-cultural approach to environmental design (Rapoport, 1980, 2005). Urban designers and planners need to understand what makes a public space appropriate for different uses of people with different cultural backgrounds.

Others suggest a need for new discourses and frameworks addressing cultural transformations, overlays, and intercultural exchanges that take place in urban spaces (Hou, 2013b). In their view, the dynamic character of culture and its instability must be considered in today’s urban environments. In this vein, Rapoport (2005, p. 36) emphasises, “*the*

*importance of culture cannot be assumed or asserted, but needs to be tested empirically.” Thus, it could be concluded that urban designers must acknowledge known cultural variables and differences in designing environments.*

## **2.5 Streets**

### **2.5.1 Streets as Public Spaces**

*“The street, more than any other space, represents the social life of the city: It is the quintessential social public space of the city.”*

*Mehta, 2013, P.10*

The history of the street goes back 8000 years (dating from the 6th millennium BC) and the first street in history was located at Khirokitia, Cyprus (Kostof, 1991). The street has been a place for social encounter throughout time and across various cultures. At the time when modes of transport were foot or pack animals, the space was often shared for both movement and as a space for social encounters. In contemporary society and with the development of vehicular transportation, streets transformed into merely movement spaces, and the social characteristics of the streets became suppressed in support of vehicular movement and circulation (Carmona et al., 2010; Fyfe, 1998; Rapoport, 1990).

Streets and their footpaths represent an important part of urban public open space and have a significant role in enriching public life of cities. Streets constitute a considerable proportion of open public space in cities, and they are known as the most significant representatives of urban public spaces of the city (J. Jacobs, 1961). Scholars advocate that;

*“If we can develop and design streets so that they are wonderful, fulfilling places to be – community-building places, attractive for all people – then we will have successfully designed about one-third of the city directly and will have had an immense impact on the rest“ (Allan Jacobs, 1993, p. 6).*

Streets serve as a ground for different activities covering a mix of economic, commercial, functional, socio-cultural and leisure needs. Streets are defined as” *more or less narrow, linear spaces lined by buildings found in settlements and used for circulation and, sometimes, other activities”* (Rapoport, 1987, p. 81). In comparison with the term “road” which is associated with vehicular and motorised traffic, street has the connotation of covering a blend of traffic and functions but also functioning as a people-centred thoroughfare frequented by a wide range of users, especially those without cars (Greed, 2001; Lillebye, 2001). Urban design and

planning for transport and traffic have been considered as incompatible planning strategies in streets (Lillebye, 2001).

Increasingly, scholars suggest re-thinking and revitalising ‘streets’ as both social space and ‘channels of effective movement’, which serve a wider array of activities than just for traffic [such as walking, biking, transit, etc.], associating them with qualities of social life (Appleyard, 1981; Tribid Banerjee, 2001; Hass-Klau, Crampton, Dowland, & Nold, 1999; Allan Jacobs, 1993; J. Jacobs, 1961; Loukaitou-Sideris & Banerjee, 1998; Mehta, 2007, 2013; Moudon, 1987; Moughtin, 2003). For example, Loukaitou-Sideris & Banerjee (1998, p. 304) argue that, rather than considering the street as a ‘*channel for efficient movement*’ or as an ‘*aesthetic visual element*’, contemporary urban design “... *should rediscover the social role of the street as a connector that stitches together and sometimes penetrates the disparate downtown realms*”.

According to Carmona et al. (2010), successful and people-centred public spaces are those that accommodate more than merely movement-through activities, rather, they encourage people to stop and spend time within the space. Thus, in order for streets to become successful spaces, they should provide means for lingering and staying rather than just pedestrian movement. In addition, many simple activities such as walking, talking, people watching, eating, and sports give streets a diverse life (Francis, 1987). Streets provide a means for sociability, which includes a range of passive and active socialisation, and formal and casual interactions. Therefore, as any other public spaces in cities, streets also become a place to encounter differences, to educate and learn about different viewpoints, to tolerate and to resolve conflict (Mehta, 2013).

## 2.5.2 Interactions between Streets and Culture

The meanings and uses of streets vary across cultures. In some cultures, they create active urban landscapes and become examples of lively urban public spaces where a variety of commercial, political, social and cultural activities take place (Fernando, 2006). Using several comparisons, Rapoport (1987) pointed out that people from some cultures and subcultures use streets and squares more than other groups; In a study comparing street use in a small town in Britain (Yoredale) with one in the United States (Midwest), findings suggest that Yoredale’s streets were livelier in terms of pedestrian activities even though the town had a smaller population.

Many scholars have compared streets in the East and West in order to provide a concrete understanding of how culture affects street use and character (Edensor, 1998;

Mazumdar, 2002; Mehta, 2009b; Rapoport, 1987). Edensor (1998) examines the differences between the “Indian street” and the “Western street”. The “Indian street” is described as a uncontrolled, vibrant space with open boundaries and a combination of spatial forms and activities, sensuous experiences, values and representations where all types of people gather to engage in various kinds of cultural activities. Otherwise, he describes the “Western street” as “highly regulated”, “single-purposed” and “over-determined” in which human interaction has been interrupted by the destruction of the functional and cultural diversity of the street.

Subsequently, Mehta (2009b) discusses that the use and meaning of the street is considerably different between the East and West, while streets in the West are considered as a path, Eastern streets are more of a place. Similarly, Mazumdar (2002) suggests that streets of the Asia-Pacific region are distinctive from Western streets. Type of activities vary significantly between East and West. While streets in the West are mono-functional and used for movement and transportation purposes, streets in Asian cities are used for a number of functions; the streets are filled with people in different costume types, animals, bicycles, trucks, and buses. The footpaths are used by shopkeepers to display their merchandise, hang banners, and put out signs. Vendors spread their goods on to the footpaths which sometimes leads to congestion and increased pedestrian traffic. Therefore, pedestrians cannot move rapidly and in a straight line. People stop their motorcycles or bicycles in the middle of the street to chat with pedestrians and it is considered a cultural activity. Pedestrians are involved in different types of activities such as sitting, standing, squatting, lying down, sleeping, cooking, eating, getting haircuts, making artefacts and handicrafts, doing laundry, chanting, bargaining and even praying among other activities (Mazumdar, 2002; Mehta, 2009b; Rapoport, 1987).

The differences of activity and use of streets however are not only limited to streets within different geographical locations. It is also seen in ethnic enclaves where ethnic groups establish a neighbourhood in a country other than their own. A study on the type of activities that occur in Chinatown and Little Italy in the USA shows differences between the spatial organisation, cultural functions, and many informal social activities; Streets in Chinatown are often considered crowded, they are lined with a variety of businesses; from jewellery shops, gift stores, seafood and meat stores, dry good and grocery store to restaurants and religious establishments. Some characteristics of Chinese traditional architecture such as carved traditional motifs and colourful clay tile roofs provides a specific character to the streetscapes. Shopkeepers extend their merchandise onto the footpaths. Several vendors selling different merchandise from vegetables and prepared meats to gifts occupy the

footpath spaces. Together with the colourful awning and signboards in Chinese and English they create a chaotic image. Vendors stand in front of the building or at the edges of the curb-side. The footpaths are used for people watching, informal socialising, gossiping and informal chats. Vendors chat with each other and with their regular customers. Chinese residents use the footpaths as a venue to people watch, meet friends, and socialise after they finish their shopping.

In little Italy, streets are distinguished with numerous restaurants offering Italian food. Restaurants use the footpaths as dining space. Different colours, movable furniture, umbrellas, signs, plants, lights and other decorations also display the boundaries of Little Italy. Cafes and restaurants in Little Italy act as regular meeting places for the Italian-American community. Restaurants and grocery stores become places where the older residents of the community usually meet. Bakeries and tobacco stores, are places that members of the community often run into each other (Fernando, 2006).

It could be concluded that the use of streets by pedestrians is primarily based on their cultural background.

*“Cultural variables are primary for any activity ... occurring in streets. It is culture that structures behaviour and helps explain the use or non-use of streets” (Rapoport, 1987, p. 83).*

The physical environment could be both supportive and inhibiting (Rapoport, 1987). Streets, as other urban environments, reflect and embody the societies that have created them. As any other built environment, streets are considered as cultural landscapes. *“Moving along a city’s streets, one can readily discern much of the residents’ lifestyles, visions and opportunities for the future”* (Moudon, 1987, p. 13). A number of studies have examined the social use of streets in urban settings (Hass-Klau et al., 1999; Mehta, 2006). These studies did not incorporate culture and have outlined the recreational activity patterns of Western populations. The body of knowledge and empirical evidence on specifics of culture-street as public space relationships are limited. According to Mehta (2013, p. 182), in order to explore possibilities that support sociability in neighbourhood commercial streets *“we must look at street cultures that support a vibrant social life but differ in the use of street space.”*

Rapoport (1987, p. 83) categorises pedestrian activities into two principal types; *“dynamic pedestrian behaviour”* mainly considered as walking and strolling, which he describes as comparatively constant in nature, and *“static pedestrian activities”*, which constitute sitting and

standing, squatting, lying down, eating, playing, working, sleeping, and the like. In his point of view, the latter activities are significantly culture based.

The majority of studies on culture and urban environments have concentrated on cultures within their original geographical settings, e.g. European culture around Europe and Chinese culture in Chinese cities (Fernando, 2007). Hass-Klau, et al. (1999) investigated street life in many European cities and found cultural differences in the way streets were used during weekdays, evenings and on Sundays. Other studies have explored culture-environment interactions in urban ethnic enclaves and ethnic strips (Fernando, 2007; Loukaitou-Sideris, 2002 b; Mazumdar, Mazumdar, Docuyan, & McLaughlin, 2000). These ethnic enclaves are dominated by certain ethnic groups and “*public life still reflects the culture of origin*” (Hall, 1966) cited in (Carr et al., 1992). Furthermore, Madanipour (2007) asserts that urban ethnic enclaves can lead to a socially fragmented city in which each community has internal cohesion, and access to resources is distributed according to the membership of one of these cultural enclaves.



Figure 2-9: A street in Thailand. Source: <http://www.ytravelblog.com/photo-khao-san-road-bangkok-thailand>



Figure 2-10: Chinatown in San Francisco. Source: author, 2013

The social use of streets as a public space for people with different cultural backgrounds is not only limited to culture-specific small scale areas such as “neighbourhood cultural enclaves”. Rapoport (2008) emphasises in the case of main streets; culture has not had the importance it has in neighbourhoods and small scale areas. On the other hand, Henry Shaftoe (2009, p. 13) argues “*Tolerance comes from close encounters with other citizens, rather than stereotyping them from mono-cultural enclaves.*” The other version of a multicultural city is a pluralist city, where the city works as a whole towards social integration, where all the people have equal access to all resources (Madanipour, 2007). This approach recognises cultures as able to mutually influence, constitute and transform urban environments rather than isolating them

from each other (Hou, 2013b). In the present study, this attitude towards multiculturalism in cities will be valued.

## 2.6 Opportunity for Research

The way streets are used for optional activities by different cultural groups provides an understanding of the similarities or differences in associated values and social meanings of streets. The same space might be used in completely contrary ways by different cultural groups.

While public spaces do not essentially guarantee issues of access and openness for all “*members of the public*” (Iveson, 1998), streets are known as external public space, “*accessible to all*” and which “*constitute public space in its purest form*” (Carmona, Heath, Oc, & Tiesdell, 2003, p. 111). However, not all streets may be able to support social activities of diverse cultural groups equally. In order to understand how streets meet the goal of publicness in multicultural societies, there is a need to clearly understand how various populations use streets as public spaces and what cultural values they attach to them. **There is a gap in knowledge to understand the way people, based on their ethnic backgrounds, socialise in urban environments and how urban environments in turn, accommodate or inhibit user preferences. This gap needs to be examined more explicitly.**

Kurt Iveson (1998) suggests that good examples of public space do not necessarily guarantee their equality and non-exclusionary aspects. According to Francis (2011), designing for mixed-use does not in itself guarantee that places will be mixed-life and diverse. While it can contribute to a place’s success, other factors are also important. “*Urban areas and cities must also provide space for social and cultural transactions*” (Montgomery, 1998, p. 99). Thus, there is a need to study mixed-life places of cities and to monitor the success of such places according to diversity (Francis, 2011).

There is a need to reconsider the planning and design of public spaces in multi-cultural societies as Western concepts might not be universal in the sense of culture. Raised from the knowledge gap outlined in the literature review, a number of research sub-questions were developed:

1. “*How can the complex and fluid process of urban design and development be led so as to ensure the place is as public as possible, serving as many people as possible, rather than being at the service of a privileged few?*” (Madanipour, 2010, p. 239).

2. In what ways do street characteristics promote social activities in cross-cultural environments in order to enhance “publicness” for different cultural groups?
3. In terms of inclusive planning and design, how can we formulate more detailed interrelationships between physical characteristics, uses and business activities that are perceptible and that support social activity for different user groups in streets in an urban setting?

These sub-questions are integrated into the key research question:

The specific research question is:

**How are streets' physical characteristics, land use activities and management strategies able to support static and social activities of people with different cultural backgrounds?**

This next chapter presents a conceptual approach for environmental design decisions in multicultural urban contexts. It develops a model of publicness for streets in multi-cultural societies. The goal is to provide an ideal framework which allows streets to be the best social places they can be for the most, regarding ethnic cultural backgrounds.



## 3 Chapter Three: Streets for a Multicultural Public

### 3.1 Introduction

As noted, our understanding of streets as traffic arteries has expanded and streets are also considered as important centres of social activity, focal points for community life, and the primary places where diverse cultures come together. Supporting and tolerating the existing cultural diversity will lead to successful public/mixed-life (Francis, 2011) streets. The research challenge lies in the overlap of three main areas, which consider streets as social spaces, and champion cultural diversity in order to enhance publicness. Its goal is to understand those types of engagement that are right for a particular space and a multi-cultural context, and to strike an appropriate balance with the satisfaction of other needs. Research has been limited in the area of streets and culture, but cultural differentiation studies related to urban public space convincingly point to evidence that there might be considerably different patterns of behaviour in the use of streets for different ethnic cultural backgrounds, especially in terms of “*static pedestrian behaviours*”.

Chapter Three discusses the framework of the study. The framework is developed on a review of the literature, in order to understand the type of engagement different cultural groups seek in the social context of streets. The framework will help managers and designers to re-think the various potential users of a social and cultural context, in order to design settings that best support particular activities for particular cultural groups. The chapter starts with section 3.2 describing the main concept that forms the framework of this study: publicness in the context of streets.

Based on the definition of inclusiveness as the major element of publicness, section 3.3 focuses on human needs. Human needs and their spatial behaviour become a basis for designing environments; these are described in section 3.4. Section 3.5 is developed on the qualities of public space that influence social behaviour. Characteristics (physical, land use and social) that can create and support those qualities are described in section 3.6. The final section summarises the chapter and represents the framework graphically.

## 3.2 Public Streets

Based on the work of Jacobs (1961), Lynch (1981), Appleyard (1981) and others, by incorporating many different aspects of “*pedestrian streets*” and “*livable streets*”, the term “**democratic street**” was first coined by Mark Francis (1987) in the field of urban design. Francis defines “Democratic streets” as “*streets that are well used, have meaning for people, invite access for all, encourage use and direct participation, provide opportunities for discovery and adventure, are loved, and are well cared for and locally controlled*”. He argues the fact that “**street democracy**” **grows out of the concept of publicness**. Streets should act as inclusive spaces that are intended for use by a broader public. It has been argued that liveliness in streets could act as a vehicle for cultural interaction (Mehta, 2013; Thompson, 2003).

While Mehta (2013) claims that the idea of an inclusive street (as any other public space), a street claimed and used by people of diverse backgrounds at the same time, is seldom possible, Corraliza (2000) considers streets as real examples of publicness of public space. In her viewpoint, compared to parks and plazas, which have become places for special age groups such as children and elderly, streets are more inclusive and accessible. Corraliza’s statement needs further investigation. While the streets may be public, to what extent is it their publicness that plays a significant role in promoting multiculturalism? There is a need to understand how publicness is applied in streets in multicultural societies. We need to understand what constitutes a good and ideal model of publicness (regarding cultural diversity) of streets in multicultural societies. The study builds on the dimensions of publicness described by previous models and adjusts it to the street environment. Based on the frameworks described in section 2.3.3, the four central dimensions of publicness include: ownership, accessibility, management, and inclusiveness.

### 3.2.1 Ownership

As indicated, in the current study, public space is considered as space in municipal ownership and as an area that is open and accessible to the general public. Therefore, this study contributes to the ongoing discussion on publicness alongside its other important dimensions such as accessibility, management, and inclusiveness.

### 3.2.2 Accessibility

One of the essential qualities of public space which is basic to its use is accessibility; it is one of the fundamental dimensions of publicness (Langstraat & Van Melik, 2013; Lynn A. Staeheli & Mitchell, 2008) and also rated as a major condition for a livable street (Lillebye,

2001). Many urban commentators and practitioners have declared that good urban spaces are ones that are accessible and are well-used by a wide range of people (Cooper Marcus & Francis, 1998; Francis, 1987; Gehl, 1987; Allan Jacobs & Appleyard, 1987; Whyte, 1980; Wooley, 2003). The levels of liveliness of a street are dependent on whether it is accessible to a wide range of publics from the surrounding neighbourhoods and regions (Jefferson, 2001). A public space becomes “open” when it is “*publicly accessible*” (Jackson, 1984; Lynch, 1981; Madanipour, 2004). In other words, without open and unconditional access a public space is not completely public. Accessibility is often considered a major factor while measuring social equity (Burton, 2000; Dempsey, Bramley, Power, & Brown, 2009).

As noted in Chapter Two, the current models of publicness mainly focus on the physical connectivity and design in terms of entrances and gateways. However, the literature of urban design introduces other forms of access as well as physical accessibility;

Carr et al. (1992, pp. 138-151) identify three different forms of accessibility to public space; physical access, visual access and symbolic access. A public space becomes physically accessible when the space is physically available to the public and anybody is permitted to be physically present. One of the characteristics that influences physical accessibility is the extent that the location of public spaces is central and connected to the city’s movement pattern (Varna & Tiesdell, 2010). Other aspects that can have an impact on the extent that a place is accessible are the quality of the built environment, public transport routes, and the provision for walking and cycling (Dempsey et al., 2009). Good city design should consider modestly scaled public spaces for outdoor leisure activities near transit stops as a city design principle. Other aspects that have known to obstruct physical accessibility to public spaces are the existence of thresholds and gateways (Varna & Tiesdell, 2010).

Visual access relates to the extent of visibility of public space. It is considered an important issue, according to one’s feeling of safety and comfort, in making a decision before entering a public space. Public spaces that obstruct visual access are likely to be exclusive (Loukaitou-Sideris & Banerjee, 1998).

Symbolic access concerns the presence of visual symbols and cues, in the form of individuals and groups of people or design elements affecting an entrance to public space. The presence of individuals or groups can be perceived as threatening or pleasing and inviting. Particular design elements also, for example, certain shop frontages, act as symbolic signage and cues suggesting the type of people who are welcomed. Socio-symbolic access regards different non-human factors such as specific facilities or design elements as cues and

symbols which invite the intended type of people; the type of shops and activities may be both inviting and repelling to the public; for example; the presence of affordable shops, eating places, vendors may act as a signage that welcomes the general public. On the other hand, the presence of expensive shops and cafés provides signs for the intended users. Staeheli and Mitchell (2008, p. 116) introduce access as the main dimension of publicness, where “*access is conditioned by feelings of receptivity, welcome, and comfort*”.

It is important to note “*the road to social integration often starts with economic integration*” (Madanipour, 2004, p. 283). Regarding the foregoing issues and in confirmation of social-symbolic access, Carmona et al. (2010) mention economic access as another form of access to public spaces which is most common in quasi-public spaces such as cinemas and theatres and less common in public parks or civic spaces. This type of access can exclude some groups of society by charging entry fees. However, there are also other, more indirect ways people can be kept out, such as the way space is organised suggesting that consumption is a prerequisite for access. Thus, although no fees or entries are charged, these spaces are treated tentatively and become uncomfortable, undesirable and unwelcome. As noted, socio-economic circumstances play an important role for leisure participation among ethnic minority groups. Economic access in streets is mainly related to the semi-public space (businesses lining the street). In this regard, streets could become more public if a wide range of goods and prices are offered by the semi-public space. On the other hand, streets become less public where there is a narrow range of goods and prices (table 3-1).

| <b>Economic Access</b>  |   |
|---|---|
| <b>More Public situation</b>  | <b>Less Public situation</b>  |
| <b>Wide Range of goods and prices offered on the street<br/>[for socio-cultural groups]</b> | Narrow range of goods and prices support for a limited range of potential users |

**Table 3-1: Descriptors of ‘more public’ and ‘less public’ for the economic dimension**

In support of these statements about accessibility and openness of public spaces, Madanipour advocates that the openness of public spaces should not only be limited to physical accessibility but also should include social accessibility which means “*having access to the place and to the activities within it*” (Madanipour, 1999, 2004). In this regard, Low (2000) suggests that a place or landscape could be interpreted through “*the social behaviour accommodated by the place, and the symbolic and communicative aspects of the place*”. Therefore, socio-symbolic accessibility could be related to the social behaviour and activities that a place accommodates as well as their symbolic, communicative and meaningful features. Table 3-2

shows descriptors of more public and less public for meaning and symbols in the socio-symbolic accessibility dimension.

| Meaning   |  |
|---|--|
| More Public Situation   | Less Public Situation  |
| Many cultural groups regard the place as a public space                                   | Few cultural groups regard the place as a public space         |
| Symbols   |  |
| Each culture's signs-symbols/ products available on the Street based on population ratios | One or two culture's signs-symbols/products dominate the space |

**Table 3-2: Descriptors of 'more public' and 'less public' for meaning and symbols in socio-symbolic accessibility dimension**

Ethnicity and economic disparity are often tied together in the formation of ethnic minorities (Pearson, 2012). Therefore, socio-economic conditions have an important role among ethnic minorities to access public spaces for leisure and recreation activities (Rishbeth, 2001). Economic mobilisation is also known as an important feature that increasingly brings diverse types of people from different social groups and ethnic backgrounds into the same public space (Walzer, 1986). Madanipour (2007, p. 146) describes taking a merely “*culturalist approach*”, which ignores economic and political considerations, as an approach with limitations, where it “*it undermines the rights and freedoms of individuals, uses a static interpretation of culture and space, resorts to undemocratic means and exacerbating social fragmentation*”. In this regard, many researchers in the social sciences field have studied the level of access and patterns of use of ethnic minority groups in leisure and recreation facilities. While their focus has been more on national parks, wildland areas, forests, gyms, they have developed a number of hypotheses and theoretical frameworks to describe ethnic patterns in recreation behaviour. The **Marginality hypothesis** suggests that low levels of recreational participation among minority groups are related to their limited access to socio-economic resources, as a result of historical forms of ethnic discrimination (Floyd, 2001). A number of researches have been conducted in the 1980s to define the relationship between the marginality and ethnicity theories towards recreation activities of people with diverse cultural backgrounds. The results of these researches provide a mixed support for both theories (Gómez, 2002). Hutchinson (1987) argues that cultural differences are related to a more complex interaction between race and social class rather than being simply influenced by either of them. Gómez (2002) reviewed a range of theoretical models regarding recreation patterns of ethnic minorities in America and developed a model for ethnicity and public participation recreation (EPRP). In this model, acculturation is defined as both acquiring the cultural characteristics of the dominant culture and continuing to maintain their own cultural characteristics (the extent that people recognise themselves with their ethnic group is an

important factor to consider). Acculturation affects both socio-economic status and subcultural identity of ethnic minorities in Gomez’s ethnicity and public recreation participation model (figure 3-1).

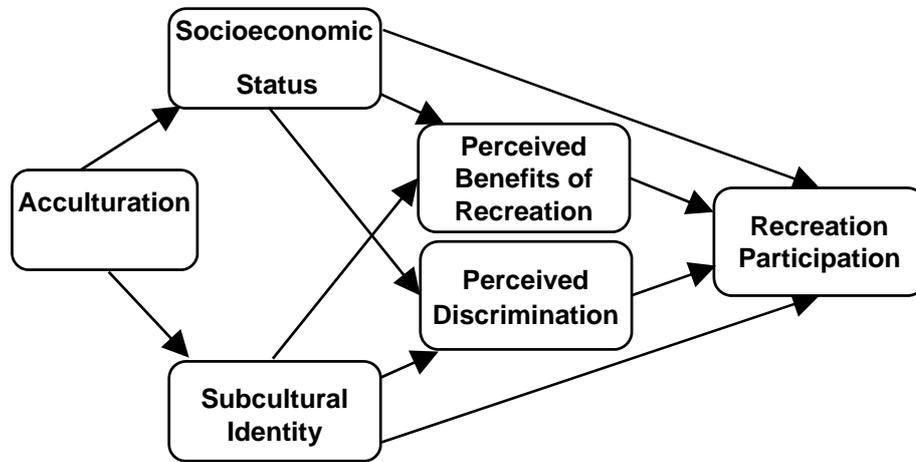


Figure 3-1: The ethnicity and public recreation participation model by Gómez (2002, p. 132)

Perceived discrimination is also an important factor that influences social accessibility and recreation participation of ethnic minorities. Perceived discrimination is associated with one’s socio-economic status. Those with higher levels of socio-economic status are anticipated to perceive less discrimination. Less perceived discrimination leads to higher levels of recreation participation (Gómez, 2002). This study does not intend to examine perceived discrimination among ethnic groups using the street environment for recreational activities. However, it could be an important factor which influences leisure and recreational activities on urban streets. Perceived discrimination might also link to Madanipour’s concept of social and political exclusion. Subcultural identity expresses the level that one considers him/herself as a member of one cultural group. The stronger this association is, he/she will have higher levels of perceived discrimination and less recreation participation. Recreation participation is also related to perceived benefits of recreation. It is assumed that perceived benefits of recreation are also based on a person’s subcultural identity and socio-economic perspective.

### 3.2.3 Management

Management and governance of urban spaces have “a key role in shaping the terms on which inter-ethnic relations are organised and conducted” (Fincher & Iveson, 2008). Management relates to maintenance (civility) and control in the investigated models of publicness.

Maintenance is one of the qualities of good urban spaces (Carmona et al., 2010) The level of required maintenance in public spaces could be different and is related to their social, economic and environmental context (Dempsey & Burton, 2011). However, in many cases, the priority is given to their aesthetic characteristics of sidewalks where they reflect the prestige of the buildings lining the street such as chain stores and boutiques (Fernando, 2006) more than the characteristics of the users. This beautification and modernisation has the potential to alter the sense of place, leading to a luxury and prosperous atmosphere and therefore orienting towards more affluent and middle class users, excluding users with lower socio-economic status (Loukaitou-Sideris, Blumenberg, & Ehrenfeucht, 2005; Zukin et al., 2009).

The other dimension of publicness related to management is control. The dimension of control in Varna and Tiesdell's star model is related to security guards and systems of surveillance which is mostly applicable towards privately managed public spaces such as shopping malls and some urban plazas and is out of the scope of this research. On the other hand, control in the present study is related to engagement, spatial control (refer to Francis's definition of control at section 2.3.3), and political representation of different groups.

Malone (2002, pp. 166-167) mentions three political guidelines of an open street that lie in the organised and conceptual means for recognising and supporting different groups and their needs in spatial terms; *“first, by giving political representation to group interest; second, by celebrating the distinctive cultures and characteristics of different groups; and finally, by re-imagining the role of streets as sites of collective culture, and culture production and reproduction”*. Therefore, political representation is an important aspect to support different groups on the street. Social accessibility of a group to public spaces is also reliant on their political representation. According to Madanipour (2003), political exclusion is another type of social exclusion, which follows on from a lack of political representation. This form of exclusion develops when some groups of society and immigrants are underrepresented or even excluded from political decision making. But it is not only decisions that are taken by politicians that can serve to exclude or to be inclusive of people from different backgrounds and means. Private owners of land, buildings and the businesses that establish along the street also make decisions that affect public space. The management and the operation of a street's retail spaces could also be an important factor in terms of political representation and social accessibility. Social relations within a space, and the ethnic group(s) that a semi-public space is managed by might have a great influence on how welcome and comfortable users of varied ethnic cultures feel about adjoining the street environment. These trades (buying and selling)

activities might be associated with important social interactions (Rapoport, 2005) between cultures.

Many shops are owned and operated by ethnic minorities in ethnic enclaves; for example, over half of the shops in Korea Town in Japan are owned and managed by Koreans (Hester, 2002) and about 85 percent of the shops in Little Shanghai in Sydney are Chinese small businesses (Lu & He, 2013). This could be considered as one of the reasons ethnic enclaves become popular destinations among ethnic groups of the countries of origin (Koreans in Korea Town). But how could the management of the business activities influence publicness on streets?

| <b>Management of the Street [Public Space]</b>   |   |   |
|--|---|---|
| <b>More Public Situation</b>   | Intermediate Public Situation   | Less Public situation   |
| <b>Public ownership/public function/public use [everyone has equal access]</b>             | The Ownership and management of the public space is distributed equally among different cultural groups | Public ownership/ private function/specific culture-related public use              |
| <b>Management of the Street [Quasi Public Space]</b>                                       |   |   |
| <b>More Public Situation</b>   |   | Less Public Situation   |
| <b>Percentage of Businesses owned by each cultural group is based on population ratios</b> |   | Percentage of Businesses owned by cultural groups is not based on population ratios |

**Table 3-3: Descriptors of ‘more public’ and ‘less public’ for management dimension of the streets public and quasi-public spaces**

Table 3-3 provides the descriptors of the management/ control dimension that could promote publicness. Managing a shop by a specific cultural group however does not necessarily mean that they would run a cultural shop or ethnic restaurant. Businesses owned or operated by immigrants do not target ethnic populations necessarily; many serve mainstream markets and non-ethnic clients (Qadeer, 1997).

### 3.2.4 Inlusiveness/Animation

Inclusiveness is one of the main dimensions of publicness that has been discussed in different definitions and models of publicness, although with slightly different terminologies (refer to section 2.3.3). In this regard, the design and management of public space need to meet and support human needs while also solving possible conflicts between different users and groups.

| <b>Inclusiveness/ Animation</b>   |                       |
|---|-----------------------|
| <b>More Public Situation</b>  | Less Public Situation |
| <b><i>How is Publicness achieved in streets of multicultural Societies in terms of planning, design and management?</i></b> |                       |

**Table 3-4: The dimension of inclusiveness/ animation needs to be further studied**

In their proposed model for publicness, Nemeth and Schmidt (2011, p. 12) indicate that between the three axes (ownership, management and uses and users), uses and users is the most difficult axis to be measured and needs a multistage methodology; *“operationalizing the uses and users axis, for example, requires a multistage methodology likely requiring both unobtrusive observation techniques and user-intercept surveys. Once all axes have operationalised, one could potentially plot several spaces to compare their relative publicness”*. The following study contributes to the ongoing discussion on publicness from the inclusiveness (animation) dimension. It will examine the possibility of street spaces being used as multi-used settings among different cultural groups.

### 3.3 Human Needs

*“Animation requires meeting human needs in public space”*

(Varna & Tiesdell, 2010, p. 585).

As noted, inclusiveness/animation is related to the degree that the design of public spaces **supports human needs** and is able to **accommodate uses and activities** of different cultural groups. In his hierarchy of human needs, Maslow identified five needs in the built environment; physiological needs, safety and security needs, affiliation and belonging needs, esteem needs, self-actualisation, cognitive, artistic and aesthetic needs (Maslow, 1943, 1968). In a similar way, Steele (1973) introduces six variables of the built environment that influence people’s behaviour: “shelter and security”, “social contact”, “symbolic identification”, “task instrumentality”, “pleasure”, and “growth”. Addressing user needs has been known as one of the main considerations in designing successful urban open spaces. Referring to user needs is often considered a prerequisite to addressing other issues such as budget, form and aesthetics (Francis, 2003). *“User needs are defined as those amenities and experiences that people seek in enjoying public open spaces”* (Francis, 2003, p. 4). Carr et al. (1992) identified human needs as ‘comfort’, ‘relaxation’, ‘passive engagement’, ‘active engagement’, and ‘discovery’. ‘Display’ relating to visibility and self-presentation was added by Carmona et al. (2010) as the sixth dimension (Varna & Tiesdell, 2010).

Jan Gehl (1987) differentiates between outdoor activities in public space and distinguishes them into three classifications, those that are **necessary**, those that are **optional** and then those that are **social**. Optional (recreational) activities are those in which people participate if there is a desire and considerably depend on what the place has to offer (both the weather and the physical setting). Optional activities include walking, sitting,

standing, and people watching. According to Gehl, necessary activities last longer and the frequency of optional activities increases when the quality of public space is desirable. Social activities relate to the presence of others in public space. They include children’s play, greetings and conversations, various kinds of communal activities, and simply seeing and hearing other people. Social activities take place when the quality of the environment supports necessary and optional activities.

|  | Quality of the built environment |      |
|--|----------------------------------|------|
|  | Poor                             | Good |
| Necessary activities                     | ●                                | ●    |
| Optional activities                      | •                                | ●●●  |
| Resultant activities (social activities) | •                                | ●    |

Figure 3-2: Jan Gehl’s representation on the relationship between the qualities of the environment and necessary, optional and social activities (1987, p. 13).

Based on these definitions, the more public situation is where the environment supports and accommodates human needs and encourages optional and social activities for different cultural groups. The less public situation is where the environment only supports necessary activities (Gehl, 1987) for all cultural groups and discourages specific cultural groups from using the space for social and optional activities. There is a need to consider the full range of potential users that might use an open public space (Francis, 2003) in order to plan and design for diverse needs of possible users of each site.

### 3.4 Spatial Behaviour and Design

The theoretical framework of this study is based on the field of environment-behaviour sciences (EBS). The study builds on Barker’s (1968) concept of behaviour setting, which examines human behaviour in relation to its physical setting [a milieu]; Gibson’s (1979) theory of environmental affordances, which proposes that the physical properties of a setting hold a set of affordances for activities and aesthetic experiences of the potential users (Lang,

1987) and Canter's (1977) theory of place, which suggests that a setting is understood as an arrangement of its physical characteristics, the activities performed within it, and their associated meanings is another important concept. This concept also implies that a similar physical environment might act as a series of behavioural settings including type of activities and behaviour that occur within it at different periods of time (Lang, 1987). Building on Canter's idea, Montgomery (1998) described urban design components that contribute to the potential sense of place.

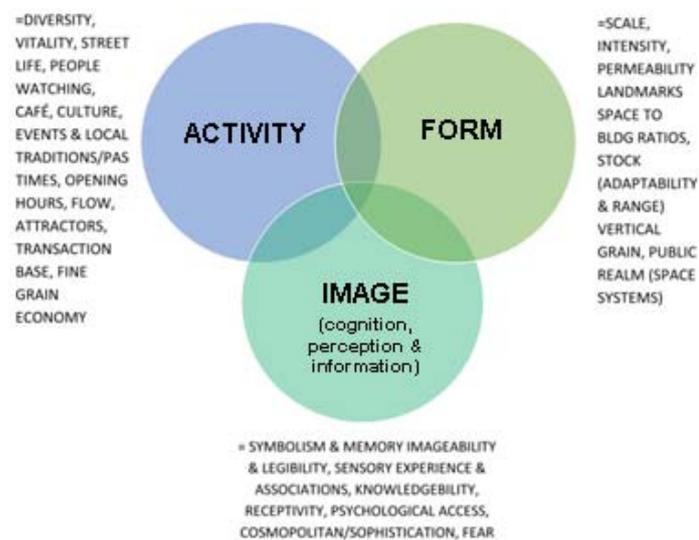


Figure 3-3: Diagram of sense of place (Montgomery, 1998).

In his diagram, the combination of three essential qualities create sense of place in urban spaces; activity, image and form. Activity is mainly based on two interrelated concepts; diversity and vitality. In general, it relates to the degree that a space is lively. Image is the combination of a place's identity and how it is perceived by an individual and includes a range of feelings and impressions about a space. Form is related to the physical qualities that urban design should seek in order to stimulate activity and create a positive image and therefore, generate a sense of place. Figure 3-5 summarises the related attributes of each essential quality.

Based on Barker's, Gibson's and Canter's theories, Mehta (2006, 2013) develops a conceptual framework for studying neighbourhood commercial streets. It suggests that the characteristics of a street are constituted of three factors; physical, land-use, and community places. These characteristics of a street, along with users' perceptions [depending on the users' associations and backgrounds and presence of people and activities], influence the overall perceived quality of the street. The overall quality of the street is displayed as six

categories based on Maslow’s and Steele’s concepts of human needs that can lead to stationary, sustained, lingering and social activities.

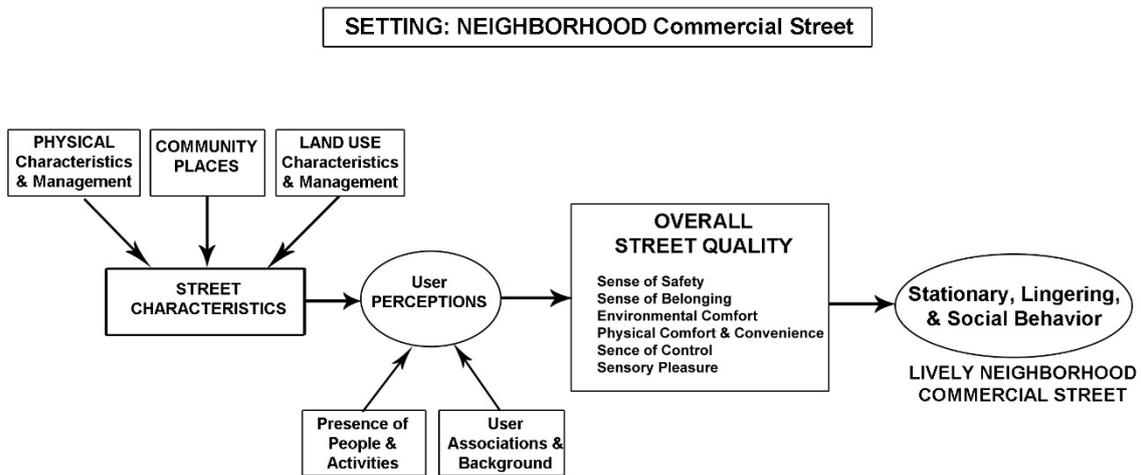


Figure 3-4: Conceptual framework for neighbourhood commercial streets (Mehta, 2006).

Whereas Mehta (2006) identified street characteristics that form and maintain lively neighbourhood streets in the city, this research aims to identify those characteristics that “**promote and maintain cultural diversity**” in the context of streets in multi-cultural societies.

### 3.5 Street Qualities

This section will determine and elaborate on those circumstances and qualities that will encourage and support stationary, lingering and social behaviour in context of streets as public spaces. Those characteristics (physical, land use and social) that can create and support those circumstances and qualities and thus lead to retaining people and enduring social activities will be described in the next section.

#### 3.5.1 Sense of Safety

Safety is considered one of the main concerns which affects the use or otherwise of public spaces. In the context of streets, safety is derived from a complex of both social and physical factors; mainly crime and traffic. According to Jane Jacobs (1961), security is the most critical aspect for a livable city. However, there is a difference between the feeling of fear and the possibility of becoming actual victims of an attack (Shaftoe, 2009). The perception of safety from crime is affected by the physical condition and maintenance of the built environment and the modifications made to it, the type of land uses, and the presence of stores and personalisation of properties. Those areas of the built environment and streets

that have the essence of human interference are perceived to be safer than blank and unanimated parts (Mehta, 2013). The presence, absence and type of people using a space also influence the extent that people feel safe in a public space (Mehta, 2013, 2014). For example, some public spaces become dominated by a specific culture at certain times of the day [such as Saturday nights] which threatens the purpose of public spaces to be accessible and used by all (Shaftoe, 2009). The perception of safety is different between cultural groups and also varies by age and gender. Each cultural group has a different perception towards acceptable levels of safety and safe behaviour (Mehta, 2013; Ward Thompson, 2002).

### 3.5.2 Sense of Belonging/ Atmosphere

The sense of belonging and a symbolic identification of collective experience (public culture) are identified as basic human needs by both Maslow and Steele. Business activities and the social life of places, including the presence of people and their activities, have been known as essential ingredients of place making and creating sense of place (Bosselmann, 2008; Laniado, 2005; Pyatok, 2001; Relph, 1976) which could create a different character of the place (Laniado, 2005). The ability to meet people of the neighbourhood in public spaces certainly increases sense of belonging and community (Mehta, 2013) and Mazumdar et al. (2000, p. 324) believe, “*there is a certain comfort in being with people who share the same language, culture and ethnicity*”. Literature suggests the potential to meet and interact with friends and acquaintances, as well as strangers and unknown individuals in a place is known to be essential in creating meaning and a sense of place. The informal social interaction that takes place on the footpaths might lead to a sense of community (Laniado, 2005; Stokowski, 2002). People’s interaction and communication with business men and women and together on the street’s footpaths again convey meaning to the environment and help create a sense of place.

*“The power of place is not only in its aesthetic or behavioural possibilities or its iconic status, but in its ability to connect people in society, encourage development of personal and social identities, and reinforce socio-cultural meanings. These are fundamental qualities of community” (Stokowski, 2002, p. 369).*

In addition, flexibility and adaptability and the chance to change over time allow individuals and communities to construct a sense of community and ownership and shape an ethnic identity by shaping their own memory and meaning (Laniado, 2005; Mazumdar et al., 2000).

### 3.5.3 Sense of Control, Territoriality and Personalisation

Control has been further described in the publicness section. Control in a public space is defined as “*ability of an individual or group to gain access to, utilise, influence, gain ownership over, and attach meaning to a public space*” (Francis, 1989, p. 158). Territory is established by the constant action of control over a specific part of the physical space by an individual or groups (Madanipour, 2003b). Environmental psychologists have defined territoriality as “*a set of behaviours and cognitions a person or group exhibits, based on perceived ownership of physical space*” (Bell, Green, Fisher, & Baum, 1996, p. 304). Territoriality is an important psychological dimension of a street and social behaviour in public space and streets relies on providing the possibility for people (both users and shop owners) to claim space (Mehta, 2013; Shaftoe, 2009). Control by an individual or groups, however could contradict with the right of access or use of other groups. It can lead to potential tensions and conflicts between those occupying the space more frequently and the rest of the population (Francis, 1987; Madanipour, 2004). Movable tables and chairs give users the possibility to move, arrange and expand their territories so that it would afford their needs (Mehta, 2013).

### 3.5.4 Sense of Pleasure

Pleasure is a consequence of various sensory experiences within an environment. From visual characteristics such as proportions, rhythms, scales, shapes, patterns, levels of complexity, variety and diversity, order and coherence, textures, colours, lights, illumination and shadowing effects and so on to the olfactory and auditory characteristics such as noises and smells. In general, the combination of fixed, semi-fixed, non-fixed and movable elements leads to different sensory experiences (Fernando, 2006; Lang, 1987; Mehta, 2013; Nasar, 1994; Rapoport, 1990). In addition to functional and practical needs and purposes, the appreciation of an environment is affected by aesthetics and influenced by visual preferences (Shaftoe, 2009). Rapoport (1990, p. 262) argues “*complexity is a particular aspect of environmental quality leading to environmental preference*”. Complexity levels could diverge between two ranges of “*sensory deprivation*” and “*boredom*” to “*chaos*” and “*sensory overload*”. The preferred level of complexity, however, depends on individuals, their culture, adaptation levels, type of activity and the context (Rapoport, 1990). “*Different cultures have different thresholds for the tolerance and acceptance of perceptual stimuli*” (Mehta, 2006, p. 161). The sensory experience of streets is perceived from the building boundaries lining the street, including the design, construction, or presence of openings, shop frontages and the type of goods they present, awnings, canopies and overhangs, signage, street furniture, landscape elements, trees, vehicles, people

and their activities, such as movement, and other multi-sensory qualities (Fernando, 2006; Mehta, 2013). Sharon Zukin (1995) is of the opinion that integrating visual representations in different spaces of the city could be done in a democratic process where it integrates different ethnic groups rather than segregating them.

### 3.5.5 Sense of Comfort and Relaxation

Sense of comfort is considered as a basic need and is divided into physical, environmental and social and psychological comfort. Sense of comfort is related to a wide range of factors, from the perception of safety, to familiarity and sense of belonging to the environment, weather conditions, and other physical, environmental, psychological and social characteristics. Physical characteristics that support comfort in public spaces include street furniture such as seating, sufficient footpath width, shade and shelter elements such as trees, and other natural features such as planters and flower boxes, other physical artefacts, nooks, corners, setbacks, provision of toilets etc. A sense of relaxation in a space is related to a wide range of factors, including the physical setting. For instance, the sense of physiological comfort is a basic requirement for relaxation. Those spaces that are a distance from vehicular traffic are perceived to be more relaxing (Carr et al., 1992; Mehta, 2014).

While the above-mentioned perceptual qualities of the street influence how different users feel about an environment, they are subjective qualities and cannot be assessed and measured with a degree of objectivity. On the other hand, the relationship between physical features of the street and social behaviour can be articulated better. Therefore, this study will concentrate more strongly on street features.

## 3.6 Street Features

Numerous street characteristics establish conditions for urban life in public spaces and lead to static and social activities: the physical characteristics of a street include buildings, furniture and vegetation. Buildings are outside the scope of this research; the focus is on semi-fixed, micro scale physical characteristics of the built environment and their management. Several characteristics that are considered important to the users of public spaces and are repeated most frequently in the literature, were identified. While most studies on streets separate the physical aspects of the environment from the uses and management of the businesses lining the streets (Mehta, 2013), urban planners and designers have recognised that "... *it remains difficult to isolate physical features from social and economic activities that bring value to our experiences...*" (Allan Jacobs, 1993, p. 270). Social activities in streets are

related to the interrelationship between uses, businesses [semi-public space], the physical elements of the streets, and planning and design strategies which manage the uses and street spaces (Mehta, 2006). The selected features from the literature coupled with pilot observations and interviews of the users provided information on the characteristics that contribute to retaining people on the street and promoting social interaction.

### **3.6.1 Traffic Management**

Surveys conducted by PPS have revealed that traffic has frequently become one of the most important issues in communities (PPS, 2008). Traffic management is an important ingredient of livable and democratic streets (Francis, 1987). Donald Appleyard studied the correlation between traffic volumes and social encounters in a neighbourhood in San Francisco in the 1970s. More recently, Sauter and Huettenmoser (2008) re-examined Appleyard's thesis in a different geographical location and cultural milieu in terms of speed limit. Both studies indicated that control and management of traffic speed is related to the person's attachment to or detachment from a residential street. It can be concluded that high traffic volume is associated with much less street activity and social interaction (Bosselmann, 2008) as it reduces freedom of movement (Lillebye, 2001) and sense of belonging (Mehta, 2013). Thus, people will mostly rely on a street with heavy traffic for necessary activities which reduces the opportunities for social encounter (Mehta, 2013).

### **3.6.2 Street Furniture**

Furniture has been an underestimated element within the public urban space and often too obvious to enter the mind of the planners. Street furniture has a considerable influence on the aesthetic characteristics of a street. It also promotes a positive social use of common space in streets. Unfortunately, preference is mostly given to the aesthetic and technical qualities of urban furniture rather than considering the requirements of the common user (Lillebye, 2001; Main & Hannah, 2010). While studies in the area of interior design have focused on the relationship between the design of interior space and furniture (Kaye & Murray, 1982), furniture has not been applied based on empirical evidence in the field of urban design (Main & Hannah, 2010).

Research has supported the role of furniture to the vitality and viability of outdoor public spaces since William H. Whyte initiated his study of urban public spaces in 1960. Whyte assumed that the density of use of space (the number of people using the space) was

the major measurement of its success. However, the number of people using a space is not the only factor by which the success of public spaces is evaluated (Main & Hannah, 2010).

Understanding the relationships between the design of the site and the furniture is a key factor in increasing the opportunity to create successful public spaces but it has been often overlooked and left to the end of the project. Also, mostly the furniture applied in public spaces is not based on the information on how these spaces are used and who is using it (Main & Hannah, 2010).

*“Furniture is vital to the way people respond to outdoor space and to the duration and quality of their experience there” (Main & Hannah, 2010, p. 7).*

Site furniture is important as it can create opportunities for enjoyment. It provides a setting for sitting, eating, meeting and socialising. However, when furniture is just used as an accessory to a public space, it is not used at its full potential and is taking a partial role rather than its full capability. On the other hand, furniture that has been thoughtfully placed in the proper locations has the opportunity to invite people and enhance their pleasurable experiences in outdoor spaces. It will help people to make a physical connection within a space.



**Figure 3-5: Street furniture in K Road, Auckland.** Source: author, 2012



**Figure 3-6: Street furniture in Queens Road, Auckland.** Source: author, 2012

Users of public spaces are from different groups, a diverse range of backgrounds and potential different interests and needs. Thus, social, cultural, and economic trends influence the way footpath spaces are used. These factors must also influence the way footpaths are furnished. However, furniture in public spaces is often specified on the basis of its appearance (aesthetics) as a complement to a site (accessorising), ease of purchase, to install and to maintain. Reducing the risk of loss is also a factor. Thus, a similar type of furniture is often installed in repetitive rows in public spaces in order to organise furniture installation and maintenance. On the other hand, in none of the criteria noted for furniture selection and

arrangement are the needs of the users taken into account. They are often independent of the needs of the users of the public spaces (Main & Hannah, 2010). This has led to public spaces that are sometimes “*littered with seating of the wrong type, in the wrong place, with the result that is rarely used*” (Shaftoe, 2009, p. 93). The existence of empty benches and chairs can cause a depressing impression to the users of the public spaces (Gehl, 1987).

### **Seating**

Seating is known to be the most important facility to ensure the successfulness of a public space (Hass-Klau et al., 1999; Main & Hannah, 2010; Shaftoe, 2009), which can promote social interaction and behaviour. Seating includes public seats, private/commercial seats, benches, steps and ledges. Movable seating and chairs that offer choice, comfort and flexibility in use are known as one of the most desired elements in urban public spaces (Whyte, 1980). The number of seating opportunities of a public space plays an important role in its level of successfulness and as to be used as a place for social interactions (Porta & Luciano, 2005; Whyte, 1980). In addition to Whyte’s studies of urban plazas in New York, which announced suitability as the key variable in plaza use, studies of plazas in Vancouver also revealed that choice of sitting space was the most important urban feature for retaining people in urban public space (Joardar & Neill, 1978).

According to Carr et al. (1992), in addition to physical comfort, seating must also provide access to social and psychological comfort. The following aspects of seating contribute to its success of being used;

A wide-ranging diversity of seating opportunities and orientations allows for both physical and psychological comfort and access to sunny and shady spots (Carr et al., 1992; Cooper Marcus, Francis, & Russell, 1998). Both commercial and public seating have an important role for retaining stationary activities in public space. Therefore, commentators argue that there must be a balance between public seating and commercial seating spaces (Crankshaw, 2009). However, the relation between commercial seating and liveliness levels became most evident in Mehta’s (2006) research on neighbourhood commercial streets. Part of commercial seating includes footpath cafés, where they “*have been a celebrated part of the urban life since the nineteenth century*” (Loukaitou-Sideris et al., 2005, p. 157).

Selecting and arranging furniture that accommodates the needs of people from different ethnic and cultural groups is a difficult challenge but necessary to the success of public spaces (Main & Hannah, 2010). Studies have shown that public spaces that provide orientation

variety hold a greater diversity of population (Joardar & Neill, 1978). The location and configuration of seating preference might also be different between individuals and groups. “*It is of particular importance to emphasise what good sitting arrangements mean in all types of public spaces*” (Main & Hannah, 2010, p. 12).

The location of seating and its configuration are important in order to accommodate user needs (Divette, 1977; Hass-Klau et al., 1999; Share, 1978). Seating locations in a space define what people can see and by whom they are seen. In “*A Primer on Seating*” The Project for Public Spaces asserts “*seating that is accessible, comfortable, well-maintained, and located in the right places is critical to successful place-making*” (PPS, n.d.-a).

Studies by Whyte (1980) and Mehta (2006) indicate that people seek liveliness, activity and engagement while enjoying relaxation and they do not like to be completely separated from the city life, people and their activities. Similarly, Hass-Klau et al. (1999) found that people intended to sit where there was something to watch. They indicated that the location of seating is an important factor that can both encourage and discourage social interaction. In this vein, Jan Gehl notes:

*“Benches that provide a good view of surrounding activities are used more than benches with less or no view of others...When benches do not face activities, either they will not be used-or they will be used in non-traditional ways” (1987, p. 29).*

Regarding the following studies, commentators have proposed design guidelines in relation to seating spaces. For example Crankshaw and Lillebye propose; in order to be frequently used, benches should be grouped and arranged in such ways that their users benefit from resting and relaxation but also take part in the social life of the street (Crankshaw, 2009; Lillebye, 2001). Similarly, Project for Public Space suggests;

*“Benches should be placed within view of the action, but out of the way of the flow of pedestrian traffic” (PPS, n.d.-c).*

It has also been claimed that “*people from different ethnic and cultural groups have different acceptable levels of density and noise in public space*” (Main & Hannah, 2010, pp. 16, 17), which might also influence preference for seating locations.

### **Proxemics or Measures of Distance**

People’s interactions in a space are affected by socio-cultural differences. The concept of proxemics was developed by Edward T. Hall (1966) in his book *The Hidden Dimension* to

describe that personal space is culturally defined and has different standards among people with different cultural backgrounds. While in some cultures the comparative distances are smaller and people feel more comfortable in closer distances between themselves, the relative personal distance in other cultures such as Anglo American and northern European is reasonably bigger.

In addition to cultural background other factors such as socio-economic status, gender, individual preference and different situations influence the personal distance in which people feel comfortable (Hall, 1966; Main & Hannah, 2010). Hall notes that people with higher socio-economic status have higher levels of privacy and larger personal space than those of lower status. Thus, people behave and react differently in different settings based on their socio-culturally defined personal space.

### Socio-petal and Socio-fugal Seating Arrangements

Literature indicates that the number of interactions within a space or an environment is affected by space configuration and furniture (Main & Hannah, 2010). Furniture arrangements could encourage or discourage face-to-face communication. The terms ‘*socio-petal*’ and ‘*socio-fugal*’ were coined by Humphrey Ostmond (1957) to describe arrangements that are expected to bring people together or set them apart. Socio-petal configurations orientate users towards each other and encourage face-to-face communication, especially eye contact. Socio-fugal arrangements place people away from one another and discourage face-to-face interactions (figure 3-13). On the other hand, they promote individual use within public spaces (Kaye & Murray, 1982; Lang, 1987; Main & Hannah, 2010). Culture also affects and influences the way people would prefer to orient towards each other while engaging socially. For example; Latin Americans prefer to sit side by side for informal conversations whereas Anglo-Americans prefer to sit in front of each other and experience face to face communication (Hall, 1966; Lang, 1987).

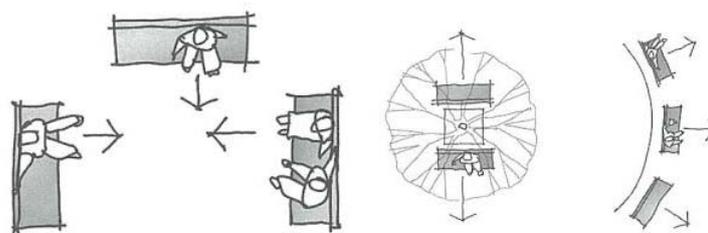


Figure 3-7: Left: Socio-petal seating (inward-facing); right: Socio-fugal seating (outward-facing) from (Main & Hannah, 2010, p. 27).

### **Prospect and Refuge Theory**

Prospect and refuge theory, proposed in 1975 by Jay Appleton, envisages that humans prefer circumstances with extended vision and place themselves at the edge of spaces where they can protect their back rather than places in the middle where they are unprotected. According to prospect and refuge theory, humans prefer environments that provide shelter and cover compared to unshielded spaces. For example, an environment containing trees is preferred to treeless settings as it provides opportunities to escape from the possible threats. The prospect and refuge theory has been recommended as design guidelines and put into practice by landscape architects with constructive effects (Carr et al., 1992; Crankshaw, 2009; Main & Hannah, 2010). In addition, Christopher Alexander and his colleagues (1977, p. 558) in *A Pattern Language* state; “*Outdoors, people always try to find a spot where they can have their backs protected, looking out toward some larger opening, beyond the space immediately in front of them*”. The findings of a study of Project of Public Space suggests that people preferred to sit in spaces facing the pedestrian movement rather than with their backs turned to the flow (Carr et al., 1992).

The design of seating (Share, 1978) and seating materials (Cooper Marcus et al., 1998) could also have a role in the use of public space.

### **Hard and Soft Landscaping**

Landscape design has been more limited to visual-aesthetic connotations but it also has impact on other aspects of urban design such as the social and functional dimensions (Carmona et al., 2010).

Soft landscaping includes natural elements such as greenery, grass and trees (Divette, 1977; Joardar & Neill, 1978; Share, 1978; Whyte, 1980), shrubs and Plants (Shaftoe, 2009), their numbers, diversity of form, texture and colour, as well as water features such as fountains (Whyte, 1980). “*Soft landscaping, can be a great source of delight, as well as offering health and practical benefits*” (Shaftoe, 2009, pp. 111-112). Nature is known as a powerful phenomenon which influences the quality of urban environments and supports mixed life in public spaces (Francis, 2011; Madanipour, 1996). According to Francis (2011, p. 438), “*mixed life places include some form of constructed nature such as plantings, native vegetation or natural systems*”. Vegetation is known as a temporary symbol in urban public spaces, streets and parks which can support intercultural connotation and representation (Hou, 2013a; Rishbeth, 2001; Velden & Reeves, 2010). “*They are evocative of a memory of place, emotionally significant as a trace of*

*past experience*” (Rishbeth, 2001, p. 360). Indigenous plant species (flora) in New Zealand have great importance for Māori and relate them to the land (Velden & Reeves, 2010).

Hard Landscaping is constituted of floor scape and hard pavement (paving design/materials)(Carmona et al., 2010). Children’s Playing areas (Divette, 1977), Statues, and Public Art are also understood as other features of landscape design which have been seen as good practice which could involve local residents in their communities, create a sense of confidence and provide sense of place to the local area (Madanipour, 2004). Public art was historically associated with monuments that memorialised an important event or a famous person, but has been gradually changing to a more populist type of art (Shaftoe, 2009). Graffiti or stencilling is understood by some as a type of informal public art (Shaftoe, 2009).

### **Shelter and Protection**

Thermal comfort is an important factor in the use of public spaces and varies by region, climate and season (Carr et al., 1992; Crankshaw, 2009; Mehta, 2014). Based on human anatomy and physiology, needs of comfort are asserted to be similar among different groups (Carr et al., 1992). Microclimatic factors include temperature, sunlight, shade and wind (Mehta, 2014). Characteristics that affect comfortable microclimatic conditions (in particular shade) such as **trees, awnings, canopies** and **overhangs**, have an important role in supporting outdoor activities during the warmer months of the year (Whyte, 1980) by creating a comfortable microclimate (Shaftoe, 2009). Seating spaces should be partly sheltered from cold winds and bright sunshine (Shaftoe, 2009). **Reflected light** can be used in colder times to warm up spaces. The sun/shade pattern surrounding seating areas should provide environmental comfort during different seasons.

### **3.6.3 Social Width**

Street width or social width is another aspect that can contribute to a sense of comfort in urban spaces and affect social activity on streets (Mehta, 2006, 2013, 2014; Whyte, 1980). It has been suggested that generous footpath width must be applied in combination with other physical and land-use characteristics that support stationary and social behaviour (Mehta, 2013).

### **3.6.4 Land-use Activities**

Mehta (2013) argues that publicness of streets is not only influenced by design and access policies but that it is also affected by land-uses in the buildings, lining the streets. Retailing is recognised as an important factor in the cultural, economic and public life of the

city (Goodman & Coiacetto, 2012; Montgomery, 1998). In the study of urban plazas Share (1978) and Chidister (1986) found the context in which the plaza is situated including land-use and worker population may be more important than plaza design characteristics in generating or "causing" use. Chidister suggested that even a poorly designed plaza with appropriate context might be used more than a well-designed plaza without an appropriate context. Land-use activities which increase the use of public space include the presence of retail, (Tridib Banerjee & Loukaitou-Sideris, 1992; Whyte, 1980), diversity of shops, store assortment (Alexander et al., 1977; Hass-Klau et al., 1999; J. Jacobs, 1961; Lillebye, 2001; Montgomery, 1998; Teller, 2008) and their patterns in opening hours (Montgomery, 1998).

Ehrenfeucht and Loukaitou-Sideris (2010, p. 460) state planners can take part in three facets of footpath planning; *"sidewalks as infrastructure, sidewalks as spaces of everyday life, and sidewalks as leisure destinations"*. The acquisition of goods and daily necessities on streets is often considered as an important social activity (Goodman & Coiacetto, 2012). The availability of ethnic cultural food and ingredients has become commonplace in many supermarkets (Thompson, 2003). On the other hand, some cultures need to go to ethnic delicatessens and fruit markets to get certain ingredients for their cultural dishes. In many cases, these specialised ethnic stores become central social settings for different immigrant groups (Preston & Lo, 2009; Rapoport, 2005). The reliance of cultural groups on their ethnic food stores and restaurants to get their specific food and spices is understood as "market mechanisms" (Sandercock, 2000). These ethnic stores become community places where *"immigrants exchange information and reinforce their social ties"* (Preston & Lo, 2009, p. 72). In many cases, the boundaries of ethnic enclaves such as Chinatowns are implied by the presence of numerous ethnic (Chinese) business establishments (Fernando, 2006).

Eating is considered a universal activity (Rapoport, 2005) that can help to encourage sociability in public spaces (Crankshaw, 2009; Parham, 2012). Communal eating has been considered as an aspect that supports lingering and leads to convivial and sustainable places in urban areas (Parham, 1992, 2012). Drinking and eating facilities such as restaurants and cafés (Alexander et al., 1977; Tridib Banerjee & Loukaitou-Sideris, 1992; Divette, 1977; Hass-Klau et al., 1999; Lillebye, 2001; Montgomery, 1998; Parham, 2012; Rapoport, 1990; Shaftoe, 2009; Whyte, 1980), and portable refreshment kiosks (Shaftoe, 2009) also have been associated with the use of public space. Convivial urban spaces are defined as *"places where people can be sociable and festive"* (Shaftoe, 2009, p. 9).

Parham (2012) explores how the relationship between design and food oriented social practices strongly influences creating vibrant urban places. Thompson (2003) further develops Parham's concept with a multicultural point of view. She considers the ways in which different groups use public spaces for food consumption and retailing as an important aspect that planners need to address in multicultural milieus. Food can help encourage sociability in public spaces. Food and variability of eating are known as one of the most acceptable forms of cultural difference and a form of cultural communication and 'ethnic bonding' (Rapoport, 2005) which could also create a sense of social and cultural belonging in a foreign environment for immigrants through familiar recipes, tastes and smells (Thompson, 2003; Zambonelli, 2013). These ethnic businesses also function as community places where the members of a culture gather, exchange information, and strengthen their social relationships (Preston & Lo, 2009). Food also provides a means for facilitating constructive cultural exchange (Parham, 1992; Thompson, 2003). Ethnic food restaurants are known as "*cultural ambassadors*" and the consumption of ethnic food is considered as an important step to experience different cultures, facilitating people from other cultures to gain a better understanding about some characteristics of the customs and rituals of theirs (Thompson, 2003; Wood & Lego Muñoz, 2007; Zambonelli, 2013). Culinary diversity is considered as an easy option for the mainstream as it gives an opportunity to experience another culture without the need to go to the community or culture (Ang, Brand, Greg, & Wilding, 2002). It has also been argued that culinary diversity could also increase the acceptance levels of heterogeneity and cultural differences (Ang et al., 2002) and that the provision of ethnic food attracts and supports mixed life (Francis, 2011).

Preston and Lo (2009, p. 73) argue that; "*Planning at the neighbourhood level should ensure a mix of retail activities, some serving a diverse clientele and others that cater to specific ethno-cultural groups*". Planning for cultural diversity in food premises can both enhance "*the ethnic character*" and "*associated gastronomic diversity*" (Parham, 1992, p. 34) of public spaces and streets in multicultural societies.

A study by Ang, Brand, Greg and Wilding (2002) in Australia showed that NESB (Non-English Speaking Background samples and different generations) Australians tend to be much more "*ethnocentric*" in terms of food than Anglo-Australians. Their study also revealed that age and generation could mark differences within cultures where the second generations preferred eating food of other cultures compared to the first generation immigrants. This could be further described as levels of acculturation and occurs when the cultural characteristics of the dominant groups are adopted by minority groups (Floyd & Gramann,

1993). The question is then whether there are any relationships between the type of eating establishments on the streets and the number of stationary and social activities of the ethnic groups?

While the importance of cultural food is well established in the literature, some commentators criticise the exaggeration of the importance of consuming exotic food. They argue that paying too much attention to the significance of this superficial aspect of multiculturalism might lead to neglecting other important aspects such as socio-economic discriminations (Castles, Kalantzis, Cope, & Morrissey, 1988). It is of great importance that streets do not just become destinations for consumption where they exclude non-consuming users and types of activities that do not add to the economic proliferation of the semi-public space (Ehrenfeucht & Loukaitou-Sideris, 2010; Williamson, 2013) but also develop as places for leisure activities of a non-consuming public. Changing streets into vibrant eating places might also “*capitalise on the ethno-cultural diversity of suburbs and businesses*” (Williamson, 2013) and lead to the loss of street life (Relph, 1987).

The provision and availability of adequate public toilets are also known as an essential infrastructure for public spaces to be successful (Greed, 2001, 2003). Certain and specific businesses along streets and the over-concentration of mono-cultural leisure options relating to excessive drinking along streets might lead to disorder and anti-social behaviour (Eldridge, 2010). These business activities may leave public spaces dominated by a specific culture at certain times, which threatens the purpose of public spaces to be democratic spaces that are accessible and used by all (Shaftoe, 2009).

Land-use activities are not only important, they could also play a significant role for creating meaning and sense of place. Sense of place lies in the relationship between the footpaths and the semi-private spaces lining the street; as Bosselmann (2008, p. 183) argues “*more promising for sense of place is to look at the entire geometry between the street and the private realm*”. While Bosselmann’s experience involves residential neighbourhoods, Pyatok addresses sense of place on commercial streets.

*“...human beings attach meaning to place experience and memory. Experience has less to do with the design of the buildings than with the activities that occur within and around them. While the street is arguably the most visible public space, the quality and frequency of its use depends almost entirely on the uses that line it, with its design coming in a distant second in importance” (2001, p. 39).*

Studies in phenomenology have shown that visiting an environment on a daily basis in order to satisfy needs could increase the sense of familiarity in the place and create a sense of place (Mehta, 2014). Literature also suggests the importance of small independent retail businesses besides chain stores in place making and creating a sense of place (Laniado, 2005). The extreme level of experience of one's culture would be ethnic enclaves which are known as "*cultural buffer zones*" and have a significant role for the immigrant's experience and create sense of community and belonging (Mazumdar et al., 2000). The existence of cultural businesses and retail activities such as cultural music and video stores, restaurants selling ethnic food with their aroma, etc. in ethnic enclaves are features that could help a place to foster distinctive cultural character (Mazumdar et al., 2000). Ethnic enclaves become places in which "*the familiar is created in unfamiliar settings*" (Mazumdar et al., 2000, p. 329). The extreme level of experience for immigrants are ethnic enclaves where they have a significant role for their experience and sense of place (Mazumdar et al., 2000).

### 3.6.5 Shop Displays

How buildings address the street is a determining factor of the quality of streets and public space. Active frontages have a strong sense of "*human presence*". In essence, this relates to whether there is a sense of activity at the ground floor and/or a sense of activity on the upper floors within a building animating the street space, and more generally, to the notion of active frontages (Carmona et al., 2010, pp. 192-193). Part of territoriality in streets occurs by businesses lining the street. Some businesses along the street extend their interior territories onto the footpaths by personalizing their street edges with signs, canopies, planters, flower boxes and merchandise or tables and chairs and other furniture (Mehta, 2013). The following list comprises the land-use related physical characteristics that influence stationary behaviour and cultural preference;

- Permeability
- Personalisation of stores including the level that they spill out in the space; dining areas, merchandise displays, and the changes in personalisation made by businesses
- Visual culture of storefronts/signs and symbols
- Visual complexity of the physical characteristics of the buildings and shop frontages

The ways shops display goods on their frontages and window decorations may influence the character of streets; Rapoport (2008) asserts that a quick way to do ethnographic research

is to study types of goods that are on sale and the ways in which they are displayed. Many merchants on streets in the East use the street to display their goods (Mazumdar, 2002). Another characteristic that might be applicable on streets, especially accommodating differences and embracing cultural diversity on streets, is open-endedness. Open-endedness on streets occurs when the environment becomes adaptable to a variety of uses without major physical alterations. In these cases fixed elements remain unchanged, however, differences are observed in the semi-fixed and non-fixed characteristics of the environment (Fernando, 2006; Rapoport, 2008). *“Open-ended streets play an important role in creating culturally specific urban environments”* (Fernando, 2006, p. 68). The open-endedness of streets could also lead to what Walzer (1986) argues is open-mind space. Also, the ways businesses extend their merchandise onto the footpath affects activities and become prime draws (Mehta, 2006; Whyte & Underhill, 1988).

Sharp and her colleagues (2005) indicate that public art interventions in public spaces of cities could generate both inclusion and exclusion in the perceptions of its citizens. Cultural inclusion relates to sharing symbols and meanings (Madanipour, 2003a). Shared symbols and events can create a sense of hope and *togetherness* in public places, that works against the sense of deprivation (Madanipour, 2004). Symbols in public spaces communicate different cultural identities and could act as representatives of various cultures (Velden & Reeves, 2010). Symbols sometimes find greater importance in the unfamiliar territory of the host country than the country of origin (Rishbeth, 2001). Ethnic cultural shops and businesses may include an important part of symbols and convey meanings for different ethnic groups with the provision of visual culture such as store names, language of signage, posters, and merchandise in their storefronts (A. Sen, 1998, 2006) as well as olfactory and other sensory information (Fernando, 2007). Scholars believe *“retail businesses offering familiar goods and services in their own languages often help immigrants retain their culture and languages”* (Preston & Lo, 2009, p. 72). Symbols could communicate and become familiar and inviting for some ethnic groups or alien and excluding for others (Parkinson, 2009; Rishbeth, 2001). In many cases, symbolic resources of cities are not inclusive to all citizens (Parkinson, 2009).

### 3.6.6 Social functions and Activities

#### Social Functions

Activities and social functions have an important role in the successfulness and liveliness of public spaces. Some commentators argue that activity programming has more importance than the physical characteristics and appearance of spaces in order to create culturally diverse vibrant spaces. In this vein Pugalis (2009b, p. 17) suggests;

*“Developing culturally vibrant and economically sustainable spaces is as much about the activity programming of spaces as it is about other aspects relating to the physical appearance of space itself”.*

Social functions in public spaces include vending, performing, weekly markets and cultural events and ceremonies.

Vending is one of the characteristics of streets in the East (Mehta, 2009b). In many Western societies, there are strict regulations on the type of activities that can take place. Therefore, streets are not used to their full potential (Fernando, 2006; Valverde, 2012). Valverde (2012) claims that, while footpaths are considered public, they are not truly public as they are controlled by the municipal corporation.

As noted, markets are one of the successful examples of cultural diversity in public spaces where they attract a diverse range of cultural backgrounds (Dines & Cattell, 2006; Watson, 2009).

Similar to ethnic businesses, cultural ceremonies could also connect peoples’ and immigrants’ present with their past and help towards creating a sense of place (Mazumdar et al., 2000).

#### People and Human Activities

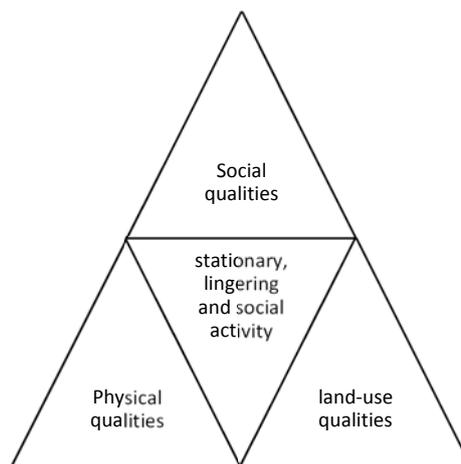
Scholars have determined people watching and human activities as primary activities in public spaces, which can draw in others spontaneously (Bosselmann, 2008; Divette, 1977; Gehl, 1987; J. Jacobs, 1961; Shaftoe, 2009; Whyte, 1980). Bosselmann argues that the fact that *“people like to gather where other people are, or at least near them to observe the activities that predictably take place out of necessity, is almost universally seen”* (2008, p. 247). Good vantage points are valued in terms of location of seating, their arrangements and use (Shaftoe, 2009).

While people watching is desired in public spaces, there are also other unwanted activities that could exclude users. Literature suggests that excessive control of public spaces

by one group could contradict the right of access and use of public areas by other groups (Francis, 1987). The night time economy of alcohol-related locations on streets could lead to mono-cultural leisure choices and exclusion of others (Eldridge, 2010). The existence of homeless and unfortunate groups might also be undesirable for users of public spaces. However, Mitchel (2003) argues that public decisions that discourage these unfortunate groups from streets contradict their rights to the city and truly democratic public spaces.

### 3.6.7 Summary

In summary, it is understood that land-use activities along with physical characteristics of the environment and their planned and unplanned activities are all considered important for an urban milieu, such as a street, to provide an appropriate, comfortable and meaningful environment for stationary, leisure and social activities (Mehta, 2006) (figure 3-8).



**Figure 3-8: Different aspects of streets which support stationary, lingering and social activities on the street based on Mehta's findings(2006).**

In addition to all the noted characteristics, the visual and non-visual sensorial aspects of streets including olfactory and auditory characteristics could also influence the spatial experience of pedestrians (Fernando, 2007; Mazumdar, 2002).

### 3.7 The Framework

Figure 3-9 shows the conceptual framework of the study based on the review of the literature. The framework used for this study is greatly based on Mehta's (2006) framework with an emphasis on user associations and cultural backgrounds. The framework suggests that three factors- physical, land-use and social characteristics constitute the characteristics of a neighbourhood commercial street. The following characteristics together with a user's cultural background and other associations will affect the overall perceptual qualities of the street, discussed in detail in section 3.5. While the framework is the extension of the inclusiveness/ animation dimension of publicness of streets, the dimensions of accessibility and management are also embedded in the framework. While physical and visual accessibility certainly influence public use, they are not the only types of access that influence use. Streets provide opportunities for trade, exchange, leisure and recreational activities without restricting visual or physical access. Based on the selection of case studies (refer to section 4.4.1); it is assumed that all streets are physically and visually accessible public spaces in terms of the physical configuration in their neighbourhoods. By access, this research does not focus on physical or visual access, rather, it concentrates on socio-symbolic and economic access that gives users an opportunity to participate in necessary, optional, and social activities (refer to section 3.3) within the street environment. Both socio-symbolic access and economic access are related to different activities and could rely on different physical, land-use, and social characteristics of a street. The dimension of management (maintenance/political representation in the context of this study) is also incorporated in the street features where physical, land-use, and social characteristics have been included in the framework.

Publicness of public spaces and "*putting the public back into public space*" involves consideration of the public that one is referring to (Iveson, 1998). The extent that a neighbourhood commercial street is inclusive could be measured and understood by the type and range of activities and the actors that it supports (Mehta, 2014). The percentages of each ethnic group participating in stationary, static and social activities and compared with the percentages of each ethnic group residing in a neighbourhood and the range of activities (necessary, optional, and social) of each ethnic group will be used in order to measure publicness in this study.

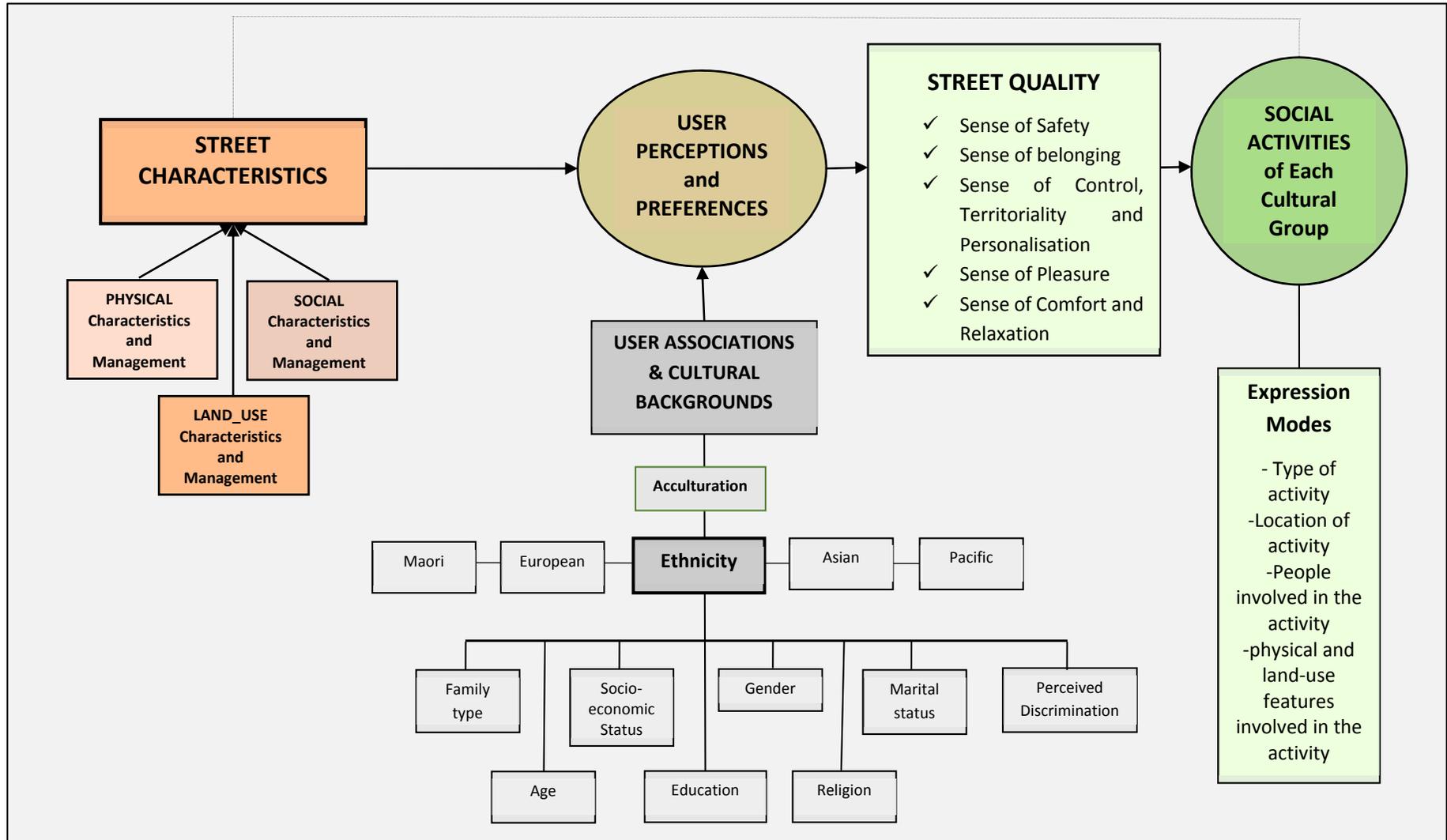


Figure 3-9: Conceptual framework for the study

The next chapter discusses the research methods and research design used to examine the relationship between ethnicity and streets, with particular emphasis on the experience of people having different ethnic cultural backgrounds. The research method is designed to answer five questions that support the main research question described in section 2.6 - **How are streets' physical characteristics, land use activities and management strategies able to support static and social activities of people with different cultural backgrounds?**

These questions in turn lead to the research objectives:

**Question 1:** What are the desired pre-conditions of each cultural group for use of streets for social activities?

**Question 2:** To which extent is the planning and design of contemporary streets congruent with different socio-cultural values and diverse user needs?

**Question 3:** What types of urban street spaces and their associated characteristics do each group prefer for social activity?

**Question 4:** Based upon a comparison of similarities and differences, which characteristics of urban streets are mutually preferred by different cultural groups for social activities?

**Question 5:** Which characteristics of urban streets prevent one or more cultural groups from using the street for social activity?

# 4 Chapter Four: Data Collection and Analysis Procedures

## 4.1 Introduction

This chapter describes the methods and procedures employed to examine streets in urban settings and to collect environmental perception and preference data from a diverse range of cultural participants. The purpose of the selected methods is to provide support for understanding which attributes of street design are associated with stationary, gathering and lingering activities of people with different cultural backgrounds, especially social activities that help make the streets lively and democratic. Chapter 5 will analyse the data in order to define characteristics that could be used to plan and design footpath spaces that enable stationary, social and leisure activities for different cultural groups.

## 4.2 Mixed Methods Research in Cross-cultural Research

Mixed methods research has increasingly become applicable to social science studies. Mixed methods research incorporates and integrates qualitative and quantitative data gathering methods within a single project. In this case, the fruitful combination of both qualitative and quantitative methods brings different benefits and strengths to the research. In other words, mixed methods research generates a more comprehensive interpretation of the area of investigation. Each of the qualitative and quantitative research methods is able to answer specific research questions. Furthermore, both of the qualitative and quantitative research methods have their strengths and weaknesses whereby their use in combination can counterbalance their weaknesses and add to the strengths of the research. Mixed method research also serves and provides an opportunity to use a *triangulation* approach or help to explain the findings of one method by another (Bryman, 2006, 2012). *“Triangulation entails using more than one method or source of data in the study of social phenomena”*(Bryman, 2012, p. 392). *“Whereas more than one method would be used in the development of measures, resulting in greater confidence in findings”*.

Broadly speaking, there are two approaches to conducting studies in urban design; the visual-artistic approach, which views the urban environment and the surrounding buildings as a work of art and mostly emphasises the visual experience of urban spaces, and the environmental behaviour approach. The visual-artistic approach in urban design began to change in the late 1960s to a new approach towards urban design with a bias toward human

behaviour. This is known as the environment-behaviour approach. This method views urban environments as social settings rather than artistic creation or a statement of art (Jarvis, 1980). In the current approach, environmental planning and design are closely related to the study and analysis of behaviour of the users of the environment in daily situations (Jarvis, 1980; Mehta, 2013). Thus, it “*provides a more appropriate, relevant and richer view of human needs in the use of space, form and artifacts*” (Mehta, 2013, pp. 58-59). Using the second approach, the focus of the first stage of the study is on the behaviour, perceptions and expectations of the users in the built environment. It is mostly concerned with the social use and experience of public space and comprises hardly any reference to the visual aspects and experiences of a place. The current approach provides data on the opportunities and constraints of the environment with regard to human activities and behaviour.

### **4.3 Research Setting and Selection of Cultures**

The research setting is physically located in Aotearoa New Zealand and is contextualised in relation to the NZ Urban Design Protocol. The history of New Zealand dates back to the 13<sup>th</sup> century when it was discovered and settled by the Māori. Māori are descendants of Polynesians and were the first inhabitants of the land prior to the arrival of European settlers in the 19<sup>th</sup> century. The pre-European Māori lived in rural, tribal settlements. The arrival of Europeans had significant effects on Māori communities and brought major changes to their way of life where many started adapting Western values and lifestyles. The process accelerated after 1945 when increasing number of Māori moved to cities and made more contact with Pākeha (Westerners) (Meredith, 2012; Pearson, 2012). Western forms of urbanisation began in New Zealand in the 1840s (Belich, 1996; Hamer, 1995; G. Park, 1995). Early urban settlements were built through formal processes of urban planning based on economic forces and became the reflection of European imperialism and colonialism in the Pacific Islands. They all shared social, physical and symbolic features and served as spaces and places of cultural and social familiarity for Europeans and gave them a feeling of cultural, racial and social superiority. The indigenous group was excluded completely in the process of urban design (Marek, 2010). More recently, immigrants from different Pacific Island states and Asian countries have immigrated to New Zealand.

*The New Zealand Urban Design Protocol*, which is part of the Government’s Sustainable Development Programme of Action, seeks to make cities healthy, safe and attractive places where business, social and cultural life can flourish. A part of this protocol proposes that;

*“Successful towns and cities reflect our increasingly diverse ethnic mix, including all people who have made New Zealand their home - indigenous Māori, Europeans, Pacific Islanders, and Asians. ... Quality urban design reflects and celebrates the unique culture of New Zealand culture and celebrates it as a multi-cultural society”* (Ministry for the Environment, 2005).

The protocol provides the setting for the aspiration of this research. In order to address the research question/s, this study examines specific streets in socially and ethnically diverse neighbourhoods around New Zealand. Immigrants to New Zealand come from a range of different ethnic and cultural backgrounds, with the diversity of these backgrounds ever increasing. Studies have provided little evidence of cultural ghetto/enclaves around large cities of New Zealand. Conversely, people from similar cultural backgrounds mostly live in the same urban areas (Pearson, 2012; Poulsen, Johnston, & Forrest, 2000).

As understood from the literature and NZ statistics the population of New Zealand is constituted of four dominant groups; **Europeans, Māori, Pacific People** and **Asians**. A minority of the population is Middle Eastern, Latin American and African (Statistics New Zealand, 2006). The physical setting of New Zealand’s streets and the four primary ethnic groups provide the setting for this research. The research mainly focuses on Europeans, Pacific Islanders, Māori, and Asian groups for assessment, since they are the largest ethnic segments of the population. Europeans are the majority in New Zealand, and ethnic minorities are formed of the Māori indigenous people and non-European immigrants (Pearson, 2012).

Māori could not be considered ethnically homogenous (Chapple, 2000). Their everyday contact with Pākehā in New Zealand has led to a diversified and heterogeneous culture. A study of *“acculturation and identity”* among New Zealand Māori showed them to have complex levels of acculturation (Fitzgerald, 1974). In many cases, the two cultures have integrated and assimilated (Booth & Hunn, 1962). However, some believe that the language and cultural patterns of Māori are very similar to other eastern Polynesian people (Thomas & Nikora, 1992). For example, Māori and Pacific people are more likely to live in large families, and shared households compared to Europeans (Pākehā) (Du Plessis & Diggelmann, 2012). Recently smaller nuclear families have also become common among the Māori population since they have become more urbanised (Statistic New Zealand).

Māori and Pacific Islanders have higher rates of un-employment compared to Europeans and Asians. They have tended to be mainly employed in low-paid jobs (NZ

Institute of Economic Research, 2003). They are involved in manual labour and strongly represented among blue-collar workers. They are less likely work in professional occupations compared to Pākehā or Asians. The concentration of Māori and Pacific Islanders in blue collar jobs and the high representation of Asians and Europeans in white-collar jobs is greatly related to educational qualifications. Only a small percentage of Māori (6%) and of Pacific people (4%) had university degrees in 2006. Occupational status differences have led to income inequalities between these groups. In 2006, the average income of Māori was 73.2% of that of non-Māori and Pacific Islanders' average income was slightly below that of Māori. On the other hand, the proportion of Asians with a degree is higher than for the whole population. Asians have a high rate in occupational status and are strongly represented among professional jobs, especially sales representatives and are rarely employed in labouring jobs (Pearson, 2012).

## **4.4 Stage One: Participant Observation/Ethnography**

### **4.4.1 Case study Selection**

This research stage examines streets in socially and ethnically diverse communities around New Zealand through a multiple issue-based case study method (Francis, 2001; Francis & Griffith, 2011). “*A case study is a well-documented and systematic examination of the process, decision making and outcomes of a project, which is undertaken for the purpose of informing future practice, policy, theory, and/or education*” (Francis, 2001, p. 16). “*An issue based case study looks across multiple closely related cases to determine common qualities and characteristics*” (Francis & Griffith, 2011, p. 268). Case studies also provide valuable information that can help us to understand potential relationships between various features (Yin, 2003; Zeisel, 1981). A multiple case study method was chosen in this research as it is often considered to be more compelling compared to a single case study and, therefore, makes the research more robust (Yin, 2003). Considering the time-frame of the study and the available resources, three case studies were selected.

The case study selection process employs census data on the demographic characteristics of a wide range of districts and neighbourhoods around two main cities in New Zealand (Auckland and Wellington). The first case study is based in a neighbourhood where Europeans are the dominant cultural group. The second case study is chosen in a neighbourhood with a balance of all ethnic groups. The third case study is selected in a district where is dominated by non-Europeans.

**Wellington** City has higher proportions of Europeans (70.1%) and Asians (13.0%) than New Zealand as a whole, and lower proportions of Māori (7.7%) and Pacific Islanders (5.2%) (Statistics New Zealand, 2006). The first case study is in Wellington, which is typical of most diverse areas around New Zealand; the dominant ethnic cultural group is European, followed by smaller proportions of other ethnic groups. Communities with bigger population ratios were selected among Wellington neighbourhoods, where Newtown, Miramar, and Kilbirnie have a more balanced ethnic group combination compared with other communities in the city.

**Auckland** is the most **ethnically diverse** region in New Zealand. 56.5% of people in the Auckland Region belong to the European ethnic group, followed by Asians [18.9 %] and Pacific Islanders (14.3%). 11.1 % of people in the Auckland Region belong to the Māori ethnic group (Statistics New Zealand, 2006). The presence of different ethnic groups has made **South Auckland** New Zealand's **most ethnically diverse** urban area (McClure, 2012). In order to select the other case studies, the researcher examined ethnic population demographics of a range of districts in South Auckland. Mangere-Otahuhu, Manurewa and Otara-Papatoetoe are districts where European culture is not the dominant ethnic culture. Among these districts, Manurewa and Papatoetoe have the most balanced mix of all ethnic groups. Mangere-Otahuhu also has a combination of all cultures; however, Pacific Islanders constitute the dominant culture. The second case study was selected from the districts that have a balanced mix of all ethnic groups; Manurewa and Papatoetoe.

The dominant ethnic cultural groups are reversed in Mangere-Otahuhu and dominated by non-Europeans (Pacific Islanders), followed by smaller proportions of other ethnic groups. The third case study is selected this area.

According to Hillier (1996a, 1996b), places that are well-located within the city's movement pattern have a greater possibility to bring different (social) groups together in space and time. The case studies are the main streets of the selected suburban centres that have centrality and connectivity within the city's movement pattern (physical configuration), with managed speed and traffic, are similar in their macro characteristics, (for example, have a similar width dimension, spatial enclosure and sidewalk width), are symbolically diverse and have comparable combinations and mixtures of land use activities (shops, eating spaces, etc.) and related micro-scale physical characteristics (landscape, seating, etc.), are lively and already being well-used as a social space. Following the literature, *“a sociable street is defined as a street that is open to the public, where people are present throughout the day and week, engaged -individually or in*

*groups- in a variety of active and passive social behaviours that are predominantly stationary and sustaining in nature*” (Mehta, 2013, p. 24). In this study, liveliness and sociability of streets are related to people and activities and are measured by the number of people. Through a number of walk-by observations of the main streets of the selected areas in Wellington and Auckland, the researcher found many similar characteristics of the above-mentioned aspects between Riddiford Street, Newtown, Wellington, St George Street, Papatoetoe, Auckland and Great South Road, Otahuhu, Auckland. Therefore, these three streets were selected as case studies.

A mixed-methods qualitative approach consisting of behavioural mapping and on-street user semi-structured interviews forms the basis for the first stage of the research. The mixed-methods approach in the first stage of the study helps to explore different behaviours and activities on the street, perceptions of users, their motivations for using the street for leisure and social activities, and their expectations and specific cultural needs in the street.

#### 4.4.2 **Ethnography**

*“Ethnography is the study of culture, cultural, or social groups for the purpose of recording, understanding, and describing their values, mores, traditions and beliefs. It is not simply a study of individuals, or individual perceptions, attitudes or responses”* (Mazumdar, 1991, p. 123). However, ethnographic studies carried out by anthropologists and sociologists focus on *“socio-cultural systems”* and typically do not take in the interrelations between culture and the built environment. In other words, these studies often ignore the built environment. However, the interest of designers is to understand the spatial relationships between culture and the built environment in order to create culturally sensitive and culturally appropriate designs (Mazumdar, 1991).

Architectural ethnography has been known as a useful method for planning for cultural diversity and cultural sensitive design. Mazumdar (1991) has developed a model for conducting architectural ethnography, addressing the needs of designers, which can easily be extended to urban design.

1. Learning and understanding the culture of the studied group(s)
2. Interacting with the members of the culture (personally)
3. Observing and making notes on what has been observed such as the people, their interactions and behaviour
4. Developing questions based on the observations which address the relationship between the culture and the built environment
5. Finding well-informed and knowledgeable participants of the culture

6. Doing an architectural analysis of the buildings of that culture and their use of them, the reasons they are built and the meanings they convey
7. Going further from the built environment and trying to earn a better understanding of the culture by looking at different aspects of their life, as some of these data which seem unrelated might give the designer some clues on the interrelationships between the culture and the physical environment.
8. The researchers' experiences of the field could be used as a source of data
9. Understand the meaning and use of the facilities that would be designed.
10. The field data should be recorded giving the possibility to re-examine and analyse it.

Sensory ethnographic methodology is a method that provides ethnographic research through the concepts of perception, place, knowing, memory and imagination. In this methodology, research contexts are understood as multi-sensorial experience that arises through *“one’s encounter with both people and the physical environment. ... It involves often unanticipated smells, tastes, sounds and textures, and unexpected ways of comprehending these”* (Pink, 2009, p. 44).

#### 4.4.3 Participant Observation

Examining the cultural life of the three case studies is approached by looking at the daily street life as a research laboratory. Discussing observation methods, Cooper Marcus and Francis explain: *“with a very limited investment of time the investigator can achieve considerable insight into the actual use of designed places – a vast improvement over the conjecture and guesswork generated by studying a site plan from the remove of the studio or office”* (1998, p. 346). Participant observation was developed and has been used since the end of the nineteenth century (Tedlock, 2008). Participant observation is the most common type of observation, is the principal method in the field of anthropology, and has the longest history among all kinds of observation. Participant observation is considered the main method of social research. Data is collected based on social interactions in their natural and real environments rather than in artificial situations that researchers provide (Burgess, 1991). In this observation method, the observer becomes the member of a group or society and tries to observe and record every aspect of behaviour in the specific culture. The *informants* who are the natives of that culture become teachers and interpreters of what the observer sees. They provide a cultural perspective on the observation (Bechtel & Zeisel, 1987). *“The goal of participant observation is to become familiar with the culture or the rules of behaviour of the entire group rather than to study the behaviour of any individual”* (Bechtel & Zeisel, 1987, p. 18).

Literature explains that there are three types of participant observations; Non-participation observation is where the researcher remains a separated and unengaged observer. Non-participation observation has been proven as an effective observation method in socio-cultural inquiry and has been utilised effectively by many researchers (Duncan, 1976; Edensor, 1998; Whyte, 1980), especially it becomes an alternative (to other types of observation) when the hidden behaviour of the researcher is necessary. Another type of participant observation is “active” observation where the researcher becomes a member of the observed ; *“being a member of another culture, the observer brings values, beliefs, and behaviours that are out of place in the new society”* (Bechtel & Zeisel, 1987, p. 18). The researcher is provided with the essential “inside” information of a social and cultural group, taking part in activities and events and therefore, becomes a complete participant (Loftland & Loftland, 1994). “Moderate participation” is a balanced type of participant observation which is placed between the former two forms of “non-participation” and “active participation”. Both moderate and active observations collect valuable and rich data and provide the researcher with important information on the social and cultural groups, being studied (Loftland & Loftland, 1994). The degree of participation and the specific role of observer must be determined based on the objective of the study and by the research questions guiding the research (Fernando, 2007).

For the present study, the researcher took the role of a moderate participant observer with specific attention to the emplaced and multisensory aspects of other people’s experience and her own. She became engaged through her participation in the environment and practices she shared with others, and it became a source of descriptive information for comprehending the data collected from the research participants (Pink, 2009). In between observation sessions, the researcher participated in public activities such as people watching, eating and buying food, watching street artists, drinking tea/coffee, talking to people and other activities. In some cases, the interviews took place in the public or private businesses of the street while sharing a table and eating/drinking while talking.

#### **4.4.4 Walk-by Observations and Behavioural Mapping**

Behavioural mapping was used as an observation tool and developed by Ittelson et al. in 1970. Its purpose was to record behaviours as they occurred in space. It links design features and behaviour together in both time and space. This method is usually used for a micro-scale environment because it is a convenient space for one person to observe. In doing behavioural mapping the following items would be necessary: to have a scale map of the

observation area, to decide the behaviours that are going to be observed, specific time schedules for observation, defining the system by which the behaviours would be recorded (Bechtel & Zeisel, 1987). For this thesis the basic plan of the chosen street blocks containing buildings, footpaths, fixed furniture, landscape and the street (vehicular road) was prepared in this section. The researcher used the plan of chosen lengths of the selected streets to map user-behaviour (activities), complemented by field notes, and photographs as they happened in the true environment. “*A critical point in behavioural mapping is to decide on the categories of behaviour needed and to pre-test these in an actual environment*” (Bechtel & Zeisel, 1987, p. 21).

Specific activity related data that were decided to be mapped consisted of:

1. Type of activity
2. Certain location of activity
3. Actors of activity
4. Physical features of the environment[street] which were involved in that type of activity
5. Understand whether those physical features support, inhibit or do not affect that activity
6. Activities that were linked with each other (people watching, street performers, etc.).

List is based on Fernando’s (2007) activity mapping.

Each user was symbolised as a point on the maps used for coding.

Approximate age, gender, ethnic background, and different postures and activities of people such as standing, sitting and talking were coded to make the mapping procedure quick and simple. The main objective of the study lies in the spatial relationship between physical characteristics, land-use activities and how different ethnicities use street spaces. Users’ ages or genders were not the primary focus but these attributes were also recorded to give additional details to the data collection. The age and gender codes were developed based on Mehta’s (2006) codes for his behavioural mapping in streets. One difference is that while Mehta did not differentiate between the genders of the teenagers, this research recorded boys and girls under two groups. Age groups were selected on the basis of quick and easy recognition. Apparent age was recorded under four categories; adults (approximately 20 to 65 years), older adults (approximately above 65 years), teenagers (approximately 13 to 19 years) and children (approximately less than 12 years). Different types of activities were based on Mehta’s (2006) and Golicnik and Ward Thompson’s (2010) identified activities in studying urban streets and urban parks. Those types of activities and their associated codes

were adjusted to the study based on the possible activities on the street, and the codes were based on the researcher’s ease in using them.

A pilot study was undertaken on Riddiford Street, Newtown, Wellington in February 2013 to investigate methods and to examine and improve the data-gathering tools, including both observations and interviews (see interview section). The pilot observations collected information on the possible range of activities on footpath spaces. Some activities such as using mobile devices were missing in other studies but were seen several times in the pilot observations and were added by the author. Colour coding by ethnicity was planned for all data entry. But during the pilot study, the researcher found it to be overly time consuming to change pens and a written code was developed instead to record cultural backgrounds of people observed.

The chosen method of observation (behavioural mapping) has been used in relation to documenting different persons' race/ethnicity in the studies of urban parks (Cohen et al., 2007; R. Hutchinson, 1987; Loukaitou-Sideris, 1995) and public markets (Watson, 2009). The researcher took the same approach and coded people’s ethnic background during the behavioural mapping procedure. Extensive caution must be taken into account when using observation methods to determine ethnicity (Gómez, 2002). During the pilot observations, it was recognised that there is a higher risk in making mistakes in differentiating between Māori and Pacific Islanders compared to other cultural backgrounds, thus, these ethnicities were coded under one group. As noted, the language and cultural patterns of Māori are closely related to other Eastern Polynesian peoples (Thomas & Nikora, 1992). Indo-Fijians were recorded under the Asian ethnic group (Leckie, 2012).

| Age                                     | Value code |
|---|------------|
| Adult Male(approximately 20-65 years)   | 1          |
| Adult Female(approximately 20-65 years) | 2          |
| Older Adult Male(approximately 65+)     | 3          |
| Older Adult Female(approximately65+)    | 4          |
| Teenager Male(approximately 13-19)      | 5          |
| Teenager Female(approximately 13-19)    | 6          |
| Child(approximately less than 12 years) | 7          |

Figure 4-1: Age and gender codes used in walk-by observations

The concentrations of behavioural mappings were on European, Māori, Pacific Islander, and Asian populations. Another group named “Others” was developed, and people from other ethnic backgrounds (Middle Eastern, African, and South American) were coded

in this group. Those ethnicities where the researcher was not confident about their background (such as mixed-race people) were coded in the “Other” category. Overall, the apparent ethnic background was recorded under four categories; European, Māori/Pacific Islander, Asian and Others.

| Ethnicity                             | Code   |
|---------------------------------------|--------|
| European(approximately)               | (EU)   |
| Māori/Pacific Islander(approximately) | (M/PI) |
| Asian(approximately)                  | (A)    |
| Others(approximately)                 | (O)    |

Figure 4-2: Ethnic codes used in walk-by observations

| Description of activity           | Symbols |
|-----------------------------------|---------|
| 1 Standing                        | ♣       |
| 2 Standing with a stroller/pram   | ♣ ■     |
| 3 Standing with a pet             | ♣ 🐕     |
| 4 Sitting                         | ●       |
| 5 Sitting with a stroller/pram    | ● ■     |
| 6 Sitting with a pet              | ● 🐕     |
| 7 Lying                           | Ly      |
| 8 Conversing/talking              | T       |
| 9 Mobile using                    | Mo      |
| 10 Eating/drinking                | E       |
| 11 Reading/writing/using a laptop | R       |
| 12 Window Shopping                | WSH     |
| 13 Playing                        | P       |
| 14 Smoking                        | Sm      |
| 15 Vending                        | V       |
| 16 Leaning                        | L       |
| 17 Begging                        | B       |
| 18 Performing                     | P       |
| 19 Advertisement/Sellers          | Sell    |
| 20 Guards                         | G       |
| 21 Other activities               | X       |

Figure 4-3: Type of activities on the footpaths and symbols used in recording activities in walk-by observations

Walk-by observations were used to record different stationary, lingering and social activities along the streets. During observation sessions, the researcher walked slowly along the complete length of the study area (both sides of the street) and recorded different types

of activities, the location, the actors (age, gender, and ethnicity), and the physical features of the street. People just walking on the footpaths, waiting at bus stops, using ATMs to withdraw cash and those waiting for the pedestrian lights were not recorded. These activities are mostly deemed necessary and are less likely to be considered as optional and social activities (refer to section 3.3).

The duration of the activities could not be recorded in the walk-by observations. People interacting with each other or engaging in different types of activities with others (as pairs, groups of three and so on) were circled on the coding maps to display that they were in a group. Figure 4-4 shows a sample of how activities were mapped by the researcher.

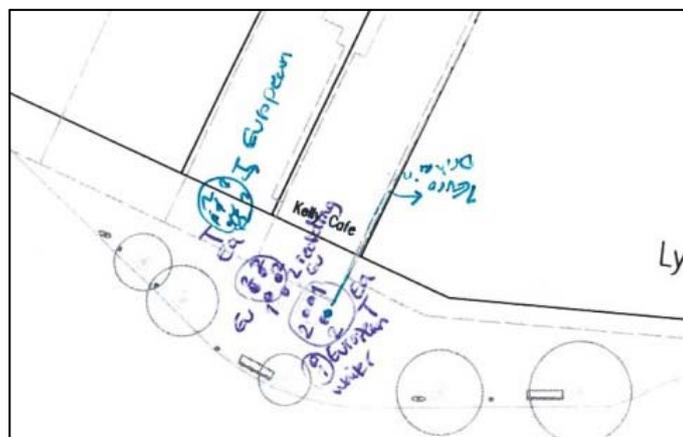


Figure 4-4: Sample of how activities were mapped by the researcher

Walk-by observations were conducted every hour between 10:00 AM and 6:00 PM on both weekdays and weekends within each case study area from which 24 (equivalent to 3 days) were on weekdays and 16 (equivalent to 2 days) on weekends.

### Observation sessions

Data were collected on both weekdays and weekends between March and April 2013 with different cloud cover and wind conditions, and no observations were conducted when it was rainy. The months of March and April (autumn) were chosen as the time of year when the weather was expected to be relatively warm in New Zealand and outdoor activities are enjoyable. Wellington is considerably further south than Auckland, and temperatures begin to fall in April. Thus, the behaviour mappings were conducted first in Wellington in March and were continued in Auckland in April, as the weather there was still likely to be warm.

## 1. Riddiford Street, Wellington

| Date       | Day       | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| 09/03/2013 | Saturday  |       |       |       |       |       |       |       |       |
| 10/03/2013 | Sunday    |       |       |       |       |       |       |       |       |
| 11/03/2013 | Monday    |       |       |       |       |       |       |       |       |
| 12/03/2013 | Tuesday   |       |       |       |       |       |       |       |       |
| 13/03/2013 | Wednesday |       |       |       |       |       |       |       |       |
| 14/03/2013 | Thursday  |       |       |       |       |       |       |       |       |
| 15/03/2013 | Friday    |       |       |       |       |       |       |       |       |
| 25/03/2013 | Monday    |       |       |       |       |       |       |       |       |

Table 4-1: Schedule of behavioural mapping for Riddiford Street

## 2. Great South Road, Auckland

| Date       | Day       | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 |
|------------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| 09/04/2013 | Tuesday   |       |       |       |       |       |       |       |       |
| 10/04/2013 | Wednesday |       |       |       |       |       |       |       |       |
| 11/04/2013 | Thursday  |       |       |       |       |       |       |       |       |
| 12/04/2013 | Friday    |       |       |       |       |       |       |       |       |
| 13/04/2013 | Saturday  |       |       |       |       |       |       |       |       |
| 14/04/2013 | Sunday    |       |       |       |       |       |       |       |       |

Table 4-2: Schedule of behavioural mapping for Great South Road

## 3. St George Street, Auckland

| Date       | Day      | 10-11 | 11-12 | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | 17-18 |
|------------|----------|-------|-------|-------|-------|-------|-------|-------|-------|
| 18/04/2013 | Thursday |       |       |       |       |       |       |       |       |
| 19/04/2013 | Friday   |       |       |       |       |       |       |       |       |
| 20/04/2013 | Saturday |       |       |       |       |       |       |       |       |
| 21/04/2013 | Sunday   |       |       |       |       |       |       |       |       |
| 22/04/2013 | Monday   |       |       |       |       |       |       |       |       |

Table 4-3: Schedule of behavioural mapping for St George Street

The manual data collected from each observation was recorded digitally onto GIS software using Arc map 10.1. Each point represents a person and the data associated with their behaviour. The researcher then uses these layers of data to demonstrate how different patterns of occupancy relate to the spatial configuration and design attributes of footpath spaces, as follows.

1. The locations where most of the stationary activities took place
2. The locations where most people contributed to social activities
3. Similarities and differences between different cultures in terms of activities and places where their activities occur

The data then are analysed in relation to the locations of various behaviours and different cultural groups to identify their association with different features of the footpaths and business activities. The number of people of various ethnic backgrounds engaged in

different types of activities in specific locations is used as an indicator of how well each section of the street serves human needs and supports different cultural groups.

Engagement with the daily users and inhabitants of the area supplemented research findings and provided multi-dimensional perspectives on the cultural life of the studied streets. In addition to the field notes, photographs were used to record behavioural patterns.

#### 4.4.5 Interviews

Interviews are understood to be the most commonly employed method in qualitative research and ethnography (Bryman, 2012). Recent methodological discussions have outlined the close links between participant observation and interviews where interviews are often part of participant observation, and there is no clear distinction between them (Pink, 2009). *“Ethnographers often check out their observations with interview questions to determine whether they might have misunderstood what they had seen”* (Bryman, 2012, p. 392). According to Bryman (2012, p. 470), questions in ethnographic and qualitative research are usually open-ended and flexible, *“responding to the direction in which interviewees take the interview.”* Semi-structured interviews are used in this research as they facilitate direct interaction between the users and the researcher. Interviewees are given a great deal of flexibility on how to answer different questions. There are differences between unstructured and semi-structured interviews. Unstructured interviews might only contain a single question and are often similar to a conversation. In semi-structured interviews, however, the interviewer has a number of topics that need to be covered. These topics are organised in the format of an interview guide based on a list of questions (Bryman, 2012).

Questions were developed based on pilot field observations and the framework of the research. Face to face interviews provided in-depth details on the information collected from the observations. The purpose of the semi-structured interviews is to gain an understanding of the range of different planning, design and management strategies in which cultural differences seem to have greater influences and impacts, or on the contrary, to get a better knowledge of how each of these planning, design and management issues might impact the different ethnic cultural groups. The semi-structured interview was designed as a kind of flexible and broad survey. In semi-structured interviews, the researcher needs to monitor the direction, depth and detail of the interview, the topics to include and the topics to avoid, together with the question order (Burgess, 1991). The interview questions did not focus on any specific design criteria and facets of the literature. It was left to respondents to raise them. On the other hand, the interviews examined participants’ activities on the street, the

places they chose for their activities and the reasons they chose those places. Participants' suggestions for improving the street environment were also a concern to the researcher to understand the main requirements of people from different cultural backgrounds.

In general, the interviews were designed and divided into three sections;

The interviews started with asking demographic questions such as the participant's cultural background, homeland, age groups, level of education, length of live/stay in New Zealand and level of familiarity with the street.

In the second section of the interviews, participants were queried about their social/leisure activities on the street without referring to their cultural backgrounds. In general, the questions of this section were based on the participant's different types of activities, activity locations, the liked and disliked features of the street influencing leisure or social activities, duration of activities, and preferred time for visiting the street.

According to Carr et al. (1992), the best way to understand people's needs in urban public space is to ask them the means in which the current context meets with their cultural expectations. In the third and last section of the interview, the researcher asked participants about their specific cultural activities and types of environments that accommodated their needs in more detail and in which ways in their opinion street spaces could be designed and maintained so that they would accommodate their ethnic social activities.

The research methodology received an approval from the Human Ethics Committee (HEC) of Victoria University of Wellington (issued number 19607).

On a sunny Saturday on February 2013, five people were recruited and interviewed on Riddiford Street, Wellington, in a pilot study of the interview questions. The initial analysis of the interviews indicated a different weighting of street characteristics. Themes referring to different businesses, uses and type of shops, restaurants and cafés were identified more frequently by the participants. On the other hand, respondents were falling short on the design of the environment. The question "*what are the features that accommodate your activities*" was developed to directly question the participants about their needs on the footpaths and to gain their views on the physical and design features of the environment, but this was unclear to most. The question was reworded to; "*In choosing a place to pass time for leisure/ socialise on this street (alone or with friends) what physical features/ elements are important?*" However, the nature of the semi-structured interviews allowed the researcher to use a number of prompts when

a question was not understandable and sometimes gave examples to make them clear. The pilot interviews were included in the findings of the first case study.

### **Sampling**

Following Gobster (2002), interviews were conducted at various times of the day and different days of the week to accomplish a representative variety of street users. During the recruitment process the purpose was to get the most diverse range of all ethnic groups, if possible. A sample of users of each street was interviewed during the participant observation. The interviews were administered to people who were sitting, standing and lingering, and not to people who were merely passing through the street, to make sure participants were not in a rush and had time for the interviews. Participants were chosen at random within the streets.

The time for the interviews ranged from 10 minutes to 50 minutes, with an average time of 15 to 20 minutes. Frequent users of the street spent more time answering the questions.

### **Analysis Protocol of Interviews**

The interviews were transcribed and coded for analysis. A coding system was defined based on the theoretical framework of the study for the open-ended questions. The coded information was employed to conduct a comparative analysis within each cultural group and between different ethnic cultures to understand the similarities and differences between their perceptions and preferences for choosing various street spaces for social activities. NVivo 10 computer software was utilised to organise and analyse content from the interviews. NVivo is a software program that enables the frequency of coded responses for open-ended questions related to each cultural group to be quantified.

Each case node (representing each participant; for example the 12<sup>th</sup> person who was interviewed in St George Street, Papatoetoe is represented as participant STG12) was then categorised by the answers that the participant gave to each open-ended question. Thus, each question's sub node (for example; Q18) contained all the responses to that question by all the interviewees. A classification sheet containing demographic data was also attributed to participants. Using the coding query, responses to each question were categorised based on the ethnic background of the respondents. A sub-node was created for each culture's responses to each question, and responses of each cultural group to each single question were categorised in the different nodes. These nodes helped the researcher to analyse and compare the responses of ethnic groups to each question.

## 4.5 Summary

Participant observations and interviews provide data for detailed discussions on the use of each street as a behavioural setting for optional, leisure and social activities (figure 4-5). The results of observations and surveys were analysed in the context of the theoretical framework described in Chapter 3. The information from the sensory ethnography (both observations and interviews) was used to conduct a comparative analysis of the similarities and differences between street characteristics which support stationary, sustained, and lingering activities in each of the case studies with different demographic ratios. The findings of the applied methods are further described in Chapter 5.

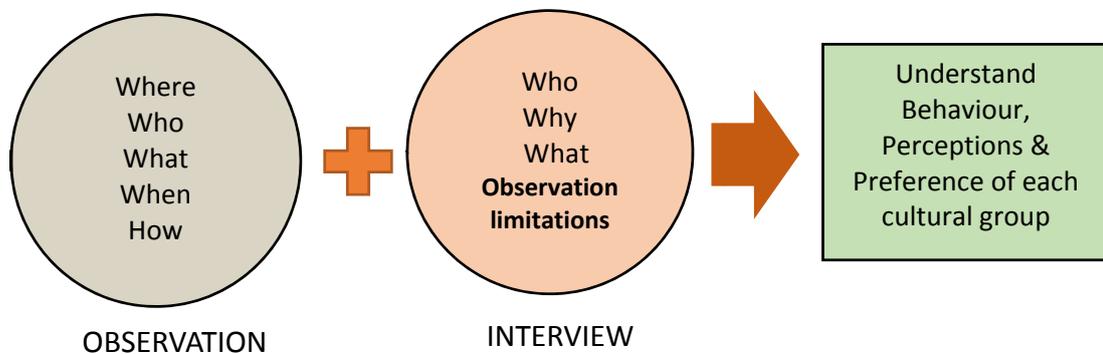


Figure 4-5: Observations and interviews help understand behaviours, perceptions and preferences

The qualitative research method used in the first stage of the research guided the researcher to develop a comprehensive questionnaire which included quantitative and scaled measured questions. A smaller framework was extracted from the main framework based on the findings from the first stage of the research in order to examine the design and management of footpaths in New Zealand as a multicultural society. The important social and environmental criteria identified through the first stage of the study were integrated with the design of the second stage. The methodology used for the second stage of the study is further described in Chapter 6 of this study.



## 5 Chapter Five: Case Studies

*Social beings are things as definitely as physical things are social.*

—George Herbert Mead

This chapter consists of four sections that present the findings of the first stage of the study; observations, and semi-structured interviews. The first three sections combine the results of observations and interviews in each case study and discuss them in the context of the theoretical framework.

Each section starts with a brief introduction to the case study, then presents a general overview of the participants engaged in different types of static activities on the street, the number of interviewees and their ethnic backgrounds. The section then moves to recorded poses and activities on the street. The activities and perceptions and preferences of users are discussed and analysed in terms of land-use activities, design attributes and management-related issues. The characteristics of the streets will be analysed in order to understand which physical features of the streets, and the type and management of uses and activities support stationary, sustained, lingering, and social activities. Each section concludes with the summary of findings. Data gathered from the three case studies provides information on the interactions between cultural groups, street physical characteristics and business activities. The chapter concludes with a section on the discussion of findings and deliberates on what is likely to be necessary to make public multi-cultural streets.



## 5.1 Riddiford Street, Newtown

### 5.1.1 Introduction

Riddiford Street is a traditional main street located in the Newtown neighbourhood of Wellington and has a north-western south-eastern orientation. Riddiford Street extends one kilometre from the corner of Adelaide Rd and John Street to Mansfield Street. Observations on Riddiford Street took place in March 2013 between Mein Street and Normanby Street on one kerbside and Hall Street and Wellington City Mission building on the other kerbside (figure 5-1).



Figure 5-1: Map showing the studied blocks on Riddiford Street in Newtown neighbourhood

The commercial heart of Riddiford Street is comprised of independent, small, unique stores. The street contains a variety of shops, eating places, services, second-hand and affordable shops, and an international chain restaurant. Shops and premises are operated and managed by different cultural groups such as European (Pākeha), Asian, and Middle Eastern. Several ethnic shops and second-hand shops extend their goods onto the footpath of the street; however, this is done in an organised manner.

Most of the length of the street has a 3-4 metre footpath width. The width increases where Riddiford Street intersects each of the side streets. Public benches have also been installed in these areas in an effort to make them more attractive for stationary and lingering activities. The street also benefits from a number of commercial chairs that belong to cafés and bakeries. There is a corner park on the intersection of Riddiford Street and Constable Street with a playground, the public library and a number of public toilets. Riddiford Street

has been holding the Newtown Street Festival each March for nearly 20 years. Every Saturday, a fruit and vegetable market, is held at Newtown School, on the corner of Mein and Riddiford Streets.

### 5.1.2 Activity Observations and Interviews

During the period of observation, 1401 people were engaged in some type of stationary activity on Riddiford Street. Of the 1401 mapped behaviours, 119 included people performing, vending, begging and the shop keepers. The other 1282 were people engaged in different types of static and stationary activities. Europeans formed the most frequent users of Riddiford Street (786). Māori/Pacific Islanders (271) and Asian (146) people were recorded in relatively smaller numbers. Also, as described in the methodology, a group of “Others” was recorded with 79 people falling into this category.

Of the people observed, 61% were European and 39% were non-European. The proportions of European/non-European where activities were mapped nearly relates to the European/non-European population distribution of Newtown (figure 5-2). In total 30 persons were subsequently interviewed: 9 European, 8 Māori, 7 Pacific Islander and 6 Asian.

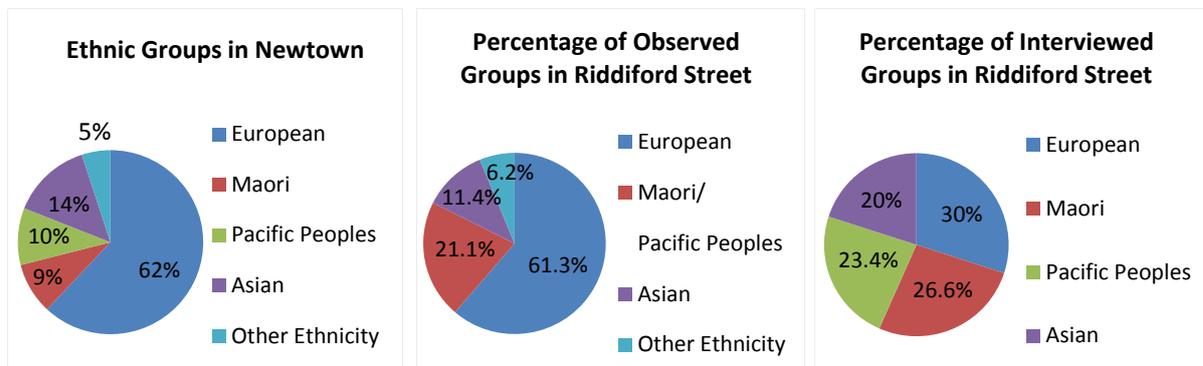
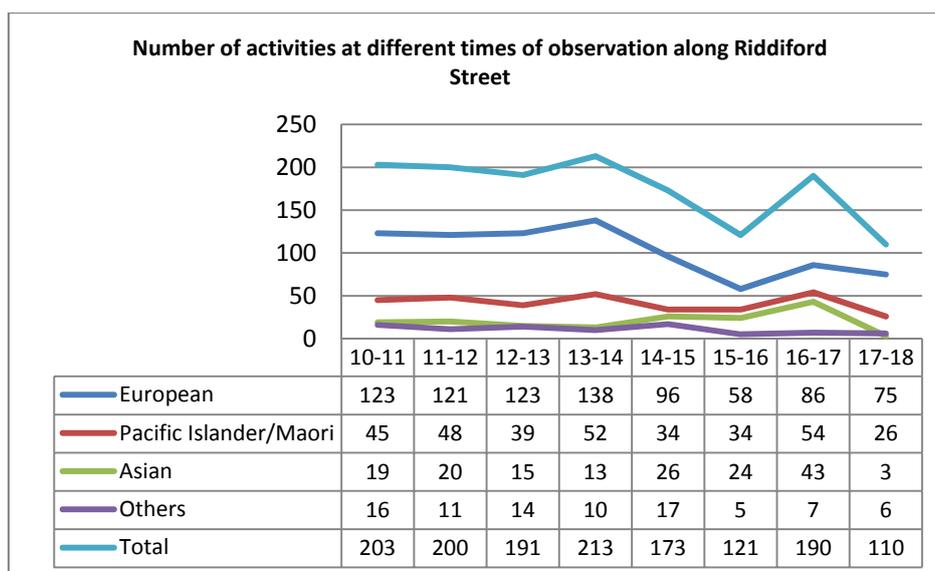


Figure 5-2: A comparison of the percentages of ethnic cultures living in the area, with those of each culture observed and interviewed. The demographics of Newtown are based on Statistics New Zealand, 2006

Patterns of occupancy showed higher numbers of users between 10 am to 2 pm. The numbers of users stayed almost consistent between each hour in this period. The number of users decreased between 2 pm to 3 pm and again decreased significantly between 3 to 4 pm (table 5-1). The numbers of users sharply increased and reached a peak between 4 pm to 5 pm when most offices closed. The number of people involved in different types of static activities dramatically decreased after 5 pm when most premises and shops shut down. No differences were observed between different ethnic groups in patterns of occupancy in different hours.



**Table 5-1: Number of static activities at different times of observation along Riddiford Street**

Of the 1401 recorded activities, 137 street users appeared to be over 65 years of age, 49 were children, 28 were adolescents, and the rest adults. Table 5-2 shows that the numbers of male users engaged in different types of static activities outnumbered female users.

| Age group              | Adult male | Adult female | Older adult male | Older adult female | Teenager male | Teenager female | Child | Total |
|------------------------|------------|--------------|------------------|--------------------|---------------|-----------------|-------|-------|
| European               | 377        | 294          | 78               | 33                 | 9             | 1               | 28    | 820   |
| Pacific Islander/Māori | 181        | 122          | 5                | 2                  | 4             | 9               | 9     | 332   |
| Asian                  | 76         | 72           | 2                | 1                  | 2             | 1               | 9     | 163   |
| Other                  | 43         | 22           | 15               | 1                  | 2             | 0               | 3     | 86    |
| Total                  | 677        | 510          | 100              | 37                 | 17            | 11              | 49    | 1401  |
| percentage             | 48.32%     | 36.4%        | 7.13%            | 2.65%              | 1.2%          | 0.8%            | 3.5%  | 100%  |

**Table 5-2: Number of different age groups and genders along Riddiford Street**

Different groups in terms of size, age and gender mix were recorded. Most users came to Riddiford Street with friends/family members and were typically recorded in groups. This pattern was consistent between people of different cultures. Asians in groups were greater in proportion than other ethnicities.

|                        | Individual |       | Group |       | Total |      |
|------------------------|------------|-------|-------|-------|-------|------|
| Cultural background    |            |       |       |       |       |      |
| European               | 317        | 40.3% | 469   | 59.7% | 786   | 100% |
| Pacific Islander/Māori | 110        | 40.6% | 161   | 59.4% | 271   | 100% |
| Asian                  | 48         | 31.5% | 98    | 68.5% | 146   | 100% |
| Other                  | 30         | 38%   | 49    | 62%   | 79    | 100% |
| Total                  | 505        | 39.4% | 777   | 60.6% | 1282  | 100% |

**Table 5-3: Number and percentage of different cultures observed on Riddiford Street, both individually and in groups**

Most groups were small; the highest number of groups were two person groups (232) followed by three (62) and four (20). A few groups had 5 and more people engaged in social

activities (figure 5-3). European interviewees noted that they often come to streets in smaller groups of 2-3 to 4 or 5 people; however, one participant mentioned that they might also meet with up to eight people.

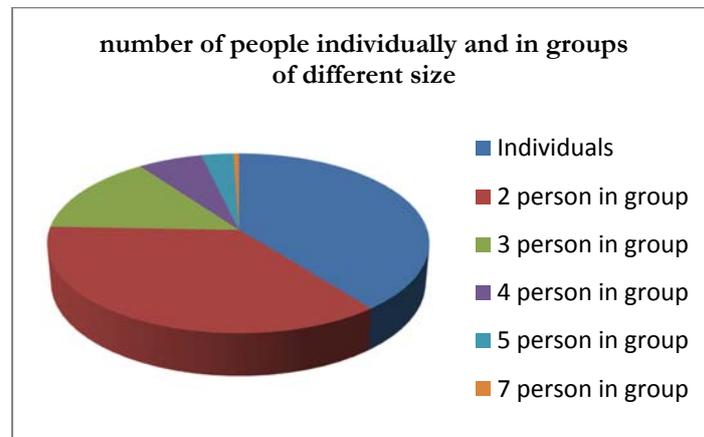


Figure 5-3: Group sizes on Riddiford Street

Māori/Pacific Islanders visited Riddiford Street in smaller group sizes (up to five people in a group) during the observation period. However, interviews suggested that larger group sizes might also be common among these groups, especially Pacific Islanders. Māori mentioned that Māori group sizes while visiting a street range between 2 to 7 people with an average size of 3-4 people in a group. Pacific Islander groups are both constituted of smaller numbers of 2-3 people and larger groups. The number of Asian group members were up to 4 members in a group. Figure 5-4 shows the group sizes of different cultural groups on Riddiford Street.

The most common type of association among the group size of two was the male-female association, followed by groups of two males or two females. The number of male-female associated groups in European cultures noticeably outstripped single-gendered group associations, whereas, there were no huge differences among other cultural groups between these three types of associations. More than half of the groups of three comprised gender mixed associations followed by groups of three males and three females. Similarly, the most common social structure among groups of four was gender-mixed (2 male, 2 female and 1 male, 3 female). The researcher did not find any specific associations among the groups of five and seven. The only group of seven people was European and comprised five females, one male and one child. In general, it could be concluded that mixed-gender groups outnumber other types of social group association and this is almost consistent among different group sizes. Figure 5-4 shows different group sizes among different cultures along Riddiford Street.

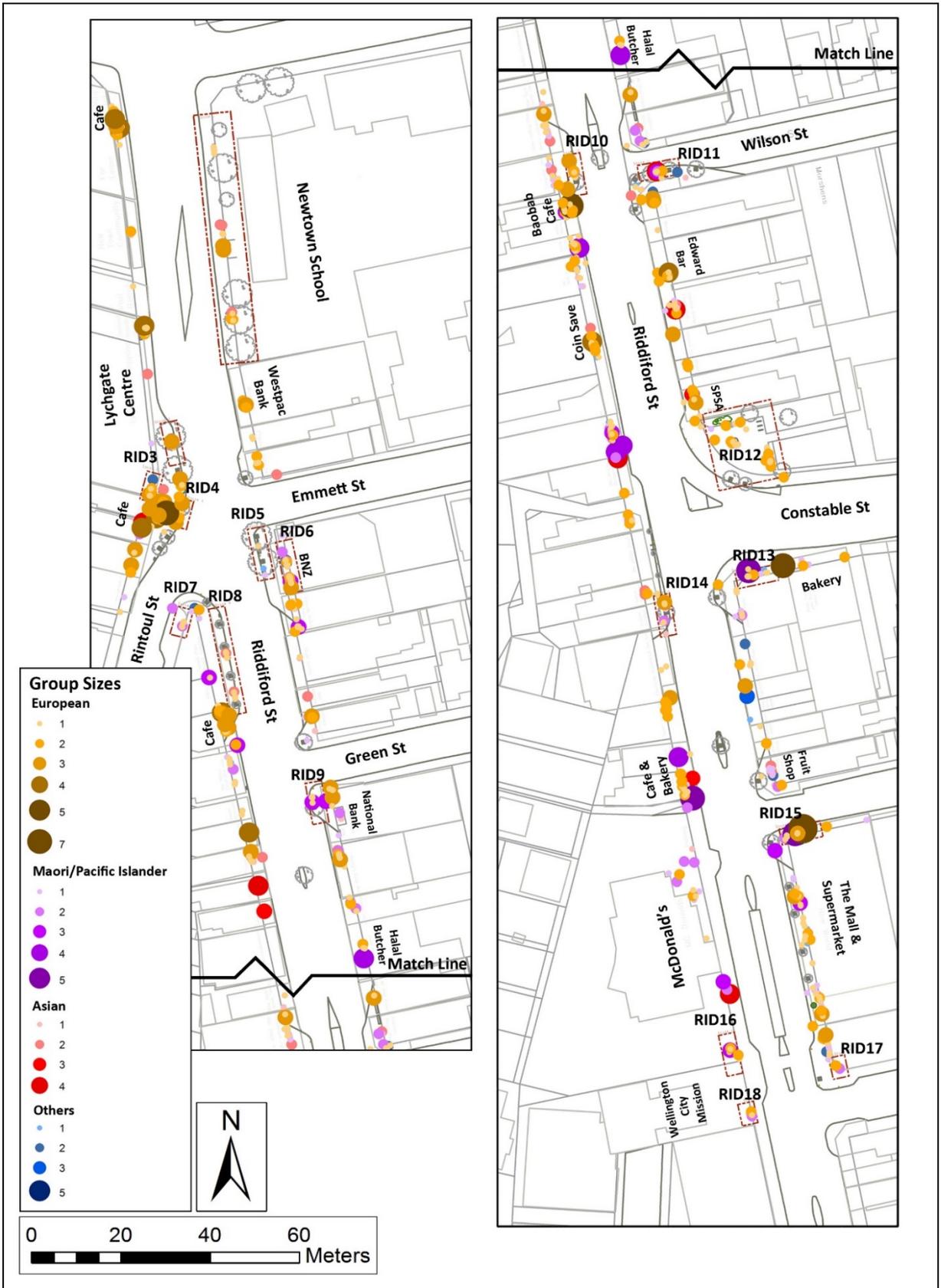


Figure 5-4: Various group sizes among different cultures, along Riddiford Street

### 5.1.3 Recorded Poses and Activities

Figure 5-5 presents the different postures and activities observed on the street. Results of observations of stationary activities reveal that a greater number of people were standing (750) and sitting (517), compared to leaning (14) and lying (1). A considerable number of people with the standing pose were window shopping. The most common activity, along with standing, sitting and window shopping, was talking. This was followed by eating or drinking then smoking and using a mobile phone. Reading and playing were also recorded in smaller numbers. Other activities on Riddiford Street included performing (51), begging (40), advertising (12), and vending (9).

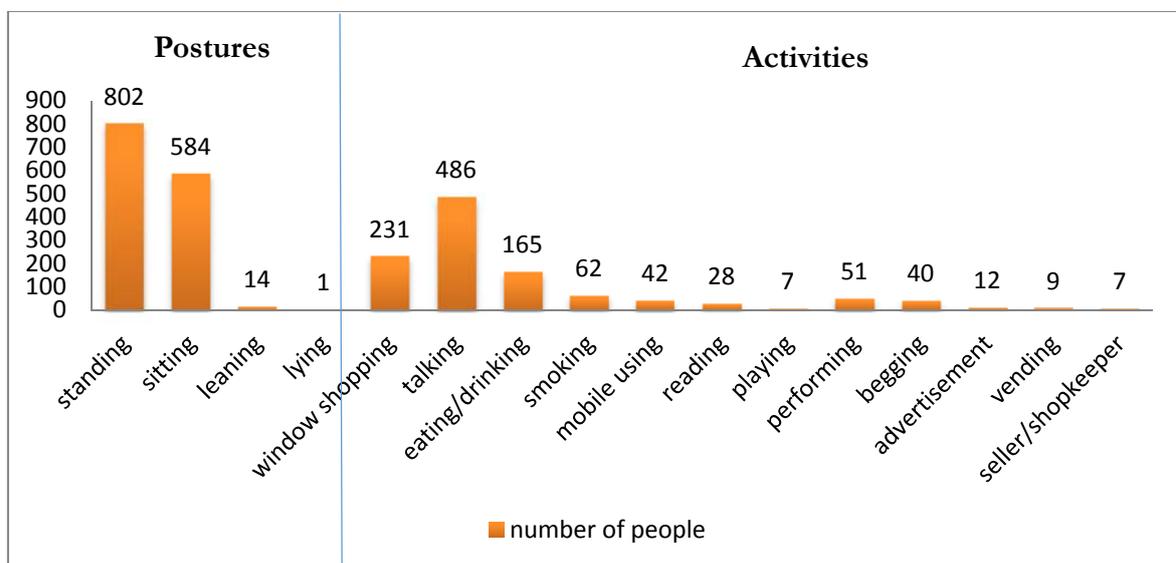
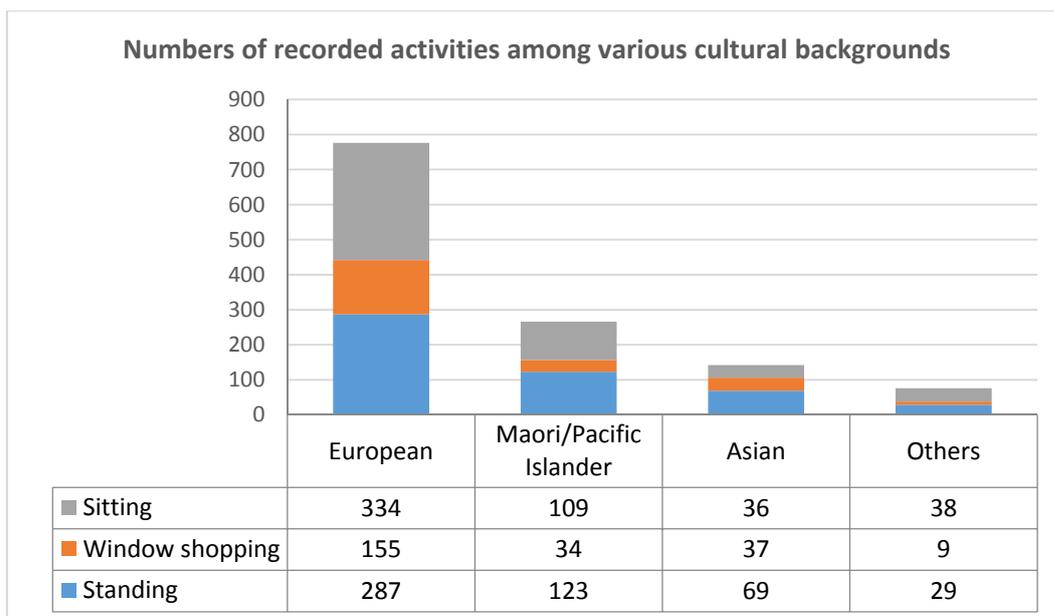


Figure 5-5: Number of people observed in different type of activities within Riddiford Street

The proportions of different cultures in standing, window shopping and seated activities varied. Table 5-4 shows that while the proportions of people sitting and standing on Riddiford Street is similar between European and Māori/Pacific Islander cultures, most Asians were recorded while standing/window shopping. A smaller percentage of Asians (24%) used Riddiford Street’s benches (public) and chairs (private) and ledges for seated activities compared to Europeans (42%), Māori/Pacific Islanders (40%) and “Others” (48%). There was a difference in the window shopping activities of different cultural groups. A higher percentage of Asians and Europeans were involved in window shopping compared to Māori/Pacific Islanders.



**Table 5-4: Differences between the proportions of different cultures involved in standing, window shopping and seated activities**

Of the 1282 recorded activities on Riddiford Street, 508 were standing/lingering activities (without window shopping). Most people irrespective of cultural background were recorded standing with others rather than alone. The most common activities coded with standing were talking, followed by mobile texting/talking, smoking, and eating/drinking.

After standing (including window shopping), sitting was the most frequently recorded posture. Observations indicate that most seated activities occurred on public and private benches along the study length. Table 5-5 shows that more seated activities were recorded in groups than alone. The most common activity observed while seated was talking. A considerable percentage (20%) of sitting and talking happened while eating or drinking.

Most people sat and watched other people by themselves rather than in groups. On the other hand, most eating/drinking activities were encountered in groups rather than individually. A considerable number of people reading/writing while sitting were Europeans. Eating and drinking while seated were also more common among Europeans. 36% of Europeans were eating/drinking while seated. This was followed by Māori/Pacific Islanders (23%). Only a small percentage of Asians (8%) and “Others” (5%) were eating while seated. Adult males constituted more than half of the recorded seated activities (52%), followed by adult females (31%) and older adult males (11%).

| Activity                          | Cultural Background | E/I | E/G | MP/I | MP/G | A/I | A/G | O/I | O/G | Total/I | Total/G | Total |
|-----------------------------------|---------------------|-----|-----|------|------|-----|-----|-----|-----|---------|---------|-------|
| Sitting/people watching           |                     | 77  | 16  | 37   | 2    | 9   | 10  | 11  | 6   | 134     | 34      | 168   |
| sitting and talking               |                     | 0   | 57  | 0    | 31   | 0   | 12  | 0   | 15  | 0       | 115     | 115   |
| Sitting, talking and eating       |                     | 0   | 90  | 0    | 12   | 0   | 1   | 0   | 0   | 0       | 103     | 103   |
| Sitting and eating                |                     | 18  | 11  | 11   | 3    | 2   | 0   | 2   | 0   | 33      | 14      | 47    |
| Sitting and smoking               |                     | 19  | 2   | 6    | 3    | 1   | 0   | 1   | 0   | 27      | 5       | 32    |
| Sitting and reading/writing       |                     | 24  | 0   | 1    | 0    | 0   | 0   | 0   | 0   | 25      | 0       | 25    |
| Sitting and mobile using          |                     | 12  | 0   | 2    | 0    | 1   | 0   | 1   | 0   | 16      | 0       | 16    |
| Sitting, talking and smoking      |                     | 0   | 3   | 0    | 1    | 0   | 0   | 0   | 2   | 0       | 6       | 6     |
| Other activities                  |                     | 3   | 2   | 0    | 0    | 0   | 0   | 0   | 0   | 3       | 2       | 5     |
| Total number of seated activities |                     | 154 | 181 | 56   | 52   | 14  | 22  | 15  | 23  | 239     | 288     | 517   |

**Table 5-5: Different types of activities by different cultural groups, both individual and in groups**

Window-shopping, defined in a broad sense of looking at signs and displays (Mehta, 2006) was the third most frequent activity after sitting and standing on Riddiford Street. Of the 239 mapped window shopping activities, 107 people were window shopping on their own, while 132 were mapped in groups. Table 5-6 shows there is a difference between the window shopping activities of different cultural groups. Although the number of Europeans window shopping in groups was almost 30% more than those shopping individually, very little difference could be observed between Asians window shopping in groups or on their own. Most Māori/Pacific Islanders were observed window shopping by themselves. Window shopping in Riddiford Street was more common among adult females and males with a slight preference for females over males.

| Activity        | Cultural Background | E/I | E/G | MP/I | MP/G | A/I | A/G | O/I | O/G | Total/I | Total/G | Total |
|-----------------|---------------------|-----|-----|------|------|-----|-----|-----|-----|---------|---------|-------|
| Window Shopping |                     | 65  | 94  | 22   | 12   | 17  | 20  | 3   | 6   | 107     | 132     | 239   |
| Total           |                     | 159 |     | 34   |      | 37  |     | 9   |     | 239     |         | 239   |

**Table 5-6: Window shopping activities among different cultural backgrounds, both individually and in groups**

2

| Cultural Group         | Measurement Units |       |
|------------------------|-------------------|-------|
|                        | Individual        | Group |
| European               | E/I               | E/G   |
| Māori/Pacific Islander | MP/I              | MP/G  |
| Asian                  | A/I               | A/G   |
| Others                 | O/I               | O/G   |

#### 5.1.4 Land-use Activities

Businesses were the main reason people visited Riddiford Street. The street has a wide range of diverse retail uses. 25 out of 30 (83%) interview participants referred to business activities as what they liked most about the street and what drew them to the street. This was consistent among the four different cultures. The diversity of businesses was valued by members of different cultures in Riddiford Street. One participant explains;

*“I enjoy that Riddiford Street has most of the things that you would need. You don’t need to go to lots of different places for shopping”.*

Keeping the current diversity and even adding more diversity to the business activities were among the recommendations made by people from different cultural backgrounds to the question of how the street could become better. Again, when participants were asked about the important spaces for their ethnic social and leisure activities most of them referred to businesses. The responses confirm the important role of businesses in stimulating static and social activities.

Daily services such as supermarkets, banks, chemists, and health service were mentioned by those of various cultural backgrounds and constituted an important part of what people liked on the street. Daily services seemed to find greater importance for the Asians, as all of the Asian participants referred to the above-mentioned qualities of the street.

In general, not many static activities were recorded in front of different services. Services such as Flight Centre (a travel agent), NGO and trusts, financial services without seating spaces and ledges at their front and a parking lot in addition to vacant businesses under offer of lease did not encourage static and social activities. Most of these services had lower levels of visual permeability and lacked visually attractive frontages and displays for pedestrians. Some covered their window displays with boards and advertisement signs to be viewed from a further distance (probably by the vehicles passing by). Others provided various types of monotonous frontages by using blank walls, opaque and very dark windows creating non-visually permeable frontages. These were all places where few pedestrians, irrespective of cultural background, would slow down or stop to window shop.

While most services did not encourage static activities, there were a number of exceptions. The fruit shops, the main supermarket, pharmacies with window displays and those services with ledges and seating provided in the frontages attracted a number of pedestrians. The variety of goods and provided products has made services such as

supermarkets become multi-cultural spaces. This became obvious in the observations where a number of static activities of various cultures were recorded in relation to the supermarket (figure 5-6).



Figure 5-6: A number of static and social activities occurs outside the mall and supermarket. Source: author, 2013

A considerable number of static activities also occurred in front of the two fruit shops along the street. These fruit shops extended their territory onto the footpath (figures 5-7 and 5-8). Patterns of occupancy among different ethnic cultures showed that the fruit shops on Riddiford Street were not only lively but also constituted one of the most multi-cultural spaces on the street, where they attract and draw people of different ethnic backgrounds.



Figure 5-7: The fruit shop attracted a variety of diverse cultural backgrounds on Riddiford Street. Source: author, 2013



Figure 5-8: Fruit shop selling ethnic food ingredients such as taro and plantain (green bananas) attracted a considerable number of Pacific Islanders. Source: author, 2013

Between the two fruit shops along the street, the shop which sold ethnic raw groceries attracted a greater number of ethnic people. It appears that specific shops selling cultural ingredients attract people of specific cultural groups to the footpaths as well as the

mainstream. A Pacific Islander participant explained the importance of raw cultural vegetables in their cooking;

*“Pacific Islanders go to vegetable shops to buy green banana and Taro, [...] Islanders like to eat Island food, and it is good to have a shop to buy our grocery, also, they are quite cheaper in these shops rather than other shops [supermarkets]”.*

Sometimes, these ethnic food and spices are provided by the mainstream (supermarkets) or in stores established by other ethnic groups. Participants frequented Asian or Indian shops to get their cultural products on Riddiford Street.

There were a number of restaurants serving ethnic foods on Riddiford Street. These restaurants of course did not just target ethnic populations but also the mainstream. A number of Europeans and Asians (Indian) lingered in front of Asian (Indian) restaurants and also a number of Europeans and Māori/Pacific Islanders were observed in front of the sushi shop. People, especially those from the mainstream, eat from a range of different cultures. An English participant explained;

*“The favourite food [of the English] is Chinese, [so English people go to] Beijing restaurant. Many English people go to Indian restaurants, the temptation”.*

Participants put a greater stress on ethnic stores/restaurants when asked about the location of their social activities. A considerable number of Asians included in the interviews that they chose to go to Asian restaurants for their family activities and that they enjoyed eating food from their country of origin. This could be related to the fact that these cultures are more ‘*ethnocentric*’. However, upmarket ethnic dining establishments targeted the mainstream and middle class users rather than serving the ethnic and less affluent groups. A number of Asian participants commented that they could not go to some Asian establishments to dine due to their upmarket menu prices. Many ethnic restaurants focused on their interior space in attracting customers and did not create many static activities on adjacent footpaths.

Businesses offering Halal ("permissible" or "lawful" in Arabic) meat and Halal ingredients in addition to restaurants offering a Halal menu had an important role in the social activities of Muslims. There were not many Halal eating places apart from the newly opened Indian restaurant on Riddiford Street. Thus, Muslim Asian participants rarely mentioned the eating places and restaurants as what they liked on Riddiford Street. On the

other hand, adding Halal restaurants was among their key recommendations for the street to become a more convenient place for their ethnic group social activities.

The role of ethnic shops on the static and social activities of ethnic groups was reinforced in observations. A number of static activities of Asians, Māori/Pacific Islanders and the “Other” cultural group (including Middle Eastern, Africans) took place on the corners of Wilson Street (figure 5-9). The concentration of ethnic minorities on the intersection of these streets could be related to the proximate distance from ethnic food stores and restaurants. Participants stated that locations for socialising on footpaths are mostly dependent on chance meetings. Ethnic shops and Halal butchers attracted Asians and other ethnic minorities and a number of social activities occurred in approximate distance to them.

Māori and Pacific Islander businesses were significantly outnumbered by businesses operated by Europeans, Asians and Middle Easterners. The management of some business activities by non-European groups was favoured among these ethnic minorities. While participants were asked about their recommendations for improvements and changes along the street for their ethnic group social activities, most of them referred to land-use activities with a pronounced weight on cultural and ethnic businesses. Cultural shops and ethnic stores constituted an important part of factor analysis of three cultures. 2 of 7=28% of Māori, 4 of 6= 75% of Pacific Islanders and half of the Asians (3 out of 6=50%) referred to ethnic stores run by ethnic minorities. For example, Māori believed that Māori should become involved in the commercial structure and management of businesses lining the street. A Māori participant explained;

*“I think they should have a Māori shop where they have the Māori food. There is nothing here. Māori have to have a function where they can meet”.*

However, there were differences between Māori perspectives on implementing Māori ethnic stores on Riddiford Street. Some Māori participants understood that adding Māori culture shops and restaurants could encourage Māori to come to the street for social activities. However, others believed that adding Māori shops or businesses might not be necessary for Māori, as they usually go to their family homes instead of streets if they wanted something culturally related. More homogeneity was seen within the Pacific Islanders’ point of view on adding Island shops and restaurants on the street. Pacific Islander participants believe that adding more Island restaurants could encourage social activities among Pacific Islanders, due to their affordable prices.

Although there were a significant number of Asian restaurants, services and grocery stores on Riddiford Street, still half of the Asian participants stressed cultural businesses and restaurants as what should be added on the street. This is because most of the Asian stores were operated by Indians. Nevertheless, many of the interviewed participants were from other Asian countries such as Malaysia or Indonesia.

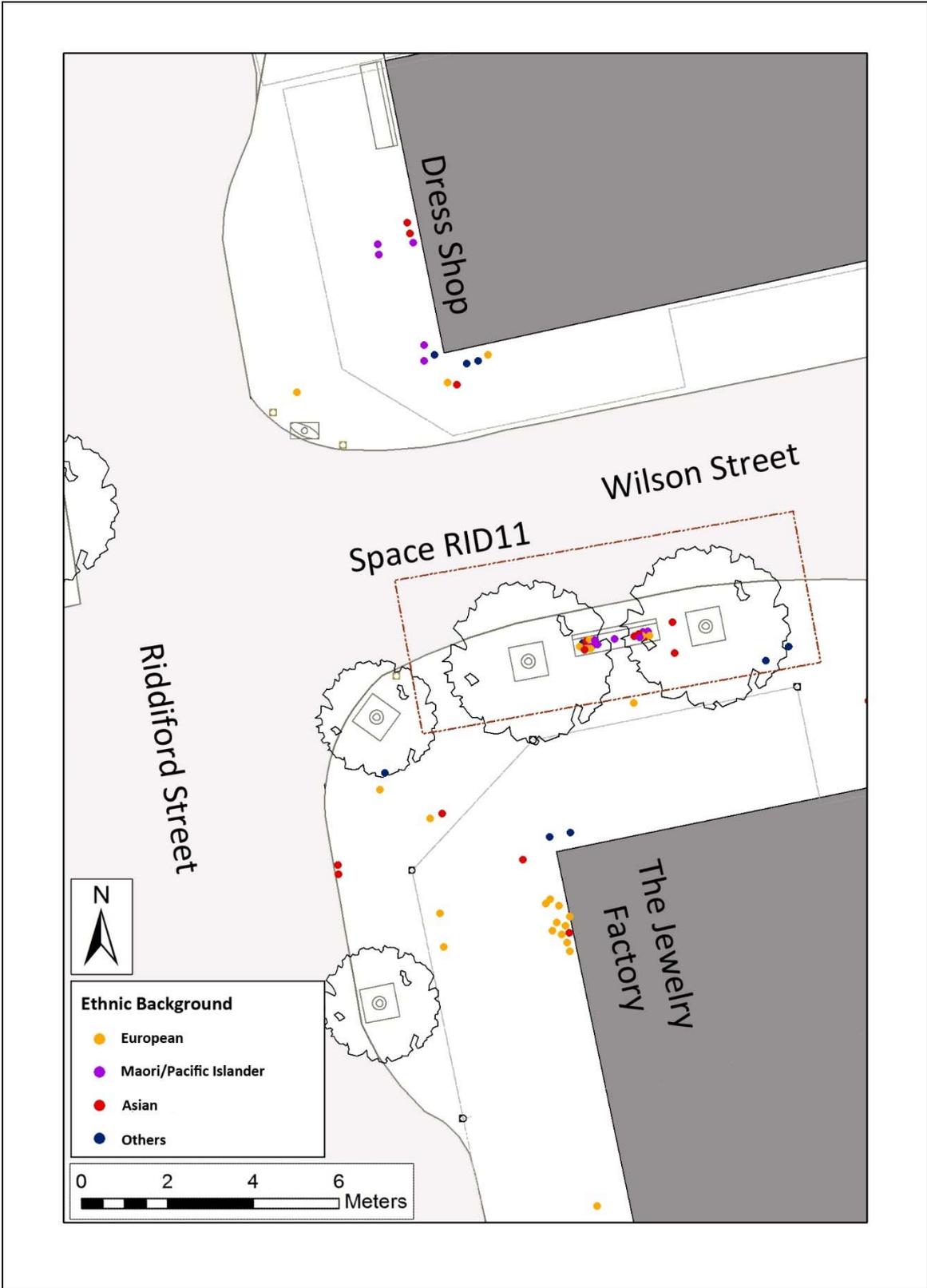


Figure 5-9: A considerable number of static and social activities of ethnic minority groups occurred in the corner of Wilson Street with close distance to cultural shops and eating establishments and the Halal butcher

Businesses centring on food were the major activities happening along Riddiford Street. Many cafés and a number of bakeries and bars extended their dining spaces out onto the footpaths which created a lively atmosphere along Riddiford Street. Around 20% of all static activities occurred in front of cafés, demonstrating the importance of cafés and commercial seating for creating lively footpath spaces. Nearly half of seated activities (215/ 517) occurred on the private seats belonging to the cafés, bakeries and a small number of seats in front of a bar (Table 5-8).

| Eating/drinking premises   | Cultural background | European   | Māori/Pacific Islander | Asian    | Other | Total |
|----------------------------|---------------------|------------|------------------------|----------|-------|-------|
| Cafés                      |                     | <b>218</b> | 15                     | 6        | 2     | 241   |
| Bakeries                   |                     | 28         | <b>18</b>              | 2        | 3     | 51    |
| Chain fast food restaurant |                     | 6          | <b>15</b>              | 5        | 0     | 26    |
| Takeaways                  |                     | 6          | 3                      | 3        | 0     | 12    |
| Ethnic Asian restaurants   |                     | 5          | 0                      | <b>4</b> | 0     | 9     |
| Sushi shop                 |                     | 3          | 4                      | 0        | 0     | 7     |
| Pubs/Bars                  |                     | <b>16</b>  | <b>7</b>               | 0        | 1     | 24    |

**Table 5-7: Number of static activities in front of different eating/drinking premises**

The number of Europeans highly outnumbered other ethnic groups in front of cafés (table 5-7). European static activities constituted 218 out of the 241 total activities in front of cafés. Europeans were the most frequent users of café seating, significantly outnumbering users from other cultural backgrounds. 148 out of 334 sitting activities of Europeans occurred on the private seating of the cafés. Cafés act as a regular meeting place for Europeans (figures 5-10, 5-11 and 5-13). Table 5-8 shows the numbers of users in groups is more than 3/2 of those sitting by themselves. This became further evident in the interviews in which 7 out of 9 (77%) Europeans acknowledged the importance of cafés for their social activities. Sitting, talking and eating and sitting and talking while waiting for their food or drinks were the most common type of activity among Europeans in groups. On the other hand, sitting and people watching and sitting and reading were most common among European individuals.

| Type of businesses | Cultural Background | E/I | E/G | PM/I | PM/G | A/I | A/G | O/I | O/G | Total/I | Total/G | Total |
|--------------------|---------------------|-----|-----|------|------|-----|-----|-----|-----|---------|---------|-------|
| Cafés              |                     | 42  | 106 | 5    | 3    | 2   | 0   | 1   | 0   | 50      | 109     | 159   |
| Bakeries           |                     | 14  | 14  | 8    | 5    | 3   | 0   | 2   | 2   | 27      | 21      | 48    |
| Bars               |                     | 1   | 5   | 2    | 0    | 0   | 0   | 0   | 0   | 3       | 5       | 8     |
| Total              |                     | 57  | 125 | 15   | 8    | 5   | 0   | 3   | 2   | 80      | 135     | 215   |

**Table 5-8: Seated activity among people with different cultural background, age and gender on private seating**

Only a small number of seated activities of non-European cultures were recorded on the café seating. These were mostly individuals rather than groups. All cafés were located on the Western side of the street where the café seating on the footpaths would get morning sun.

Meanwhile, more Māori/Pacific Islanders lingered in front of the international fast food restaurant (McDonalds) and bakeries. Europeans and Māori/Pacific Islanders also outnumbered other cultural groups in front of bars.



Figure 5-10: Sitting and reading while eating/drinking was a common activity among Europeans on café seating. Source: author, 2013



Figure 5-11: The open space café provided interest for passers-by which led to lingering and static activities. Source: author, 2013

European adult males and females were the most frequent users of private seating. Only small numbers of other age groups were observed sitting on private seating. Private seating was more used by couples without children.



Figure 5-12: Cafés play an important role in the social life of Riddiford Street. Source: author, 2013



Figure 5-13: The users of café seating were mainly European and most activities occurred in groups. Source: author, 2013

In addition to a considerable number of seated activities in front, cafés also generated interest in those passing by. A number of standing or lingering activities were recorded in front of cafés, especially among Europeans. Most of the activities occurred in front of those bakeries which claimed space on the footpath area with tables and chairs. Bakeries attracted greater percentages of Māori/Pacific Islanders compared to cafés.

Bakeries and cafés mostly accommodated smaller sized seating arrangements due to the small width of the footpath in order to leave space for the pedestrians walking and passing by (figure 5-12). The only exception was the café where the footpath exceeded the average

width of 3 to 4 metres along the study area. It was expanded to a width of 8 to 9 metres and provided bigger benches and chairs that accommodated bigger groups (figure 5-13).

Takeaways were mentioned as a place for social activities, especially among Māori and Pacific Islanders. Takeaways in Riddiford Street typically had more closed frontages, which could be mainly related to Wellington's weather conditions. Takeaways in Riddiford Street did not generate many activities on the adjacent footpaths (figures 5-14, 5-15).



Figures 5-14 and 5-15: Takeaways on Riddiford Street did not generate many static activities. Source: author, 2013

A number of activities were mapped in front of the fast food chain restaurant (figures 5-16, 5-17). Most of these activities occurred in front of the entrance or on the ledges surrounding the block. This limited number of activities was not enough to make the prolonged length of the building look lively. In other words, the block segment seemed deserted compared to other sections of the street with privately owned small businesses (figure 5-18).



Figure 5-16 and 5-17: A number of static activities were documented in front of the entrance and on the ledges around the McDonald's building. Source: author, 2013



Figure 5-18: A comparison between the density of use between two different lengths of the street; a single big building and a number of small privately owned businesses

In addition to bakeries and takeaways, the international fast food restaurant also attracted greater numbers of Māori/Pacific Islanders. A considerable number of Māori/Pacific Islanders with larger group sizes were observed outside or in close distance from the international fast food restaurant. Many Māori and Pacific Islanders mentioned the importance of international fast food restaurants for their social activities. Their preferences were associated with affordability of food in these places and adequate number of seating spaces for large gatherings.

The cultures seen lingering in front of bars and pubs were mainly Europeans and Māori/Pacific Islanders. Interviews suggested that bars and pubs have an important role for the cultural activities of Europeans, Māori and Pacific Islanders. On the other hand, not one Asian activity was recorded in front of the pubs in Riddiford Street and no Asian mentioned bars to have a specific role for their ethnic cultural activities.

| fashion/<br>household<br>Shops               | Cultural<br>background | European | Māori/Pacific<br>Islander | Asian | Other | Total |
|--|------------------------|----------|---------------------------|-------|-------|-------|
| Flat-rate shops (3 stores)                   |                        | 26       | 16                        | 11    | 0     | 53    |
| Second-hand<br>shops/diverse (4 stores)      |                        | 45       | 16                        | 10    | 5     | 76    |
| Second-hand<br>shops/furniture (2 stores)    |                        | 33       | 4                         | 12    | 3     | 52    |
| Used Book shop (1 store)                     |                        | 18       | 1                         | 1     | 0     | 20    |
| Shoe shop (1 store)                          |                        | 9        | 1                         | 4     | 0     | 14    |
| New shops with window<br>displays (2 stores) |                        | 0        | 2                         | 2     | 0     | 4     |
| Jewellery shop (1 store)                     |                        | 11       | 0                         | 1     | 0     | 12    |
| Appliance store                              |                        | 0        | 0                         | 2     | 0     | 2     |

**Table 5-9: A considerable number of window shopping and static activities occur in front of affordable shops where they attract a diverse range of backgrounds**

Flat-rate shops (coin shops, dollar shops) and second-hand shops outnumbered the shops selling new, branded and high-priced goods in Riddiford Street. The second-hand shops sold goods ranging from furniture, and appliances to books and clothing. Observations indicated that more than 16% of all static activities on Riddiford Street occurred in front of affordable shops (flat-rate or second-hand shops) where they attracted people from a diverse range of backgrounds. This could be both related to the “personalisation” as a characteristic which creates change in a familiar setting and the affordability of these businesses.

The unpredictable nature and changeability of random items in second-hand shops either those with personalised window displays or ones that spread their items onto the footpath spaces provided motivation for people to stop and window shop. Mehta (2006) notes that personalisation of shop fronts fosters lingering and social activities. This is related to what Carmona et al. (2010) express as the need for “discovery” and the desire for new experiences in urban environments. Discovery is related to variety and change. The variety and change of streets mainly relies on the store frontages of different activities lining the street.

Price and affordability of the shops and businesses in Riddiford Street was a key attraction. Participants referred to the bargains being offered by some of the shops, especially the second-hand shops as what attracted them to the street.

The affordability of certain businesses and dining spaces along Riddiford Street was the main reason Māori and Pacific Islanders visited the street for functional and social activities. The higher levels of interest of Māori/Pacific Islanders for bakeries, takeaways and the fast food chain restaurant over cafés is most likely linked to income levels. A Māori-European participant compared both sides of her family and related the reasons most Māori go to some shops and businesses on the street to their socio-economic status and cultural attitudes;

*“Most Māori don’t have a disposable income, not all of them, but I mean, maybe they don’t feel welcome in some places, maybe they don’t have enough money, you can’t see many Māori in those places [referring to cafés]. We just go and do our shopping ... our interest is not really monetary”.*

While participants, especially Europeans, referred to the affordability of the businesses lining the street, some Pacific Islanders compared the tenant mix with the streets of South Auckland, and stated it to be less affordable. This might further explain the reason why fewer number of Māori/Pacific Islanders were involved in window shopping activities (table 5-4).

Compared to the two other case studies in South Auckland (see sections 5-2 and 5-3), a smaller number of shops along Riddiford Street spread their goods onto the footpath. Even so, it was usually small numbers of clothing racks or furniture items; the goods of flat-rate and second-hand shops did not occupy the whole window frontage by hanging bits and pieces from canopies. In general, items were more sorted and organised. There were no complaints on how businesses manage their frontages in Riddiford Street.



Figure 5-19 and 5-20: A second-hand shop and an Asian flat-rate shop. Many static activities were recorded in front of affordable shops where they extended their items onto the footpath spaces. Source: author, 2013

A comparison between the number and the cultural background of the users in front of flat-rate shops and second-hand shops show that comparatively, a higher proportion of Europeans were recorded while standing in front of second-hand shops rather than flat-rate

shops, whereas, the number of Māori/Pacific Islanders and Asians almost stays similar between these two type of shops. Europeans constituted 90% of the total static activities in front of the second-hand book shop and their numbers significantly outnumbered ethnic minorities. Their frequent number of static activities in front of the book shop could be further discussed in relation with their reading activities on café seating. Fashion and jewellery shops with window displays also attracted a higher proportion of Europeans followed by Asians, relatively. Apart from an Indian fashion shop, not many shop premises along the street provided specific ethnic fashion. However, some participants demonstrated that some of their specific cultural dressings and fashion could be purchased in Chinese or Indian shops.

Those shops that extended their territories onto footpath spaces created opportunities for social interactions between the shopkeepers and customers (figure 5-21).



**Figure 5-21: The extension of the shop's territory onto the footpath extends the possible activities that occurs inside the store onto footpaths. Source: author, 2013**

The diversity of business activities presented a multi-cultural character preferred by different cultural groups. 6 out of 9 Europeans, 5 out of 8 Māori, 2 out of 7 Pacific Islanders and 3 out of 6 Asians referred to atmosphere as what they liked most about the street. Participants provided different explanations such as the multi-cultural character, the sense of community, and the chance of meeting acquaintances as what attracted them to the street environment. A European participant quoted walking along Riddiford Street to be similar to traveling to different countries around the world as one gets exposed to different cultures;

*“[There are] lots of interesting shops to look at, different outlets that have different cultural elements. It feels like we can travel, otherwise we are at the same place”.*

Participants also referred to “*lack of cooperative sameness*” as what they particularly enjoyed. The individual and ethnic businesses lining the street gave the street a distinctive character and made the street unlike other streets in New Zealand.

Participants noted the predominance of flat-rate shops, pubs, the excessive number of restaurants and eating places, finance shops and vacant units as what they disliked about the street. While the second-hand shops and flat-rate shops attracted less affluent and some middle-class users, they were also the target of complaints about the quality and attractiveness of the area to other street users. A part of the interviewees were concerned about the quality of many shops and preferred to have higher quality businesses rather than the affordable second-hand and flat-rate shops. The need for more quality and boutique shops was mentioned by European and Asian participants in order to encourage their communities to frequent the street for leisure activities. Although interviewees were selected from a wide range of cultural backgrounds, many of these issues could not be linked to people of a specific ethnic background. It appears to be a response related to socio-economic circumstances and personal preference more than it is to cultural preference.

The high number of eating places could also reduce levels of window shopping. The disproportionate number of eating places on Riddiford Street led to criticisms about the attraction of the area to some users of the street, especially older adults from European background.

#### **5.1.5 Design Attributes**

Overall, design attributes were less discussed in the interviews compared to business activities. The only exception was when participants were examined on what they wanted to change/add without referring to their cultural needs. In this case, people mentioned design characteristics more frequently than businesses. One assumption is that design characteristics found importance as users had a positive perception about the businesses lining the street, their variety and agglomeration. The number of Māori recommendations about the design characteristics and maintenance of Riddiford Street outnumbers all other cultures; 62.5 % of Māori had design related recommendations for the public area whereas only 11% of the Europeans, less than 30% of Pacific Islanders and 50% of Asians were concerned about the design of the environment. The majority of participants of each cultural group were female

so gender could not be an important factor which affected preference. On the opposite side, Europeans made the most positive comments about the design characteristics of Riddiford Street compared to other groups.

Seating characteristics, landscaping, and footpath width were the main design characteristics mentioned by people, without breaking the numbers down according to ethnic groups. Environmental comfort factors, colour, adding tables and pavement materials were discussed less often.

The main design related characteristics among the interviewees, especially Māori, were the number of seating spaces along the street and their characteristics. Seating had an important role for social activities among all cultural groups. However, public seating on footpaths was mainly associated with traffic, pollution, noise and safety. Referring to these issues, some participants mentioned they prefer the interior spaces of the businesses such as cafés or the international fast food restaurant for social activities. Despite the forgoing issues, observations show that public benches were occupied by a number of street users.

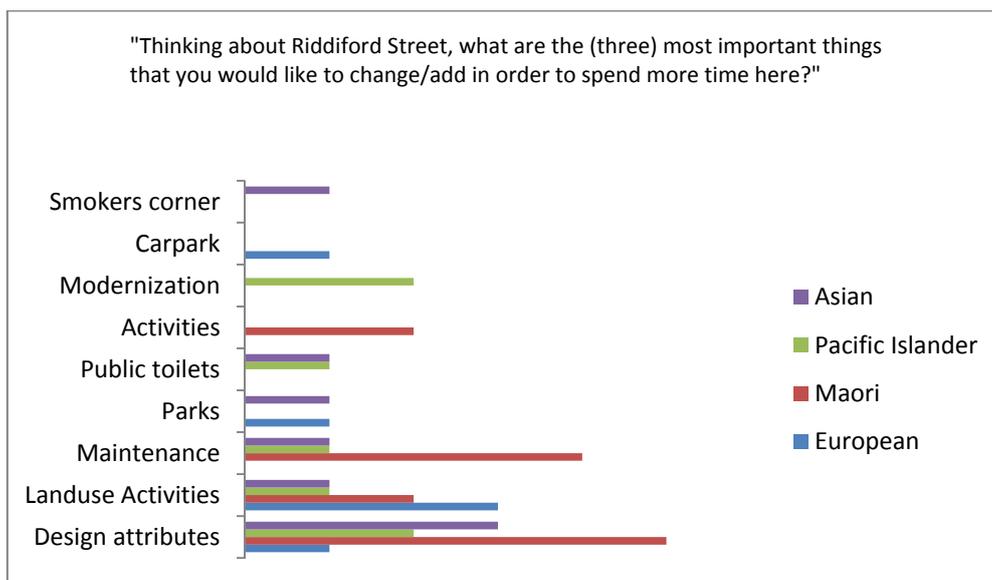


Figure 5-22: Response to open-ended question of what people would like to change or add on the street shows the importance of design attributes. Data from 30 interviews.

### Patterns of Occupancy of Public Seating

To analyse patterns of occupancy, each public bench or group of benches was named (figure 5-23). All the benches along the study area and those at a close distance (where they could be easily observed in walk-by observations) were selected. The number of users, their ethnicity, the number of individuals and groups were then associated with each space. The

use of the street for static and social activities is mainly related to the opening hours of business activities. Many benches went unused during some observation times. This was especially noticeable between 5 pm and 6 pm when most activities shut down.

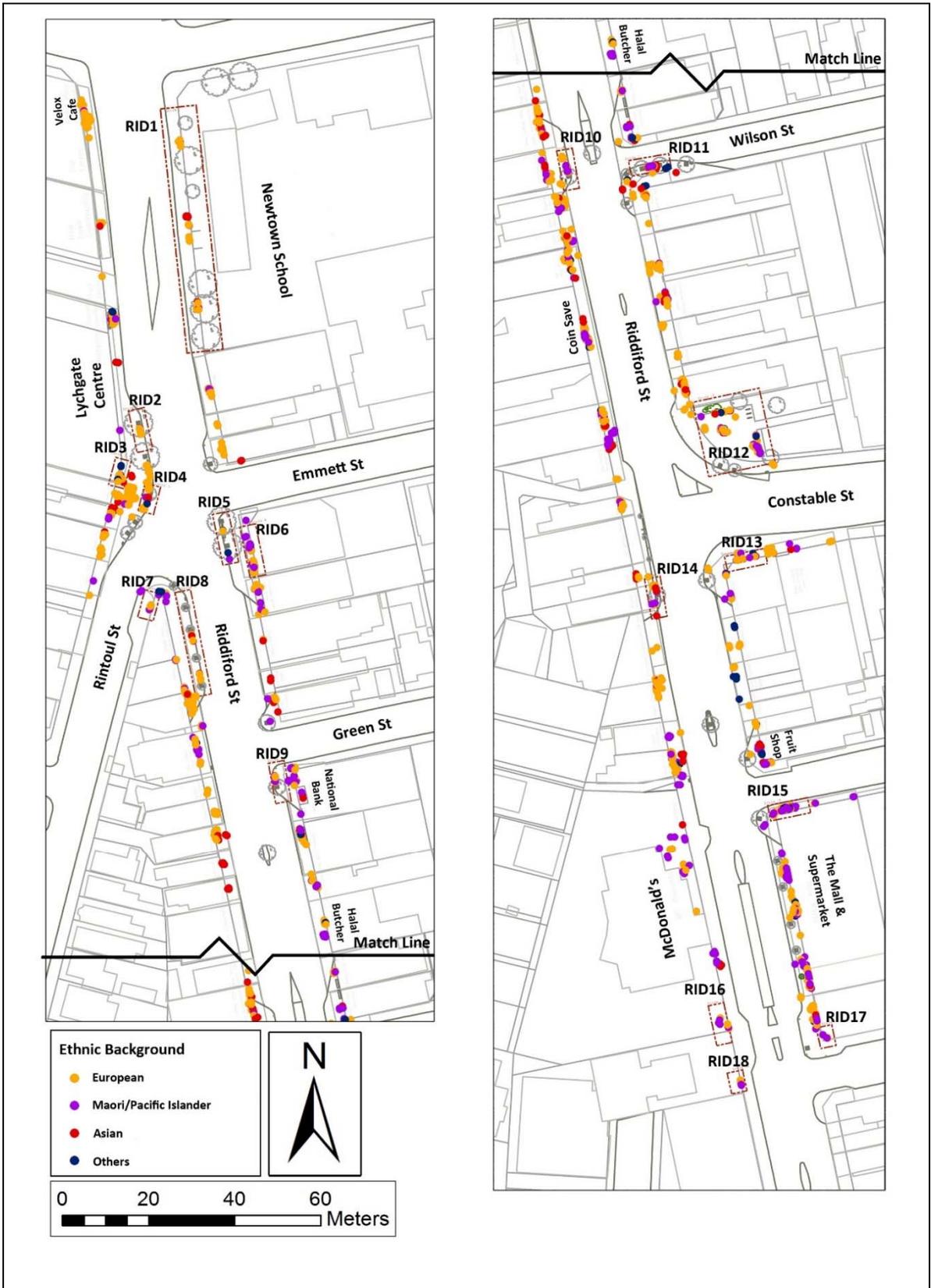


Figure 5-23: Locations of different public seating spaces and static activities of people with different cultural backgrounds on Riddiford Street

Of all recorded behaviours by Europeans, 18% were sitting on public benches. The percentage increases among other cultural groups; 19.8% of Asians were mapped seated on public benches along the street, while it seems that sitting on public benches was even more common among Māori/Pacific Islanders where 30% (80 out of 271) were mapped seated. A higher percentage of seated activities of the “Other” group was also recorded. The numbers seated in groups and those seated individually were almost similar on public benches in Riddiford Street. In general, Europeans made up half of the total recorded observations on public benches. The number of Europeans seated alone outnumbers those seated in groups. On the other hand, Asians, the “Other” group and Māori/Pacific Islanders were mostly recorded in groups.

| Age group                  | Adult male | Adult female | Older adult male | Older adult female | Teenager male | Teenager female | Child | Total |
|----------------------------|------------|--------------|------------------|--------------------|---------------|-----------------|-------|-------|
| <b>Cultural Background</b> |            |              |                  |                    |               |                 |       |       |
| European                   | 72         | 34           | 33               | 7                  | 1             | 0               | 1     | 148   |
| Māori/Pacific Islanders    | 45         | 31           | 1                | 0                  | 1             | 1               | 1     | 80    |
| Asian                      | 20         | 10           | 0                | 1                  | 0             | 0               | 1     | 32    |
| Other                      | 15         | 6            | 12               | 0                  | 0             | 0               | 2     | 35    |
| <b>Total</b>               | 152        | 81           | 46               | 8                  | 2             | 1               | 5     | 295   |
| <b>percentage</b>          | 51.5%      | 27.5%        | 15.6%            | 2.8%               | 0.6%          | 0.3%            | 1.7%  | 100%  |

Table 5-10: Different age –gender groups using public seating

Comparison between the uses of public versus private seating among different gender-age groups show that while the percentage of male users almost remains the same within both seating types, a higher percentage of female users preferred private seating rather than public benches. On the other hand, a greater percentage of public seating was occupied by older adult males than café seating. Older adult females were relatively seen in very small numbers on both public and private seating. However, the number of older adult females using public seating outnumbers those sitting on café chairs.

Only 3% of the sitting of over 517 recorded sitting activities was carried out away from seating in the form of benches and chairs. The seated activities away from benches and chairs occurred on the edges of planters and business ledges. These ledges became spaces for street musicians and panhandlers. A few seated activities were also recorded on the ground where most sat and leaned against the physical artefacts.

Eighteen seating locations were identified along Riddiford Street (see Figure 5-23). Tables 5-11 to 5-14 show the numbers of each cultural group using public benches and the associated features of each space. Of all the public seating along Riddiford Street, some seemed to work better than others in accommodating people. The most frequented spaces

along the street were spaces RID6, 15, 12, 3, 11 and 10 (table 5-11). Most of the well occupied spaces on Riddiford Street were also frequented by different ethnic cultures. Spaces RID11, 12, 13 and 15 followed by spaces RID6 and RID10 were the spaces used by the most diverse range of ethnic cultures. Sitting and socialising were frequently observed in spaces RID15, RID12 (the corner park), RID11, RID6 and RID10.

| Cultural Background | European | Pacific Islander/Māori | Asian | Other | Total |     |     |
|---------------------|----------|------------------------|-------|-------|-------|-----|-----|
| Name of Space       |          |                        |       |       | I     | G   | T   |
| Space RID1          | 10       | 1                      | 3     | 1     | 11    | 4   | 15  |
| Space RID2          | 6        | 2                      | 0     | 0     | 5     | 3   | 8   |
| Space RID 3         | 17       | 7                      | 0     | 1     | 16    | 9   | 25  |
| Space RID 4         | 6        | 2                      | 1     | 1     | 8     | 2   | 10  |
| Space RID 5         | 1        | 1                      | 0     | 2     | 4     | 0   | 4   |
| Space RID 6         | 20       | 18                     | 0     | 7     | 24    | 21  | 45  |
| Space RID 7         | 5        | 3                      | 0     | 0     | 6     | 2   | 8   |
| Space RID 8         | 8        | 0                      | 4     | 0     | 8     | 4   | 12  |
| Space RID 9         | 3        | 4                      | 0     | 0     | 4     | 3   | 7   |
| Space RID 10        | 12       | 6                      | 3     | 0     | 7     | 14  | 21  |
| Space RID 11        | 6        | 8                      | 6     | 3     | 8     | 15  | 23  |
| Space RID 12        | 16       | 9                      | 4     | 3     | 12    | 20  | 32  |
| Space RID 13        | 9        | 4                      | 1     | 2     | 10    | 6   | 16  |
| Space RID 14        | 5        | 2                      | 2     | 0     | 6     | 3   | 9   |
| Space RID 15        | 8        | 4                      | 5     | 17    | 10    | 24  | 34  |
| Space RID 16        | 6        | 4                      | 0     | 0     | 6     | 4   | 10  |
| Space RID 17        | 5        | 2                      | 0     | 0     | 1     | 6   | 7   |
| Space RID 18        | 4        | 5                      | 0     | 0     | 3     | 6   | 9   |
| Total               | 147      | 82                     | 29    | 37    | 149   | 146 | 295 |

**Table 5-11: Patterns of occupancy of public seating among different cultures**

Public seating is different from private seating in terms of type of activities they hold. While most social activities happened while eating on private chairs of the cafés, bakeries and bars, social activities on public benches were mainly sitting and conversing; not much food was consumed. Only 4.2% of the recorded activities included eating and socialising at the same time. Also, smaller numbers were observed reading/writing on public benches compared to café seating. On the other hand, a greater number were smoking on public benches compared to café seating (10.8 % compared to 1.3%). Most smoking activities occurred individually. However, in some cases people smoked while talking and socialising. Most eating/drinking activities occurred on the benches of the small corner park (space RID12) followed by RID10 (6), space RID6 (5) and space RID9 (4). All of these benches were located a close distance from eating premises that had fewer opportunities for people to consume goods inside their premises (takeaways, bakeries) and did not provide

commercial seating on the footpaths. Although space RID13 was located outside of a bakery no eating/drinking activities were recorded during the observation period. This could be related to the size of this bakery and its interior space which accommodated most of the eating/drinking activities.

In order to analyse different seating spaces within the study area, seating spaces were categorised in two ways; first, whether they were located in zone “A”; in front of buildings and activities and facing the footpath or zone “C”; the curb side edge facing buildings and retail activities and backing onto traffic (see section 6.3.4) and second; those located along Riddiford Street itself and those located on other streets branching from Riddiford Street but which had seating spaces and benches a close distance from the study area and activities were observed and recorded during the walk-by observations.

A comparison of seating spaces located in zone “A” versus zone “C” shows that in total, the number of people seated on seating located in zone “A” is more than double those seated on public seating located on zone “C” within Riddiford Street (143/71).

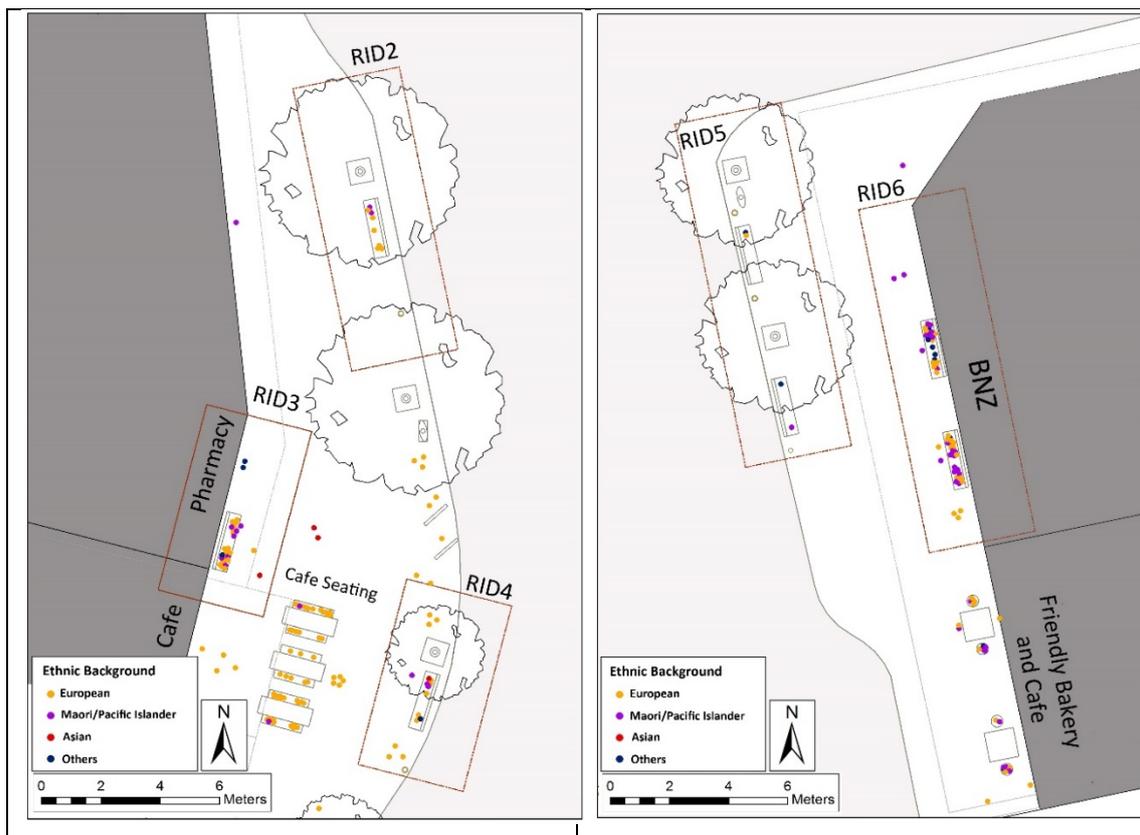


Figure 5-24 and Figure 5-25: The edge effect; observations show that in spaces within similar locations and characteristics, seating located in open parts of the space got less frequently occupied compared to the edges.

Observations showed that for spaces within similar locations and characteristics, those benches located in open parts of the space were less occupied compared to the edges. For

instance; benches located in spaces RID3 and RID6 drew a greater number of users compared to the benches located in spaces RID 2, 3, 4 and 5 (figures 5-24 and 5-25). This further supports Jay Appleton's theory of "*prospect and refuge*" (1975) and De Jonge's (1967-68) observations in public spaces termed the "*edge effect*" which indicated that the open parts of the space get occupied only after the edges have been fully filled.



Figure 5-26: A clear example for "prospect" theory in space RID2. Source: author, 2013

Behavioural maps show that among different benches located in Zone ‘A’ spaces RID 6, 12 and 3 were more often occupied compared to spaces RID 1, 16, 17 and 18. Tables 5-12, 5-13 and 5-14 show a number of physical and social attributes associated with each space location. These attributes include footpath width, landscape provision, type of adjacent businesses, activity levels, number of seating and arrangement types.

| Name of Space                       | Space RID1     | Space RID3    | Space RID6    | Space RID12 (park) | Space RID16      | Space RID17 | Space RID18 |
|-------------------------------------|----------------|---------------|---------------|--------------------|------------------|-------------|-------------|
| <b>Design attributes</b>            |                |               |               |                    |                  |             |             |
| Footpath width                      | 3-4 m          | 8-9 m         | 6-7m          | 4-5m               | 3-4m             | 6-7m        | 3 m         |
| Trees                               | yes            | no            | no            | yes                | yes              | no          | yes         |
| Type of business                    | Newtown School | Services/food | Services/food | Park               | Chapel/McDonalds | Services    |             |
| Level of activities on the footpath | low            | Medium-High   | High          | high               | low              | low         | low         |
| Number of seats                     | 3              | 1             | 2             | 4                  | 2                | 1           | 1           |
| Seating arrangement type            | Type 2         | Individual    | Type 2        | Type 2             | Type 1           | Individual  | Individual  |
| Number of activities                | 15             | 25            | 45            | 32                 | 10               | 7           | 9           |

Table 5-12: Physical, social and land-use characteristics of spaces with public seating on Zone “A”

Space RID6 was used by Europeans, Māori/Pacific Islanders, and the “Other” cultural group. Many of those seated on benches located on spaces RID3 and RID6 included the elderly, homeless and those on social support. These spaces might be marked or claimed as a territory by them. That might also be the reason that not many Asians were recorded on the mentioned spaces. The higher number of Māori/Pacific Islanders could also be related to the eating premises (bakery) adjacent to these seating spaces.



Figure 5-27: Seating located in space RID10. Locating benches in an active section of the street could attract people to sit and people watch. Source: author, 2013



Figure 5-28: The corner park (space RID12) is preferred and used by people of various cultures. Source: author, 2013

Space RID12 (the corner park) was frequently used by people of different cultures for sitting, smoking, socialising and eating. This space was among the main areas frequented by Europeans and Māori/Pacific Islanders. Factor analysis of the interviews shows the corner park drew the attention of all groups. Pacific Islander participants mentioned the park as a community place. Many others referred to the qualities of the park. A Māori participant notes;

*“I think it’s nice here because of shelter and then you have the birds. You always have the birds here and that’s what I love”.*

Space RID1 is adjacent to Newtown school (the location of the Saturday market) and was not defined by business and retail activities. People just passed by this space without lingering (with the exception of Saturday mornings); the level of activities happening in this space was relatively low. In contrast with space RID12 (the corner park), the seating located in space RID1 did not attract many people, even though it provided a number of benches with trees and landscaping. Spaces RID16, 17 and 18 have similar characteristics in terms of low levels of activities on the footpaths and they are located at a further distance from the small private businesses and are surrounded by bigger building sizes such as the international fast food restaurant, Wellington City Mission and the supermarket. In general, spaces which were exposed to footpaths with low levels of activities did not attract as many users as those benches located in the livelier sections of the street.

Space RID15 outside the main supermarket was used by Asians and the “Other” cultural group. This reinforces the importance of supermarkets as multi-cultural spaces for all different cultures. The extensive use of this area could be considered as an exception, as it is a place that was usually occupied by taxi drivers waiting for customers shopping in the supermarket.

| Name of Space                              | Space RID7                    | Space RID13   | Space RID15 |
|--|-------------------------------|---------------|-------------|
| <b>Design attributes</b>                   |                               |               |             |
| <b>Footpath width</b>                      | 3-4 m                         | 5-6           | 2-3         |
| <b>Trees</b>                               | no                            | no            | no          |
| <b>Type of business</b>                    | Back of the historic building | Food/services | Services    |
| <b>Level of activities on the footpath</b> | Low-medium                    | medium        | medium      |
| <b>Number of seats</b>                     | 1                             | 2             | 1           |
| <b>Seating arrangement type</b>            | Individual                    | Type 1        | Individual  |
| <b>Shade</b>                               | Yes-no                        | Yes-no        | yes         |
| <b>Number of activities</b>                | 8                             | 16            | 34          |

**Table 5-13 : Physical, social and land-use characteristics of spaces with public seating on Zone A along seating in close approximate distance of Riddiford Street**

Although most seating in zone “C” (where seats back onto the traffic) were less frequented compared to those located in zone “A”, analysis of observations show some exceptions.



**Figure 5-29: People of different ages and backgrounds sitting on benches located in space RID13. Source: author, 2013**

Spaces RID10 and RID11 were among the spaces in zone “C” along Riddiford Street that were frequented by a diverse range of users and cultural backgrounds. Space RID10 is located on a busy section of the street and is the only space providing seated opportunities for an elongated length of the eastern part of the street with a number of cafés and eating premises in a close distance (figure 5-27). Space RID11 was one of the specific areas preferred by Māori/ Pacific Islanders. The preference for this space along with the corner park could be further described by the specified space qualities that Māori prefer;

*“For Māori culture [they would like to sit] under a tree, somewhere outside, outside, sitting there in the open air and talk”.*

It is also removed from the busy main road and backs onto a low-traffic street (Wilson Street). Distance from the traffic was mentioned as an important factor for social activities in the interviews. This space provides a quiet place for social activities covered by the shade of trees. This area was also favoured by Asians, the least frequent users of public benches. The reason that space RID11 is preferred and used by Asians might be related to the fact that it is located in front of an Asian (Chinese) eating establishment and also is close to the Halal butcher and an Asian delicatessen on Wilson Street. The chance meetings in relation to businesses on the street sometimes led to further use of public benches for social activities. As an Asian (Indonesian) female user (aged 25-34) described;

*“When we meet people we know on the street, when we see a place like this (the bench) then we decide to sit and chat more”* (figure 5-9).

She further described the qualities of their preferred locations for social activities;

*“Because of the tree and the bench here, it’s quite shady and its close (to the Halal butchers and Asian store and Saturday market) and we still have a view while we sit and chat”.*

While participants referred to thermal and environmental comfort aspects to be important for their ethnic group social activities, they referred less to them as what needed to be added on the street. This might be related to the fact that the street provides a range of sitting opportunities in both sunny and shady areas. In general, benches located on the western side of the street that receive sun in the morning show higher numbers of users in the morning (44) compared to the afternoon (26). On the other hand, the numbers of users of the spaces on the eastern side of the street that get afternoon sun is relatively similar in the morning and the afternoon. Analysis of the behavioural mappings indicate that 80% (42

out of 52) of the seating located in the western side of Riddiford Street was occupied on sunny days (3 days) whereas only 20% sat on the same benches on days without sun (2 days). In general, the research did not find a strong correlation between the numbers of people using benches located in sunny or shady areas during the observation period. There was a greater preference for sitting on benches that got morning sun on sunny days rather than cloudy days. In general, those seats that were located in shady areas at different times of observation show similar patterns of use in the morning and the afternoon. These are related to the specific time of observation in a specific time of the year and behaviour patterns might vary in other seasons.

| Name of Space                       | Space RID2    | Space RID4  | Space RID5    | Space RID8 | Space RID9 | Space RID10    | Space RID14    |
|-------------------------------------|---------------|-------------|---------------|------------|------------|----------------|----------------|
| Design attributes                   |               |             |               |            |            |                |                |
| Footpath width                      | 5-6m          | 8-9m        | 6-7m          | 5-6 m      | 4-5m       | 5-6 m          | 4-5 m          |
| Trees                               | yes           | yes         | Yes           | yes        | yes        | Yes            | Yes            |
| Type of business                    | Services/food |             | Services/food | Services   | Services   | Services/ Food | Services/ food |
| Level of activities on the footpath | Medium-High   | Medium-High | High          | Low-Medium | High       | Medium-high    | Medium         |
| Number of seats                     | 1             | 1           | 2             | 2          | 1          | 1              | 2              |
| Seating Arrangement type            | Individual    | Individual  | Type 1        | Type 1     | Individual | Individual     | Type 2         |
| Shade                               | Yes/no        | Yes/no      | Yes/no        | no         | Yes/no     | Yes/no         | Yes/no         |
| Number of activities                | 8             | 10          | 4             | 12         | 7          | 21             | 9              |

Table 5-14: Physical, social and land-use characteristics of spaces with public seating on Zone C along Riddiford Street and Wilson Street

Benches used by a diverse range of backgrounds and for social activities, regardless of the zones, have some qualities in common; they are located in the livelier sections of the street, a close distance to activity supportive businesses. Most benches have a view of the footpath activities but are at a distance from the busy road either due to the footpath width or because there is a branching off the main street and landscaping, shade and environmental qualities have been provided.

In addition to recommending trees to provide shade and thermal comfort, some participants mentioned trees and natural elements as characteristics of the street they would like to have on the footpaths without referring to these microclimate benefits. Participants suggested that parks and vegetation along the street would increase the opportunity that people would stay longer on the street for optional activities rather than just shopping and going back home. Among all cultural groups, Māori (4 out of 7= 57%) and Europeans (3 out of 9=33%) emphasised landscape elements as design attributes which could attract more

people of their ethnic group to the street. Although participants of various cultures mentioned the corner park, landscape, greenery and trees as design aspects they like or would like to have on Riddiford Street, the interviews indicated that female Māori participants made stronger and deeper arguments for the natural qualities of sitting spaces both as what they liked about the street and what they would like to add.

Among those Māori that stated landscape elements, three out seven (42%) mentioned “native” trees and landscape as what to be added to the street. One states;

*“Planting native trees would be good, trees on this street are not native, just [add] Pohutukawa trees, [or other sorts of] native trees”.*

Spaces RID11 and RID12 (corner park) were the exceptions among public benches where the number of female users outnumbered male users. With a considerable number of the users of these two spaces being Māori/Pacific Islander and Asian, it can be concluded that European female users mostly preferred to use the café type of seating for their activities on the street and that female users of other ethnic backgrounds (especially Māori) preferred public seating spaces away from the traffic noise and foot traffic with widespread landscapes.

The size of the user groups sitting, such as a solitary person, pairs, threes, and so on using public benches was noted. The highest levels of social interaction were among pairs, followed by groups of three. In five of the groups of three, one or two people were standing. The seating were much less occupied by groups of four and five. Even when so, some of the members were standing while interacting.



**Figure 5-30: The corner park in Riddiford Street. The arrangement and location of public seating may not support social activities of specific groups and lead to underuse. Source: author, 2013**

An issue associated with footpath benches was safety, especially for those with children or toddlers. This could be the reason that the seating (both public and private) on the street was less occupied by children or those with children. Families with children often preferred the playground for leisure activities, where it was spacious, fenced and safe.

While bird-attracting landscaping was favoured among Māori, a number of participants made complaints on the location of public benches in association with trees. A European participant explains;

*“The areas which have seating provided are a little too close to the road or under trees that are inhabited by pigeons. The main road is quite loud, so the seats on the footpath are not really in practice to sit and talk”.*

The footpaths in most of Riddiford Street are narrow, yet this narrowness does not mean they are crowded. There was little congestion observed. The footpath width does not accommodate seating arrangements for larger groups of people. The fact that the street lacked suitable meeting spaces for bigger groups made it a less conducive place for sitting and socialising among some cultural groups. Observations showed that while the width of the footpath is an important factor in accommodating street furniture and providing separation from traffic, it did not necessarily affect the number of static activities on footpaths. Participants had different perceptions about footpath width. European and Māori participants noted the width of the footpath as a characteristic they liked about the street. On the other hand, increasing the width of the footpaths in Riddiford Street was recommended by other groups. The average width of the footpath is a key principle for accommodating the lingering and walking activities of people. Insufficient width of footpaths was a matter for Pacific Islanders and Asians. The width of the footpath might have a more crucial role for accommodating the lingering and walking activities of these cultures. For instance; the footpath width does not provide Pacific Islanders with enough space while walking in groups. An older female participant states: *“Sometimes you can’t walk there with a kid coming with a scooter.”* Wider, cleaner footpaths were associated with feeling more welcome by some participants.

Of 6 Māori, 4 mentioned that Māori design could attract their culture to the footpaths for social and leisure activities; this could include Māori crafts, signs, and language. Māori were also the only group who stressed design symbols more than businesses and social functions as a way in which their culture could be represented on footpaths. 66% of Māori (4 out of 6) believed that their culture could be represented on the street footpaths by Māori

art, carvings and weaving. However, they stressed that the incorporation of Māori symbols on the street footpaths should be done with consideration and respect. On the contrary, Europeans just used the term “public art” to represent what they thought the street could be enhanced with, without being specific as to what type of art. Māori also believed that in addition to Māori design, Māori language could also be incorporated on the streets by street naming.

A number of participants from three different cultures mentioned having more colour in the environment could encourage people of their ethnic cultural environment to frequent the street more often for social/leisure activities. Colour was also mentioned by Europeans as a way in which their culture could be represented on footpaths.

### 5.1.6 Management Issues

Buskers and beggars were at specific locations along Riddiford Street. Half of the activities of these people occurred in front of the major mall and supermarket. Activities usually occurred in public areas such as the corner park and in front of businesses that were less permeable and had less interaction with the footpath environment (such as walls or opaque windows) and usually in front of businesses that were not owned and operated individually but close to activity supporting businesses. In other words, they chose locations on the street where they could create their own territory and not interfere with business owners. At the same time, they preferred locations with pedestrian traffic where there is more chance to get custom. A number of vending and performing activities were recorded outside the Saturday market where Asian vendors sold plants and musicians/buskers performed on a bench outside the market. All together with the activities related to the market, it created a lively and vibrant environment on Saturday morning.



Figure 5-31: The ethnic background of the Māori performer becomes a part of the cultural landscape in Riddiford Street. Source: author, 2013



Figure 5-32: Asian vendors outside the Saturday market created a number of static activities on the footpath. Source: author, 2013

Participants referred to the Newtown yearly festival, the Saturday weekly market and the playing area and the corner park as what they liked about the street. The Saturday market and the festival were also mentioned by participants as places where they met with other members of their ethnic community. Participant observation at these functions revealed the fact that they are both real examples of diverse and multicultural spaces which encourage unintentional interactions between different ethnic groups who would otherwise not encounter each other.

To retain the current activities and to add more social functions to the street were among the key suggestions of people of various cultural backgrounds. Participants proposed to add activities such as food stalls, buskers, cultural festivals, and daily markets along the street as qualities that draw people of their ethnic culture to use the street environment for social and leisure activities. The demand for food stalls was more apparent between Asian participants, where half of the respondents mentioned food stalls would attract more people to visit the street for leisure activities. Some participants compared streets in New Zealand with streets in Asia and described street vendors as a way in which the business potential of the street could be improved;

*“In Indonesia we have a lot of people on the street that they can sell anything so we can buy. But I’m not sure that it is applicable here, because when people decide to sell stuff on the street, they need a license, but in Indonesia, especially in my place, you can sell anything”.*

Food stalls could also offer more affordable types of cuisine compared to the upmarket Asian restaurants along the street, some Asian participants explained. According to other participants, stalls could become places where ethnic people sell cultural goods and products and pay cheaper rent.

Adding festivals with specific cultural themes such as Māori festivals were also among the recommendations of interviewees to make the street an interesting place for those of different cultural backgrounds. In the opinion of many participants, cultural festivals and events seem to be an effective way in which cultural groups represent themselves at the street level. To add functions for children such as parks, playgrounds, and skateboard places were among other recommendations for the street to become more multi-cultural and diverse.

Traffic was the main issue for participants using Riddiford Street and was mentioned by 40% of the interviewees from various cultural backgrounds. The traffic, the noise and

pollution caused many participants not to enjoy using footpaths for sitting and socialising. When participants were asked about things they would want to change on the street in order to become a place for their ethnic group social activities, traffic calming again found great importance.

Beggars asking for money, homeless people on the street, drunk people and people smoking on the benches were mentioned among the disliked activities on Riddiford Street. Smoking was a common activity among those occupying public benches and usually encountered alone. Interviews with people of various cultures reveal that smoking discouraged people from using public seating areas for social activities.

Maintenance and presentation of the Street environment seems to be an important issue especially for Māori participants where half of those interviewed mentioned issues relating to civility such as painting and cleaning, upgrading and managing the shop fronts and the pavement. Maintaining places along the street could play an important role for the social activities of Māori participants as one Māori participant explains;

*“We like clean spaces, in term of toilets, we like them clean; we don’t like them close to the food areas. That would be another thing that turns people off”.*

The modernisation and upgrading of shops and the area was also a matter for a number of participants, especially Māori and Pacific Islanders. Some participants however were aware of the difference between the type of ethnic and small retail businesses on Riddiford Street and flashy chain stores and more expensive boutique shops and were more conscious about how the existing shops could be improved without the need to change them to be modern and flashy. In fact, some interviewees were aware of the possible effects of commercial gentrification to the area. Māori asserted that the environment should not look expensive but rather friendly and welcoming to attract Māori to use the space. A Māori participant states that:

*“Some of the shop fronts are quite boring. A good lick of paint would make it more interesting, a bit of design work on it, to make it nicer. Riddiford Street would never look glitzy like Lambton Quay, but I have a sort of nice sort of feel about it, because it’s a sort of ethnic community. Mixed cultures make it colourful”.*

Opening hours of the premises along Riddiford Street was an issue for Asian participants. Surprisingly, only one participant made mention of a need for more public toilets.

### 5.1.7 Summary

Riddiford Street attracts a great range of users resulting from the diversity of its retail business activities. The business agglomeration on the street ranges from a number of chain businesses to local stores. The businesses contain a mix of daily services, ethnic delicatessens, fashion and household items, food establishments and eating premises. These businesses attracted people of various backgrounds to the footpath and sometimes led to chance meeting and social activities on the street.

Riddiford Street is well developed in its various daily/weekly services and businesses which encourage leisure activities. It provides a wide range of choices to consumers from a number of different cafés to restaurants of different cultures. It also offers more affordable type of eating premises such as a number of bakeries, takeaways, and a big fast food restaurant. Thus, this variety attracts a range of cultural groups with different income levels. The diversity of businesses was among what people most enjoyed about the street, giving them a reason to comment on the design attributes of footpaths that they thought needed to be changed or added on the street level. However, adding to the current diversity was among key recommendations for the street to become a place for leisure and social activities among different cultures.

While food establishments with different economic ratings fit within the overall profile of the street, apparel shops lacked the variety that food premises had and were limited to more affordable types; second-hand and flat-rate shops. A narrow range of goods and prices offered in these type of shops supported a limited range of potential users. These might have excluded a number of more affluent groups of various ethnic groups (especially among Europeans) to frequent Riddiford Street for window shopping.

Sitting, standing and window shopping were the main activities on the street. Window shopping was more popular among Europeans and Asians and usually occurred in groups. Window shopping on Riddiford Street was selective. People lingered and window shopped at certain locations on the street. All shops and premises that either spread part of their goods on the footpath where they could be touched and picked up by the public or had personalised displays that changed quite often were prime draws. They attracted the greatest numbers from a diverse range of ethnic cultures. On the other hand, blank shop frontages did not encourage static activities or any dialogue between the passer-by and the shop fronts. However, these vacant shop frontages and building setbacks provided opportunities for other supporting behaviour activities such as street performers and musicians.

The number of static activities carried out by different cultures is not uniformly distributed along the footpath spaces where there are different businesses. While some businesses are more likely to draw interest among one or two cultures, others seem to attract a wider range of different cultural backgrounds. Patterns of occupancy indicated that fruit shops, flat-rate shops and second-hand shops did not just create lively frontages but were also the most multi-cultural spaces on the street. The common characteristics among all these premises are affordability and the ways in which shopkeepers and owners of these establishments manage their shop frontages.

In addition to activities that occurred in direct relation to specific types of businesses, businesses without specific design in their frontages also attracted a number of users to footpath spaces. Many of the services that attracted specific or a diverse range of backgrounds did not have permeable and engaging interfaces with the footpath spaces (for example; supermarkets, ethnic delicatessens). A number of chance encounters and interactions sometimes occurred in relation to these businesses.

There were more Europeans using Riddiford Street than any other ethnic group. The majority of European activities took place in front of cafés and where there was café seating. Window shopping was a group activity among Europeans. Europeans were recorded in front of a range of affordable to more costly businesses and establishments on the street. Some businesses such as the second-hand book shop and jewellery shop attracted a greater number of Europeans compared to other groups. Europeans made more positive comments on the street environment than others. Most social activities between Europeans took place on café seating whereas public benches were used by individuals. The corner park was frequented for social activities by Europeans.

Māori/Pacific Islanders' activities occurred in relation to more affordable types of businesses and food premises. Affordability was a major factor in selecting locations for social activities among these groups. While specific affordable businesses were mentioned by Māori/Pacific Islanders as what attracted them to the street, few members of these groups were recorded window shopping. The overall business agglomeration was understood to be less affordable among some members of these groups. The main supermarket area, the international fast food restaurant and second-hand shops were the main areas that drew a considerable number of Māori/Pacific Islander groups.

Māori, more than other groups, commented on the design attributes of the footpaths. A considerable percentage of Māori/Pacific Islanders were recorded seated. Public seating

plays an important role for Māori/Pacific Islanders in their use of streets for social/leisure activities. This might explain why Māori were concerned about the design of these areas. Compared to other groups, Māori valued the landscaping, greenness and natural qualities of the street in greater percentages, providing more detailed descriptions. Smaller numbers of static and social activities of Māori/Pacific Islanders were observed in front of the eating premises that had spacious interior spaces. Shops selling ethnic Island ingredients had a more important role for Pacific Islanders than for Māori.

It is likely that Asians consider the street as a place for practical/functional activities. Asians were more involved in standing and window shopping activities and were less recorded as seated. In general, Asians used the street for more daily shopping and other necessary activities. Asian delicatessens, ethnic restaurants and the Halal butchery were the main reasons that attracted Asians to the street. Many social activities occurred inside or close to these premises.

Riddiford Street provides a considerable number of private/commercial and public seating opportunities. Analysis of observations supports the prospect and refuge theory where in general, those benches positioned at the edge of buildings and with broader vistas were occupied more frequently. Using seating against the edges of a building on streets does generally increase their frequency of use, however, analysis suggests more complicated patterns of use amongst the public benches and that the edge effect and prospect and refuge are not the only theories that ensure use.

Evaluation of the proportions of people involved in social activities compared to those seated individually within private and public seating showed that private seating encouraged a greater percentage of social activities relatively. This related principally to European people, whose social activities took place on café seating most often. Public benches, on the other hand, had an important role in the social activities of non-Europeans. Public benches and the corner park were often frequented by various cultural groups and more divergent age groups (adult males, adult females and older adult males). Although planning for outdoor café seating might attract monoculture to the street edges (European, specific age groups), behavioural mapping shows that planning for public seating adjacent to or in close proximity to certain businesses could increase the level of activities at public seating for both European and non-European people.

People preferred to sit on benches where they were able to see activities. Regardless of the location zone, most well occupied benches had a view of activities but were at a distance

from the busy road due to separation by a footpath width or were simply at a location away from the main street. These preferred spaces also provided landscaping, shade and environmental qualities. The corner park (space RID12) and space RID11 could be considered the most successful areas of public seating as they were mentioned by interviewees and were well used spaces for a diverse range of ethnic cultures, both for individual and social activities and also used by women more than other spaces. Public benches were mostly used individually by Europeans and the corner park seemed to be a preferred location for social activities among Europeans. According to Project of Public Space (n.d.-b), the use of public spaces by both individuals and groups, women and different ethnic cultures is an indicator for a place to be successful.

While a considerable number of seating opportunities were provided along the study length, the footpath width and furniture arrangements usually did not accommodate the multiplicity of groups with a higher number of members. The benches with linear arrangements were more frequently used for solitary and smaller group activities and the arrangements of public seating discouraged those in groups of four and more from frequenting public benches. Observations showed that when the footpath width allowed cafés to use larger table and chair arrangements, the spaces were used by larger groups of Europeans.

While observations did not support strong correlations between user numbers and design attributes such as landscaping and footpath width, these qualities found greater importance in the interviews.

To conclude, Riddiford Street succeeds in attracting a diverse range of users to the footpath and creating static and stationary activities via a range of land-use activities, their associated qualities, the physical characteristics of the footpaths and a number of social functions.



## 5.2 St George Street, Papatoetoe

### 5.2.1 Introduction

St George Street is one of the two main business areas in the Papatoetoe area of South Auckland. Observations on St George Street took place in April 2013 between Shirley Road and Kolmar Road on one kerbside and Tavern Lane and Wallace Road on the other kerbside (figure 5-33). The street consists of two fruit shops, a number of takeaways, bakeries, barbers, a pharmacy, second-hand and flat-rate (dollar) shops, liquor shops, dairies, real estates and a chocolate shop. With the predominance of Asian flat-rate shops, takeaways and liquor shops, St George Street lacks the diversity of retail activities seen in Riddiford Street<sup>3</sup>.



Figure 5-33: Map showing the studied blocks on St George Street in Papatoetoe neighbourhood

Culture here is seen in the non-fixed elements of the street, including sensory and olfactory characteristics. One can smell Indian cuisine and spices while walking along the street, rising from the ethnic shops and food establishments. The social structure of the street comprises mostly ethnic minorities that manage and operate businesses and use the street for their daily shopping activities. Most retail businesses are operated by Asians (Indians and Chinese) followed by a few New Zealand Europeans (Pākehā). Māori and Pacific Islanders

<sup>3</sup> The number of businesses, their type (services, eating, fashion), and the variety of each type were used to measure the diversity of business activities in each case study.

are not represented in the management of the businesses of the street. A number of Asian shops use the footpaths as an extension of their shop interiors in order to increase acquisition. Most signboards and advertisements are in English but at times also contain Indian or Pacific Island words. Unlike Riddiford Street, no street vendors or musicians were recorded during the observation period. The footpaths are generally 3-4 metres in width and linear seating arrangements have been placed at different locations of the street. Trees have been planted at different street locations.



Figure 5-34: St George Street, Papatoetoe. Source: author, 2013

There is a shopping mall next to the street that consists of the entrance of the supermarket, a bakery, 2-dollar shops, a coffee shop, an Asian restaurant, a sushi shop and a pharmacy. It has a courtyard with a beautiful old tree in the middle. People often sat on the edges of the garden. The place drew many people for their social and leisure activities away from the noisy areas of the footpaths. There are also two public benches and a number of tables and chairs that belong to the bakery and café.



Figure 5-35: The shopping mall next to St George Street. Source: author, 2013

As observed by the researcher, many families with children (Pacific Islanders/Māori) used the area for social and recreational activities, however this was not a part of the behaviour mapping the researcher carried out on the main street.

### 5.2.2 Activity Observations and Interviews

Walk-by observations showed that 829 people were engaged in some type of stationary activity in St George Street. Māori/Pacific Islanders were the most frequent users of St George Street (410), followed by Asians (299). In contrast to those cultural groups, Europeans represented the smallest sample (107 out of 829). Even though a considerable proportion of the population ratio of Papatoetoe is European, relatively fewer Europeans were mapped during observation periods. Also, a small number of “Other” cultural groups were recorded with 13 people recorded under this heading. Compared with the ethnic distribution in the census population of Papatoetoe, Māori/Pacific Islanders were seen in proportionately greater numbers, and Europeans were observed to be the least proportion. Figure 5-36 shows that the proportions of different ethnic cultures engaged in different types of static activities do not relate to the ethnic population distribution of Papatoetoe; while the street attracts greater proportions of Māori/Pacific Islanders and Asians, the proportion of observed Europeans is less than the proportion living in the neighbourhood.

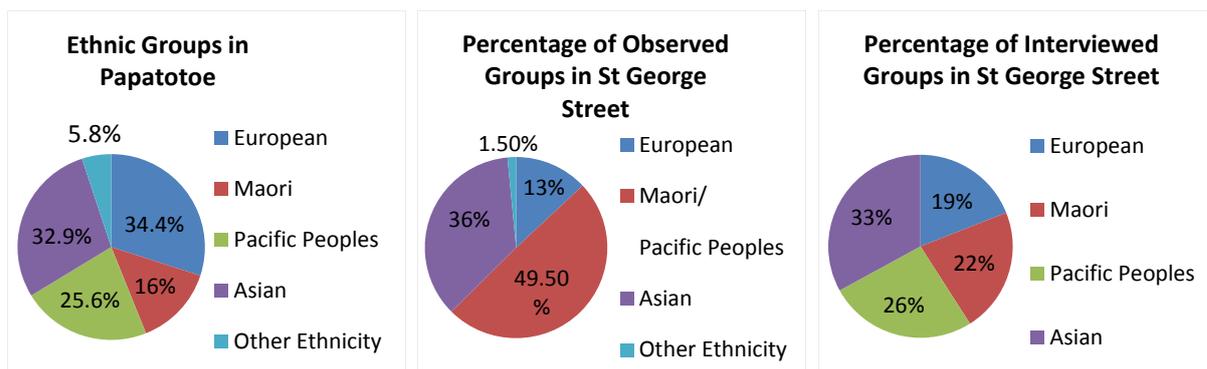


Figure 5-36: A comparison of the percentages of ethnic cultures living in the area, with those of each culture observed and interviewed. The demographics of Papatoetoe are based on Statistics New Zealand, 2006

The researcher interviewed a balanced number of different ethnic backgrounds. In total 29 persons, comprising 5 Europeans, 6 Māori, 7 Pacific Islanders and 9 Asians, were interviewed. Many interviews took place in the open court of the shopping mall as well as the street environment.

In general, the number of static and stationary activities reached a peak at three times during the observation period; between 10 am to 11 am, 12pm to 1 pm (lunch time) and 3pm to 4 pm (school closes). The highest number of activities were recorded between 10 am to 11 am (141 recorded activities). The number of activities occurring in the first half of the observation period (between 10 am to 2 pm) outnumbered the number of activities observed in the second half of the observation period (between 2 pm to 6 pm) and was relevant for all

the observed cultures. However, these numbers decreased significantly among Europeans. Almost two thirds of the Europeans were engaged in static activities between 10 am to 2 pm. The number of static and social activities dramatically decreased along the study area after 5 pm. This was related to the fact that many shops and premises had closed by this time. However, there were a number of activities that were still open such as the big fruit shop and takeaways.

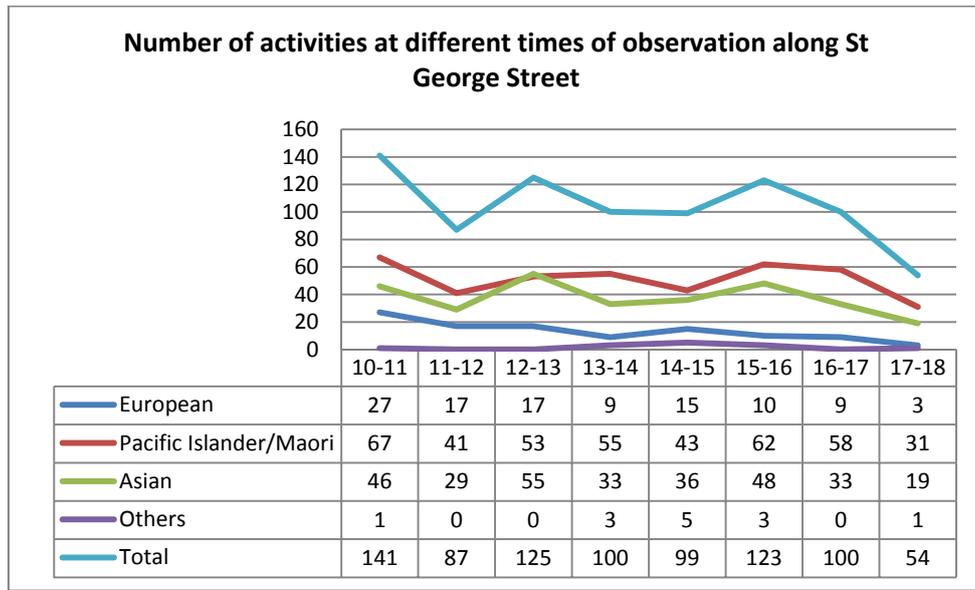


Table 5-15: Number of static and stationary activities at different times of observation along St George Street

Less than 15% of street users involved in any type of static activity appeared to be over 65 years of age; around 10% were children, 5% were adolescents, and 70% were adults. Adults were seen in proportionately greater numbers, and teenagers/adolescents were seen the least. More males (435) than females (316) were mapped in static activities. While the number of men significantly outnumbered women in the Asian group, the number of male and female users is almost balanced in European and Māori/Pacific Islander groups.

| Age group              | Adult male | Adult female | Older adult male | Older adult female | Teenager male | Teenager female | Child | Total |
|------------------------|------------|--------------|------------------|--------------------|---------------|-----------------|-------|-------|
| Cultural Background    |            |              |                  |                    |               |                 |       |       |
| European               | 29         | 30           | 22               | 26                 | 0             | 0               | 0     | 107   |
| Māori/Pacific Islander | 150        | 145          | 20               | 9                  | 20            | 14              | 52    | 410   |
| Asian                  | 137        | 81           | 42               | 4                  | 7             | 2               | 26    | 299   |
| Other                  | 7          | 5            | 1                | 0                  | 0             | 0               | 0     | 13    |
| Total                  | 323        | 261          | 84               | 39                 | 28            | 16              | 78    | 829   |
| percentage             | 39%        | 31.5%        | 10.1%            | 4.7%               | 3.3%          | 2%              | 9.4%  | 100%  |

Table 5-16: Number of different age groups and genders along Great South Road

Age groups were not evenly distributed among the various cultures; most Europeans were middle aged or elderly. No teenager or child was recorded in this cultural group. On

the other hand, a considerable percentage of observed Māori /Pacific Islanders and Asians were children. Teenagers were mostly from Māori/Pacific Islander groups followed by Asians. Compared to other cultural groups, Asians had a significant number of older-adult males relatively.

Most users came to St George Street with friends/family members and were usually encountered in groups rather than alone. However, different patterns exist among people of various cultural backgrounds. A larger number of Europeans came to the street alone (66%). In contrast, most Māori/Pacific Islanders (61%) and Asians (66%) came to the street with friends/family members and were usually encountered in groups (table 5-17).

| Cultural background    | Individual |            | Group |            | Total |            |
|------------------------|------------|------------|-------|------------|-------|------------|
|                        | Count      | Percentage | Count | Percentage | Count | Percentage |
| European               | 68         | 63.5%      | 39    | 36.5%      | 107   | 100%       |
| Māori/Pacific Islander | 157        | 38.3%      | 253   | 61.7%      | 410   | 100%       |
| Asian                  | 101        | 33.8%      | 198   | 66.2%      | 299   | 100%       |
| Other                  | 4          | 30%        | 9     | 70%        | 13    | 100%       |

Table 5-17: Number and Percentage of different cultures observed on St George Street, both individually and in groups

Most groups were small in size; the most observed size in groups was two person in a group (158) followed by three (36) and four (9) and a few groups had 5 or 6 people engaged in social activities (7 groups). There is a significant trend towards solitary and smaller group activities on footpath spaces of St George Street.

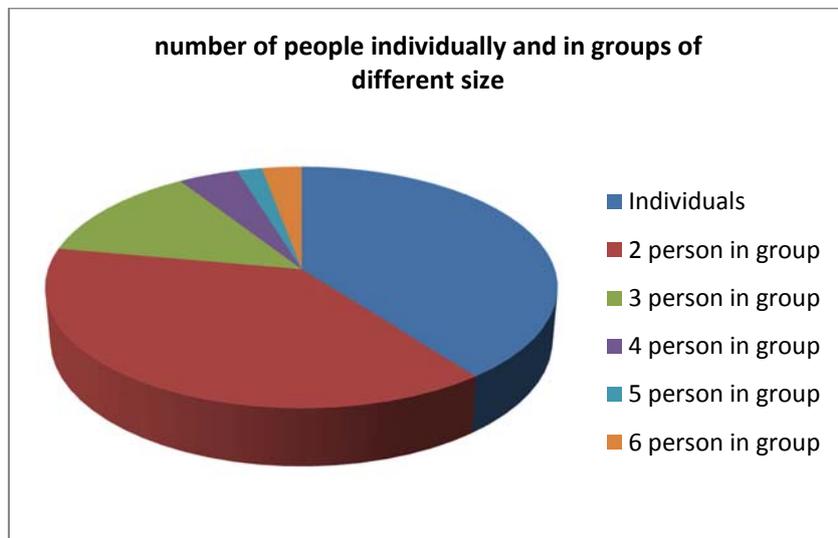


Figure 5-37: Percentage of different groups sizes on St George Street

Most of the recorded social interaction on St George Street was among pair groups. Europeans only constituted groups of up to three. Group sizes with four or more members were mainly observed among Māori/Pacific Islanders. However, interviews suggested that

larger group sizes might be more common among Pacific Islanders and that Māori came to St George Street individually or in smaller groups. Figure 5-39 shows group sizes of different cultural groups on a section of St George Street.

Of the total 158 pair groups on St George Street, 80 comprised people of the same gender. Other common associations were male-female and female-child. The social structure of the groups of three was mostly constituted of **three males** (9 groups out of 36=25%) and **one female and two children** (7 out of 36 groups=19.5%). In general, groups consisting of male-only members made the most common type of association of Asian groups with different sizes. Māori/Pacific Islander groups were a mix of both genders and children constituted a significant part of these groups.

Field observations on St George Street showed that different cultural groups co-existed on the street, but they did not tend to mix, and rather kept to their cultural groups. Of 158 groups of two, 149 were constituted of people from a similar ethnic cultural background; European-European, Māori/Pacific Islander-Pacific Islander/Māori and Asian-Asian. In the other nine groups left, people with different cultural backgrounds interacted, most often between shopkeepers and customers (figure 5-38). Some social interaction was also observed between elderly people of different cultures. This mostly occurred in the courtyard public space adjacent to the street.



Figure 5-38: Part of the social interaction on St George street occurred in front of the stores between the sellers and people of various backgrounds. Source: author, 2013

Most interaction took place within rather than between cultural groups. This was further confirmed within the interviews where participants of European and Māori cultures stated that their interaction was mostly with the people of their ethnic culture and they hardly intermingled with other cultures.

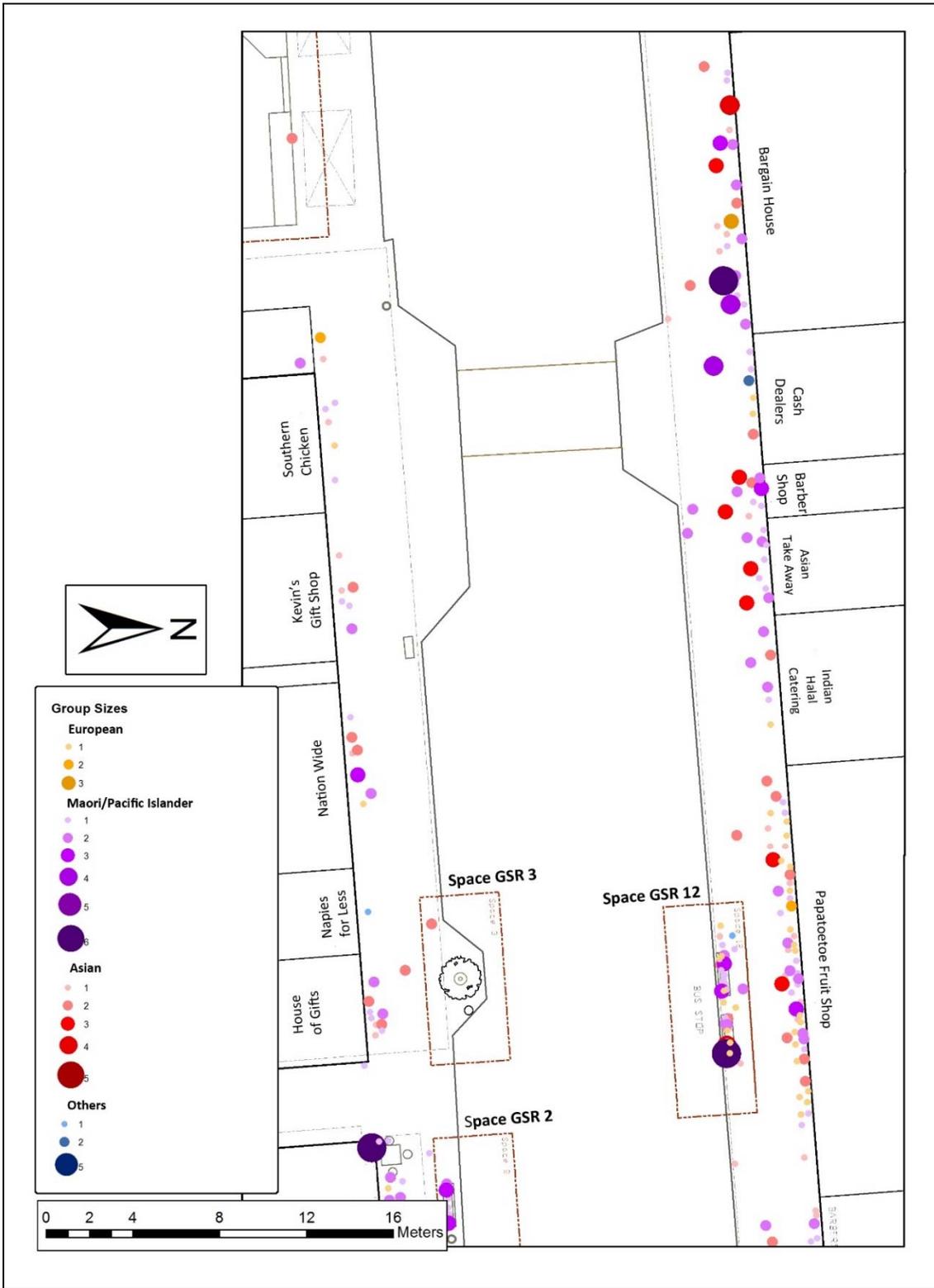


Figure 5-39: Groups sizes of different cultural groups on a section of St George Street; size of circles and intensity in colour represent larger groups.

### 5.2.3 Recorded Poses and Activities

Figure 5-40 shows the different types of postures and activities observed on the street. A greater number of people were observed standing (604) compared to sitting (224) and leaning (1). A considerable number of people with a standing pose were window shopping. The most common activity along with standing, sitting and window shopping was talking, followed by eating or drinking, smoking and mobile using. Also, very small numbers of reading/writing or playing activities were recorded.

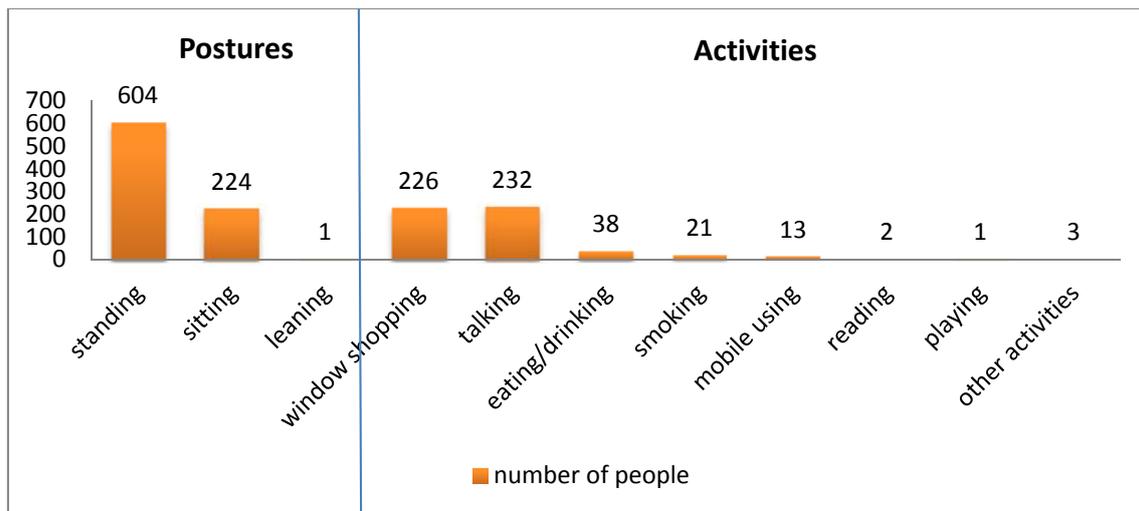


Figure 5-40: Number of people engaged in different types of postures and activity on weekdays and weekends on St George Street

Less than 5% of static activities on St George Street were those related to shopkeepers or sellers, panhandlers, and security guards. They were not separated from the main activities in this case study as patterns of occupancy were not much influenced by their numbers.

Of the total 829 recorded activities on St George Street, 378 standing/lingering activities were documented. More than 60% of the total standing activities in St George Street were in groups (233 out of 378) whereas 145 people stood by themselves. A considerable number of people (157) standing did not join in any other activities. Talking was the most common activity among all different activities while standing. Other activities such as smoking, mobile using and eating/drinking were seen in noticeably smaller numbers. A small number of Māori/Pacific Islanders were observed eating/drinking in groups while standing. Eating and drinking while standing and socialising was specific to Māori/Pacific Islander groups and no Europeans or Asians were observed eating and drinking in groups while standing.

Observations showed that window-shopping was a significant activity on St George Street and was recorded very often. Of the 226 persons involved in window shopping, 100

were recorded individually, and 126 were in groups. There were differences between the window shopping activities of different cultural groups. While most of the window shopping activities of Māori/Pacific Islanders and Asians occurred in groups, fewer numbers of Europeans window shopped in groups, their window shopping activity was done individually. The number of Māori/Pacific Islanders and Asians window shopping in groups was almost twice of those window shopping individually. This shows that while window shopping might be a social activity among Māori/Pacific Islanders and Asians, it is an individual activity among Europeans on St George Street.

| Activity        | Cultural Background | E/I | E/G | MP/I | MP/G | A/I | A/G | O/I | O/G | Total/I | Total/G |
|-----------------|---------------------|-----|-----|------|------|-----|-----|-----|-----|---------|---------|
| Window shopping |                     | 37  | 4   | 39   | 69   | 23  | 51  | 1   | 2   | 102     | 124     |
| Total           |                     | 41  |     | 108  |      | 74  |     | 3   |     | 226     |         |

Table 5-18: Number of people of different cultures involved in different types of activities while window shopping, both individually and in groups<sup>4</sup>

In general women (55%) window shopped more than men (34%) in St George Street. Window shopping was much more popular among elderly European female adults compared with other groups within the same age range and same gender. Children of both Māori/Pacific Islander and Asian groups accompanied their families and especially their mothers while window shopping and established a greater percentage of window shopping activities compared to teenagers and older adults.

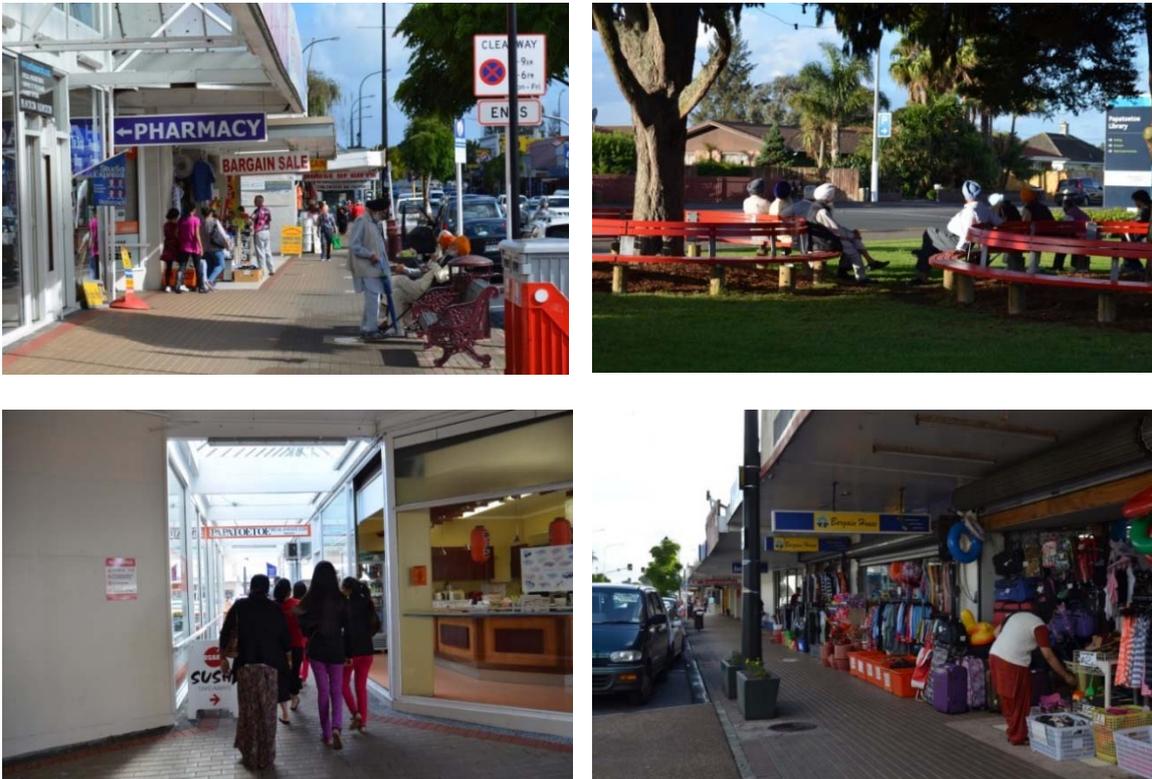
Of the total 829 activities on St George Street, 224 seated activities were documented. Observations in St George Street indicated that a smaller percentage (17%) of Europeans used St George Street's benches for seated activities compared to Asians (30%) and Māori/Pacific Islanders (27.5%) relatively. In general, seating spaces were mostly dominated by men (141 out of 224= 63%) compared to women (63 out of 224= 28%).

| Age group              | Adult male | Adult female | Older adult male | Older adult female | Teenager male | Teenager female | Child | Total |
|------------------------|------------|--------------|------------------|--------------------|---------------|-----------------|-------|-------|
| Cultural Background    |            |              |                  |                    |               |                 |       |       |
| European               | 8          | 2            | 6                | 3                  | 0             | 0               | 0     | 19    |
| Māori/Pacific Islander | 39         | 37           | 11               | 2                  | 5             | 5               | 14    | 113   |
| Asian                  | 37         | 10           | 30               | 2                  | 4             | 2               | 6     | 91    |
| Other                  | 1          | 0            | 0                | 0                  | 0             | 0               | 0     | 1     |
| Total                  | 85         | 49           | 47               | 7                  | 9             | 7               | 20    | 224   |
| percentage             | 38%        | 21.9%        | 21%              | 3.5%               | 4%            | 3.5%            | 9%    | 100%  |

Table 5-19: Number of recorded seated activities among people with different age groups, genders and cultural backgrounds

<sup>4</sup> For cultural background codes see footnote on page 104

Sitting was much more popular among adult males, adult females, older adult males and children. However, the frequency of seated activities of different age groups was not evenly distributed between different cultural backgrounds and genders. Table 5-19 shows that Asian adult male and older adult male along with Māori/Pacific Islander adult male and adult female users constituted a significant number of seated activities on St George Street.



**Figure 5-41: Differences between preferred activities of Indian male and female users on St George Street. Source: author, 2013**

The Asian older adult males were generally Indian men that gathered on the footpaths or in the park nearby. Their numbers were usually up to 5-6 people during the observation period but interviews suggested that their group sizes sometimes increased to more than 10 and even up to 20-25 people in the adjacent park where they sat together, talked or listened to the radio in order to pass time. Their duration of stay was also noted where they gathered and stayed for a lengthy time (around 2-3 hours or more). In contrast, the numbers of Asian women (both adult and older adult) and Māori/Pacific Islander elderly (both men and women) seated were quite low. Unlike Māori/Pacific Islanders where both genders were frequently recorded seated, sitting and socialising, this was not a common activity among Asian females. While Māori/Pacific Islanders were grouped together, some participants

suggested that Māori tend not to frequent public benches for longer term social activities; they communicate briefly on footpaths. Māori often socialise on the marae<sup>5</sup>.

Footpath benches were less occupied by children compared to adult males, females and older adult males. Smaller numbers of Europeans especially European female adults and older adults were recorded as seated. Older adult females and teenagers were in the minority when it came to occupying footpath benches. This might be partly a reflection of what the street has to offer to different age groups and cultures as well as related to the observation time. The limited number of Europeans involved in seated activities might have been due to various reasons; an explanation is that it might be partly culturally related. A European (Pākeha) participant said;

*“I won’t sit on the footpaths, normally, [...] I don’t feel right about it [...] we have RSA, or park or this area over here [the court] people should sit here. You don’t have to sit on the main street”.*

Table 5-20 shows that most of the seated activities on St George Street existed in groups rather than individuals. A considerable number of people sitting alone did not participate in any other activity than people-watching. Among all social interactions while sitting, talking was the most frequent. The next social activity with a significant difference with sitting and talking was eating or drinking.

| Activity                           | Cultural Background | E/I | E/G | MP/I | MP/G | A/I | A/G | O/I | O/G | Total/I | Total/G | Total |
|------------------------------------|---------------------|-----|-----|------|------|-----|-----|-----|-----|---------|---------|-------|
| <b>Sitting/people watching</b>     |                     | 10  | 0   | 39   | 17   | 21  | 15  | 0   | 0   | 69      | 32      | 102   |
| <b>Sitting and talking</b>         |                     | 0   | 6   | 0    | 29   | 0   | 47  | 0   | 0   | 0       | 82      | 82    |
| <b>Sitting and eating/drinking</b> |                     | 2   | 0   | 5    | 17   | 3   | 0   | 1   | 0   | 11      | 17      | 28    |
| <b>Sitting and smoking</b>         |                     | 0   | 0   | 1    | 2    | 2   | 2   | 0   | 0   | 3       | 4       | 7     |
| <b>Sitting and mobile using</b>    |                     | 0   | 0   | 1    | 0    | 1   | 0   | 0   | 0   | 2       | 0       | 2     |
| <b>Sitting and reading</b>         |                     | 1   | 0   | 1    | 0    | 0   | 0   | 0   | 0   | 2       | 0       | 2     |
| <b>Sitting and playing</b>         |                     | 0   | 0   | 0    | 1    | 0   | 0   | 0   | 0   | 0       | 1       | 1     |
| <b>Total</b>                       |                     | 13  | 6   | 47   | 66   | 27  | 64  | 1   | 0   | 87      | 136     | 224   |

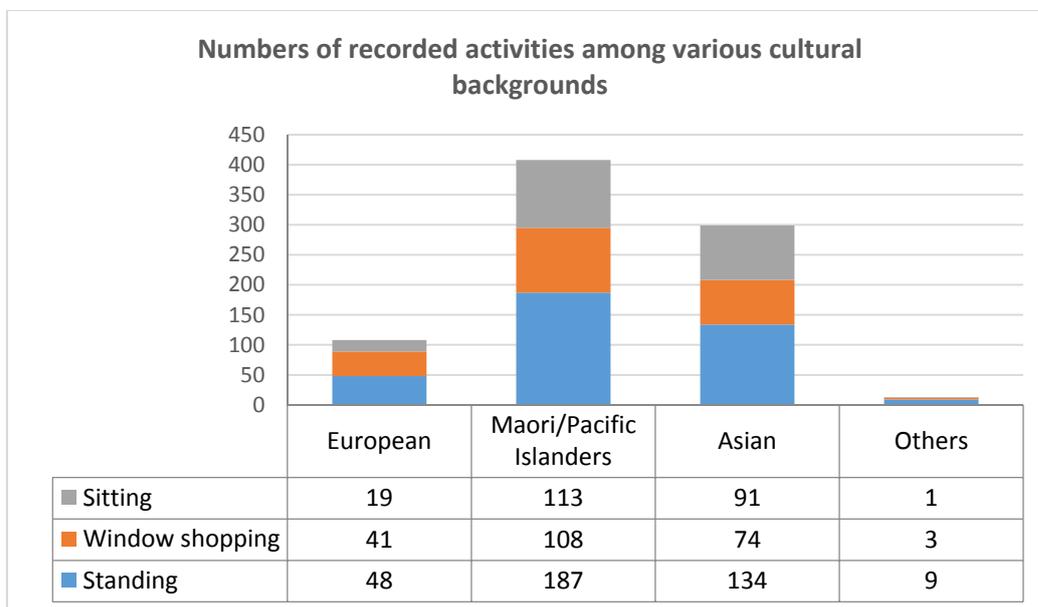
**Table 5-20: Number of people of different cultures involved in different types of activities while seated both individually and in groups**

There is a difference between the seated activities of different cultural groups; over 25% of the social interaction between Māori/Pacific Islanders that occurred while seated was

<sup>5</sup> The marae is the hub of a Māori community, the place where people gather in times of joy and celebration, and times of stress and sadness. It generally has a whareniui (meeting house), a wharekai (dining room with attached kitchen) and a shower and toilet block. In older marae this is often a building separate from the others. In more modern marae it is attached to the meeting house (Whaanga, 2013).

associated with eating or drinking. However, eating or drinking as a social activity was specific to these cultural groups (especially Pacific Islanders). No Europeans or Asians were observed eating and drinking in groups, but rather they did this individually. Smoking, reading, playing and texting were the other activities that were recorded but occurred less frequently compared to talking or eating and drinking. Seated activities were much more popular on footpath spaces with public and private seating in the form of benches and chairs. Seventeen fixed benches were counted on St George Street, and three to four commercial plastic chairs around tables were in front of a takeaway. Less than 2 percent out of 224 observed seated activities were carried out away from benches and chairs and took place on low walls of the Community Centre. The highest levels of social interaction while seated were among groups of two, followed by groups of three. The benches were less frequently occupied by groups of four, five and six.

Table 5-21 shows the difference in the proportions of different cultural groups involved in the main activities on the street. While Maori/Pacific Islanders and Asians were relatively involved in all different types of main activities, fewer percentages of Europeans were recorded as seated.



**Table 5-21: Differences between the proportions of different cultures involved in standing, window shopping and seated activities**

### 5.2.4 Land-use Activities

Analysis of interview data reveals that the diversity of shops offering goods and services on the street was the main reason people were attracted to use the footpaths (figure 5-42). The majority of interview respondents mentioned businesses, retail activities and public buildings as what they liked most about the street. Again when they were asked about what they would want to add (with and without mentioning their own ethnic group activities), most answers related to the type of businesses and retail activities. The open-ended interviews suggested that retail activities remained the main concern of participants on St George Street.

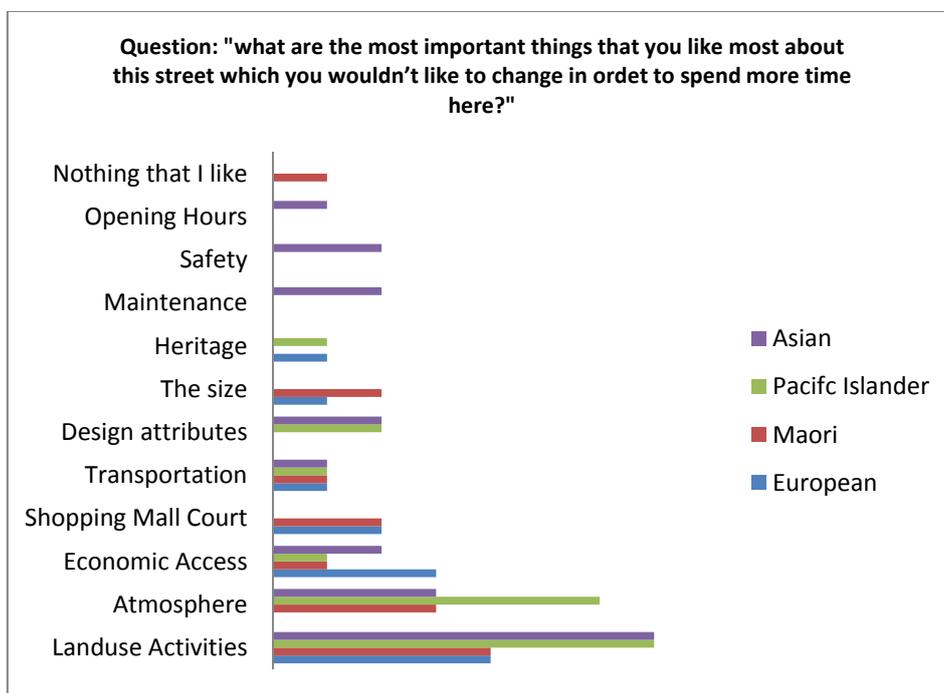


Figure 5-42: The question that what people like about this street shows relatively high importance to land use activities. European did not make any reference to the atmosphere.

Services such as supermarkets, banks, chemists or pharmacies, and health services constituted an important part of what people liked on the street. Responses to the question of what they would like to add included the types of services and facilities that did not exist but were required for daily needs such as hardware stores and butchers. Community places and public buildings such as the town hall, the library, the sports centre, the RSA where they offered a space for social functions, fitness, sports and recreational activities were also recorded responses as important places for social/cultural/recreational activities. However, analysis of observations indicated that various services had potential for a variety of static activities and interactions on footpath spaces.

Observations in St George Street indicated that a significant number of stationary and lingering activities occurred in front of fruit shops against the building (in zone A) (more than 10% of observed static activities). Patterns of occupancy among different ethnic cultures showed that the fruit shops in St George Street were not only lively but also the most multi-cultural spaces on the street, where they attracted people of different ethnic backgrounds. A number of Asians socialised while shopping. While Europeans were relatively less engaged in different activities compared to other ethnic cultures, a number of them lingered in front of the fruit shops during the observation period (22 out of 107=20%).



**Figure 5-43: Patterns of occupancy of different cultures in front of fruit shops. Source: author, 2013**

The book shop displaying some books in boxes on the footpath encouraged a number of static activities. Behavioural mappings showed that Europeans (7 out of 107) were more often observed in front of the book shop compared to any other ethnic groups. The findings from the interviews support the behavioural mapping conducted, where Europeans stated they usually visit the bookshop.

Many services in St George Street covered their window display with boards and advertisements creating non-visually permeable frontages. Some buildings (such as the community centre) and banks also provided blank and monotonous frontages using blank walls, opaque or very dark glass. In general, not many people were observed lingering or engaging in static or social activities in front of services that one could not see through (figure 5-44).



**Figure 5-44: Illustration shows how the management of the physical environment can affect patterns of behaviour. Source: author, 2013**

Although people did not engage in activities related to these types of frontages, a number of lingering activities and social interactions were observed away from these non-visually permeable shop frontages. These can be categorised in three levels. First, static activities which were related to the type of businesses; some businesses such as hairdressers did not provide enough seating for a large number of patrons inside their shop, and customers often stood or lingered outside the shop waiting for their services. The second: a number of interactions between Asian shopkeepers and customers on the footpath. And third: when a physical artefact such as a bench was located in front of these types of frontages, people often sat and socialised with each other. Additionally, among the type of non-visually permeable businesses that covered their windows with boards and advertisement signs, those that made frequent changes in their signs and displays (real estates and cash dealers) created a reason for street users to stop and look at the signs. The number of activities in front of these types of businesses was evenly distributed amongst the various cultures.

A number of static activities occurred in front of the shops with open displays; 132 out of 829 static activities on St George Street (16%) occurred in front of Asian flat-rate shops which have a similar style of character in their frontages. However, patterns of occupancy among different cultures reveal that the provision of Asian flat-rate shops increased the static activity of Māori/Pacific Islanders (19%) and Asians (17%) and had less effect on the static activities of Europeans (7%). This is specific to those Asian affordable shops which extended their territory outside their shops (figure 5-45). Similar types of shops which kept their goods

inside their premises did not affect the number of social activities on the footpaths as much as those which extended their territories.



Figure 5-45: Shop displays out on the footpaths encouraged stationary and static activities. Source: author, 2013

While some Asian participants were of the opinion that the ways premises advertised and extended their merchandise onto the footpaths made the footpaths more attractive, Europeans and Māori participants had a more negative opinion on the management of these shop frontages. Europeans mentioned that they did not like the ways in which premises spread their merchandise on the footpaths. However, some made comparisons between St George Street and Great South Road and that they preferred St George Street as there were fewer shops that spread their merchandise onto the footpath outside the shops.

Participant observation on St George Street revealed that there are only a few shops with visually permeable window displays. Much less static activity was observed in front of these types of stores with window displays compared to those that extended their store onto the footpath space. Businesses for lease did not encourage static activities in front of them.

Looking at various food premises along St George Street, a number of static activities were seen in front of takeaways compared to bakeries, the fast food chain restaurant and the Chinese restaurant. Takeaways usually left their doors wide open, letting the activities inside them be seen by the people outside on the footpaths. The level of permeability and activities happening inside takeaways created lively frontages on St George Street (figure 5-46). Among different premises along St George Street, Asian takeaways had later opening hours.



Figure 5-46 : The interior spaces of the takeaway shops integrate with the footpath space and provide lively frontages. Source: author, 2013

There were two types of Asian culture food takeaways; Chinese and Indian. The Chinese had more permeable and open frontages; some had folding fronts where the only way to distinguish where the footpath ended and the shop began was change in level whereas the Indian takeaways were less permeable and covered their frontages with signs and picture displays. Less activity was observed in front of Indian takeaways; this could be based on their lower level of visual permeability or the type of food that is less common among members of other ethnic groups.

Patterns of occupancy demonstrated that the stationary and lingering activities of Māori/Pacific Islanders increased in front of takeaways, and this was followed by Asians and had less effect on the statistic activities of Europeans. Interviews also reveal the importance of takeaways for the leisure/social activities of Pacific Islanders, Māori and Asians. On the other hand, not many Europeans referred to takeaways as a place for social activity on St George Street, which confirms observations. Some Māori mentioned the importance of international fast food restaurants such as McDonalds for social activities among Māori as what could be added to the businesses along the street. Furthermore, a number of Asian shopkeepers also believed that adding international fast food restaurants could attract a greater number of users to the footpath.

Restaurants and takeaways that provide a culturally specific menu play an important role for Asians compared to other cultural groups, with 7 of the 8 people interviewed mentioning this (figure 5-47). Indian participants noted that Indian eating places play an important role for their gatherings. Some members of the Asian cultural group, especially Fijian Indians, are Muslim, and it is clear that the establishment of Halal eating places had a vital role for them. At the time of observations, there were two Asian (Indian) Halal takeaways on St George Street which were often visited by these groups.



Figure 5-47: Participants were asked about the important places for their ethnic members for their desired activities. Response to open-ended question of 27 interviews.

While participants were asked about their suggestions for the street to become a better place for their ethnic group social activities, the majority of interview responses were linked to the provision of ethnic cultural shops and restaurants. Europeans acknowledged the importance of cafés for their social activities as a feature that could be added to the street. However, adding cafés to the street was also among the recommendations of Māori and Asians although in relatively fewer numbers.

In general, the data suggests that an important factor that can draw people from different ethnicities to the street for leisure activities is the establishment of ethnic shops, cafés and eating places. Ethnic eating places are hospitable for other ethnic cultures as well as their own, as one Pacific Islander participant commented;

*“We wouldn’t bother to have an Island restaurant here; the Chinese takeaways are similar to Island food.”*

This could be why the majority of Pacific Islanders’ social activities occurred in front of Asian takeaways. Other ethnic restaurants such as authentic Indian establishments mainly appeal to people from their own culture and might be non-inviting to other groups.

The temporal dimensions of space occupancy show that while some businesses created lively frontages at all different times of observation, others were only occupied at specific times of the day. Observations show that the opening hours of shops and businesses managed and operated by Europeans (Pākeha) were less compared to the Asian shops and takeaways. Takeaways helped to create lively shop frontages when most of the other shops

were closed. Almost half (47%) of the activities in front of takeaways happened between 5pm to 6pm.

Economic access and affordability in St George Street found importance after land-use activities and the atmosphere of the area. Most of the business activities along St George Street such as second-hand shops, those charging a flat dollar rate for all goods, takeaways and hairdressers were associated with budgeting, bargaining and affordability. Economic access seems to be an important issue for the users of St George Street, regardless of ethnic cultural background. Interview respondents explained that the popularity of these businesses was related to socio-economic status rather than cultural background. Participants also compared St George Street to more trendy areas of Auckland and how it fitted with the socio-economic status of people residing in the area. In fact, many users of St George Street could be considered less affluent and so shopping and participating in various activities along the street had a different meaning for them compared to those from wealthier neighbourhoods. Among the requests of participants was to add more budget retailers to the street and to replace the current supermarket with a more affordable retailer.

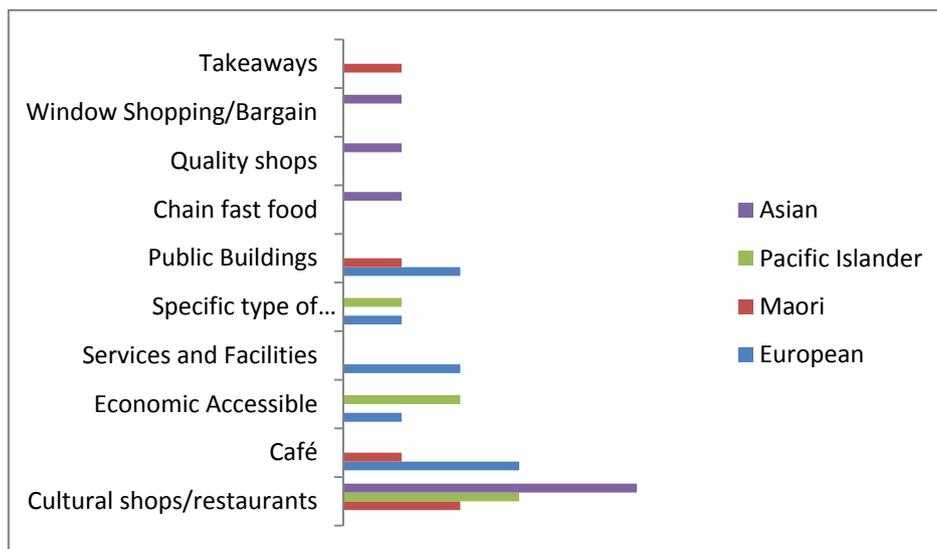


Figure 5-48 Response to open-ended question of type of retail activities that people would like to change or add on the street. Data from 27 interviews.

According to interview responses, St George Street provides a tasteless and monotonous image derived and originated from the similarity between business activities. Although the street was not dominated by chain stores and most of the shops were privately owned, economic globalisation on the one hand and socio-economic conditions of the area on the other have led to homogeneity in the businesses. Numerous flat-rate shops and similar takeaway businesses create a repetitious image. In other words, globalisation has

surpassed the cultural diversity and uniqueness seen elsewhere in the urban area. The similarity between the shops and eating places along St George Street has reduced levels of window shopping and led to complaints about the quality and attractiveness of the area to some customers. Interviewees were also concerned about the quality of many of the shops and would have preferred to shop at higher quality businesses including quality restaurants instead of the takeaways on offer.

The ownership and the ethnic composition of the retail activities (management of the semi-public space) were not distributed equally among different cultural groups and the rates of business ownership were not based on the ethnic ratios of the population. Asian and European cultures were represented more frequently in terms of commercial and retail activities, despite Māori and Pacific Islanders constituting a larger proportion of the users of St George Street. In other words, Māori and Pacific Islanders rarely participated in the ownership or management of shops.

While the existence of shops operated by one or two cultural groups might be welcoming for some cultures, it might also exclude others. Managing of premises by a specific cultural group does not mean that they would manage a cultural shop or ethnic restaurant. Some businesses along St George Street such as the photo shop or the fruit shops were owned and managed by Asians but had a wide range of ethnic cultures as their patrons. However, this still led many users to consider the overall social structure of the street to be Asian. Not only were the restaurants mostly Asian but it was clearly demonstrated in the interviews that participants were aware that most businesses were managed and operated by Asian people. Interviews also suggest that other cultures would also like to be represented in business activities; a number of Māori commented that Māori people are proud of their culture and that wherever they go they would love to see something that relates to their culture. There were no businesses that were operated by Māori or places that sold Māori art/crafts. In addition, some Māori mentioned they would prefer European stores more than other ethnic shops. This can be further explained by the integration of these two cultures living together for more than a century.

While a number of respondents referred to the friendly environment of the street and the people who use it, going into considerable detail when discussing its lively, multi-cultural character, others suggested that there is nothing to like about the street, relating it to the lack of people and activities. Notably, Europeans did not make reference to the area's atmosphere. It seems that non-Europeans were more mindful of the factors that helped

create atmosphere in the public space, or at least were better able to articulate and converse about these matters. This could help explain why the area was being used less for optional activities by Europeans compared to other ethnicities.

### 5.2.5 Design Attributes

Design attributes were less discussed in the interviews compared to business activities and social functions/activities. Most participants made comparisons between footpath spaces and other public spaces such as the central court of the shopping mall or the park. The footpaths drew negative comments and more recommendations, while the latter two were seen more positively. A few number of participants said they would never sit on footpaths.

More than half of the participants (14 out of 27) stated they usually visit the open court for their leisure activities. Participants associated the open court space with qualities such as adequate number of sitting spaces, distance from traffic, surrounding businesses, safety, quietness, spaciousness, environmental qualities and its marvellous landscape which made it a desirable meeting place. For example a European participant compared the court with the footpaths and said: *“I sit under the trees in the mall for a rest, it’s close to the traffic over there, and you can get the traffic fumes.”* Or another participant talked about the environmental qualities of the court; *“it gets shade and sunshine at the same time”*. Even a participant proposed that St George could do with another facility like the current space rather than giving recommendations for the footpaths. Furthermore, Māori compared the open space court with their marae and that it could be a suitable space for Māori to socialise. Māori described the quality of the place they would choose as a spacious, safe and quiet space with not many people. In addition to the shopping mall court, participants also referred to the park and the bus stop as places for their social activity; mostly because of the number of seating spaces provided as well as spaciousness.

### Patterns of Occupancy of Public Seating

While interviews suggest a greater preference for the central shopping mall court compared to footpath spaces, results of walk by observations provided a clear indication on the preferred locations among different zones of activity on St George Street. Most of the public furniture in St George Street is located in zone “C”; the curb side edge facing buildings and retail activities and backing onto traffic compared to zone “A” in front of buildings and activities and facing the footpath.

This included seating, trees, flower boxes, and rubbish bins. Fourteen spaces including specific micro scale characteristics of the environment (public furniture) were classified on the map (figure 5-49). Table 5-22 shows number of activities in each of these places by different cultural groups. The associated features of the spaces used more frequently are summarised in tables 5-23 and 5-24.

| Cultural Background | European | Māori/Pacific Islander | Asian | Other | Total |
|---------------------|----------|------------------------|-------|-------|-------|
| Name of Space       |          |                        |       |       |       |
| Space STG 1         | 2        | 5                      | 22    | 1     | 30    |
| Space STG 2         | 0        | 13                     | 0     | 0     | 13    |
| Space STG 3         | 0        | 0                      | 2     | 0     | 2     |
| Space STG 4         | 6        | 9                      | 6     | 0     | 21    |
| Space STG 5         | 0        | 0                      | 0     | 0     | 0     |
| Space STG 6         | 1        | 0                      | 3     | 0     | 4     |
| Space STG 7         | 0        | 0                      | 2     | 0     | 2     |
| Space STG 8         | 1        | 17                     | 2     | 0     | 20    |
| Space STG 9         | 0        | 0                      | 0     | 0     | 0     |
| Space STG 10        | 3        | 12                     | 3     | 0     | 18    |
| Space STG 11        | 0        | 10                     | 31    | 0     | 41    |
| Space STG 12        | 9        | 47                     | 26    | 1     | 83    |
| Space STG 13        | 0        | 16                     | 3     | 0     | 19    |
| Space STG 14        | 1        | 7                      | 3     | 0     | 11    |
| Total               | 23       | 136                    | 103   | 2     | 266   |

Table 5-22 : Number of activities in different spaces on St George Street

Of these spaces, space STG 4 includes the court in front of the Town Hall and is a semi-public space which has a different character to other footpath spaces. The public seating in front of the big fruit shop (Space STG 12) is a bus stop where the researcher could not differentiate between those waiting for the bus and those involved in social/recreational/resting activities. These two spaces were not taken into account for analysis.

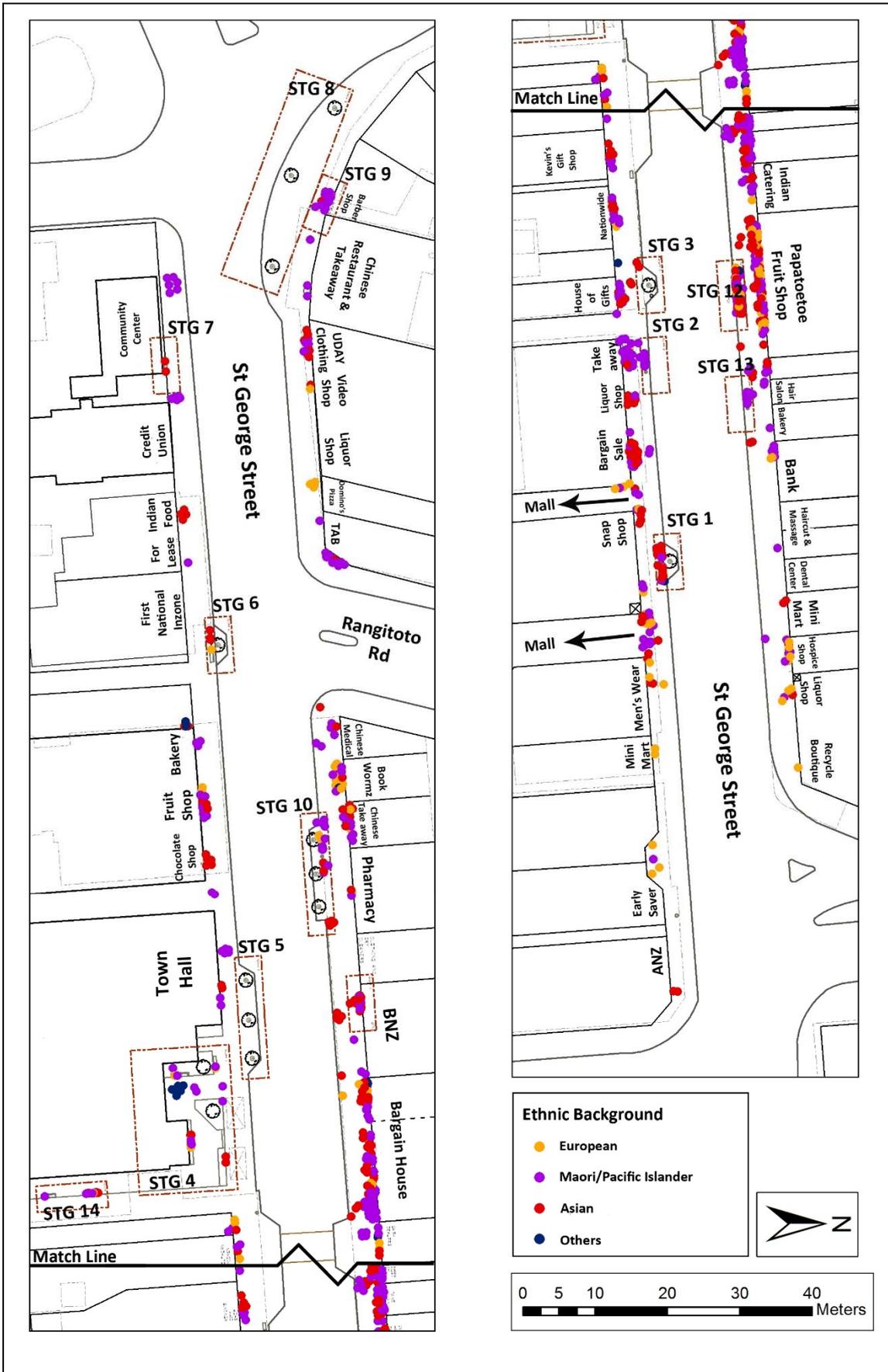


Figure 5-49: Location of different spaces along St George Street

Spaces STG 7, STG 9 and STG 11 are located in zone A and spaces STG 1,2,3,5,6,8,10,12 and 13 are located in zone C. Spaces STG 3, STG 5 and STG 8 comprised only trees and no public seating existed in these spaces. Observation showed that less than 0.3% of static activities of the total 829 activities have taken place in these three spaces. Analysis of the behaviours shows no significant correlation between the existence of landscape (trees) and stationary and social activities where there is no seating available. On the other hand, a considerable number of activities occurred in spaces with the provision of seating. Providing an adequate number of seats was also a main concern (figure 5-50).

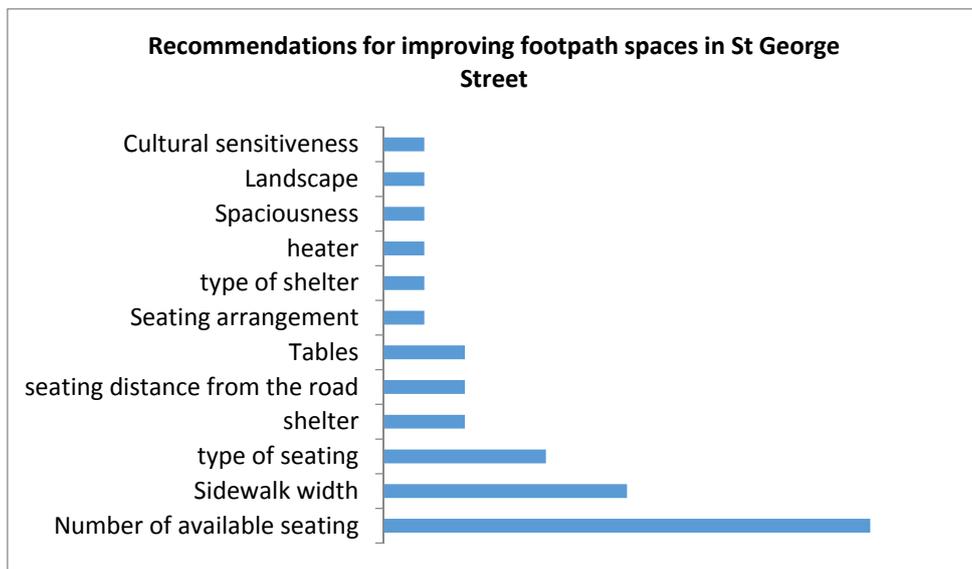


Figure 5-50: Design recommendations for improving footpath spaces for social activities on St George Street

Spaces STG 1, 2, 6, 10 and STG 13 are located in zone “C” where they all faced the pathway and back onto the traffic flow. Observations showed that the width of the footpath in St George Street was quite similar in front of all the benches located in these five spaces (between 3-5 m). Although the footpaths had been widened in a few spaces, STG 1, 6 and 10, furniture (tree boxes) had been placed there and it provided a separation from the road traffic; the footpath width stays similar in the front (figure 5-51).

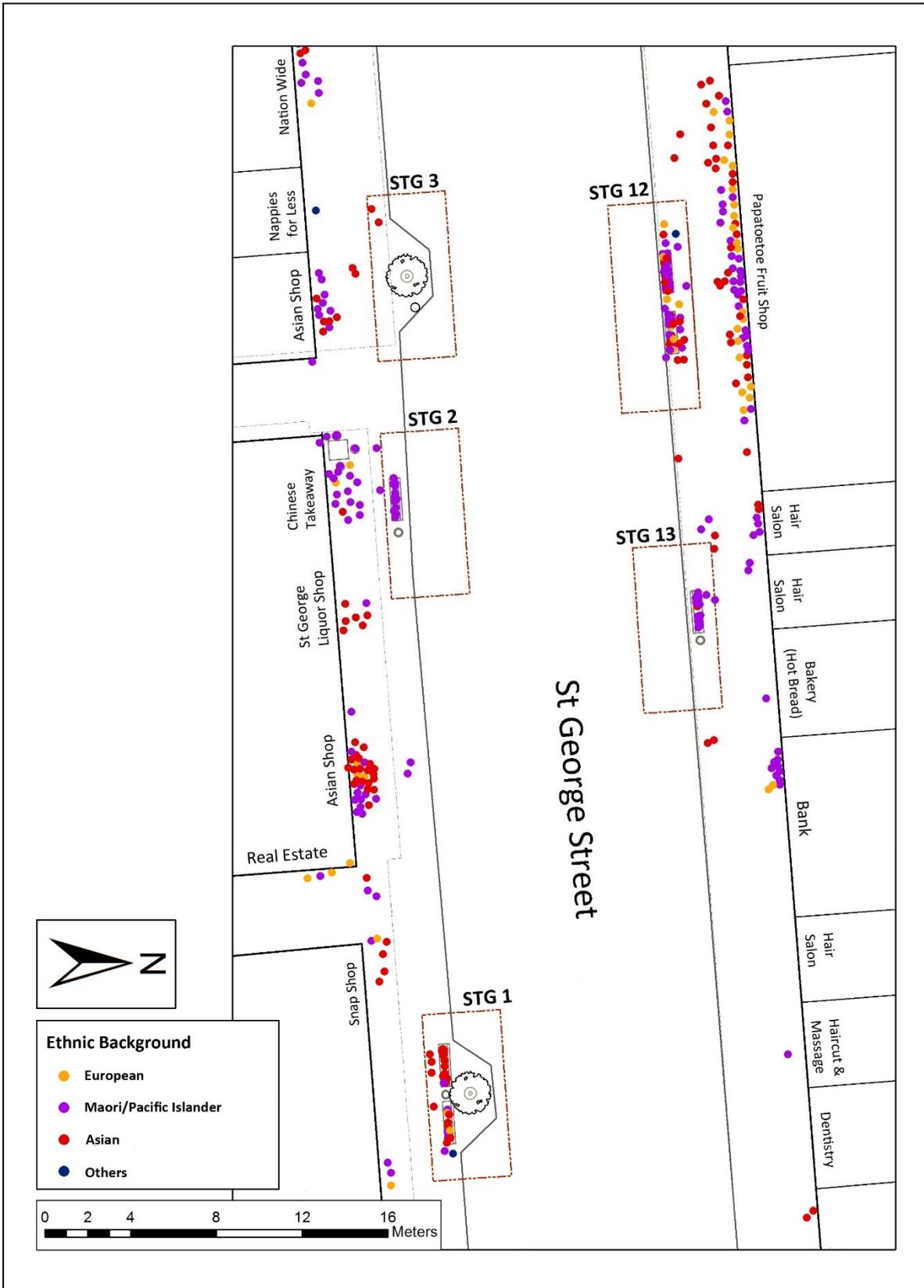


Figure 5-51: Layout of spaces located in zone “C”

Spaces STG 1, 6 and 10 had many similar design attributes such as footpath width, number of benches and benches located in these spaces were distant from the road. However, the frequency of static activities occurring in these spaces was not similar; while a considerable number of sedentary and static activities were recorded in space STG 1 followed by space STG 10, space STG 6 did not accommodate many static activities. Spaces STG 1 and STG 10 were located in close proximity to activity supporting businesses such as eating establishments and a medium-high level of pedestrian movement. Whereas space STG 6 was away from eating establishments and had low levels of activity. As a result, observations showed that even with similar physical and design characteristics, not all seating (locations) on the footpath were equally used for seated activities. The ability to see people and their activities is also an important factor that determines the seating spaces that people occupy.

| Name of Space                                   | Space STG 1         | Space STG 2      | Space STG 6             | Space STG 10  | Space STG 13     |
|---|---------------------|------------------|-------------------------|---------------|------------------|
| Design attributes                               |                     |                  |                         |               |                  |
| Footpath width                                  | 4-5 m               | 3-4 m            | 3-4 m                   | 3-4 m         | 3-4 m            |
| Distance from traffic by space behind the bench | yes                 | No               | yes                     | yes           | No               |
| Trees   | yes                 | No               | Yes                     | yes           | No               |
| Type of business                                | Services/facilities | Food             | Clothing shop/permeable | Food/services | Food/services    |
| Level of activities on the footpath             | Medium-high         | High             | Low                     | Medium-high   | Medium-high      |
| Number of seats                                 | 2                   | 1                | 2                       | 2             | 1                |
| Seating arrangement type                        | Type 1              | Individual bench | Type 1                  | Type 1        | Individual bench |
| Shadow  | no                  | no               | no                      | no            | no               |

Table 5-23: Physical, social and land-use characteristics of spaces with public seating on Zone “C”

Spaces STG 2, and STG 13 have similar characteristics in terms of their footpath width in front, their position and orientation on the footpath (they both back onto the traffic without any distance or landscape). They are both close to eating establishments and have a high level of activity and pedestrian traffic. Both of these spaces were well occupied during the observation period.

The behavioural mapping indicates that space STG 7 (the community centre bench) was rarely used during the observation period. Similar to space STG 6, space STG 7 also had low levels of activity. Observations show that a significant number of activities occurred in space STG 8 (outside the barber shop). Many people sat or stood in a queue outside the barber shop waiting for their turn for a low-cost haircut. Meanwhile, they spoke with each other. Small shops with activities inside and limited interior spaces are able to retain people and increase social activities on the adjacent footpaths. Space STG 11 had the most

frequently occupied bench (38 person observed) among all street benches. The current bench was located in zone “A” and exposed to medium-high levels of activities.

| Name of Space                              | Space STG7       | Space STG8       | Space STG11      |
|--|------------------|------------------|------------------|
| <b>Design attributes</b>                   |                  |                  |                  |
| <b>Footpath width</b>                      | 4-5 m            | 7-8 m            | 3-4m             |
| <b>Distance from traffic</b>               | yes              | yes              | yes              |
| <b>Trees</b>                               | yes              | yes              | no               |
| <b>Type of business</b>                    | Community centre | Services         | Services         |
| <b>Level of activities on the footpath</b> | Low              | Low              | Medium           |
| <b>Number of seats</b>                     | 1                | 1                | 1                |
| <b>Seating arrangement type</b>            | Individual bench | Individual bench | Individual bench |
| <b>Shadow</b>                              | Yes/no           | yes              | yes              |

**Table 5-24: Physical, social and land-use characteristics of spaces with public seating on Zone “A”**

Activity patterns demonstrate that in St George Street, public seating in the street is mostly being occupied by Māori/Pacific Islanders and Asians rather than Europeans. The open-ended surveys also show the importance of seating provision for these cultures. On the other hand, Europeans commented the least on the design attributes of the street and seating. Europeans seemed to be restrained in their use of street benches for their social and recreational activities compared to other cultures. It is likely that the street is perceived as a shopping space and only for essential activities by Europeans rather than a place for leisure/social activities.

Observations show that Māori/Pacific Islanders and Asians have different preferences for seating locations on St George Street. Māori/Pacific Islanders usually sat on seating close to establishments that offered goods that could be consumed outside the stores which usually did not provide enough space for sitting inside (figure 5-52). Asians acted in the opposite manner and chose to sit on benches that were not close to eating premises (figure 5-53). This could be further explained through analysis of the answers in interviews as due to a cultural difference between the two groups: while Pacific Islanders have cultural connections with food in the use of public spaces, Asians prefer to eat indoors.



Figure 5-52: Placing street benches near some activities such as takeaways and bakeries increases the static and social activities of Pacific Islanders. Source: author, 2013

The use of public benches by different ethnic groups and genders is sometimes influenced by adjacent businesses. In addition to the preferred locations of different ethnic groups, observations showed that benches were mostly used and frequented by the specific gender that was being served by the nearby businesses (women’s hair salons or men’s hairdressers).

The ways that public seating was occupied by Asians (Indians) sometimes led members of other ethnic backgrounds to make comments about the public seating, claiming that there were not enough seating spaces. A European female participant also mentioned that she did not feel right to sit on the public benches next to the takeaways without purchasing an item. Covert territory exists among the participants’ use of public benches. *“Ownership, access and control are all of key importance in analysing public space. ... What is publicly owned may still have restricted access and what is privately owned may have unrestricted access”* (Franck & Paxon, 1989, p. 123).



Figure 5-53: Space STG1 usually occupied by Indian Sikh older male users. Source: author, 2013

Observations did not necessarily support prospect and refuge theory. On the other hand, the number of seated activities seemed more closely related to activities and businesses. Observations showed that in general, seating spaces that were near supporting stores and businesses with medium to high levels of activities on footpaths were used more often.

Benches were more frequently used for solitary and smaller group activities on St George Street and the environment did not support the seated activities of larger groups. Since there was a lack of space on footpaths, the furniture did not accommodate the groups with more members unless benches were located beside each other with the same orientation towards the footpath. Participants emphasised the importance of the seating arrangements that can accommodate cultural activities of larger groups. A Māori participant stated that;

*“Definitely [Māori need] bigger seating, Māori families are usually very large. It’s not really a friendly place to take a seat here [St George Street] with a large group.”*

This also might be the reason Māori/Pacific Islanders did not visit the street in larger groups. Spatial analysis of the behavioural maps showed that an increase in the number of benches (grouping benches together) on footpath spaces did not necessarily raise the frequency of sedentary activities. A comparison between spaces showed that spaces STG 2 and STG13 with an individual bench were more often occupied than space STG 6 with two benches. It seemed that their use is also greatly influenced by activity levels.

Participants commented on the relation of seating to rubbish bins and to trees. A Māori participant explained locating disposal bins next to seating might lead to underuse by Māori. This could also be linked to the cultural practices of Māori users. Bird droppings occurred when a bench seat was under a tree. Smoking on public benches was mentioned as an activity that discouraged the non-smoking public from using public benches for different activities.

St George Street does not provide many commercial chairs and tables. To add commercial seating and tables around food establishments was among the recommendations. Participants explained their need for table and commercial seating in relation to premises that they visit every so often, such as cafés or bakeries.

Observations did not identify any relationship between footpath width and number of static activities. However, the width of the footpath was the main design concern after the need for more seating. Footpath width was mentioned by participants of various cultures, especially the Māori where 5 out of 6 recommended that the footpaths become wider along St George Street. This could be related to the size of Māori groups. The congregation of

large groups on footpaths affected ease of movement for pedestrians and was a matter of concern among participants. The width of the footpath did not allow non-linear types of seating arrangements in most lengths of the street. Adding to the current footpath width would enable the placement of other types of seating arrangements.

The issues of thermal/environmental comfort were raised mainly by Pacific Islanders. Participants explained they liked to sit in the open area of the shopping mall as it was shaded and sunny at the same time. Others mentioned they liked the court because of the trees without referring to its environmental comfort characteristics. Asians mostly referred to the uncovered seating on the footpaths that made them unusable during wet and rainy hours.

Observations did not find a specific relationship between numbers of users of public benches with the placement of landscape behind them. However, parks and landscaping were an important design factor for the leisure and social activities of participants of various ethnic groups. An Asian (Indian) participant stated that;

*“Indian people like trees, they like to sit under a tree, and this represents our culture.”*

While participants made references to the trees of the shopping mall court and the park, none of the participants ever referred to the trees lining the street. This could be related to the fact that greenery and vegetation do not have a major presence in St George Street; the trees are not big in size and do not provide much shade and environmental comfort to seating areas. Landscape was also a feature that was mentioned as a cultural enhancement for the street by Māori and Asians. Māori emphasised the importance of native trees for Māori.

When participants were queried on the type of shop displays they preferred on St George Street, Pacific Islanders mostly associated their preference for Asian flat-rate shops as a matter of affordability and cheapness, but some also related their preference to the colourful items displayed in these types of shops and described them as bright, colourful and welcoming;

*“I’ll say all of these Chinese shops; they are a kind of colourful, what attracts me is all the colours, good for families and little kids.”*

One Pacific Islander associated the creamy colour of the walls and buildings on the street as “dead” and “lifeless”. When a Pacific Island female participant was asked about what to add to attract her own ethnic group to the street environment, she emphasised that:

*“We need more colour; I hate plain boring buildings, and it starts to look like a train station”.*

This indicated the importance of colour for the Pacific Island culture. However, the requirement for a colourful environment was not just limited to Pacific Islanders, Asian participants also complained about the dull and non-attractive colours used in the shop frontages along the street. A number of Indians (2 out of 8=25%) stated the shops and their frontages needs to be more flashy, showy and attractive and to have more decorations in order to become impressive for Indians.

Among various design attributes, public art found greater importance for cultural representation among different ethnic groups, especially for Māori. Public art is constituted of cultural elements and symbols, signage and decoration. 4 out of 6 Māori (66%) referred to public art as Māori art, carvings, murals and signage and language as design elements that could increase Māori representation on the street. Similar to Riddiford Street, in St George St also, Māori participants clarified that the use of Māori carvings and art in public areas should be done with caution. The recommendations for public art and symbols were not just limited to Māori; other ethnic cultures also referred to cultural symbols as elements that would help the street to become more welcoming.

Māori were the only group that mentioned their culture could be represented through the history of Papatoetoe and St George Street. The history of the area was seen as a key provider of local identity for Māori. Interviews revealed that Māori have a stronger relationship with the land itself than other cultural groups. Although some Māori believed that their culture was not represented by the businesses and design of the footpaths, other Māori thought that Māori culture was already meaningfully identified in the naming of Papatoetoe.

### **5.2.6 Management Issues**

Traffic was something that people did not like about the street environment and this made them not want to use footpaths for social/recreational activities. This had been an issue for all cultures except for European people, the least users of footpaths. Safety was related to road traffic and was a matter of concern especially among Māori and Pacific Islanders that often visited the street with children. This might explain why many participants especially families with children preferred to use footpaths less for leisure or social activities. Other safety related issues were the existence of gang groups, a number of

liquor shops on the street (which brought inebriated behaviour to the street during the day and the night) and a number of robberies. These issues were more of a concern among Māori and Asians.

Disliked activities mainly included the beggars in the area asking for money and smoking on public benches.

The issue of maintenance and modernisation seemed to have a greater importance among Pacific Islanders where it was raised by 5 out of 7 = 72%. Painting, modernisation/renovation and beautification of the environment were the key concerns of Pacific Islanders and Māori. Asians, on the other hand, mainly focused on the cleanness of the footpaths rather than issues of modernisation. Users expressed concerns over maintenance, with factors such as litter, birds' droppings and chewing gum remnants.

Social functions and activities were in great demand among participants of St George Street, finding importance after land-use activities. Social functions found more significance compared to design attributes and maintenance. Many participants focused on the idea that adding different types of activities could add to the levels of liveliness on the street. This was further relevant in the opinion of some business owners, stressing social functions and "*the design of the streets would not necessarily attract people (here)*".

Participants would like to add activities for children, weekly markets and performers. Participants' requirements for some activities could also be somehow related to their experiences of some different activities (market, performers) in the past which have ceased to exist. Participants clearly demonstrated strong associations between those types of functions and the vibrancy of the area in the in the prior years. Participants of various backgrounds also referred to the previously held market as a community place that had an important role for attracting different ethnic groups to the space.

Māori, Pacific Islanders and Asians mentioned performers playing cultural music as activities that could take place on St George Street and would attract people from their culture to the street. Participants mentioned that they would like to have a variety of performers/music from both their culture and other cultures.

Animation of the place and programming for festivals and events could help to create a dynamic multi-cultural space as indicated through the interviews. Participants did not just consider the street as a commercial space, but also as a space that can serve different ceremonies and cultural events. Participants, especially Asians (5 out of 8 = 62.5%) and

Pacific Islanders (2 out of 7= 28.5%) considered cultural ceremonies and events as ways in which their culture could be represented on the street. Diwali, dancing festivals and Māori cultural events were among their recommendations.

Asians were the only group that mentioned late opening hours of the takeaways as what they liked in St George Street. Among their recommendations was to keep the late-opening hours of current businesses and add to the opening hours of others.

### 5.2.7 Summary

St George Street lacks the diversity in business assortment compared to Riddiford Street. This led interviewees to make more negative comments and recommendations on business activities in order to gain the required diversity, rather than making comments on design attributes of the footpaths. Referring to design attributes; they rarely made comments on footpaths, and they preferred the shopping mall court for their social and leisure activities. However, observations indicated that specific locations on the street were frequented for static and social activities.

The most important characteristics that supported lingering and stationary activities on St George Street were those related to land-use activities and businesses. Analysis of the behavioural mappings shows that different activities have the potential to create lively frontages at different times of the day. Two types of business activities along St George Street created the greatest number of static activities; those that extended their goods onto footpath spaces, and small private shops which created lingering through the nature of the business; for example, hair salons or takeaways. The permeability of storefronts together with the degree of personalisation of store-fronts, in terms of decoration and changing signs, were important aspects of the street which affected stationary and social activities in order to support liveliness. These aspects were second only to those stores that extended their store to the footpath space in this regard. Little interaction was observed in relation to blank or monotonous walls and windows of many services and public and community buildings where one could not see through them.

The findings in this case confirm previous findings; locating public seating near to activity supporting businesses is the most crucial factor for ensuring their use. The importance of business activities outranked different attributes such as location and orientation of benches (prospect and refuge), landscaping and footpath width. The number of benches located in zones “A” and “C” were not equally distributed in relation to

businesses along St George Street in order to test prospect and refuge theory. However, businesses and level of activities they generate seem to have a greater importance to levels of use than prospect and refuge. Observations did not reveal any significant correlation between footpath width, landscaping and levels of activity on St George Street. However, increasing the width of the narrow footpaths and adding trees and landscape were among the key recommendations for creating a supportive environment for participants' leisure/social activities.

Europeans were seen in smaller numbers on St George Street than other cultural groups. The Europeans were mostly middle-age and older; no European children or teenagers were seen on the street during the observation period (this might relate to gentrification). Unlike other groups, most Europeans came to the street individually and visited the street in smaller family/friend groups.

This may suggest that most Europeans do not perceive St George Street as a place for social activities. On the other hand, it is more likely to be a place for necessary activities. European activities are mainly related to daily services such as fruit shops, the bus stop, and the corridor leading to the mall and the supermarket. Most European participants also stated they mainly came to the street for daily shopping and necessary activities, referring to the affordability of the businesses. There were a very small number of fashion/household item shops that attracted interest among Europeans. On the other hand, many commented negatively on the low quality of the flat-rate shops and their frontage management. None of the food establishments along the street generated interest among Europeans, and not many static activities were recorded in relation to them. However, they mentioned the importance of cafés for their communal activities. The lack of such places might further explain the lack of social activities among Europeans on St George Street. Compared to other ethnic cultures, Europeans did not refer to atmosphere as an aspect of the street that they liked. They understood the social structure of the businesses to be Asian. Also, they did not make any comments on the design attributes of the street or the traffic. According to Jan Gehl (1987), optional activities are largely dependent on the physical qualities of an urban environment. The type of businesses lining the street, a lack of cafés and other upscale eating establishments, the social structure of the businesses, and the perceived quality of the shops could be some reasons why the area is less frequented by Europeans. St George Street is not considered a social space or a place for optional activities by them.

Māori/Pacific Islanders were mainly observed in groups rather than individually on St George Street. Their communal activities outnumbered individuals in all main types of activities; standing, window shopping and being seated. They were observed in both smaller and larger sized groups, but there was a maximum of 5-6 people in their groups on St George Street. The age of those observed was mainly constituted of adults and children. Māori/Pacific Islanders were observed on most locations along the study length. Their activities were observed in relation to services, fashion and household item shops and food establishments. The overall affordability of the businesses assortment seems to attract these groups to different locations of the street. Along with Asians, this group frequented public benches more often.

The location of seating close to eating establishments was found to be critical in the lingering and social activities of the Māori/Pacific Islanders. A considerable percentage of social interaction among Māori/Pacific Islanders was associated with eating/drinking. Eating is considered an important aspect of socialising among Pacific Islanders and is part of their culture. Social activities of Māori/Pacific Islanders were often associated with takeaways and bakeries, and the majority of their social activities occurred on benches in close approximate distance of these businesses. Also, many other seated activities took place on the benches outside the barber shops/beauty salons.

While all different groups stated the importance of landscape, trees and park for the leisure and social activities of their ethnic groups, Māori were the only group who stressed native landscapes. Making the built environment more colourful, however, seems to be one of the concerns of Pacific Islanders.

Asians were mainly observed in groups rather than individually on St George Street. The number of groups also outnumbered individuals in all main types of activities; standing, window shopping and being seated. Similar to Māori/Pacific Islanders, Asians were also observed in most locations along the study length; the fruit shops, the Asian affordable shops, liquor shops, and barbers. Different services, Asian flat-rate shops and ethnic food establishments, attracted greater numbers of Asians to the footpaths. Asian sitting and gathering locations were very clearly delineated in the observation period; their locations for static/social activities were in active sections of the street but distanced from eating premises. Their socialising on footpaths did not include food consumption.

Data suggests that in Asian and Māori/Pacific Islander cultures, integration of leisure/social activities with the extended family groups or peer groups contrasted strikingly

with the European culture. However, the amount of furniture (seating) and its arrangement did not support the social activities of larger groups.

Observations showed a difference in the patterns of occupancy of public benches among genders of different cultures. While a considerable number of Asian male users sat on public benches along the street, only a small number of Asian females were recorded seated. This might relate to the differences of labour divisions among genders of these cultures. Asian women might still traditionally carry a greater responsibility for household tasks and their use of public space might not be culturally appropriate. On the other hand, Asian female users were more involved in window shopping activities than male users (this is consistent among all studied cultures). Shopping is an activity that may be perceived by women in public spaces as a part of their household responsibilities (Franck & Paxon, 1989). However, due to these domestic responsibilities, they are more likely to have less leisure time to spend in public spaces (Cavanagh, 1998; Franck & Paxon, 1989). Another reason that might cause women to frequent streets as public spaces less often compared to men, is that they are usually accompanied by small children. This makes the use of streets as public spaces more difficult due to safety issues. However, these issues are not generalisable among other cultures as public benches were equally occupied by both genders of Māori/Pacific Islander ethnic groups.

## 5.3 Great South Road, Otahuhu

### 5.3.1 Introduction

Great South Road is a popular shopping destination in the Otahuhu neighbourhood of South Auckland. Observations on Great South Road took place in April 2013 between High Street and Princes Street on one kerbside and Park Avenue and Ings Asian Food Warehouse on the other kerbside (figure 5-54). The street runs along a north-west south-east direction. It is a place of ethnic commerce, with the majority of premises operated by Asians (Chinese, Indians/ Fijian Indians) and is well-known for its low-priced goods. The shopping strip is highly frequented by the Polynesian population and thus it is famous as a Polynesian shopping district (ethnic strip). It is an enlivened street overflowing with people and activities. Business agglomeration of the street targets ethnic populations such as Pacific Islanders and Asians (Indians).



Figure 5-54: Map showing the studied blocks on Great South Road in Otahuhu neighbourhood

The footpaths are used as an extension of many of the shop interiors (figure 5-55). The number of shops spilling their merchandise onto the footpaths is greater in Otahuhu than in the other two cases and the volume of products outside on the street presents a chaotic arrangement. There are no clear boundaries between many of the adjacent businesses and it is hard to see the façade of the buildings and party walls that separate one shop from the

other. Clothes, bags, blankets, artificial flowers (including lei or garlands) are all hung out outside the shops from the awnings. The prices and sale items are marked on the products. The customers experience the products and evaluate the prices on the footpaths without the need to go inside the stores. The arrangement of the products makes for a complex visual character. Culture here is not displayed by the architectural characteristics and forms of the buildings or façades. Instead, it is represented in the non-fixed elements of the street such as signs, window displays or the goods expanded on the footpaths as well as the sensory qualities of the street such as smells from cultural food (Pacific Island food) or music.



Figure 5-55: Footpaths are used as an extension of many of the shop interiors in Great South Road. Source: author, 2013

Many premises advertise themselves with bold signboard displays such as “Island Fashion”, “Polynesian Fashion”, “Island Groceries”, “Extra-large sizes” and “Extra Wide Fittings”. While walking in front of the sari shop, one is able to get an essence of India by looking at different colourful sari dresses and listening to Indian music. In contrast to Chinatown described by Fernando (2007), most names and prices are not described in ethnic language and most are in English. Although most of the signboards here are in English, some commercial activities contain ethnic names represented in English for example; an Indian shop named *Roop Ki Rani*. A few number of businesses have bilingual signage, both in English and an ethnic language.

### 5.3.2 Activity Observations and Interviews

The observations recorded 2554 people engaged in some stationary activity in Great South Road, Otahuhu. 144 of 2554 mapped behaviours included the shopkeepers and salesmen (141), and a very small number of vendors (2) and performers (1). The majority of the businessmen and sales persons in Otahuhu were Asians (Chinese and Indians, including Fijian Indians). The author did not witness any beggars in this case study. There were fewer performers than in Riddiford Street playing music; only one was observed during the entire

observation period. Rather, there were loudspeakers along the street that played music that added to the vibrant atmosphere of the Street.

The other 2410 were people engaged in different types of static or stationary activities in observation periods. 1801 out of 2410 observing other people (74.7%) were Māori/Pacific Islanders compared to 609 (25.3%) of other ethnic backgrounds. Following a similar methodology, Māori and Pacific Islanders were grouped together, however, observations and interviews revealed most users to be Pacific Islanders. Asians (476) and Europeans (121) were recorded in relatively smaller numbers compared to Māori/Pacific Islanders. Also, as described in the methodology another group of others was taken into account where 12 people were recorded under this group.

Figure 5-5-56 shows that the proportions of different ethnic cultures engaged in different types of static activities does not relate to the ethnic population distribution of Mangere-Otahuhu. The street attracts higher proportions of Asians and lower percentages of Europeans.

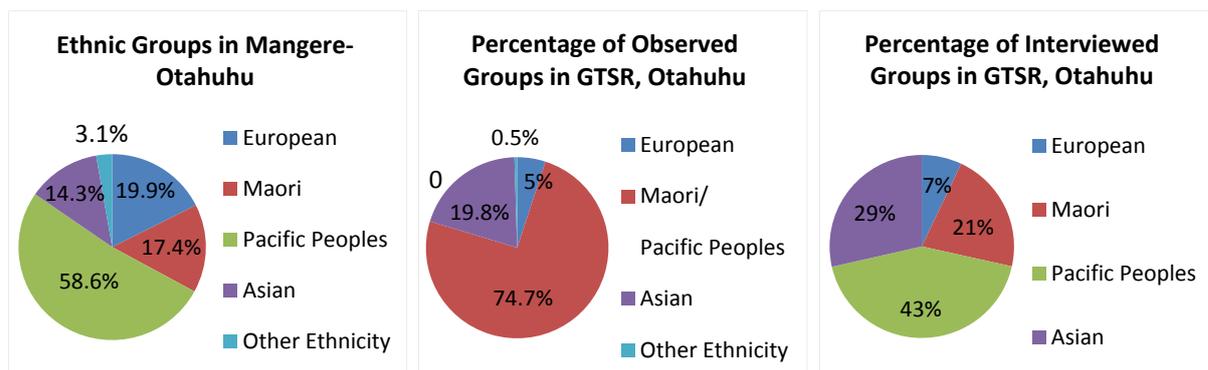
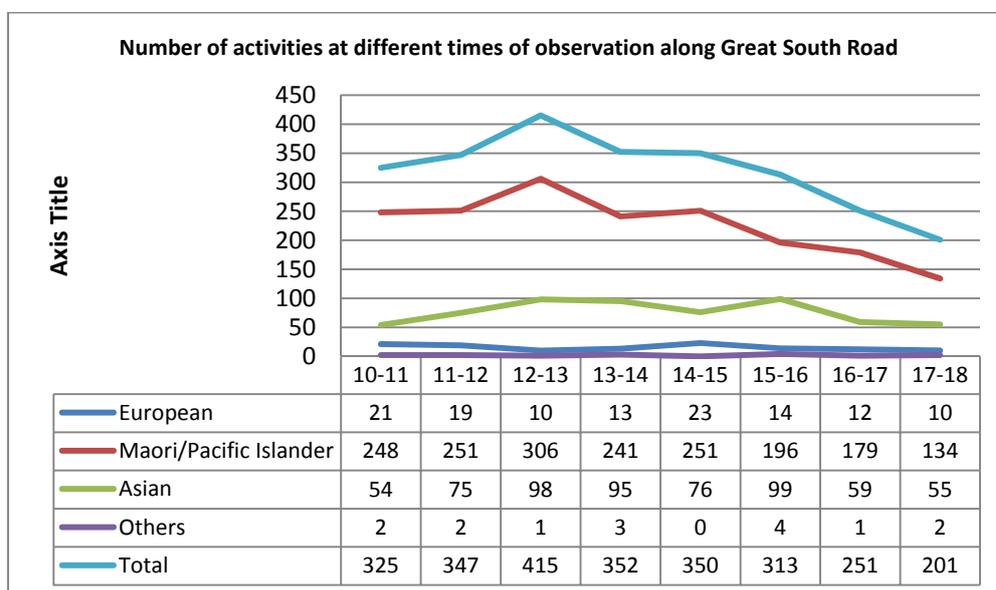


Figure 5-56: A comparison of the percentages of ethnic cultures living in the area, with those of each culture observed and interviewed. The demographics of Mangere-Otahuhu are based on Statistics New Zealand, 2006

Observations in Great South Road show that Europeans were less represented in the social structure of the street environment and less used the street environment for leisure and social activities. Therefore, fewer numbers of Europeans were interviewed than was expected from the demographic population ratio of Mangere-Otahuhu. In contrast, the street was extensively used by Pacific Islanders that gave the researcher the opportunity to interview a considerable number of Pacific Islanders compared to other cultural backgrounds. In total, 28 people, comprising 2 Europeans, 6 Māori, 12 Pacific Islanders and 8 Asians, were interviewed.

The number of users of the street increases and reaches a peak between 12 pm to 1 pm. The number of users then sharply decreases after 1 pm and stays almost consistent between

1 pm to 3 pm. The number of people involved in different types of static activities gradually decreases after 3 pm and reaches its minimum between 5 to 6 pm when most premises close (table 5-25).



**Table 5-25: Number of static activities at different times of observation along Great South Road**

Close to 10% of street users involved in any type of static activity appeared to be over 65 years of age; 10.5% were children, 5.4% were adolescents, and nearly 78.3% were adults. Adults were seen in proportionately greater numbers, and teenagers were seen the least. In addition, the numbers of female users engaged in different types of static activities outnumbered male users (table 5-26). While the number of male and female users is almost balanced within European and Asian groups, the numbers of females significantly outnumbers male users in the Māori/Pacific Islanders. In general, adult females, adult males and children constituted the greatest numbers of recorded observations.

| Age group              | Adult male | Adult female | Older adult male | Older adult female | Teenager male | Teenager female | Child | Total |
|------------------------|------------|--------------|------------------|--------------------|---------------|-----------------|-------|-------|
| Cultural Background    |            |              |                  |                    |               |                 |       |       |
| European               | 38         | 35           | 23               | 18                 | 1             | 3               | 4     | 122   |
| Pacific Islander/Māori | 502        | 894          | 60               | 41                 | 61            | 38              | 210   | 1806  |
| Asian                  | 220        | 296          | 14               | 11                 | 6             | 11              | 53    | 611   |
| Other                  | 5          | 9            | 0                | 0                  | 0             | 0               | 1     | 15    |
| Total                  | 765        | 1234         | 97               | 70                 | 68            | 52              | 268   | 2554  |
| percentage             | 30%        | 48.3%        | 3.8%             | 2.7%               | 2.7%          | 2%              | 10.5% | 100%  |

**Table 5-26: Number of different age groups and genders along Great South Road**

Most users came to the street with friends/family members and were usually encountered in groups rather than alone. From the 2554 mapped behaviours, 739 (28.9%) were engaged in individual stationary activities, while 1815 (71.1%) others were engaged in

different types of social activities. This was constant among the people of different cultures. Number of individual persons of European cultural background were of a greater proportion compared to other groups where the numbers in groups significantly outnumbered individuals (table 5-27).

| Cultural background    | Individual |            | Group |            | Total |            |
|------------------------|------------|------------|-------|------------|-------|------------|
|                        | Count      | Percentage | Count | Percentage | Count | Percentage |
| European               | 54         | 44.6%      | 67    | 55.4%      | 121   | 100%       |
| Pacific Islander/Māori | 470        | 26%        | 1331  | 74%        | 1801  | 100%       |
| Asian                  | 127        | 26.7%      | 349   | 73.3%      | 476   | 100%       |
| Other                  | 3          | 25%        | 9     | 75%        | 12    | 100%       |

Table 5-27: Number and Percentage of different cultures observed on Great South Road, Otahuhu, both individually and in groups

The group size seen most often was two persons (428) followed by three (163), four (65) and five (22). Fewer groups had six (6), seven (3), eight (2) and nine (3) persons in the group. As figure 5-57 shows a considerable number of activities takes place in groups of four and larger. Of Europeans, social interactions constituted mainly groups of two and only a few number of groups with three or four members were recorded. Groups of five were only recorded among Māori/Pacific Islanders and Asians.

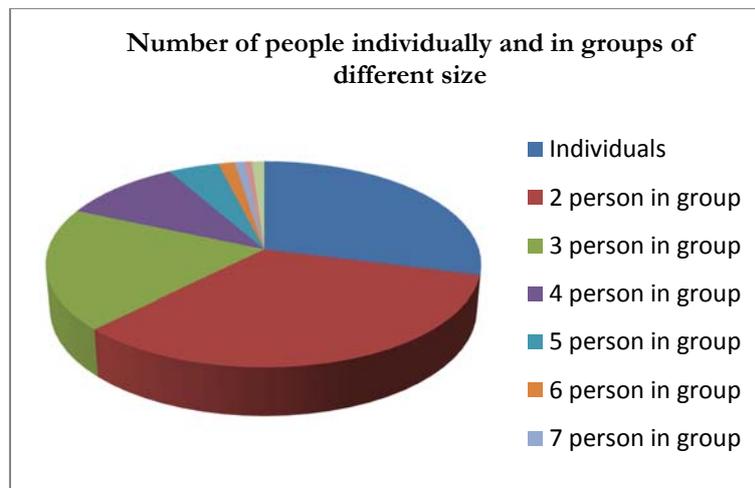


Figure 5-57: Group sizes in Great South Road

The most common type of association among the group size of two is the male-female and the female-female association, followed by groups constituted of two males and groups of one female and a child. The social structure of the groups of three is mostly constituted of two females and one male (20%) and three females (20%) followed by groups of male-female-child (15%), 2 females and one child and 2 males and one female (12% each). Most groups were gender-mixed.

Most of the groups of four comprised 2 males and 2 females, followed by 3 females and one child; 2 male, one female and one child; 4 females; and one male and 3 females. The social structure of the groups of five is mostly constituted of 2 males and 3 females followed by 3 female and 2 children. The only single gendered group was a group of female Indians window shopping together. Most groups of six and more members were gender mixed and the number of women outnumbered men (figure 5-58). All of these groups had children in their social structure. Children constituted an important feature of social structure of groups in Great South Road.



**Figure 5-58: Females and children constituted a significant part of social structure of Pacific Islander groups with 6 and more number of members. Source: author, 2013**

Interviews revealed many of the bigger sized groups to be Pacific Islanders. A Pacific Islander participant stated:

*“Our groups are big, we have bigger cars, we have families where we all meet up together and then we start walking together”.*

On the other hand, Māori participants stated that their groups are smaller than Pacific Islanders at around 5-6 people in a group. It appears that Asian (Indian) groups are constituted of even smaller numbers and usually groups of 3-4 people visit the street for leisure activities.

Most interaction took place within the same ethnic groups rather than between groups and was consistent among different group sizes. A small number of social interactions occurred between business and sales persons themselves (Indian and Chinese) or with people

shopping and window shopping on footpaths (mostly Asian-Māori/Pacific Islander). While most Europeans were observed individually or in groups of two, a few groups comprising of three and four members comprising of European were also recorded. Many of these groups were a mix of Māori/Pacific Islanders and European and only a few were comprised of European only members.

### 5.3.3 Recorded Poses and Activities

Figure 5-59 shows different type of postures and activities observed on the street. A breakdown of the stationary activities indicates that 1984 people were standing and 541 sitting while 27 were leaning and 2 lying. A considerable number of people with a standing pose were window shopping/sign reading (882). The most common activity done in conjunction with these activities was talking, followed by eating or drinking. Smoking, mobile using, and playing were recorded in smaller numbers. The higher number of playing activities in Great South Road is related to the considerable number of children here compared to other case studies. Also, small numbers of people reading/writing, vending and performing were also observed.

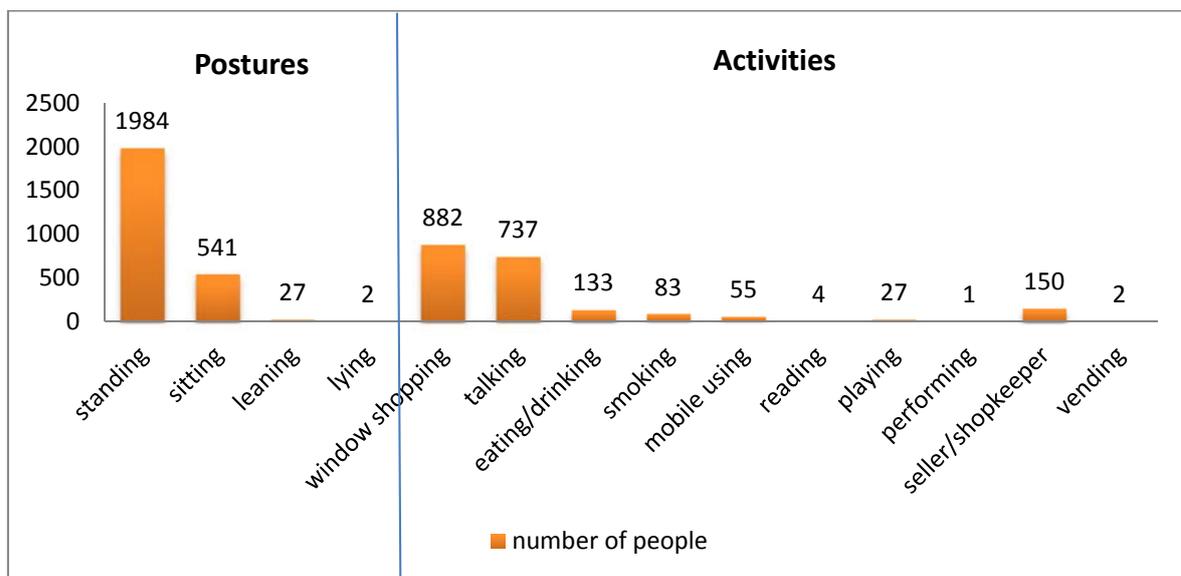
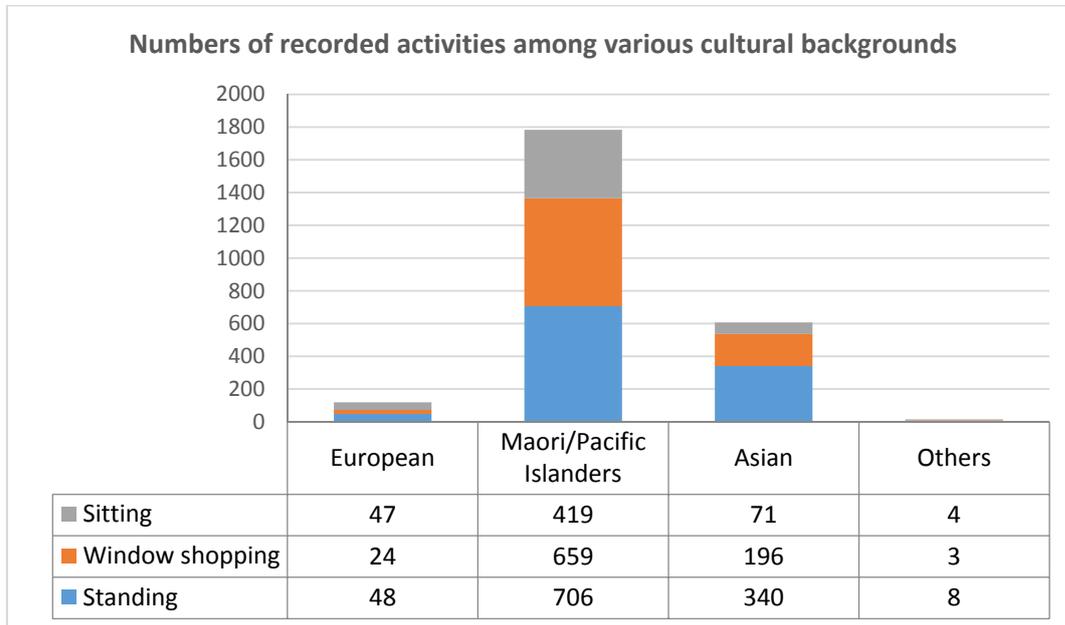


Figure 5-59: Number of people observed in different type of activities within Great South Road

5.8% of the activities on Great South Road involved shopkeepers and sales persons on the footpaths. Their interaction with the customers in front of premises with open shop frontages increased the vitality and liveliness of the street environment.

Differences were observed between the proportions of different cultures in standing versus sitting postures; table 5-28 shows that higher proportions of European sat rather than

stood compared to other cultures. On the other hand, Asians had the smallest proportions of those seated rather than standing/window shopping compared to other ethnic groups. Maori/Pacific Islanders were involved in all main activity types in considerable numbers.



**Table 5-28: Differences between the proportions of different cultures involved in standing, window shopping and seated activities**

More people were recorded standing in groups than as individuals. 806 out of total 1102 standing activities in Great South Road took place in groups whereas only 296 stood by themselves. A considerable number of people standing did not join in any other activities (529). Using mobile phones and smoking while standing was done more by individuals than those in groups; on the other hand, standing, eating/drinking and playing happened more frequently in groups rather than individually. Smoking in groups while socialising was also recorded in frequent numbers. Observations show that standing activities occurred both in Zone “C” and Zone “B” of the footpath environment. Zone “C” is adjacent to the road and parked vehicles. Zone “B” is primarily for pedestrian movement and is the space between Zone “A” and Zone “C”. For more details on different zones refer to section 6.3.4.

Window-shopping was the most frequent activity after standing on Great South Road. In total, 882 people were involved in window shopping. From these 882 mapped behaviours, 225 were window shopping individually, whereas 657 were mapped in groups (table 5-29). Window shopping on Great South Road is more common among adult females followed by adult males. The number of females was three times more than the number of males window shopping. Compared to the other case studies, a greater number of children were recorded while window shopping with their families.

Table 5-29 shows differences in the window shopping activities of cultural groups; the number of Pacific Islanders and Asians recorded while window shopping in groups outnumbers those window shopping alone. On the other hand, more Europeans were observed window shopping individually than in groups

| Activity        | Cultural Background | E/I | E/G | MP/I | MP/G | A/I | A/G | O/I | O/G | Total/I | Total/G |
|-----------------|---------------------|-----|-----|------|------|-----|-----|-----|-----|---------|---------|
| Window shopping |                     | 14  | 10  | 172  | 487  | 38  | 158 | 1   | 2   | 225     | 657     |
| Total           |                     | 24  |     | 659  |      | 196 |     | 3   |     | 882     |         |

Table 5-29: Different type of activities among different cultures while window shopping, both individual and in groups

Window shopping mostly occurred in groups of up to five persons per group. Many of these groups also were part of bigger groups and while some members sat on the benches, others window shopped.

Sitting was the most frequent activity after window shopping. Recorded observations indicate that most sitting activities occurred on public and private benches and ledges and other physical artefacts along the study length.

Māori/Pacific Islanders occupied sitting spaces more frequently than other ethnic cultures. The majority of the people sitting were adult females and males, followed by older adult males, older adult females and children. The number of adult females outnumbers the number of adult males involved in seated activities among Māori/Pacific Islanders. On the other hand, the number of female users sitting is less than the number of male users in European and Asian cultures (table 5-30).

| Age group              | Adult male | Adult female | Older adult male | Older adult female | Teenager male | Teenager female | Child | Total |
|------------------------|------------|--------------|------------------|--------------------|---------------|-----------------|-------|-------|
| Cultural Background    |            |              |                  |                    |               |                 |       |       |
| European               | 14         | 6            | 17               | 9                  | 0             | 0               | 1     | 47    |
| Pacific Islander/Māori | 146        | 173          | 30               | 19                 | 18            | 9               | 24    | 419   |
| Asian                  | 29         | 22           | 8                | 6                  | 1             | 0               | 5     | 71    |
| Other                  | 2          | 2            | 0                | 0                  | 0             | 0               | 0     | 4     |
| Total                  | 191        | 203          | 55               | 34                 | 19            | 9               | 30    | 541   |
| percentage             | 35.3%      | 37.5%        | 10.2%            | 6.3%               | 3.5%          | 1.7%            | 5.5%  | 100%  |

Table 5-30: Seated Activity among people with different cultural background, age and gender

Table 5-31 shows that in total, more seated activities took place in groups than individually. The most common activity observed while seated was talking. Most people sat and watched other people by themselves rather than in groups. On the other hand, a considerable number of eating activities occurred in groups rather than individually. Sitting and eating in groups and socialising was a common activity between Māori/Pacific Islanders, who comprised 86% of all communal eating activities. On the other hand, the difference

between numbers seated and eating individually or in groups were not noticeable in other cultures. Interviews suggest the majority of those eating in groups were Pacific Islanders; according to Pacific Islander participants; *“we eat and meet together, and you cannot meet up and not eat”*. In other words, **social activities and eating are closely related**. Thus, many sat and ate in groups on the footpaths. On the other hand, only a few Asians in groups were recorded involved in eating/drinking activities; and those limited numbers of eating/drinking activities in groups mostly occurred on the commercial seating of the bakery and café. Interviews also disclosed that Asians do not use the footpath spaces to sit together and eat; they walk and talk or socialise while window shopping and sometimes use the benches to just sit to take a rest. Rather, many Asians (Indians) chose indoor spaces of the premises or other public spaces as places for their eating activities. As an Indian participant explained;

*“We move and talk, we just sit to take a rest, we don’t sit on the footpaths to eat, and [instead] we go inside the shops”.*

| Activity                           | Cultural Background | E/I | E/G | MP/I | MP/G | A/I | A/G | O/I | O/G | Total/I | Total/G | Total |
|------------------------------------|---------------------|-----|-----|------|------|-----|-----|-----|-----|---------|---------|-------|
| Sitting/people watching            |                     | 20  | 3   | 88   | 67   | 27  | 9   | 1   | 0   | 136     | 79      | 215   |
| sitting and talking                |                     | 0   | 12  | 0    | 133  | 0   | 17  | 0   | 2   | 0       | 164     | 164   |
| Sitting, talking and eating        |                     | 0   | 3   | 0    | 33   | 0   | 4   | 0   | 0   | 0       | 40      | 40    |
| Sitting, talking and smoking       |                     | 0   | 0   | 0    | 0    | 0   | 9   | 0   | 1   | 0       | 10      | 10    |
| Sitting and eating                 |                     | 5   | 0   | 13   | 35   | 5   | 4   | 0   | 0   | 23      | 39      | 62    |
| Sitting and smoking                |                     | 1   | 2   | 13   | 12   | 0   | 0   | 0   | 0   | 14      | 16      | 30    |
| Sitting and mobile using           |                     | 0   | 0   | 10   | 5    | 3   | 0   | 0   | 0   | 13      | 3       | 16    |
| Sitting and reading/writing        |                     | 1   | 0   | 1    | 0    | 1   | 1   | 0   | 0   | 3       | 1       | 4     |
| Total number of sitting activities |                     | 27  | 20  | 125  | 285  | 36  | 44  | 1   | 3   | 189     | 252     | 541   |

Table 5-31: Number of people of different cultures involved in different types of activities while seated both individually and in groups

Smoking and using mobile phones were also among the common activities while seated but were recorded less frequently compared to talking and eating/drinking. Activities such as reading, mobile texting mostly did not happen in the company of other people but rather individually.

A comparison between different activities happening while seated and standing shows that eating/drinking activities were much more common among those seated compared to standing. Smoking while sitting and standing occurred in relatively similar numbers. Smoking in groups was more popular while seated. Sitting and smoking both individually or in groups

was more common among Māori/Pacific Islanders. Interviews suggest that smoking is part of their social activity.

Businesses and retail activities, the atmosphere of the area, affordability and specific design attributes are the main characteristics that people of various backgrounds enjoyed on Great South Road, based on interview responses (figure 5-60).

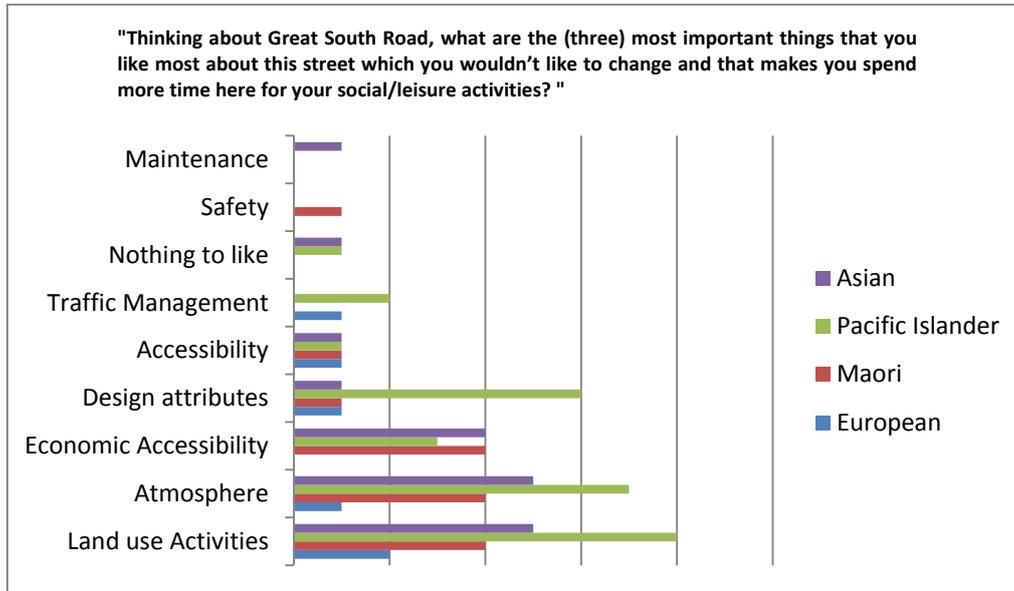


Figure 5-60: “What are the most important things that you like most about this street which you wouldn’t like to change and that makes you spend more time here for your social/leisure activities?” Response to open-ended question.

### 5.3.4 Land-use Activities

Retail activities was the major attraction on Great South Road. Most retail stores in Great South Road contain fashion and household items, many have open shop fronts with many merchandises extended onto the footpaths. 19 out of 28 (68%) participants referred to businesses and land-use activities as what they liked most about the street and what drew them to the street. This was consistent among the four different interviewed cultures (2/2 Europeans, 4/6 Māori, and 8/12 Pacific Islanders and 5/8 Asians mentioned land-use activities). In general, participants had a positive view about the overall retail activities and services on Great South Road.

Among the participants, the diversity of shops and businesses was mentioned by three cultural backgrounds. All Pacific Islanders and Asians that referred to land-use activities mentioned the diversity of shops and businesses as what they liked most about Great South Road. A Pacific Islander participant states that

*“Shops, they are interesting, when you walk pass, you see heaps, you even see baby stuff, and you see clothes, different colours”.*

Keeping the current diversity and even adding more diversity to the businesses activities were among the recommendations of Pacific Islanders, Māori and Asians. Adding more quality shops, chain stores/supermarkets, cafés, restaurants and eating places on the main street were the specific activities mentioned most often. The provision of services such as fish shops, health clinics and night clubs were also mentioned by participants but in limited numbers.

Among various services along Great South Road, fruit shops, finance stores/banks and hairdressers created higher numbers of static activities on the adjacent footpaths comparatively. However, the activities were not equally distributed along different finance stores/banks or hairdressers.

Observations show that near 4.5% of static activities occurred in front of the three fruit shops along the street. These fruit shops extended their territory by displaying fruit and grocery boxes outside the store onto the footpath (figure 5-61). The type of fruit and vegetables displayed could also convey meaning for some cultures. For example; taro is an important staple food for Polynesian people and is displayed extensively in these shop fronts. In contrast with the other case studies that attracted a more diverse range of cultures, here, fruit marts mostly drew Māori/Pacific Islanders and few Asians and no Europeans were observed in front of fruit shops.



**Figure 5-61: Fruit shops attracted a great number of static activities within two cultures: Pacific Islanders and Asians. Source: author, 2013**

Most finance stores/banks created empty frontages. The only exception was the bank with the security guard who often stood and socialised with people on the footpath. Hairdressers that did not provide enough space for their waiting customers created opportunities for static activities on footpaths. These lingering activities sometimes led to social interactions between customers.

Observations indicated that similar to the other two cases, a significant number of static activities (1150) occurred in front of the shops with open displays. Such displays are common in Great South Road. Shop frontage management, however remains the most controversial aspect of the Great South Road street environment. The ways shops spread their merchandise onto the footpaths was a matter of interest to Pacific Islanders and Asians. Pacific Islanders stated the ways in which premises display their merchandise is eye-catching and attractive:

*“These shops that place their stuff out and they have price tags. The way they put their stuff out is always eye-catching for me”.*

On the other hand, the same shop front management seemed to be largely disfavoured by other participants mainly among Europeans and Māori. They often criticised premises for spreading their merchandise onto the footpath which made footpaths look untidy and also impeded pedestrians. The negative comments were not only related to Europeans and Māori; not all Pacific Islanders or Asians had positive views about the open shop frontages and often made recommendations to add more order to the shop fronts.

Observations show that type of merchants that spilled their goods onto the footpath spaces were not only an attraction for adults but also for children. Children interacted with the open shop frontages which expanded their merchandise onto the footpaths. Some placed toys and items attractive for children on the floor or at the level of children’s height. Children found the opportunity to touch and play with these items while parents were shopping (figure 5-62).



**Figure 5-62: Children also interacted with the shop fronts by walking close to it; touching and playing with different toys. Source: author, 2013**

There were also a small number of shops with window displays (around 11 premises) that also created static activities, however, the number of activities compared to the length of the premises with window displays were comparatively insignificant compared to shops with open displays.

It was not the intent of this study to quantify and analyse different types of merchandise offered by various premises along the streets. Nevertheless, general observations and mapping of the behaviours suggest that merchandise and cultural products often target different ethnic groups (figure 5-64). However, it is hard to define specific boundaries between specific cultural shops and customers of various culture; analysis of observations show that although Indian jewellery shops and the sari store attracted both Māori/Pacific Islanders and Asian (Indians), greater numbers of Asian activities were recorded on the footpaths in front of them.

The importance of culture related premises was further supported by interviews where Pacific Islanders and Asians stated the ways in which different cultural premises respond to their needs as what they liked most about Great South Road. A Tongan participant states that the diversity of retail activities accommodates their cultural needs;

*“The diversity of shops caters to my culture more than anywhere else (in New Zealand). We can buy Tongan stuff and clothes here, were we cannot find anywhere else or in the mall”.*

100% of Asians stated the importance of cultural shops including Indian clothing and sari and jewellery shops, Indian restaurants and sweet shops as places for their ethnic group social activities. For Islanders, the existence of Island shops seem to have less importance compared to Asians (Indian) where (3 out of 11) stated the importance of ethnic shops and

eating place for their culture (figure 5-63). There were a considerable number of Asian restaurants on Great South Road, yet Asian participants would like to add to this range.

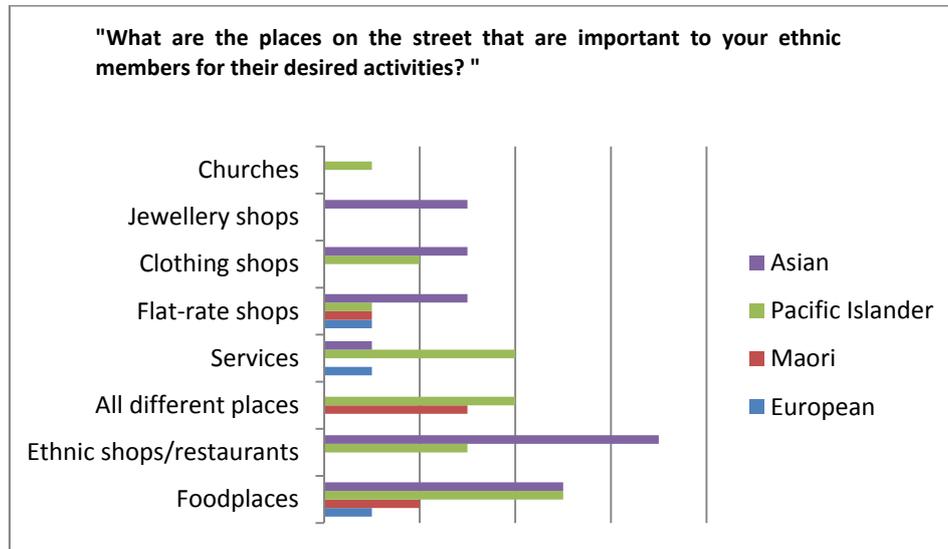


Figure 5-63: “What are the places that are important to your ethnic members for their desired activities?” Response to open-ended question

Half of Asians (Indians) referred to the visual culture and decorations of the storefronts such as “*Roop ki Rani*” and other stores that sell Indian saris or Indian jewellery shops as different locations where they enjoy window shopping. Many Māori/Pacific Islanders usually stopped to have a look at various traditional clothing worn by Polynesians such as lava lavas and other fabrics with flower patterns. Items such as blankets, shoes, bags, and fashion items attracted people of diverse cultural backgrounds.

Many people, especially women, dress Polynesian style. It has been stated that plant products have a great importance for body decoration in the Pacific Island societies (Morrison, Geraghty, & Crowl, 1994). Flowers were a significant feature in Great South Road. Many Islanders were observed while shopping for artificial flowers. Many Asian premises along the street advertised artificial flowers in their shop fronts and interiors. Flowers and colour (bright colours such as green, purple, pink, and yellow) seem to be an important element, part of Polynesian costume. Many Pacific Islanders on the street tucked large single flowers behind their ears, either right or left (which can display different meanings) or wore circular headbands of flowers and greenery twigs around their heads. The use of flowers was not limited to head adornments. Rich coloured clothing and fabrics with floral patterns constituted a significant part of the open shop fronts and daily fashion wear in the study area.



Figure 5-64: Premises advertising cultural materials and merchandise attract people of own culture and other cultures in Great South Road. Source: author, 2013

The provision of ethnic stores represented culture and more than half of interview participants referred to businesses as representatives of their culture (5 Pacific Islanders, 3 Māori and 3 Asians have stated the importance of ethnic premises).

Observations along Great South Road reflected its dominantly Pacific Island clients. This was evident in the perceptions of some Māori participants that believed there is no Māori culture on the street, rather it is a place for Pacific Islanders. Similar to the other case studies, Māori were shown to be under-represented on Great South Road. There was only one Māori eating premises that sold Māori food in the area, and it was not on the main road. Interviews revealed that there had been a number of tattoo shops in Otahuhu (this is significant to Māori culture) in the past but have moved and relocated to other areas. Māori participants believed that having Māori shops and premises could attract more Māori to the street. There were a few shops selling Māori art crafts such as greenstone but they were managed by Asian people.

While many Pacific Islanders believed that their culture is symbolised in the type of businesses lining the street, a number of them claimed that the overall landscape of the street (mostly the shops and retail activities) did not represent their culture and that was more Asian (Chinese). This might have related to the ownership and the ethnic composition of the retail

activities (management of the semi-public space which is mainly Asian) and non-authentic character of the products and merchandise. Observations suggest that many Asian/Chinese premises targeted the Polynesian population with cheap but non-authentic products copied and manufactured in other countries such as China. Others believed that compared to other places in the city, the street by some means represented Island culture, but was different to the Pacific Islands.

Many social activities were recorded in front of eating premises (figure 5-65). Interviews confirmed the importance of food and eating places for social activities of different cultural groups. Half of the respondents (13 out of 26) outlined the importance of the connection between food and their ethnic group social activities on Great South Road. Cultural eating premises constituted an important factor in the assessment of Asian culture where all Asian (Indian) participants that referred to food and eating premises associated it with an ethnic theme (Indian).



**Figure 5-65: Takeaways with open and permeable frontages created lively frontages. Source: author, 2013**

Asians outnumbered other cultural groups in front of Asian restaurants and food establishments. On the contrary, other cultural groups did not place much weight on cultural and ethnic eating premises. Pacific Islanders, for example, mainly stated bakeries, takeaways, and the international fast food restaurant (McDonalds) as places that they usually visit for their social activities. The provision of Island food was only mentioned once by participants. Observations show that Māori/Pacific Islanders outnumber Asians in front of bakeries and both Chinese and Island takeaways.

As noted, fashion and household item stores significantly outnumbered eating premises on Great South Road. Therefore, the inadequate number of food premises became a matter of concern for a number of interviewees, who included they would like to see more cafés, restaurants and eating places on the street. Although a number of Asian food premises

contained the Halal label, the provision of Halal eating places was mentioned by one Asian participant.

Observations showed that Asian (Indian) food premises had less interaction with the footpaths and generated less activities on the adjacent footpath spaces comparatively.

Most seating on Great South Road is public seating rather than private i.e. for patrons at commercial outlets such as bakeries and cafés. Very few premises extended their commercial seating onto the footpaths. This was also obvious in the number of activities recorded around private (commercial) seating compared to the public seating and edges where only 86 out of the 541 sitting activities (16%) occurred on private/commercial seats of the bar, Turkish café and bakery along Great South Road. A higher percentage of activities occurring on private seating was also in groups (85%) while only a small percentage sat individually.

Although Europeans did not visit Great South Road frequently, a greater number of European activities were recorded in front of the pubs/bars. The bars became a place for social activities of Europeans and Māori/Pacific Islanders. The outdoor tables and chairs of the bar did not accommodate any Asians or of the “Other” cultural group. Asians’ (7 out of 8) eating/drinking activities mostly occurred on the commercial seating of the bakery and café and Asians were usually encountered in groups.

The bars/pubs located at both ends of the study area showed different numbers of static activities. This may relate to the levels of personalisation, permeability and how these buildings faced the street. Observations show that only a limited number of activities occurred in front of the fully enclosed pub. Most activities occurred in front of the main entrance and these included standing, smoking and socialising. Figure 5-66 shows that businesses that used blank, monotonous walls, opaque and dark glazing did not encourage static and social activities.



Figure 5-66: Businesses that used blank, monotonous walls, opaque and dark glasses did not encourage static and social activities. Source: author, 2013

Price and affordability of the shops and businesses on Great South Road was a great matter of attraction; becoming important to people after business activities and the atmosphere. Of 28 participants, 11 mentioned affordability of the businesses and the cheap apparel shops as what attracted them to the street. When participants were queried what could be added in order to facilitate their ethnic group activities, they made references to cheaper shops.

Asian shops with open window displays and cheap and affordable appearance outnumber new, quality, high-priced fashion and jewellery shops in Great South Road. Participant observations showed that many shopkeepers created a cheap and affordable appearance by the ways they displayed their items outside their premises onto the footpaths. Labels and prices sought to portray items as cheap and affordable (figure 5-67). While economic access and affordability were favoured, homogeneity through the dominance of retailers was a matter of concern among a few number of participants. Objections were associated with similarity in the quality and type of products offered in businesses lining the street. However, fewer complaints towards the similarity of business types was recorded in Great South Road, than in St George Street, relatively.



Figure 5-67: Labels and prices suggested items are cheap and affordable. Source: author, 2013

Interviewees (5 out of 28=18%) were also concerned about the quality of many of the shops and would have preferred to have higher quality businesses rather than Asian flat-rate on offer. As one participant says:

*“There must be another bracket from these shops, you see the shops over there, their prices are 5 to 25\$, I would like to have shops with the prices of 25-50\$; a better quality of shops”.*

Social class remains an important aspect in choosing a street for necessary and social activities. However, there might be different preferences among people of various cultural background with similar socio-economic conditions. A European participant explains how their needs have not been met in terms of the quality of the shops in Great South Road. She describes quality as an important factor which attracts Europeans to streets and how their needs could be better met with second hand shops rather than affordable Asian flat-rate shops.

1 out of 2 European (50%), 4 out of 6 Māori (66%), 7 out of 12 (58%) Pacific Islanders and 5 out of 8(62.5%) Asians mentioned atmosphere as what they liked about Great South Road. Participants mentioned they like the street because it is a place they can meet friends and people of their own culture. Others mentioned that they liked the culture and vibrancy of the street, the cultural diversity of the people, and the friendly environment and helpful receptions. The environment was described as crowded, cheerful, friendly and relaxed.

One of the primary features that made Great South Road distinctive for Pacific Islanders was the presence of Polynesian people. Asian participants also stated they have the chance to meet many friends and acquaintances there. However, participants did not just rely

on the presence of their own ethnic culture as what they liked most about the street, many also referred to the cultural diversity of the area and people:

*“All the people are friendly, if you talk to someone you would be happy and doesn’t matter what colour you are. Indian, Asian, Tongan; we are mixed together which is really nice”.*

Of the 28 interview respondents, 11 commented positively about the street and its atmosphere, finding nothing to add or change to make it better.

### 5.3.5 Design Attributes

Design attributes of the street environment were also found to be significant, falling only slightly after land-use activities in importance. Pacific Islanders generally had a positive view on design elements of the footpath where they made the most positive comments; Māori and Pacific Islanders made most of the design recommendations for improving footpaths. Interviews suggest that seating remains the main design concern to Pacific Islanders where 8 out of 12=75% of the participants have referred to seating as an important artefact that accommodates their leisure/social activities.

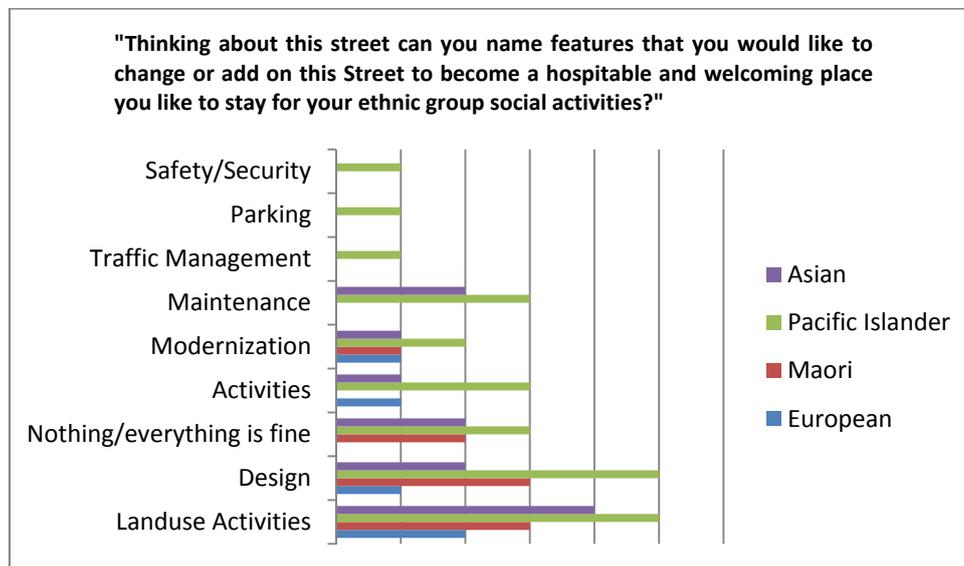


Figure 5-68: “Can you name features that you would like to change or add on this street to become hospitable for your ethnic group social activities?” Response to open-ended questions.

## Patterns of Occupancy of Public Seating

The studied section of Great South Road had a considerable number of public seating (23 benches), a circular green space with sitting edges around and a number of other physical artefacts. Observations showed that Māori/Pacific Islanders were the most eager users of public benches on Great South Road, followed by Asians, Europeans and Others.

More than twice the sitting activities of Māori/Pacific Islanders happened in groups (67%) rather than individually (33%). On the other hand, Europeans and Asians usually sat on these public benches and edges by themselves. Of 63 Asians involved in seated activities, 13 were shop assistants; they occupied the public benches close to their premises at times where they had no customers or used flexible picnic chairs on the footpath. A number of Europeans sitting alone were the homeless (8 out of 31).

| Cultural Background | European | Māori/Pacific Islander | Asian | Other | Total |     |     |
|---------------------|----------|------------------------|-------|-------|-------|-----|-----|
|                     |          |                        |       |       | I     | G   | T   |
| Name of Space       |          |                        |       |       |       |     |     |
| Space GSR1          | 0        | 11                     | 2     | 0     | 0     | 13  | 13  |
| Space GSR 2         | 0        | 7                      | 0     | 0     | 5     | 2   | 7   |
| Space GSR 3         | 0        | 18                     | 1     | 0     | 8     | 11  | 19  |
| Space GSR 4         | 1        | 7                      | 3     | 0     | 5     | 6   | 11  |
| Space GSR 5         | 3        | 40                     | 17    | 0     | 23    | 37  | 60  |
| Space GSR 6         | 12       | 82                     | 2     | 1     | 36    | 61  | 97  |
| Space GSR 7         | 1        | 9                      | 5     | 0     | 7     | 8   | 15  |
| Space GSR 8         | 0        | 11                     | 5     | 0     | 1     | 15  | 16  |
| Space GSR 9         | 2        | 4                      | 1     | 0     | 7     | 0   | 7   |
| Space GSR 10        | 1        | 9                      | 1     | 0     | 3     | 8   | 11  |
| Space GSR 11        | 0        | 13                     | 5     | 1     | 7     | 12  | 19  |
| Space GSR 12        | 4        | 80                     | 3     | 0     | 28    | 59  | 87  |
| Space GSR13         | 4        | 28                     | 18    | 0     | 30    | 20  | 50  |
| Space GSR14         | 1        | 7                      | 0     | 0     | 4     | 4   | 8   |
| Space GSR15         | 0        | 2                      | 0     | 0     | 0     | 2   | 2   |
| Space GSR16         | 2        | 17                     | 0     | 0     | 8     | 11  | 19  |
| Total               | 31       | 345                    | 63    | 2     | 173   | 268 | 441 |

Table 5-32: Number of seated activities of ethnic cultures on different spaces, both individually and in groups

Table 5-32 presents the number of activities in each space by different cultural groups. Similar to other case studies, all benches located along the study area or those in a close distance that could be observed clearly in the walk-by observations were chosen. Figure 5-69 shows the location of each space along the study area.

Spaces **GSR6**, **12**, **5** and **13** had the greatest number of people seated. Close to 18% of all seated activities occurred in **space GSR6**, an open area next to Criterion Street and close

distance to the international fast-food restaurant (McDonalds). Space GSR6 comprises a circular green space with suitable sitting edges, a stone memorial with horizontal surfaces and two benches. One of the benches is located in close proximity of the circular green space, and the other is on the other side of Criterion Street. Behaviour mapping shows that people sat on the edges of the green circular space and the memorial, as well as the benches. Recorded observation indicates that more than 60% people sitting in space GSR6 were engaged in social activities (figure 5-70). Similar to all spaces, space GSR6 was also most frequented by Māori/Pacific Islanders.

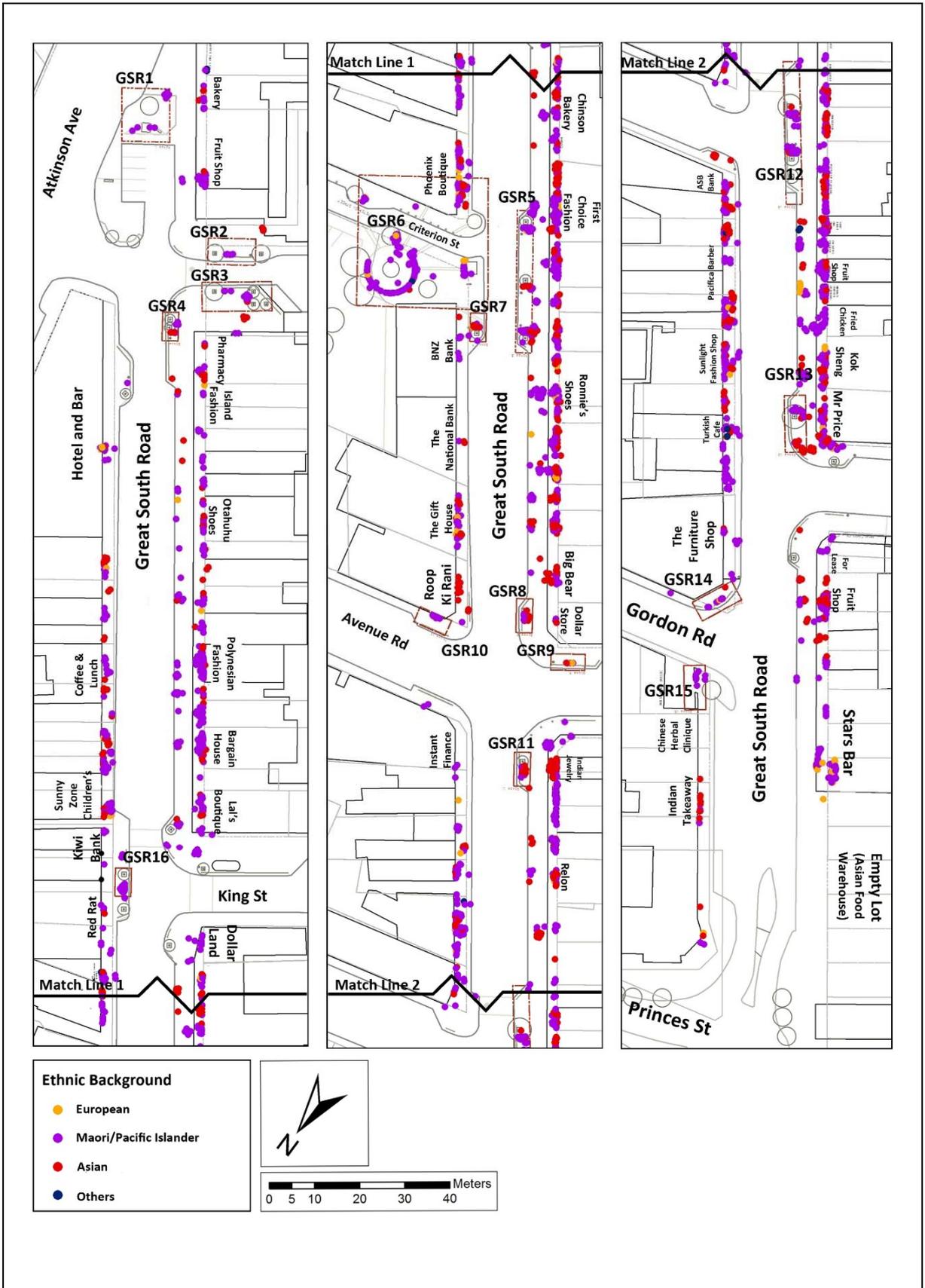


Figure 5-69: Location of different spaces along Great South Road



Figure 5-70: Space GSR6 held a considerable number of social activities. Source: author, 2013

The most common activities in space GSR6 were, sitting, talking, followed by eating, smoking and mobile using. Along with spaces GSR1 and GSR13 that were located in close proximity of eating premises, space GSR6 had the largest number of eating activities. People sometimes purchased food from the international fast-food restaurant then sat and ate while socializing. Space GSR6 also provided opportunities for larger groups to sit in the area. Group sizes of up to five people in a group were recorded in space GSR6 during the observation period. The arrangement of the physical artefacts in space GSR6 provided more opportunities for eye-contact and facilitated socialising (figure 5-71).



Figure 5-71: The arrangement of the physical artefacts in space GSR6 provided opportunities for eye-contact and ease in socialising. Source: author, 2013

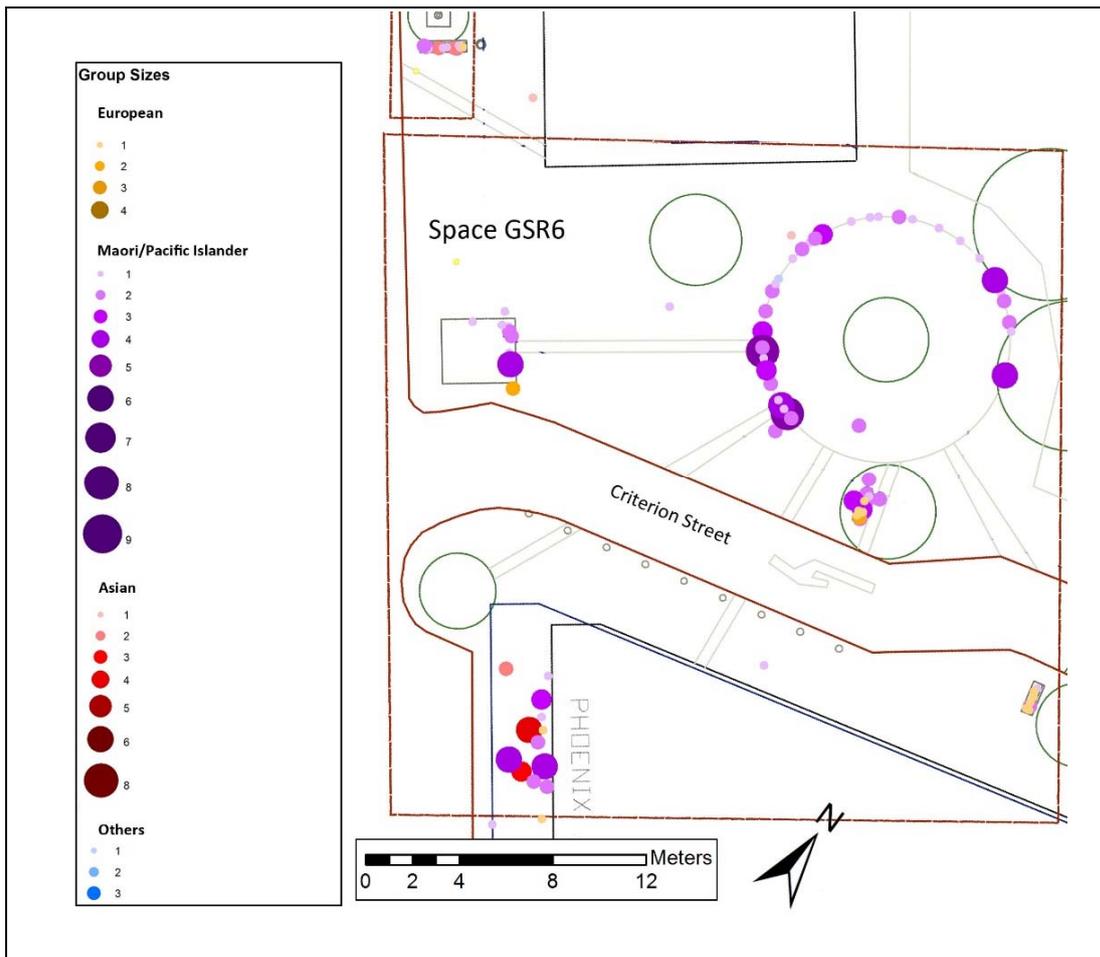


Figure 5-72: Space no 6 accommodated a number of social activities of both small and large groups

Interviews also put forward the importance of space GSR6 for social activities among different cultural groups. This space often became a landmark in the perceptions and preference of participants. Space GSR6 was associated with qualities such as comfort, spaciousness and an adequate number of seating. Many qualities that participants referred to showed that a desire for seating spaces is embedded in space GSR6; participants referred to quietness as a quality that they preferred for social activities in public spaces. Therefore, seating locations away from the densely crowded footpaths were valued. People also liked to observe street activities; space GSR6 is at a distance from the traffic and the crowded footpaths, yet it is located in a busy section of the street which provides a good prospect of the street environment and activities.

Space GSR6 provided opportunities for play. A considerable number of children's playing activities were recorded on the street; the open area in space GSR6 gave children a chance to run around, go up and down the hilly circular space and play chase and tag and other types of games (figure 5-66).



Figure 5-73: A considerable number of children’s playing activities occurred in space GSR 6. Source: author, 2013

In general, observations of public benches showed that public benches along the main strip were often well used and sometimes overused by Pacific Islanders. Many larger groups (up to 9 people) of Pacific Islanders frequented public benches; however, within these groups, some members had to stand or lean or even squeeze together on the benches. The numbers and arrangements of the seating did not accommodate for sitting activities in larger groups. Even when adequate numbers of seats were provided they were located too far away from each other, thus could not be conveniently used by the members of large groups (figure 5-74, 5-75).



Figure 5-74: Benches are located too far away from each other to be conveniently used by the members of one large group. Source: author, 2013

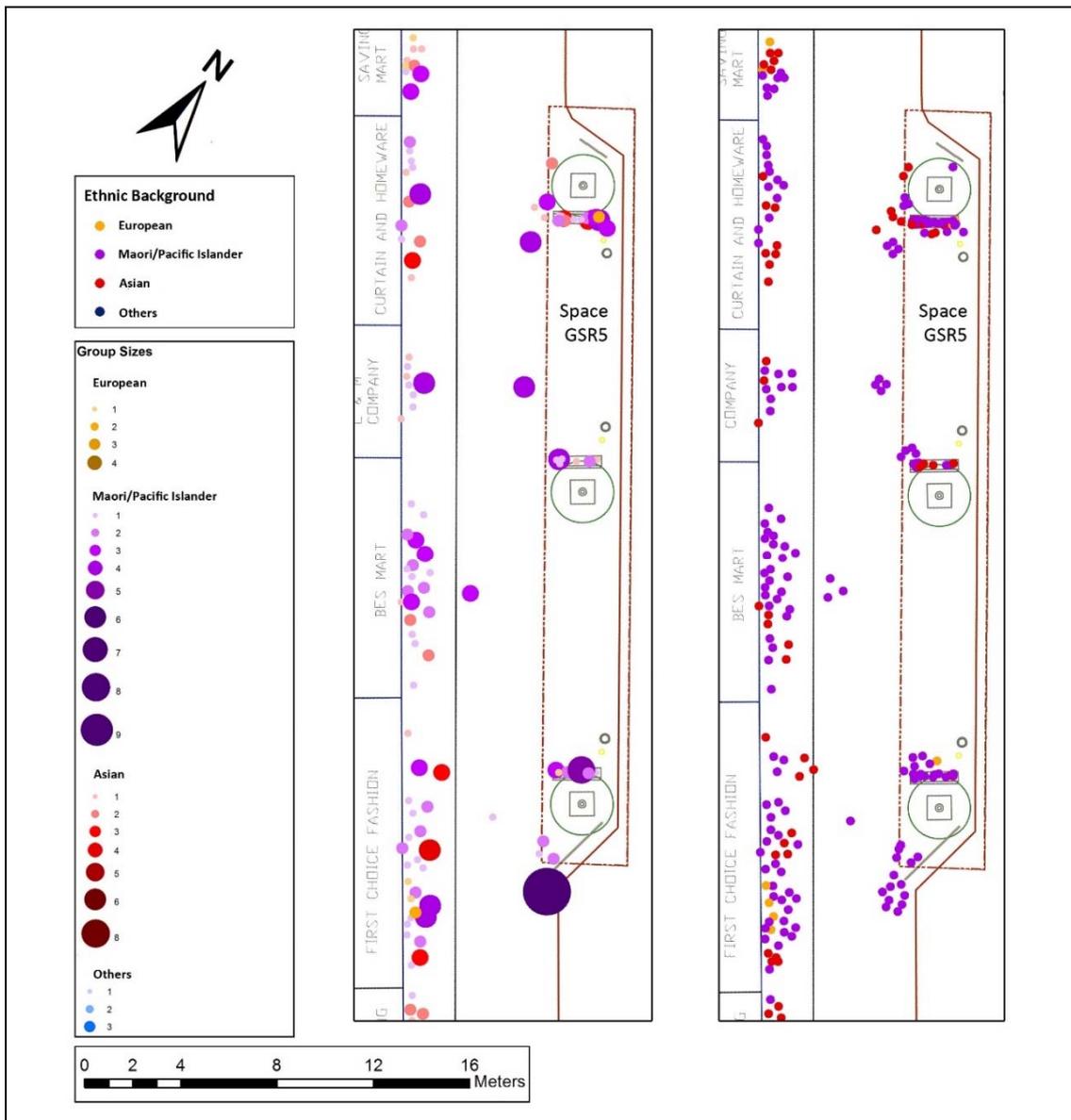


Figure 5-75: Space GSR5; Left plan shows different group sizes using and clustering around public benches, right plan shows number of people standing while interacting

Benches located in spaces with less activities around or off the main street were less occupied compared to spaces located at the busier sections. Even when the affordances of these spaces easily facilitated leisure and social activities (e.g. seating, shade, traffic control, distance from the crowd and noise) they were less occupied (figure 5-76). Benches located in spaces with a fewer number of activities around accommodated greater percentages of individuals, rather than groups. The only exception is space GSR1 which was located close to a bakery, and was frequented by groups rather than individuals. Conversely, benches located in the busier sections were frequented by both individuals and groups.



Figure 5-76: Space GSR1 and space GSR3: Benches located in spaces with fewer number of activities around or off the main street were less occupied compared to spaces located at the busier sections. Source: author, 2013

Close to 80% of the spaces were occupied by Māori/Pacific Islanders (mostly Pacific Islanders), other ethnic backgrounds used different benches less frequently. Pacific Islanders usually stood, sat and socialised for longer periods of time. While observations and interviews reaffirm the importance of seating provision on Great South Road, a Pacific Islander participant mentioned that she would not add seating to accommodate her culture due to their “undesirable” behaviour around public seating.

*“Why would you want Islanders to stay? They would occupy the seats and stay all day; they won’t move if another cultural group goes there. I know the people of my culture”.*

Europeans were recorded in greater numbers in spaces GSR6, GSR12 and GSR13, whereas Asians sat mostly in spaces GSR13 and GSR5. These spaces were all located in sections with numerous activity supporting businesses, and no specific pattern could be seen between cultures and occupancy patterns. Many Asian salespeople frequented these benches as they were close to their premises.

Greater numbers of eating/drinking activities were recorded on those spaces located in close proximity to eating/drinking premises. In addition to the defined public benches and integral edges and surfaces, a number of seated activities also occurred on several armchairs belonging to a furniture shop that had been extended onto the footpath and the front doorstep of the hairdresser and the bar. Once again, the location of street benches in relation to trees frequented by birds became a concern to some participants.

Analysis of the observations indicates that it is of great importance to have wide footpaths in Great South Road. While footpaths have a reasonable width in substantial lengths of the street, sometimes the congregation of groups, especially those with larger numbers, blocked the footpaths for pedestrian traffic. Interviews also suggest that that many

Pacific Islanders meet, stand and socialise on the footpaths in larger groups for longer time periods and talk. Participants believed that greeting each other for longer times makes Pacific Islanders block footpaths:

*“They [Pacific Islanders] usually stand and talk in groups and congregate on the footpath on everyone’s way. They block the whole footpath”.*

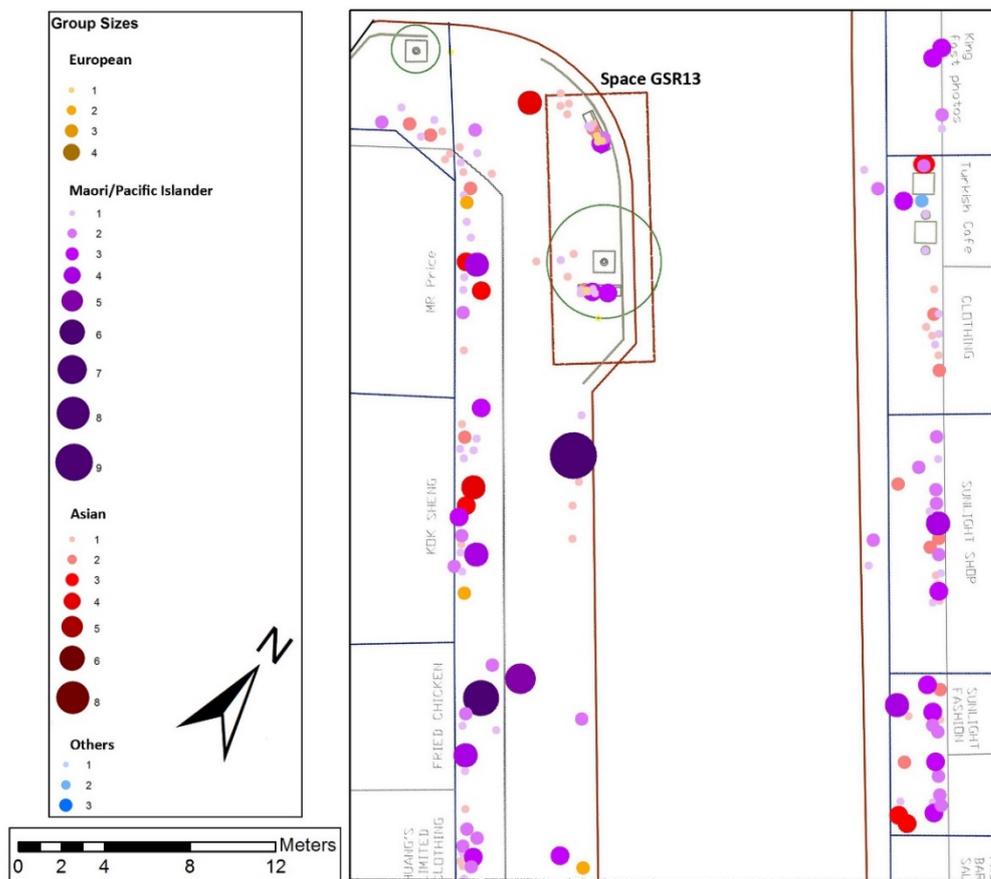


Figure 5-77: The importance of footpath width on the static activities of groups with larger sizes; the footpaths on the Eastern side accommodated larger group activities



Figure 5-78: Pacific Islanders usually stood and socialised on footpath spaces in larger groups. Source: author, 2013

Some window shopping took place in larger groups. The nature of the storefronts displaying various goods and commodities on footpaths and the number of shoppers lingering and socialising in larger groups blocked the footpaths and made it hard for pedestrians to pass by. While these images might create a familiar street pattern for users of some cultures, people of other cultures sometimes found it difficult to tolerate the overcrowded footpaths. Interviews also suggested footpath width to be an important design factor. The importance of footpath width was rated third, after number of available seating and quality of seating locations. Footpath width was mentioned by ethnic minorities, but became more critical for Pacific Islanders. According to some interview participants, adding to footpath width should happen in conjunction with management strategies for the storefronts.



Figure 5-79: The nature of the storefronts displaying various goods on footpaths and the large number of shoppers lingering and socialising in larger groups led to dense and overcrowded footpaths. Source: author, 2013

The responses to the open-ended questions stressed the importance of environmental comfort characteristics for various cultural backgrounds. These issues were again mainly raised by Pacific Islanders, the most enthusiastic users of the footpath spaces. Along with Pacific Islanders, Māori participants also explained and confirmed the importance of shade and shelter for their activities. Recommendations mostly related to the uncovered seating on the footpaths that made them unusable in wet weather. It seems that users of these cultures relied less on favourable weather conditions for using public space. The preference for shady spots in sunny weather might have greater importance for Europeans. A European participants describes:

*“If they [the footpath spaces] had tables and chairs and sun umbrellas then people would use it more. We get sunburnt too fast. That’s why if the whole sun area centre gets under cover it could become quite suitable for us”.*

Interview analysis suggests that landscape was considered less important than other design characteristics of the street such as seating, footpath width and shop displays. Although few trees, shrubs and other landscape elements existed along the street (rather than space GSR6), it did not seem to be a major requirement for the interviewees and was only mentioned a few times by Pacific Islanders and Asians. However, preferences for sitting spaces were mainly associated with space GSR6 (which has more landscape features) and parks. Observations showed that the use of public seating mainly related to activities instead of landscape elements.

The display of bright and multi-coloured goods by Asian merchants gives Great South Road a distinctive character. Colour is a functional element of art and design which causes a prominent influence on the overall view and perception of urban environments(Ojo & Kayode, 2006). Bright and colourful merchandise displays are considered one of the characteristics of Asian streets (Mazumdar, 2002). Content analysis of the interviews show that the issue of colour was mentioned only once, by a Pacific Islander participant. She explained and recommended that making the environment more colourful for Pacific Islanders would make the streets more attractive and appealing. It has been argued that culture is a factor which influences the choice of colour (Ojo & Kayode, 2006).



**Figure 5-80: Artificial flowers, rich colour clothing and fabrics with floral patterns constituted a significant part of the open shop frontages in the study area. Source: author, 2013**

The ways in which businesses advertise their products on the street leads to different colour combinations and gives it a characteristic that might be perceived differently by various cultural backgrounds. One assumption is that the outstanding and brightly coloured street scene made by business merchandise might make it look more attractive to some ethnic cultures, and this might be the reason that colour has received less consideration in the interviews (figure 5-80).

Several participants (1 European, 2 Pacific Islanders and 1 Asian) mentioned the importance of tables for social activities that can be included in footpath design. 3 out of 4 (75%) Māori, 4 out of 11 (37%) Pacific Islanders and 1 out of 6 Asians (16%) referred to symbols, murals, and ethnic signage for cultural representation. Within all groups, Māori had a greater stress on design symbols. The necessity to display the history of the place was also only argued by Māori. Culture might also be represented in non-visual street characteristics. Some Māori participants believed that their culture was represented in the naming of the neighbourhood (Otahuhu).

### **5.3.6 Management Issues**

Observations show that traffic had better management compared to the other case studies. This was further clarified in the interviews, where 3 respondents had a positive view on how the traffic was managed. Traffic remained the most disliked street characteristic and was mentioned by 32% of the total interviewees of all non-Māori backgrounds. Traffic was associated with narrowness of the street, noise, danger, accidents, and safety. Adding more traffic controllers was among the recommendations of the interview participants.

Other disliked activities included: people spitting on the street, beggars asking for money and cigarettes, drunken people, street workers and gang affiliated groups. While smoking was mentioned as a social activity among some Pacific Islanders, participants from other cultures (European) stated they prefer indoor spaces to footpath benches due to the smoking activities that occur on public benches.

Asians and Pacific Islanders mentioned organizing different themed and ethnic festivals, events and live music, both as an attraction for people and as cultural representations. One Asian stated that night festivals could bring families to the street. Pacific Islanders referred to live Island music and ethnic events as something which could attract more users. Other participants wanted to add a taste of multi-cultural music to the street.

Observation showed that children comprised an important segment of different groups in Great South Road. Although a number of children playing were observed in spaces GSR3 and GSR6, no dedicated activities or spaces specifically designed for children were identified. To add activities for children was among the key recommendation of Europeans, Pacific Islanders and Asians. The playground was one of the characteristics that attracted many Pacific Islanders to the international fast-food restaurant.

Asians mentioned food stalls that sell ethnic cuisine as cultural ambassadors that presumably could attract greater numbers of Asians to the street.

The provision of parking spaces was an important issue for a number of participants (mainly Pacific Islanders). Many users of Great South Road were not local. The extended family structures of Pacific Islanders cause them to use more spacious types of vehicles. These vehicles became part of the cultural landscape of the street and were not observed in other case studies. The provision of public toilets was mentioned only once by a Pacific Island participant.

Maintenance and modernisation received the greatest consideration after land-use activities and design characteristics. Maintenance requirements included waste management, window washing, and painting the buildings lining the street. 24% of the participants (including 1 European, 1 Māori, 3 Pacific Islanders, and 1 Asian) stated that buildings and the public area needed modernisation but also needed to keep the current businesses. These interview respondents were aware that modernisation might lead to capitalisation, gentrification and exclusion of the current population using the public space.

### 5.3.7 Summary

Great South Road is a diverse and vibrant shopping strip, where significant lengths of the street are covered by affordable but lower quality Asian shops. Most of these businesses are fashion and household item shops. These premises offer a wide range of goods, from ethnic fashion items to blankets, suitcases, and souvenirs. There are fewer numbers of services on the street such as pharmacies, mini marts, banks and meat shops. Food and eating establishments are limited to a number of takeaways, bakeries, Asian restaurants and an international fast food restaurant. The services and food establishments are a minority between the large number of Asian fashion and household shops. The number of interactions between Asian shopkeepers and costumers created a vibrant atmosphere along the street. Most businesses were similar cheap and affordable shops. The variety of goods offered by each of these shops plus the vibrant atmosphere of the street led to fewer complaints on the similarity of the type of business activities compared to St George Street. Complaints were mainly related to the quality of businesses and the way most shop fronts were managed.

Data suggests that businesses were the main thing that attracted users to the street environment. The shopping strip was overwhelmingly frequented by the Polynesian population followed by Asian. Many shops along the study area target the Polynesian population with signs, advertisement boards and the way they represent fashion and other cultural products on the footpath outside the premises. In addition to fashion and household items services and food establishments, such as Asian and Pacific takeaways, bakeries and the international fast-food chain restaurant, were the reasons they visited the street. Many static activities of Polynesians were recorded in relation to these businesses.

Asian and Indian fashion and jewellery shops seem to attract greater numbers of Asians to the street. However, it was not limited to Asians; and many Māori/Pacific Islanders were recorded window shopping at these premises. The importance of cultural shops and eating places for social activities among Asians was reinforced in the interviews. Services such as banks and fruit shops also attracted both Polynesian and Asian groups.

Europeans were observed in both smaller numbers and group sizes on Great South Road. A greater percentage of Europeans were observed individually on the street. The type of businesses lining the street and the atmosphere were not attractive to Europeans. Comparatively, fewer Europeans were recorded while window shopping. They were mostly

recorded on the commercial seating of the bar. Unlike St George Street, here even the small number of services along the street did not create interest among European.

Observations indicated that most static activities while window shopping/standing occurred in front of the shops with open displays which comprised a significant length of, and the general image of, Great South Road. While the affordable and vibrant open shop frontages with the extreme number of standing/lingering activities around might create a familiar or attractive street pattern for users of some cultures, such as Pacific Islanders and Asian, it generated an unfamiliar and exotic setting for those of other cultures, especially Europeans and Māori. Their recommendations often included bringing order to the apparently chaotic environment. The findings of the interviews revealed that Europeans found it difficult to tolerate the dense and overcrowded footpaths. In addition to the quality of the premises, this could be another reason to explain why Europeans visited the street less frequently. However, the preference for these type of open frontages might not always be a cultural preference; as revealed in the interviews, economic access and affordability also play a great role. Their preferences for affordable and socially accessible shops, businesses and eating premises could be highly related to their socio-economic circumstances.

Buildings and premises that provided blank and monotonous frontages by using blank walls, opaque and very dark glass, such as banks, pubs, the quality sportswear store and etc., did not encourage static and social activities. Very little social interaction was recorded in front of these buildings no matter what type of premises they were.

People considered design attributes in Great South Road to be important after land-use activities. Among all cultural groups, Māori/Pacific Islanders were the most eager users of footpath spaces. They sat and relaxed on the public seating and open spaces adjacent to the footpaths for longer time periods. Pacific Islanders made the most positive comments on design attributes of the footpaths. Māori and Pacific Islanders made the largest percentage of design related recommendations on footpaths. For them, the footpath was primarily a social space. As the main users of footpaths, they were more aware of the limitations of the footpaths to accommodate their activities. Data revealed that Pacific Islanders took part in social activities in larger groups. Many of them came to the street accompanied by family members and friends for their activities. Māori stated that they socialise in smaller numbers in the street environment compared to Pacific Islanders

It has been noted that Pacific people have strong spiritual and cultural relationships with food and family (Ruth, 2009). Sitting, eating and socialising in groups was a popular activity

among Pacific Islanders on footpath benches. Public seating and ledges seem to have an important role for social activities of Pacific Islanders. At times, Pacific Islanders congregated on footpath spaces for socialising where their groups occupied footpath spaces. Their habit of shopping in larger groups, along with shops displaying various goods and commodities on footpaths, led to dense and overcrowded footpaths.

Seating spaces in relation to activity supporting businesses in lively sections of the street were more frequently occupied. When the quality was supported by physical and environmental comfort aspects, it generated more interest among users of public space. Space GSR6 could be considered one of the most successful locations of seating on Great South Road, something which observations and interviews support.

Pacific Islanders' needs were associated with wider footpaths and more seating places along the footpaths. The number of people and different group sizes (especially Pacific Islanders) involved in seated activities reinforced the insufficient number of sitting opportunities and the need for selection and configuration of supportive furniture planning and design. As the frequent users of the street, Pacific Islanders and Māori were also conscious about the climatic comfort characteristics of the street.

Asians mostly came to the street in groups. There were fewer Asian groups of a larger size compared to Pacific Islanders. Asians shopped and window shopped along the active length of the street and lingered in front of shops with open shop fronts. Fewer numbers of Asians were recorded seated. Unlike Pacific Islanders, Asians did not use the public benches for eating/drinking activities. For them, communal eating activities mostly took place inside the food premises rather than on footpath benches. Most Asians used the benches to take a rest after and in between shopping, or while waiting for friends/family members.

A considerable number of children were observed in family groups compared to the other case studies and children constituted a significant part of the social structure of groups. The street environment provided opportunities for children to stand, play or window shop freely on the footpaths. In general, the environment was perceived to be reasonably safer for children than Riddiford Street and St George Street. This could be further discussed in relation to the management and design qualities of the street and sidewalks; bus removal and traffic management, wider sidewalks and the existence of physical barriers along extensive lengths of the sidewalks which kept the vehicular traffic and pedestrian movement divided. Although observations showed greater success in Great South Road in terms of children's activities, interviews suggested designing for children in commercial streets is a priority.

To conclude, Great South Road succeeds in attracting ethnic minorities to the footpaths and creating static and stationary activities via a range of land-use activities, their associated characteristics, social qualities such as the atmosphere and the physical characteristics of the footpaths.

## 5.4 Discussion and Conclusion

Assessing the three case studies reveals the qualities that facilitate or limit each street from realizing its full potential as a public space, in terms of accommodating different cultural needs. Standing, window shopping, sitting and talking were the main activities among all case studies. The physical space of the three streets was primarily frequented by the adult population. The most common type of association within all case studies was the group of two followed by individuals and groups of three. A higher percentage of Great South Road's users were groups of four or more.

A comparison between the three studied streets shows notable differences in the social structure and group sizes between cultures. Activities by Europeans involved smaller to medium sized groups and their groups were often gender-mixed. Māori/Pacific Islander groups comprised both smaller and larger sized groups. Interviews suggest that a higher percentage of larger sized groups were Pacific Islanders and that many Māori nowadays live in nuclear families. The social structure of their groups is also often gender mixed and children establish an important part of their groups. Asian groups were mostly up to 3-4 persons. Unlike other groups, a considerable number of Asian groups were gender-inclusive. Each case study had its particular people-scape or sense of people (Mazumdar, 2002).

While the main type of activities were similar across case studies and ethnic backgrounds, depending on what the street had on offer and the cultural habits of users, the percentages of static activities, frequency of type of activities and uses differed.

Riddiford Street: Europeans were the most frequent visitors. Māori/Pacific Islanders and Asians were recorded in smaller numbers. Europeans were involved in greater numbers in seated, standing and window shopping activities. Māori/Pacific Islanders were more involved in standing and seated activities and a small percentage were only recorded as window shopping. Asians were mostly recorded in standing and window shopping activities and were less seated.

St George Street: Māori/Pacific Islanders and Asians were the most frequent users of the street. Both groups were recorded in standing, window shopping and seated activities. Europeans visited the street in smaller numbers. They were mostly involved in standing and window shopping activities and less recorded as seated.

Great South Road: Māori/Pacific Islanders were the most frequent users of the street and were greatly involved in all types of standing, sitting and window shopping activities.

Asians frequented the street in smaller numbers compared to Māori/Pacific Islanders and were mainly involved in standing and window shopping activities and only a small percentage were recorded as seated.

#### 5.4.1 Land-use Activities

The case studies reveal that the retail tenant mix and the diversity of shops offering goods and services on the street are the main reason people are attracted to use the footpaths (Teller, 2008). Observations show that static and social activities on streets are mainly related to the periods that retail activities and services are available. Static and social activities decreased dramatically after premises along all study areas shut down. The majority of the respondents mentioned businesses, retail activities and buildings with public use as what they liked most about the streets and what they would want to add (with and without mentioning their ethnic group activities). Business activities and commerce such as various services, culinary, fashion and delicatessens greatly influence street life and could be understood as the very basic condition of the foundation of public streets.

In each case study, participants' responses on business activities found different weighting compared to other attributes. Participants' recommendations on business activities found greater consideration in St George Street. This begins to suggest a lack of diversity among businesses activities on this street compared to other case studies and that the business agglomeration here is less attractive for users.

#### Spaces of everyday life and leisure destinations

The findings suggest that footpaths are understood as both spaces of everyday life needs and leisure destinations. This confirms Ehrenfeucht and Loukaitou-Sideris' (2010) suggestions for planners to take action on footpaths as spaces of daily life and places for recreational activities in addition to their key role as infrastructure connecting destinations together. People frequented the streets for economic, functional and social reasons and to purchase goods and daily necessities. Streets as public spaces are different from other types of public open spaces (such as parks) as they are partly controlled by commercial and retail activities. Discretionary and social activities are usually mixed with functional activities (daily shopping). In other words, different types of activities occur in the combination and support of each other. Many of the businesses that offered daily goods and services such as fruit shops, supermarkets and banks were most commonly preferred and attracted people of various cultural backgrounds to the street environment. Others such as ethnic delicatessens

mostly targeted specific cultural groups. Analysis of the data suggests that an important factor that can draw ethnic minorities to the streets is the provision of ethnic shops and eating places. The availability of ingredients for some ethnic cultural food has become commonplace in many supermarkets (Thompson, 2003). However, some ethnic groups still rely on ethnic delicatessens and fruit markets to get certain ingredients for their cultural dishes. Ethnic shops and restaurants had a greater role for Asians and Pacific Islanders compared to Māori and Europeans. Many Asians and Pacific Islanders used ethnic shops to buy specific items such as Asian/ Pacific ingredients for meals or outfits for special occasions. Thus, having a fine business agglomeration that serves daily/weekly shopping, and leisure places to eat/drink and other services such as fashion and footwear, among other services is important for streets to become diverse and multi-cultural.

### **Food and Sociability**

Eating/drinking was a common activity among case studies. The findings of the current study suggest different food premises, cafés, takeaways and ethnic restaurants play an important role in the social activities of different ethnic cultures and could possibly increase the number of static activities on footpaths (Crankshaw, 2009; Parham, 1992, 2012). While the type of places varies between cultures, their choices are also greatly influenced by socio-economic characteristics. Cultural activities on the street and the preference for locations for leisure and social activities are also likely to be related to levels of acculturation. The levels of attachment to the original ethnic culture, however, varied among different ethnicities. Asians, for example, had the highest preference for ethnic establishments, followed by Pacific Islanders. Māori, on the other hand, seem to have adopted the mainstream European culture. However, communal eating might not affect the level of social activities of all cultures on footpaths at the same level. While eating and socialising on the streets was common among Europeans, Māori and Pacific Islanders, it was not a common activity among Asians. Unlike cafés or bakeries and Asian (Chinese) takeaways, Asian (Indian) restaurants did not spread their dining space onto the footpaths and most Asians stated they prefer the interior space of the restaurants for eating and socialising and not the footpaths.

### **Gastronomic Diversity**

As noted, the places people chose for leisure/social activities varied between socio-cultural groups. Cafés had an important role among the European cultural grouping. Being celebrated as a part of street life since the nineteenth century (Loukaitou-Sideris et al., 2005), cafés often provide seating that can increase levels of liveliness and social activities along

streets. However, footpath cafés do not necessarily increase levels of social activity among non-Europeans.

Cultural food plays an important role in streets as social spaces among specific and ethnocentric cultures. Ethnic restaurants become community places where ethnic groups interact and strengthen their community bonds (Preston & Lo, 2009). The findings of this study suggest offering a culturally specific menu plays an important role for Asians compared to other cultural groups. Many Asians noted that Asian eating places serve as a gathering place for their community. Religious requirements still are a matter of importance for a specific range of Asians. Muslims comprise part of the Asian cultural group and it may be self-evident that provision of Halal eating places plays an important role for them. A study by Chan and Ahmed (2006) noted that Halal certification in McDonald's Punchbowl in Australia has led to an increase in attracting Muslim customers. Halal establishments increase the chance of Muslim customers to visit streets and may lead to static activities on footpaths. In addition to Asians, Pacific Islanders also stressed Island food premises have an important role among their social gatherings. However, compared to Asians, Pacific Islanders were less ethnocentric and also visited many Asian takeaways and fast-food restaurants. A number of Asian and Pacific Island food establishments mainly attracted people from their own culture. On the other hand, some others, especially in Riddiford Street, did not just serve to their own culture, many targeted the mainstream and were also hospitable to other ethnic cultures. These establishments provided an opportunity to gain experience about other cultures (Ang et al., 2002). However, sometimes they created an exclusive image and their menu prices also followed suit in an effort to cater to more affluent audiences, disregarding the financial capability of less affluent ethnic minorities. Thus, it is also important to take the financial capability of the potential users into account while planning for such ethnic food places. In addition to ethnicity, age and levels of acculturation also influenced participants' choices of food (Ang et al., 2002). Acculturation and the preference for a culinary diversity made it difficult to define a line between ethnic shops, especially restaurants and the type of customers they attract. The exact cross-cultural differences in consumer behaviour and preferences in terms of assimilation and acculturation need further investigation and are out of the scope of this research.

Other than specific ethnic food establishments, fast food chain restaurants and takeaways found great preference among a diverse range of ethnic groups. Some of these chain restaurants such as McDonalds have gained success in creating an inclusive public culture for different ethnicities and socio-economic groups. Still, the embodied public culture

that they represent and their popularity in multicultural contexts have been disregarded. Economic accessibility and providing a cheap model for amusement, private management, the size and design of the interior spaces that allow large groups to gather made these international fast-food restaurants an ideal type of public space for different groups.

The provision of cafés, cultural food, chain restaurants and other variety of food choices broadens the opportunity for people from different cultural backgrounds to use street spaces for their desired social and leisure activities. Planning for cultural diversity in food premises can both enhance “*the ethnic character*” and “*associated gastronomic diversity*” (Parham, 1992, p. 34) of streets. Having a diverse range of cafés and eating places catering to different tastes would be an important factor that could attract people from different ethnicities and increase diversity in streets. Thus, planners should support and encourage the establishment and development of culturally diverse eating premises based on the demographic profile of urban areas.

It has been stated that streets should not just become destinations for consumption which exclude non-consuming users and activities that do not add to the economic proliferation of the semi-public space (Ehrenfeucht & Loukaitou-Sideris, 2010; Williamson, 2013). The combination of different services for daily needs and affordable fashion and household items and the general atmosphere of the area allowed for other non-consuming public and less-affluent groups to frequent the streets for leisure activities. It can be noted that when streets become exclusively consumption destinations they misplace their full potential for becoming truly public.

### **Affordability and Economic Access**

Ethnicity and inequality are often intertwined among ethnic minorities (Pearson, 2012). Therefore, socio-economic conditions have an important role among ethnic minorities to access streets for leisure and social activities. Economic mobilisation and accessibility were an important feature that attracted diverse types of people, from different classes and ethnic groups into the streets (Walzer, 1986). Many visitors of the study areas came to purchase daily goods and other necessities at discounted prices. Most businesses, such as second-hand shops, those charging a flat dollar rate for all goods, and takeaways, were associated with budgeting, bargaining and affordability. Economic access and affordability in the case studies was an important issue, especially in St George Street and Great South Road, mentioned many times by different participants of various cultures. Economic accessibility was mentioned less frequently in Riddiford. This could be more a reflection of the socio-

economic profile of these neighbourhoods than ethnic culture. A higher percentage of Europeans reside in Newtown which has a higher socio-economic profile compared to Papatoetoe and Mangere-Otahuhu.

The findings from the open-ended interviews support Hutchinson's (1987) concept on differences. Hutchinson argues that cultural differences are related to a more complex interaction between race and social class than being simply influenced by either of them. In some cases, the ethnic background of the users was the key reason for differences in preference, whereas in many others they appeared to be related to social class. Thus, social class and economic access inevitably influence perception and choice. There is a great link between specific ethnicities and poverty in New Zealand. Māori and Pacific Islanders are the most economically and socially disadvantaged ethnic groups among the population (Pearson, 2012). Their preferences for different businesses and places of social encounter such as takeaways, bakeries, and fast food chain restaurants were mainly associated with affordability. Many similarities between choices for social encounter among Māori and Pacific Islanders could also be related to their economic disparities from the mainstream. However, the preference for economic access and affordability of the current streets was also favoured by Asian and European visitors. The affordable type of shops attracted a diverse range of people within case studies, regardless of cultural background. However, there are slight differences among the preferences. While Asian flat-rate fashion shops seem to attract larger numbers of Māori/Pacific Islanders and Asians, Europeans were mostly observed in front of the second-hand shops. Planning for appropriate activities that enable social and economic access is an important factor for streets to become "more public".

### **Diversification, Not Homogeneity**

Most of the fashion/household item shops in the three case studies were limited to affordable second-hand and Asian flat-rate shops. Only a few medium-high range quality fashion shops were seen. While affordability of the businesses was favoured among users, this excluded a number of more affluent and higher class users from the street environment. The expensive and more quality shops and brands might also be attractive to less affluent groups (Whyte & Underhill, 1988). They might bring streets a more diverse range of users.

A number of participants in the three case studies were concerned about the quality of the shops and would prefer higher quality businesses including quality restaurants instead of takeaways on offer. This appears to be a response related more closely to socio-economic circumstances and personal preference than cultural preference. While one of the best ways

of increasing publicness in streets is to make sure that retailers of different economic ratings fit within the overall profile, the small independent quality retailers might not thrive due to the inequitable distributions of wealth in the studied areas. The economic viability of the retail activities on shopping strips, as multi-owned spaces, is related to individual owners and operators who must ensure that they choose the right business to minimise the risk of their investment. Thus, the provision of retail activities is linked to the economic profile of the area. To attract customers in areas with low income levels, businesses must focus on affordability. This is contrary to privately owned shopping malls, which often have a regional catchment and can focus on attracting people with sufficient means with the range and mix of their tenants, as well as offering free car parking (Lloyd & Auld, 2003). Such centres are considered by many as non-democratic (see Chapter 2-section 2.3.2).

These findings suggest that similarity between the shops and eating places along streets could reduce the levels of satisfaction and lead to complaints about the quality and attractiveness of the area to some shoppers. Mehta (2006) argues that only restricted numbers of particular businesses could be supported by neighbourhoods. Homogeneity through the dominance of retailers was a key concern of the participants in St George Street and Great South Road. According to interviewees, these streets, especially St George Street, provide a flavourless representation of a mono-culture in their retail activities. Although chain stores do not dominate and most of the shops are privately owned, economic globalisation on the one hand and socio-economic criteria of the area on the other have led to similarities within the streets. Multiple flat-rate shops and similar takeaway businesses begin to create a monotonous image. Planning for the most diverse range of activities that enable social and economic access is an important factor for streets to become “more public”.

### **Atmosphere**

As the focus of this study was the spatial and management aspects of public streets, none of the interview questions mentioned soft concepts such as atmosphere. It was left to respondents to raise it. However, a considerable number of participants in the three case studies referred to “atmosphere” as an intangible aspect of the street which they favoured. This was the most preferred aspect of the street after business and land-use activities for participants of various cultures. All respondents referred to the friendly environment of the streets and the people who used them, going into considerable detail when discussing their lively, multi-cultural character.

Atmosphere lies in the relationship between the footpaths and the semi-private businesses lining the streets (Bosselmann, 2008). Business activities are not just important, they also have a significant influence for creating meaning and sense of place among different cultural groups. One discussion is that business agglomeration targets different ethnic populations. The social life of places including the presence of people and their activities is the essential ingredient of place making (Pyatok, 2001; Relph, 1976) which could reflect the distinctive character of a place (Laniado, 2005). One of the primary features that made Great South Road distinctive for Pacific Islanders was the presence of Polynesian people and the chance to meet many friends and acquaintances. It has been claimed that being with people who share a similar language, culture and ethnicity increases sense of social comfort (Mazumdar et al., 2000). However, participants did not just rely on the presence of their own ethnic culture, many also referred to the cultural diversity of the studied areas and people from other ethnic backgrounds. Literature suggests the potential to meet and interact with friends and acquaintances as well as strangers and unknown individuals is essential in creating meaning and sense of place. The informal social interactions that take place among various groups on the footpaths might also lead to sense of community (Laniado, 2005; Stokowski, 2002). Therefore, business assortment is not just important for attracting a diverse range of sociocultural groups to streets, but it also has a central role for creating meaning and sense of place.

### **Social structure of the business owners/sales persons**

Social relations within a space and the ethnic group(s) who manage the semi-public space influence how welcome and comfortable users of different groups might feel about the street environment. While the existence of shops operated by one or two cultural groups might be welcoming for some cultures, it might be less welcoming among others. For example; a number of participants had a positive view on the social structure of the premises run by Asians in Riddiford Street, where they believed ethnic differences were better tolerated among ethnic minorities. This might also reflect tension and the feel of discrimination where the majority of traders are European (white) and traders of other ethnic backgrounds are not represented or establish a small minority. This study did not intend to explore perceived discrimination, but it became evident that one of the reasons that some participants enjoy streets is also related to the social structure of the traders, shoppers and users. Furthermore, managing a shop by a specific cultural group does not necessarily mean that they would run a cultural shop or ethnic restaurant. Not all immigrant-owned businesses targeted ethnic populations; many served the mainstream (Qadeer, 1997). For example; the

photo shop or the fruit markets or hairdressers along St George Street are owned and managed by Asians but accommodate a wide range of ethnic cultures. Nevertheless, this led many users to consider that the overall social structure of the street is Asian. Thus, having a composition of European (white) and non-European (ethnic) traders along the street could influence users' perceptions on the general atmosphere of the street.

Observations and interviews within case studies reveals that the ownership and the ethnic composition of the retail activities (management of the semi- public space) is not distributed equally among different cultural groups nor based on population ratios. While some cultures, such as Asians and Europeans, are more represented in terms of commercial and retail activities, fewer businesses on the street were managed by Māori and Pacific Islanders. Several Māori commented that Māori people are culturally proud and they would love to see something that reminds them of their culture, referring to shops owned and managed by Māori. Managing a shop by a specific cultural group does not mean that they would necessarily run a cultural shop or ethnic restaurant. There were not many places in the streets managed by Māori, even those selling souvenirs and mementos of the Māori culture were managed by Asians. Participants suggested a number of possible barriers and impediments to Māori involvement in the business activities along the Street. These varied from a range of cultural preferences to more complex social and political exclusions. As Chapple (2000) argues, Maori might have stronger preferences for leisure and, therefore, have lower attachments to the labour market. As a consequence, they are less likely to succeed in business management and operation. The ownership and the operation of businesses, however could be considered also as an important factor in terms of what Madanipour (2003a) discusses as social/political exclusion. Historically, Māori have been both geographically segregated from urban areas, and the economic advantages found in them (Hamer, 1995; Marek, 2010).

Findings suggest that representing different ethnic groups in the social and cultural characteristics of premises is an important aspect to retain a meaningful place for people of various backgrounds and help streets become more public. The trade communications between patrons and sellers are associated with social interactions between cultures (Rapoport, 2005) and have a potential in creating a sense of social comfort among ethnic minorities.

## Shop frontages

Another characteristic associated with business activities is their interaction levels with footpaths. Shop frontages have an important role in generating and retaining static activities on footpaths. Observations show that static activities (window shopping/lingering, standing) in zone “A” (in front of buildings, facing the footpath) were not equally distributed all along the footpaths. Along with Whyte and Underhill’s (1988) study, the behavioural mapping indicated that shops and premises that extended their territory onto the footpaths created the liveliest settings along the streets. These types of stores provided an opportunity for people to see or touch their items without entering the store, more often encouraged stationary and static activities that led to lively frontages. Observations within the case studies reveal that the types of shops with extended territories have more significance in creating stationary and sustained activities compared to other types.

Participant observation revealed that much less static activity was observed in front of types of stores with window displays compared to those that extended their store onto the footpaths. It is important to note that not all shops with window displays encouraged the same numbers of stationary activities in front of them. Those that provided interesting opportunities for window-shopping in their displays attracted greater numbers of people. This was related to how these displays were managed and decorated, types of items and goods offered, and frequency of display changes. On the other hand, businesses that covered their window displays with boards and advertisement signs creating visually impermeable frontages or buildings that provided various types of blank and monotonous frontages did not generate many activities. A comparison between takeaways in Riddiford Street and those in South Auckland shows that takeaways in Riddiford Street did not generate as many activities as those with open frontages in Auckland. Takeaways in Riddiford Street typically have more closed frontages, which could be related to the weather differences between the cities. This strongly reinforces the importance of shop frontages in generating activities on footpath spaces.

Outcomes of this study confirm Mehta’s (2006) findings that levels of permeability and personalisation of the storefronts certainly affect user behaviour and lead to static activities. The study also found a positive association between the stationary activities of specific ethnicities and visual cultures of the storefronts and different types of cultural merchandise they displayed. For example; many Indians stopped and looked at shop frontages displaying Indian saris or jewellery in Great South Road.

Activities might occur in direct relation to businesses. For example, the social and static activities of Europeans in front of cafés or different groups in relation to shops that extend their merchandise onto the footpaths or have interesting permeable frontages. While different businesses generate different levels of static activities based on their type and shop frontage management, Mehta (2006) suggests it is irrational and inappropriate to just plan for types of businesses that generate static and social activities along streets. Furthermore, planning for specific businesses without specific frontage design and management could also lead to attracting people to footpath spaces. Many of the places for day to day shopping, such as ethnic shops, supermarkets and banks, attracted people of diverse backgrounds to the footpaths. However, most of these services did not provide permeable and engaging interfaces with the footpath spaces, and, therefore, did not create lively frontages. Nevertheless, they attracted different ethnic groups to the street and sometimes a number of chance encounters and interactions occurred in proximity to these businesses. Thus, it is necessary to have a mix of business activities that support a range of day to day necessary and optional activities plus provide a means for static, leisure and social activities.

Suggestions could be made to increase the number of static and social activities in front of less activity supportive businesses. For instance, fast food chain restaurants could help streets to become more public for different groups. However, the form and shape of their exteriors does not encourage static and social activities to their full potential. Their designs of the building exteriors are known as “*tangible manifestations of corporate culture*” (DeBres, 2005, p. 125); they are often big blocks with lower permeability levels and numbers of activities. Design guidelines and proposals could help retrofit existing McDonald’s buildings in order to increase their integration with footpath spaces. Observations showed that locating public benches in front of monotonous, blank, solid and opaque walls increases the number of static activities especially if activity supporting businesses are in approximate distance. Different types of social functions such as buskers could also be planned in relation to these places in order to enrich liveliness.

Open-endedness in the case studies allowed many Asian businesses to expand their merchandise onto the footpaths and led to many static and stationary activities on footpaths. Fernando (2006) examined a range of streets in different cultural contexts and suggested open-endedness as a key characteristic of urban environments that can accommodate a range of uses without altering the overall appearance of the street. Flexibility and adaptability and the chance to change over time allow individuals and communities to construct a sense of community and ownership and shape an ethnic identity by shaping their own memory and

meaning (Laniado, 2005; Mazumdar et al., 2000). Open-endedness in streets provides a means for a range of commercial and social activities and could create specifically cultural urban environments.

The open-endedness of the business activities might also lead to conflicts and incompatible needs and uses of streets. Different ethnic groups had different viewpoints and thresholds for the acceptance and tolerance of shops with open frontages that often added to the perceptual complexity of streets. In many cases, Pacific Islanders and Asians complimented the way shops with open displays presented their items on footpaths. On the other hand, there was no positive feedback from the Europeans and Māori about the type of shops that displayed their items onto the footpath spaces. It could not be concluded that the preference for different types of shop displays is merely related to cultural background. Cultural background is only one factor influencing preference. However, it is important to note that, while open-endedness is a prerequisite for streets to become culturally specific, it is not the only way to make streets multi-cultural and more public.

Different types of business and tenant management along streets and the ways in which they communicate target different ethnic populations. This ethnographic study clearly demonstrated that streets, depending on what they have on offer, could have a significant role as a social space among different ethnic cultures. Data indicates that, in each case study, types of businesses and tenant assortment were only able to create interest among a specific range of cultures and socio-economic groups. The ways in which each street was used by different ethnic cultures were mainly dependent on the mix of its business activities and retailers.

Different types of businesses and tenant management might create familiar environments and provide settings for people of specific ethnic backgrounds to frequent streets for static and social activities or exclude them from using the space. The fewer shops and premises comprising daily services, fashion shops and food establishments convey meanings for specific cultures, the fewer the people of that culture frequent the street for static, leisure and social activities. On the other hand, if the range of different businesses relating to specific ethnic cultures on the street widens, the chances of leisure and social activities increase among the members of that culture. None of the streets studied completely related to a specific culture. The mix and percentages of ethnic groups in each case study were different.

Riddiford Street attracted diverse cultures by the number of services such as supermarkets, banks, fruit shops and ethnic stores. The diverse range of food establishments from affordable takeaways to more pricy and upscale ethnic restaurant generated interest among all different cultures. The type of fashion and household item, however, attracted great numbers of Europeans and Asians compared to Māori/Pacific Islanders. The overall composition of businesses that encourage lingering might be perceived less affordable among these groups. St George Street and Great South Road on the other hand, attracted greater numbers of Māori/Pacific Islanders and Asians. The tenant assortment comprising services, Asian flat-rate fashion/household shops and takeaways attracted great numbers of these groups to the street.

Europeans, on the other hand were observed in smaller percentages in these case studies. Europeans mostly came to St George Street by themselves and their activities mainly occurred in relation to different daily services. The flat-rate type of fashion shops and Asian takeaways did not generate interest among Europeans. Nor were they often sitting or made positive reference to the atmosphere of the street. Together this suggests that St George Street is not perceived as a place for social/leisure activities by Europeans. Great South Road comprises an excessive number of Asian fashion/household item shops that overwhelm the narrow range of services and food establishments. The types of business assortment did not attract many Europeans to the footpaths and they were mostly only observed at the bar. While the bar became a place for social encounter among Europeans, it did not encourage them to stroll up and down the street to contribute to a multi-cultural character. Different aspects ranging from the type and quality of businesses, the social structure of businesspeople, and the management of the shop frontages among other possible reasons might have created an unfamiliar setting for Europeans and thus decreased their desire to use the space in Great South Road. It is important to note that the same type of premises might also function, act or communicate differently in various settings. Mazumdar et al (2000) describe how a similar coffee shop might function differently in a traditional environment to an American mall. Having a limited number of businesses offering familiar goods and services might not make enough interest in attracting specific cultures to streets. Instead, the tenant mixture is an important factor to attract different cultures to a place. Thus, the variety of businesses and tenancy mixture of retail activities, such as cafés, fruit and grocery stores, takeaways and bakeries, ethnic premises, and their associated characteristics, could provide the means for the static and social activities of different ethnic groups.

Unlike ethnic enclaves, in which the familiar is created in an unfamiliar setting through a range of familiar retail and business activities (Mazumdar et al., 2000), in multicultural streets the familiar and unfamiliar together shape the environment. The businesses, elements and characteristics which are familiar for one culture might be unfamiliar for the others. If business activities along the street create an exotic and non-familiar image for ethnic cultures, it is less likely to be used as place for recreation. The findings of this study suggest that retail and tenant management could create environments where visitors and shoppers of various backgrounds feel a sense of belonging and identification and reinforce their social bonds. However, it should be noted that culture is never entirely static and ethnic groups are subject to change and adaptation to the cultural characteristics of the mainstream. The question is how long people from one culture need to be living in another culture (or mix of cultures) for its elements and characteristics to become familiar.

Cultural diversity on streets would be most effectively achieved through strong management strategies of the business, retail activities and services and their associated characteristics rather than the aesthetic characteristics of the design elements. The most common suggestion for all case studies is to retain the existing variety of uses and services and simply add more. This confirms the importance of a pluralistic approach towards land-use planning and inclusionary retail activity controls on commercial streets in multi-cultural contexts. Planning could guarantee a mix of businesses that target a diverse range of cultures and others that serve to specific ethnic groups. As Preston and Lo argue:

*“Planning at the neighbourhood level should ensure a mix of retail activities, some serving a diverse clientele and others that cater to specific ethno-cultural groups”*(2009, p. 73).

Scholars define public space as a space that is not organised by private individuals or organisations, and therefore is open to the public (Madanipour, 1996). Findings of this study suggest that streets are public spaces of a city in which the socio-cultural backgrounds of the users are mainly influenced by the businesses, retail activities and services (private property). In other words, the extent that footpaths become public or a common property of different ethnic and cultural groups greatly depends on the context of the privately owned businesses along the street. Having a right mixture of land-use activities on the street that supports a wide range of necessary, optional and social activities for different cultural groups is critical for streets to become more public. Thus, it is important to note that promoting cultural diversity on streets could happen in the collective action of both public and private sectors.

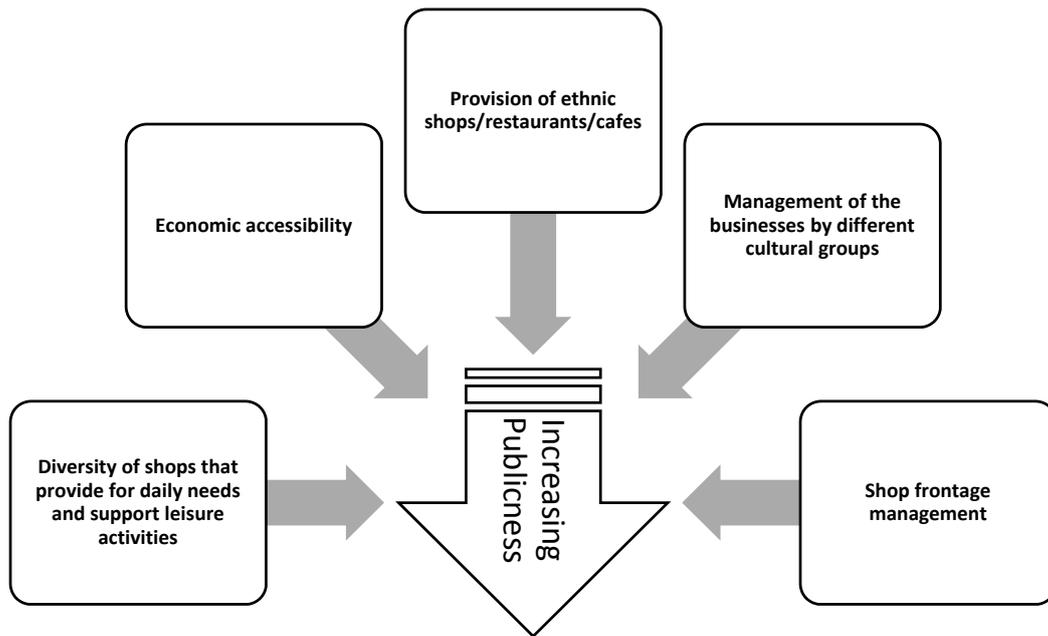


Figure 5-81: How publicness could increase in terms of the management of land use activities

It could be concluded that when assessing publicness in the public spaces of multicultural societies, five factors should be considered simultaneously. These five factors are; diversity of shops for daily use and leisure/recreational activities; economic access and affordability, provision of ethnic shops, restaurants and cafés, business management by different cultural groups, and shop frontage management (figure 5-81).

These levels together could ensure the success of the street in terms of their retail activities and services which seems to have a major role in attracting a diverse range of users. Underestimating the role of each one may lead streets to become inefficient places for a heterogeneous public and activities.

#### 5.4.2 Design Attributes

The social, economic and business characteristics seem to be the most significant and crucial variables that could make streets become more multi-cultural. Participants recognised the design quality of the footpaths as a backdrop, only acknowledging or commenting on design aspects after making comments on issues such as business activities and the atmosphere. The only exception was Riddiford Street, where design attributes found more importance when participants were examined on what they wanted to change/add without referring to their ethnic cultural background. In all other responses to open-ended questions, comments and recommendation on business activities outnumbered design qualities. This bring us to an important finding where what can be achieved through design is inevitably

limited. On the other hand, the design characteristics might be of a less importance but a necessary component of streets which might not essentially determine but influence people's behaviour and activity.

The way designers make decisions on the design of the footpaths and their adjacent buildings could also lead to meaningful public spaces that encourage optional and social activities; as Allan Jacobs in his book *Great Streets* asserts;

*“Streets still have to be laid out and designed, and non-designers at least as much as designers are concerned with their physical as well as their socioeconomic development”.*

(Allan Jacobs, 1993, p. 6)

Design attributes found greater importance in Riddiford Street and Great South Road than St George Street. Participants made neither positive comments nor referred to design attributes in St George Street as what they wanted to add or change on the street. On the other hand, what participants wanted to add or change on St George Street mainly related to business activities and social functions/activities. The recommendations on design attributes came after making comments on business activities and social functions. Riddiford Street was the only case where users made a considerable number of comments on design attributes, finding greater importance than business activities. Riddiford Street had a more diverse range of retail activities among those studied, affording a great range of ethnic cultures. Riddiford Street also accommodates a number of social functions such as the weekly market, the festival and a number of buskers. These gave participants the opportunity to think of the design attributes of the built environment. Great South Road does not have the diversity of business mix of Riddiford Street, but the diversity of goods each business provided and the presentation of goods and interactions between the sales people and the customers created a vibrant atmosphere. On the other hand, St George Street lacked the diversity in its business activities compared to the other case studies. It did not include many social functions nor did the shops create a vibrant atmosphere. This might describe the reason that more attention was allocated to businesses and social functions than the design qualities of the footpaths. The other reason that design attributes of footpaths received less attention might be related to the existence of the shopping mall court. The open area attracted many groups for their longer term static and social activities, and it might have reduced the importance of footpath design for static and social activities.

It is noted that design characteristics were mainly favoured by Europeans in Riddiford Street, whereas, in Great South Road, Pacific Islanders greatly outnumbered other ethnic backgrounds in referring to design attributes. In these two cases, the majority of users made the most positive comments on the design attributes. However, St George Street does not follow this pattern. Māori were quick to note when design related qualities were absent in Riddiford Street and Great South Road. Their design recommendations on the built environment outnumbered other cultures.

The extent that benches were used by different ethnic groups reflected street visitors and was also dependent on cultural and personal attitudes of the visitors. In a broader sense, patterns of occupancy of benches along each street depended on the tenant mix of business activities, and their associated characteristics. For example, not many Europeans were recorded seated in St George Street and Great South Road where type of business agglomeration did not encourage longer term static activities among them.

Seated activities and the use of public and commercial seating in streets is also greatly influenced by cultural attitudes and socio economic status of street visitors. Data showed that high percentages of Māori/Pacific Islanders were engaged in seated activities within all case studies. These groups were the most frequent users of public benches. The frequency of use of Māori/Pacific Islander groups might also be related to income levels. Groups with lower socio-economic profile might be more dependent on public spaces for recreation and social activities than more affluent groups (Loukaitou-Sideris, 1995). However, interviews suggest that less consistency exists between Māori than Pacific Islanders and some Māori participants suggested that they do not use benches for leisure and social activities like Pacific Islanders.

Small percentages of Asians were recorded seated in Riddiford Street and Great South Road, the exception was St George Street where the increase in the number of Asians seated was mainly related to a specific range of older Sikh men. These groups often occupied the benches and socialised with each other for longer times. The higher levels of seated activities of Asians on St George Street might also be connected to the general atmosphere of the street and the social structure of businesses which is mainly Asian.

Europeans were mostly recorded seated on Riddiford Street but only a few Europeans were recorded seated in the other case studies. The number of seated activities was both related to commercial and public seating, but their social activities were mainly associated with café seating. Europeans mentioned they use public benches less than other ethnic

groups. For many adults, spending too much time on the street without any purpose might be perceived as a matter of suspicion and deviation; in other words, “*To be on the street carries with it an implied stigma related to poverty or deviance?*” (Jefferson, 2001, p. 135). However, as many Europeans were observed seated on public benches along Riddiford Street, this issue is not generalisable within the whole European or Pākeha culture.

Most of the proposals and recommendations on increasing the social activity of streets focus on footpath café maintenance and outdoor sales (Crankshaw, 2009). However, participant observation suggests that cafés are mostly frequented by Europeans and those with an average to higher socio-economic status. While café seating increased the social activity on Riddiford Street, social activities in Great South Road and St George Street were associated mainly with public seating. The latter did not have any café seating types. While the social activities of Europeans were associated with commercial/café culture, ethnic minorities more often relied on public seating for social activities. Although planning for outdoor café seating might create a monoculture along the street edges (European, specific age groups), behavioural mapping shows that planning for public seating adjacent to or in a close proximate distance of activity supporting businesses could increase the level of activities of public seating and both European and non-European cultures.

While Mehta (2006) found the relationship between commercial seating and liveliness to be most evident, the findings of this study suggest that having a right balance between commercial and public seating is essential for streets to become lively and more public. The type of business that commercial seating is attached to is also important. Café seating attracted higher percentages of Europeans while takeaway and bakery seating was used by a more diverse range of cultures.

The use of benches in different case studies varied by different ethnic cultures, but there were certain qualities that were similar between all streets. Data show that people did not necessarily sit where there were places to sit and that street environments were sometimes littered with benches in the wrong spaces. In many cases the use of benches on streets was influenced by adjacent businesses. However, this was not always the case and many users sat on benches randomly to take rest. Furthermore, some groups claimed territories on benches without having specific relation to business activities. What was common among well occupied benches across the case studies was that all were located in the active sections of the street, surrounded by activity supporting independent businesses. Locating benches in active sections of streets supported by businesses is the most important factor that ensures

their use. While many participants mentioned they would choose seating spaces that were distant from the crowd, observations show that benches with less activities around were less frequently occupied. This could be further described based on the findings of similar studies by White (1980) and Mehta (2006) which indicate that people seek liveliness, activity and engagement while relaxing and they do not like to be completely separated from the city life, people and their activities. “People watching” is an important activity on streets and analysis shows that good vantage points were valued among the participants (Bosselmann, 2008; Divette, 1977; Gehl, 1987; J. Jacobs, 1961; Shaftoe, 2009; Whyte, 1980).

Other factors such as the edge effect, prospect and refuge, and environmental comfort characteristics were of second importance compared to activities. In similar conditions, people preferred to sit on benches located in zone “A” where they could have their back protected and have a broader view than benches in zone “C” that faced the shops but backed on to the road and traffic. On the other hand, benches in zone “C” on active sections of the streets were filled more frequently than those placed in Zone “A” with less pedestrian flow. Similarly, places with higher environmental qualities distancing from traffic, pedestrian flow and noise without activities around were less often occupied. Bosselmann argues the desire to gather where other people are, or at a close distance of them to be able to observe the optional activities that predictably take place, is almost universally common (2008, p. 247). It could be concluded that the location of benches follows the same rule in streets in multi-cultural contexts and “*Benches should be placed within view of the action, but out of the way of the flow of pedestrian traffic*”(PPS, n.d.-c).

Analysis shows that the planning and design of the studied streets is somewhat culturally blind and needs further consideration. The number of people in different group sizes using footpath spaces drives demand for other (different) types of furniture arrangement of the public seating. Design and management that facilitate ethnically based social activities need to include amount of seating and their arrangement that accommodates larger groups. For instance, Great South Road has higher percentages of larger groups than Riddiford Street. This relates to the demographic profile of the Otahuhu neighbourhood. It is important to understand the socio-cultural composition and demographic statistics of each neighbourhood and streets before deciding what types of seating arrangements are mostly needed.

The study could not identify specific ethnic group preference for seating and public bench seating. The exception was St George Street where Asians had specific locations for

their social activities. As noted previously, the use of benches for static and social activities is based on street visitors, the reasons they frequent the street and cultural attitudes. However, observations suggest that in many cases patterns and rhythms of use of street benches were influenced by adjacent businesses, which is extendable to different ethnic groups. The benches close to businesses that encouraged static activities and targeted specific ethnic groups and genders were frequently occupied by those groups.

It is most critical to understand the type of business characteristics that support the static and social activities of each socio-cultural group. Placing comfortable sitting places along footpaths located close to activity supporting businesses could enhance the time people from specific cultural backgrounds spend on footpaths. Along with Parham (1992, 2012) findings suggest that the relationship between design and food oriented social practices could lead to convivial and vibrant urban places. The research found differences among different cultural groups' attitudes and activities in the street environment. Fewer percentages of Asians used public benches for eating/drinking whereas Pacific Islanders' social activities on the footpaths were often associated with eating/drinking. For Europeans, eating/drinking while socialising was related to the setting, where they often socialised on café seating. Thus, for example, planning for larger seating arrangements adjacent to or a close proximate distance from affordable eating premises such as Asian or Island ethnic takeaways could work together in order to create a means for the social activities of Pacific Islanders/Māori. The ways in which different groups use public spaces for food consumption and retailing are an important aspect that planners need to address in multicultural milieus (Thompson, 2003).

Underestimating cultural values in terms of seating locations might lead to their underuse by some cultural groups. Māori, were more cautious of the locations of public benches and maintenance compared to other ethnic groups. Designers must be mindful of the placement of public benches in relation to other amenities such as public toilets and waste containers.

Smoking is an activity on public seating which could influence the use by non-smokers. Street planners and designers should plan a number of smoke free areas and benches on footpaths. This is not related to a specific culture/s but an important aspect that affects public use of benches.

In addition to seating locations, the study found that many basic concepts derived from successful public spaces such as nature and landscaping, and the need for environmental comfort to be relevant in the studied streets.

Observations within case studies did not show much correlation between landscaping and number of static activities, especially in St George Street and Great South Road. However, landscape and specific green locations became a consistent design issue within case studies and were mentioned by participants of various cultures. Interviews re-emphasise the importance of native planting and the specific meaning of some types of plants in streets for Māori compared to other cultural groups(Velden & Reeves, 2010). The selection of the right type of landscape and plant species could have a significant effect on streets as multicultural public places.

Landscape found greater importance and was mentioned more frequently by participants, especially Māori and Europeans, in Riddiford Street compared to other case studies. Riddiford Street has a great number of mature and shady trees along its length. This was evident in what many participants favoured on this street. While landscape was mentioned in great numbers in Riddiford Street, participants in Great South Road and St George Street were more concerned about the environmental characteristics of seating places. Many users mentioned that the location of benches does not allow use in wet and rainy hours. This might relate to the cultural behaviour and length of stay among different cultural groups. While the use of public space by some groups such as Europeans might be conditional on good and sunny weather, Māori and Pacific Islanders use public benches for longer times and in different weather conditions.

While recommendations for seating locations were associated with trees and landscaping, there were also a number of complaints around benches placed under trees in terms of bird droppings and maintenance of these benches. Designers must be mindful of the placement of public benches in relation to landscape and trees.

Footpath width is a necessary aspect of public streets. The study did not find any strong correlations between footpath width and numbers of activities. The essential width of footpath depends on how premises manage their shop frontages, levels of activity occurring on footpaths and group sizes. While Great South Road had a comparatively broader width than the other streets, increasing the width of the footpath was among the recommended changes made by participants. The type of businesses lining the street and size of groups standing and socialising for longer times and window shopping drive demand for more social width. Findings of this research suggest that footpaths should allow retail activities and businesses to extend their merchandise onto the footpath and also the window shopping and standing activities of extended families and larger groups. This width also should allow for

furniture arrangements (both public and commercial) in different sizes and forms in conjunction with business activities that support stationary and social activities of diverse cultural groups with different sizes.

Interviews suggest the importance of tables for the leisure and social activities of diverse groups. Tables have been neglected in the design of the streets as public spaces and are mostly associated with commercial areas. Shaftoe (2009) argues that the existence of tables and food outlets can change a space to become convivial.

Although having colourful settings was a less significant issue within interviews, participants still preferred to have more colour in the street environments, especially on Riddiford Street and St George Street. These two case studies were more monochromatic in terms of buildings and businesses lining the street. Great South Road, on the other hand, expressed a colourful environment by its businesses and the colourful items they spread onto the footpaths.

Design symbols found importance among ethnic minorities, especially Māori. Symbols represent different cultural identities in public spaces (Velden & Reeves, 2010). Māori were less represented in business management and ownership of the case studies. This finding suggests that it is necessary to provide different ethnic groups with opportunities to manage and run business activities along streets. However, it should be noted that not necessarily all ethnic cultures might represent themselves in similar ways. Groups such as Māori might have less history and experience in business management, but their skills in weaving and carving could be integrated in the design of furniture and shop frontages. Place naming is a symbolic mechanism which can also promote dialogues between cultures in public spaces and communicate as a cultural representative for Māori (Velden & Reeves, 2010). However within a single street the name cannot be derived from a variety of cultural groups.

Looking across the three cases, the findings strongly suggest that retail and business activities together with the design and skilful management of the public area could support a broad range of static and social activities among people of various cultural backgrounds. Retail land-use activities play an important role in attracting people of diverse backgrounds onto the street and as Gehl (1987) describes, the physical environment is able to help them linger or stay longer.

### 5.4.3 Management Issues

In addition to land-use activities and design attributes, several management related issues became important in the interviews. Fincher and Iveson (2008, p. 119) argue that management and governance of urban spaces have *“a key role in shaping the terms on which inter-ethnic relations are organised and conducted”*.

Traffic was the main issue for participants within all case studies and was mentioned several times by interviewees of various cultural backgrounds. The most important criteria for many users to use and enjoy footpath spaces for leisure/social activities depended on the acceptable vehicle speeds, noise levels, pollution and safety on the street. Traffic management is considered a main ingredient of democratic streets (Francis, 1987).

#### **Maintenance/ Modernisation through a process of being upgraded and revitalised**

Maintenance and modernisation of the environment were a consensus among all case studies, finding importance along with business activities, design attributes and social functions. Maintenance and presentation of the street environment were an important issue for those of various cultural backgrounds, especially Māori and Pacific Islanders. Fernando (2006) argues that there is an increasing tendency to privatise footpaths and to deal with their aesthetic characteristics in order to express the prestige of the adjacent buildings. However, it should be argued that public, multicultural streets are not necessarily streets as a perfectionist may wish. Businesses, shop fronts and footpaths are not maintained as well as they might be. The quality of the buildings and shop frontages that line street edges and the design of the pavement using multi materials and colours (asphalt and concrete blocks) might look not-so-new and leftover, dull and uninspiring. However, streets might still be inviting to people of diverse cultural backgrounds. The look of the street, and premises, the materiality of the shop frontages and the type of merchandise they sell convey different social and cultural meanings which might attract some individuals of specific socio ethnic backgrounds while discouraging others from entering that space. Studies have been undertaken to show how the change of retail businesses might lead to gentrification of neighbourhoods. Chain stores and boutiques have the potential to change the existing sense of place for the lower socio-economic users and ethnic communities residing in the area by reproducing the existing culture and orienting towards more affluent and middle class users (Zukin et al., 2009). The beautification and modernisation of the street might lead to a luxury and prosperous atmosphere which will keep out disadvantaged users of footpath spaces (Loukaitou-Sideris et al., 2005).

Care should be taken to understand the extent to which the general design of public areas and private businesses can be improved without going through the “*boutiquing process*” causing retail activities to pay higher rents which leads to “*commercial displacements*” and social inequality by ignoring ethnic homogeneity (Zukin et al., 2009). Maintaining an appropriate balance between these conflicting needs and behaviours is central in terms of design and management of streets.

### **Social functions and activities**

Social functions and activities are important in order for streets to become more public. Social functions were favoured among those of different backgrounds in Riddiford Street. St George Street, on the other hand, lacked variety of social functions. Thus, to add different types of social functions to the street environment was important for interview participants. Every day users of the street quickly understood the missing qualities of the street. Riddiford Street accommodated a number of performances and a weekly market. Activities undertaken by people and business owners along Great South Road created a vibrant and lively atmosphere. However, such qualities were missing in St George Street.

One explanation is provided by Pugalis who draws attention to the activity programming on public spaces. According to Pugalis (2009b, p. 17);

*“Developing culturally vibrant and economically sustainable spaces is as much about the activity programming of spaces as it is about other aspects relating to the physical appearance of space itself”.*

Street vendors selling a diverse range of goods were mostly among the recommendations of Asian participants. Vending is considered as one of the characteristics of streets in the East (Mehta, 2009b). In contrast, in many Western societies, streets are not used to their full potential due to the strict regulations on the type of activities that can take place (Fernando, 2006; Valverde, 2012). Planners could encourage ethnic restaurants and eating premises with a different range of prices as well as street vendors, performers or artists of various cultures to offer a range of cultural goods, cuisines, music or art. Informal social functions, such as vendors and performers of various cultures, could enrich the cultural diversity of streets and enhance the multi-cultural streetscape. In order to encourage cultural groups with fewer opportunities in business history, planners and street managers could provide stalls along streets, so that these groups will find opportunities in running businesses with cheaper rents. Valverde (2012) claims that, while footpaths are considered public, they

are not truly public (common property), but rather are “*private property of a municipal corporation*” (Valverde, 2012, p. 35). Future research can investigate such possibilities in urban footpaths.

Previously research has proven the potential of market spaces in attracting a diverse range of cultural backgrounds (Dines & Cattell, 2006; Watson, 2009). Planning for weekly markets is also important for streets to become more public. Markets are places which offer a variety of international goods for people to buy their familiar goods and they could attract a range of different cultural backgrounds and become places “*for everyone to experience different and hybrid cultures*” (Ehrenfeucht & Loukaitou-Sideris, 2010, p. 467). Cultural ceremonies become a means where they connect peoples’ and immigrants’ present with their past, where their heritage could be expressed and shared and help towards creating a sense of place (Mazumdar et al., 2000).

Begging and the presence of homeless people were among the most disliked activities within case studies and decreased the possibility for streets being used to their full potential for leisure/social activities. Literature suggests that excessive control of public spaces by one group could contradict the right of access and use of public areas by other groups (Francis, 1987). However, as Mitchel (2003) argues, public decisions that discourage these unfortunate groups from streets contradict their rights to the city and truly democratic public spaces. The research for this thesis did not include observations from 6 pm onwards. However, alcohol related behaviour disorders taking place at specific times of night were also among the participants’ complaints. While bars and pubs were considered places of social encounter among participants, the night time economy of such places leads to mono-cultural leisure choices and exclusion of others. Thus, it threatens the purpose of public spaces to be democratic spaces that are accessible and used by all (Eldridge, 2010; Shaftoe, 2009). Parkinson (2012) in *Democracy and Public Space* reasons that democratic solutions to such socio-cultural conflicts in public space are not always simple or forthright.

This chapter has provided insight on the multiple dimensions (economic, social and physical) that could help streets to become more public for a diverse range of ethnic cultures through a number of case studies. The general tendency is that conditions other than the physical qualities of the footpaths have crucial effect on different activities at the street level. In many cases the design elements and managerial aspects of the streets were overshadowed by business activities lining the streets and restraint by social and economic circumstances. Thus, taking the study a step further in order to concentrate on design attributes of footpaths is necessary. The next chapter is based on the research design and analysis procedures of a

visual preference survey and intends to associate the preferences and behaviour related needs of each group with selected design features.

## 6 Chapter Six: The Visual Preference Survey

### 6.1 Introduction

The focus of the first stage of the study was the behaviour, perceptions and expectations of the users in the built environment. There are aspects of the social environment that can only be understood within the real environment, for example; the need to plan for smoke-free areas or the relationship between the seating and trees. The first stage of the research was concerned with social use and peoples' experience of public space. There were no references to visual aspects. In the open-ended interviews the researcher found that socioeconomic aspects and land use activities were discussed more often than design attributes. The first stage provided data for three specific streets, each of which attracts a range of ethnic groups, albeit not in equal representation. Thus, in order to address contemporary and proposed design advice and to widen the study to be more equally inclusive, a further study that allowed the effects of the social environment to be minimised and provides correlational data was necessary; the second stage. The current chapter discusses the second stage of the research.

The chapter is organised in six sections. The first section provides a brief on the literature of visual preference surveys. The second section discusses the research design and the exact methods employed to define the preferences of different cultural groups on the design characteristics of footpath spaces. Section three presents the methodological approach and survey design. A framework is developed based on appropriate design variables that could be employed in the preference study of footpath spaces. The next two sections discuss the pilot study and the sampling procedures. The chapter then presents the findings of the quantitative data analysis based on the preference ratings. The findings of this section identify those aspects of footpath design and management that are constant and invariant and those that vary between cultures. Chapter Six concludes with a section on the discussion of findings and conclusion and proposes design recommendations for creating culturally responsive urban footpath spaces.

## 6.2 Stage Two: Visual Preference Surveys

Stage Two uses a survey questionnaire, the most commonly used tactic for data collection strategies in correlational research (Groat & Wang, 2002). They are most frequently used in research that investigates socio-cultural interactions or perceived meanings of environments. Survey questionnaires enable the researcher to achieve a wide range of information, across a large number of respondents in a limited amount of time; from behavioural habits to opinions or attitudes on a variety of topics. They give the researcher the possibility to associate the behaviour of each group with the design features (Groat & Wang, 2002). While full scale mock ups might seem the best way to examine built environments, they are not practical as they are expensive, time-consuming and complex (Seaton & Collins, 1972). Online (web based) survey is a method that enables data collection in a relatively fast and inexpensive manner (Sue & Ritter, 2011).

A visual preference survey (VPS) is a method for gaining public response on physical design choices in order to evaluate and promote planning and design.

*“VPS is a research and visioning method that attempts to articulate community residents’ impressions of their present community in order to build consensus for its future. It consists of photographic images, evaluation forms, optional questionnaires, and evaluation and analysis techniques to understand and present the results” (Al-Kodmany, 2002, p. 194).*

Visual preference surveys are known as a tool for democratic decision making within communities. Anton Nelessen (1994), in his book *Visions for a New American Dream*, describes the Visual Preference Survey, a visualisation method using photographs to promote democratic design and planning. Similarly, Al-Kodmany states that; *“Computerised visualization methods offer planners and architects some new ways to support and facilitate democratic decision-making”* (2000, p. 220). *“It has [also] been shown that the use of preference reactions to photographic material is a highly effective procedure for deriving salient perceptual categories”* (Kaplan, 1985, p. 161). Visual data are often considered easier to process than verbal information. In *Visual Research Methods in Design*, Henry Sanoff (1991, p. 2) states *“photographs contain a vast resource of information and are often less ambiguous than words.”*

A visual preference study was conducted as a part of the online survey. This approach was used to define design attributes that influence each cultural group’s preference in choosing specific micro-environments for their desired activities in the context of streets.

Participants were asked to examine a series of images and vote on their preference. Visual simulations have been used in a number of studies (Bosselmann & Craik, 1987) and are considered to be a reliable tool in recording preferences and as effective as those responses gathered from respondents of actual environments (Sanoff, 1991). A number of studies using visual simulations and photographs have been done in the field of environment and visual-perception studies. These studies have tried to understand the visual preferences of groups defined by social class, sex, age, and ethnicity. While most have focused on visual and environmental landscape preferences (Kaplan & Talbot, 1988; Sonnenfeld, 1966; Zube & Pitt, 1981), others have concentrated on visual preferences in urban street scenes or sign-scapes (Gjerde, 2011; Nasar, 1984; Nasar & Hong, 1999; Zube, Viving, Law, & Bechtel, 1985). The advantage of visual simulation surveys compared to surveying people in actual places is that they can manipulate and control the variety of influential attributes and while some attributes are kept constant, attributes of interest will vary (Stamps III, Nasar, & Hanyu, 2005). Thus, the effect of each of the design attributes on the preference and appreciation of the street environment could be examined separately and in relation with each other. While participants' comments were highly influenced by activities, noise, pollution and odours in the first stage of the study, these factors are able to be disregarded in photographs and images (Nasar & Hong, 1999). Visual images have been employed more often for illustrative purposes than for conducting empirical studies in the field of environment and behavioural research (Hartig & Staats, 2005). Scholars propose that perception is more closely related to the possible functions that the environment affords rather than to its physical and structural aspects (Gibson, 1979; Heft, 1997). Aesthetic components, landscapes and physical spaces are also referred to as commodity components, capable of accommodating behaviours and activities (Lang, 1987). Thus, preference could be related to the opportunities they offer for different and specific behaviours of their users (Hartig & Staats, 2005).

## 6.3 Survey Design

### 6.3.1 Simulation Sampling and Selection of Images

John and Sharon Gaber (2004, pp. 223-224) propose three principles for using images in an empirical research tool;

1. The image must replicate ‘contemplation’ where it illustrates an existing subject (environment) that can be interpreted and analysed by the researcher.
2. The image must have ‘variable composition’; in other words identifiable variables of photographs must be integrated based on the theoretical framework of the research and be based on the area of interest.
3. The image must have ‘indexality of visual variables’ where the image is broken down into a number of variables and each variable (subject) could be understood in spatial relation to other variables and the image is understood as a sentence that narrates a story.

Single and multiple variables based on the framework of the study were included in the survey questionnaire. The images illustrate relationships between different variables in order to narrate a story. The framework for this questionnaire was based on literature, observations and those attributes which occurred most frequently in the interviews. Content analysis of the interviews helped define the design attributes for each question. Those characteristics identified as most important were seating and its associated characteristics, landscape elements, environmental comfort characteristics, footpath width, shop displays, public art and symbolic design elements, colour, tables, and pavement materials. Characteristics that were capable of being simulated photographically were selected for the second stage. Public art and symbolic design elements need to be studied in more detail and conducting a preference study based on cultural signage and symbols is out of the scope of this study. The first stage of the study suggested that an appropriate footpath width greatly relates to the functions of the street, adjacent land-uses and levels of pedestrian density. Therefore, the study stage does not intend to quantify the minimum requirements for footpath widths.

Image selection was undertaken with care, as “*uncontrolled biases in the content of photographs could produce misleading results*” (Stamps III et al., 2005, p. 74). The focus of this research is on those types of streets that accommodate both traffic and pedestrians. The assumption in the survey is that the streets have a well-managed traffic and movement system.

Response stimuli were photographs of real places and computer-simulated images illustrating potential footpath spaces. To ensure that the computer simulated images maintained a familiar urban micro environment for the research participants, the researcher organised design manipulations using computer software on photographs taken along footpaths of streets in New Zealand. Images feature streets' footpaths with an average social width. The design manipulations were based on the theoretical framework. For example, the footpaths included trees. Through the interviews, trees were one design attribute that respondents had a positive view on. Thus, they were kept consistent in all the simulations. All of the images were illustrated the same way from the same pedestrian view-point. The simulations were generated using Photoshop Cs5 based on photographs taken by Nikon D5100 of footpaths from the passer-by perspective. The layering option of Photoshop enabled the researcher to manipulate images by adding, deleting, or changing variables while keeping the shared basis. For example, lighting, weather conditions, and background activities in the visualisations were consistent in all images as they may influence participants' perceptions. The added layers were photographs taken by the researcher from the footpath spaces and their micro-scale physical characteristics or images found on the internet. For example; a bench was photographed from different angles and then extracted from its original image and then placed as a new layer on the basis image to create a simulation. The pictures and simulations were represented in colour as research confirms a strong correlation between colour, static simulations and on-site preferences (Stamps III, 1990; Stamps III et al., 2005). Each simulation set constituted two to five images that were attached vertically in the left side of the web page. A rating scale (extremely dislike-extremely like) was positioned next to each simulation on the right side of the page to create an easy to view and rate composition. The survey was organised in six sections.

### 6.3.2 Participant Details

The first section of the survey included a demographic set of questions. Participants were asked about their ethnic background, homeland, age, gender, level of education, occupation, household income and the length of time they have lived in New Zealand. Collecting demographic information helps to ensure that participants come from diverse backgrounds representing New Zealand's population and may suggest whether differences between ethnic groups relate to other subgroups or not.

### 6.3.3 Shop Displays

The second section of the survey asks participants to rank different types of shop frontages. The exact design of shop frontages, type and proportions of windows and doors are beyond the scope of this research. Based on the three case studies the researcher categorised shop fronts into six themes; 1) shop displays out on the footpath, 2) fruit and vegetable shops displaying their items on the footpath, 3) shops displaying their items inside their premises with low levels of permeability, 4) open shop window displays, 5) café frontages with activities on the footpath and 6) open shop fronts with activities inside the shops. Scale categories were on a continuum from extremely like to extremely dislike and stay consistent within the length of the survey. In order to represent an unbiased sample of scenes, the focus of this section was just on the theme of the shop frontages, not on the type of shops. It did not focus on the ethnic characteristics of the shops, i.e. if a shop is selling Pacific Island cuisine or Indian clothing it might affect the preference from some cultures to choose a visual image over others. In order to reduce personalisation effects, the researcher grouped three shop frontages in one theme together. As a result of learning from observations and interviews, the selection of images was so that they were most representative of shop fronts of the studied areas.

### 6.3.4 Seating Conditions

The purpose of the third section is to understand peoples' preference for different seating locations and orientations towards footpath spaces. The design of this section relies on activity zones;

**Activity Zones:** activities on the footpaths could be categorised into three zone spaces; zone "A" is along the edge of the buildings and shop fronts. Zone "B" is primarily for pedestrian movement and is less used for lingering activities. Zone "C" is not always available but where it is available (footpath width increases), it is furnished with street furniture such as fixed benches, tree trunks, and litter bins. Zone "C" is adjacent to the road and parked vehicles. Advertisement signs from the shops are more often located in zone "A" (figure 6-1).

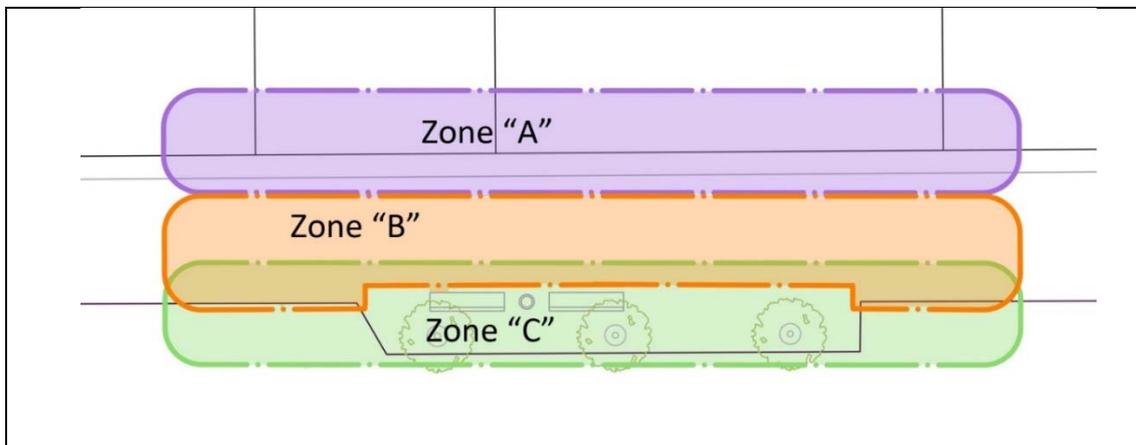
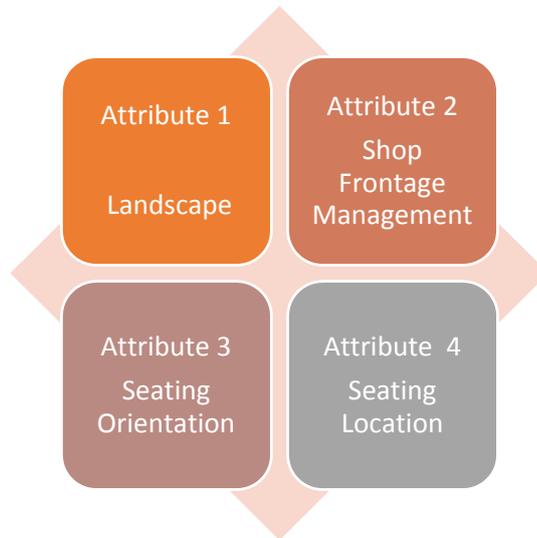


Figure 6-1: The three activity zones

Earlier visual preference studies have focused on design and management attributes on their own and not on the relationships between design attributes. Stage Two aims to find whether any relationship exists between different characteristics in different situations. Due to the nature of visual preference surveys, the number of questions that can be asked without overwhelming and boring the participants is limited. Thus, with the identified most important design variables, each with separate possible levels (between 2 to 4 levels), a full factorial design which takes on all possible combinations of these levels across design attributes would be tedious. The researcher's aim is to study the effect of each attribute, as well as the effects of connections between attributes on the response variables. However, in the design of visual preference surveys, it is essential to control variations in a limited number of micro-scale physical features.

The third section of the survey examines the relationship between seating location and orientation towards road traffic and footpath with different levels of separation by landscape height and density and shop frontage management. This section is constituted of nine simulation sets (27 images). Each set contains three simulations attached vertically and could be easily seen simultaneously. The variables manipulated in each simulation were seating location; zone A or zone C, seating orientation, shop frontage management, and landscape edge (figure 6-2).



**Figure 6-2: Images vary from one another by different types of shop frontage, seating locations, seating orientations and types of landscape edging the footpath.**

Based on the current activity zones of footpaths in New Zealand, two seating zones were selected. Zone “A”; along the edge of the buildings and shop fronts, and Zone “C”; along the curb. Five seating types were chosen. These seating types differ from each other by their location and orientation. Seating types B1 and B4 were located on Zone “A” and seating types B2, B3 and B5 were placed in Zone “C”. Seating types B2 and B5 faced the footpath and the businesses, but backed onto the traffic. Four seating types (B1, B2, B4, and B5) were parallel to the footpath and the road. Usually, if the footpath width allows, benches are also placed perpendicular to the footpath and the road. Seating type B3 was also located in zone “C” but was perpendicular towards the road and footpath. The locations of seating types B4 and B5 are similar to seating types B1 and B2 with the same surroundings, but face another bench on the other side of the footpath. Table 6-1 shows the units of measurement and descriptors of different design variables.

Shop frontage management is an important issue for seating located in zone “C”. In order to make a better comparison between different types of seating, the researcher chose

three types of shop frontages that were common in the three investigated streets. First, businesses that keep their items inside the shop (organised) were investigated and second, those type of shops that spread their items onto the footpath spaces. Third, footpath cafés with café seating were considered. The seating on a footpath is usually provided by the city authorities and is usually fixed in place, so the seating location determines what the shops can provide in the way of display. The latter two shop front management types are only provided when seating is located in zone “C” of the footpath. Zone “C” on footpaths usually has two types of seating orientations; parallel and perpendicular.

Landscape was frequently repeated in the interviews. In many circumstances, people preferred seating that was distant from the busy road. Landscape can serve as a buffer from road and traffic. Three landscape types were chosen. Landscape type L1: no landscaping along the edge. Landscape type L2: short landscaping along the edge which provides a view to the road and the traffic. Landscape type L3: tall landscaping along the edge that acts as a visual barrier to the road and traffic. These landscape types were combined and questioned in all nine simulation sets in the third section of questions.

| Design Variables     | Measurement Unit | Descriptor   |
|----------------------|------------------|--|
| Bench type 1         | B1               | Bench faces the footpath   |
| Bench type 2         | B2               | Bench faces the footpath and backs on to traffic                   |
| Bench type 3         | B3               | Bench is perpendicular to the footpath                             |
| Bench type 4         | B4               | Bench faces the footpath and another bench                         |
| Bench type 5         | B5               | Bench faces the footpath and another bench. It backs on to traffic |
| Shop frontage type 1 | SF1              | Organised shop frontage  |
| Shop frontage type 2 | SF2              | Spreading onto the footpath  |
| Shop frontage type 3 | SF3              | Café shop frontage   |
| Landscape type 1     | L1               | No Landscaping along street edge                                   |
| Landscape type 2     | L2               | Low landscaping along street edge                                  |
| Landscape type 3     | L3               | Tall landscaping along street edge                                 |

Table 6-1: Units of measurement and descriptors of the design variables

The preference for different seating types (with different location and orientation) could not be addressed without considering different types of shop frontages and how seating is separated from the road with different landscape buffers. As noted, each seating type has a specific location and orientation. The section aims to make comparisons between different

five seating locations, three landscaping options and three different types of shop frontage management. All other aspects of the built environment were kept consistent. The perspective (basic image) chosen in this section is comprised of shop frontages, footpath and traffic. The image was taken centrally in the footpath width and from 1.5 metres eye height. Manipulations were created in controlled conditions. Figures 6-3, 6-4 and 6-5 show different simulation sets that were questioned in section three of the online survey. The image size was 15\*9.94 cm on a 21.5" *Dell Ultra Sharp U2212HM* monitor. Each simulation set presents different landscape options along with other examined characteristics. Participants were asked to imagine themselves as the person sitting on the bench and answer accordingly.

The five simulation sets shown in figure 6-3 relate to the five seating types with the organised shop frontage (SF1). Figure 6-4 shows seating types B2 and B3 with types of shop frontages expanding their items onto the footpath (SF2). Simulation sets 8 and 9 presented in figure 6-5 relate to seating B2 and B3 with the café frontage.



Simulation set 1 : seating condition type 1



Simulation set 2: seating condition type 2



Simulation set 3: seating condition type 3



Simulation set 4: seating condition type 4



Simulation set 5: seating condition type 5

**Figure 6-3: The first 15 images examine the relationship between seating location, seating orientation and landscaping with shop frontage type 1**

As the differences between images are sometimes subtle, a caption was added above each image which described the main differences between images (for more information on the design of the survey refer to appendix E).



Simulation set 6: seating condition type 2



Simulation set 7: seating condition type 3



Figure 6-4: The second 6 images in the third section examine the relationship between seating orientation and landscaping with shop frontage type 2

The perspective view in the third set of questions allowed the researcher to make comparisons between different seating locations and orientations, shop frontage management and landscaping along the edge of the footpaths. However, the angle of this perspective view did not address the degree of permeability of shop fronts. In these perspectives, it was not clear whether the businesses had open shop window displays or they only displayed their items inside their premises. Thus, another question including images from another perspective was added to address preferences among seating and levels of permeability of shop fronts (refer to section 6.3.6).



Simulation set 8: seating condition type 2



Simulation set 9: seating condition type 3



Figure 6-5: The third 6 images in the third section examine the relationship between seating orientation and landscaping with shop frontage type 3

### 6.3.5 Seating Arrangement Types

The third section of the survey examined a range of seating conditions. It questioned the same bench under different condition types (locations, orientations, shop frontages, and landscape types). The fourth section of the online survey addressed seating arrangements<sup>6</sup>. The purpose of this section was to measure how supportive each group felt about a variety of seating arrangements in footpath spaces while visiting by themselves and with their ethnicity centred group. The framework in shaping this question was based on Hall's (1966) work on proxemics that has been further described in section 3.6.2. Hall's findings suggest that distances for interpersonal contact and privacy are culturally based. Hall's work on spatial patterns of use has implications for furniture arrangements in open space design (Zhang & Gobster, 1998). Different types of furniture arrangements both 'socio-petal' or 'socio-fugal' (Ostmond, 1957) were combined with the number of possible seating spaces (individual benches or a number of benches clustered and grouped together) and illustrated. The stimuli consisted of nine pictures of a footpath environment (figure 6-6). These pictures were examined in two question sets; while people were visiting by themselves and with their ethnicity centred group. The section started with questioning the size of participants' groups while visiting the streets for social/leisure activities. It was expected that each respondent would answer the question according to their interpretation of the number of people they usually go to the street with for social activities.

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<sup>6</sup> Reader must note that seating arrangement types are different from seating conditions in the previous section. Seating conditions examined a bench under different condition types (locations, orientations, shop frontages, and landscape types). Seating arrangements question a variety of furniture layouts within the kerbside of the footpath.

|   |  |
|---|--|
|    |    |
| <p>Seating Arrangement Type 1</p>   | <p>Seating Arrangement Type 2</p>  |
|    |    |
| <p>Seating Arrangement Type 3</p>   | <p>Seating Arrangement Type 4</p>  |
|   |   |
| <p>Seating Arrangement Type 5</p>   | <p>Seating Arrangement Type 6</p>  |
|  |  |
| <p>Seating Arrangement Type 7</p>   | <p>Seating Arrangement Type 8</p>  |
|  |  |
| <p>Seating Arrangement Type 9</p>   |  |

Figure 6-6: Seating arrangement types. The actual imagery made use of photographic representation

### 6.3.6 Other Design Variables

The fifth section examined native and non-native planting and vegetation types, paving materials, colour, and permeability. In this section, a specific characteristic was manipulated in each simulation set. The only exceptions were those questions that examined peoples' preferences for seating orientations towards different density levels. Apart from the question that examined the preference for native or non-native landscapes that questioned two options, other sets of questions were composed of three options for the questioned characteristics. The reduction of options simplified and shortened the rating process and helped to design an easy to view composition of images and rating scale on the screen. Each of the three options for each characteristic presented a very different but related scenario.

#### Vegetation Types

Vegetation is perceived as a temporary symbol in urban public spaces and parks which can support intercultural connotation and representation (Rishbeth, 2001; Velden & Reeves, 2010). *"They are evocative of a memory of place, emotionally significant as a trace of past experience"*(Rishbeth, 2001, p. 360). Indigenous plant species in New Zealand have significance for Māori and relate them to the land(Velden & Reeves, 2010). Stage One also confirmed the importance of native planting in streets for Māori compared to other cultural groups. However, exotic flora have cultural symbolic value for other ethnic cultures to communicate with public open spaces (Velden & Reeves, 2010). The plant chosen to represent a native plant in the image was flax which is one of New Zealand's most distinctive native plants. Flax is known to have symbolic meaning for Māori; *"In Māori sayings and songs flax is often a metaphor for family bonds and human relationships. It is also a national emblem and is used in logos for local and government organizations"*(Swarbrick, 2012). The non-native plant chosen should have a similar appearance (type of leaves, density, and height) so that people would judge the plant by its native or non-native character rather than visual qualities. In order to stress the difference between native and non-native landscaping, a descriptive caption was added above each image.

*"Although flax has been exported, it is a plant that many New Zealanders associate strongly with their homeland"* (Swarbrick, 2012).

#### Paving Materials

According to Cullen (1961, p. 128), *"the floor could be a connecting surface between and around buildings"*. Floor-scapes could enhance the character of urban environments by providing a

sense of scale (Carmona et al., 2010). Paving with similar function in different materials; asphalt, interlocking concrete blocks and stone paving was chosen as the most frequent options in New Zealand. In her study among different ethnic cultures, Reich Roman (2012) noted differences in opinions about paving materials.

### **Colour**

Urban designers must be aware of the meaning members of different cultures attach to colours. While a considerable number of studies have applied “colour meaning”, “colour preference” (Chougourain, 1968) and cross-cultural preferences in the area of interior design (Y. Park & Guerin, 2008) there is a lack of empirical evidence on the meaning of colour among different cultures in the field of urban design. Studies on cross-cultural differences among colour preferences fall into two categories; the first category relies on “colour universals” which claim that individuals of different cultures have similar preferences for colour (Osgood, Suci, & Tannenbaum, 1957). On the other hand, the other stream of researchers believe cultural background is one of the principal reasons that individuals have different colour preferences and that colour preference is influenced by an individual’s cultural background (Chougourain, 1968, 1969; Y. Park & Guerin, 2008). In other words, people have different interpretations of colour based on their cultural background. A study by Park and Guerin (2008) indicated there are preference differences between Eastern and Western cultures and differences among the individual cultures for interior environments. The current study only examines colour of the landscape in which it examined a spectrum of single colour to multi-colour landscaping along the footpath edges. This will help designers to design outdoor footpath spaces which convey special meanings for different cultures and would ensure a potential for successful design in public spaces in multi-cultural societies.

### **Visual Permeability**

This question refers to the visual permeability of storefronts. Three options were chosen for this question in order to vary visual permeability (figure 6-7). The first frontage was determined to be a completely blank surface where one cannot see through the shop. Using very dark glass, participants were asked to rate their desire to sit in front of the non-visual permeable store frontage. The second option was a medium-visual permeable shop front where part of the glass was dark (non-permeable) and the other part was transparent.



Figure 6-7: Participants were asked to rate their preference for sitting on the bench facing a shop with three levels of visual permeability. Left image: shop with opaque and dark windows, middle image: shop with partly opaque and partly visually permeable windows and right: shop with all windows visually permeable.

The third option readily revealed the interior of the shop and its interior activity. Again, participants were asked to rate their preference to sit in front of this visually permeable storefront.

### 6.3.7 Pedestrian Density

It has been noted that levels of noise and density have different meaning among people of different cultures (Main & Hannah, 2010). The sixth section of the survey was manipulated in terms of two variables; pedestrian density and seating orientation (parallel or perpendicular). The researcher manipulated different levels of pedestrian density on footpath spaces by altering the number of people engaged in different activities on the footpath (walking, standing and talking and window shopping). Participants were asked how they would like to sit on the bench facing the footpath with three different pedestrian density levels (figure 6-8).

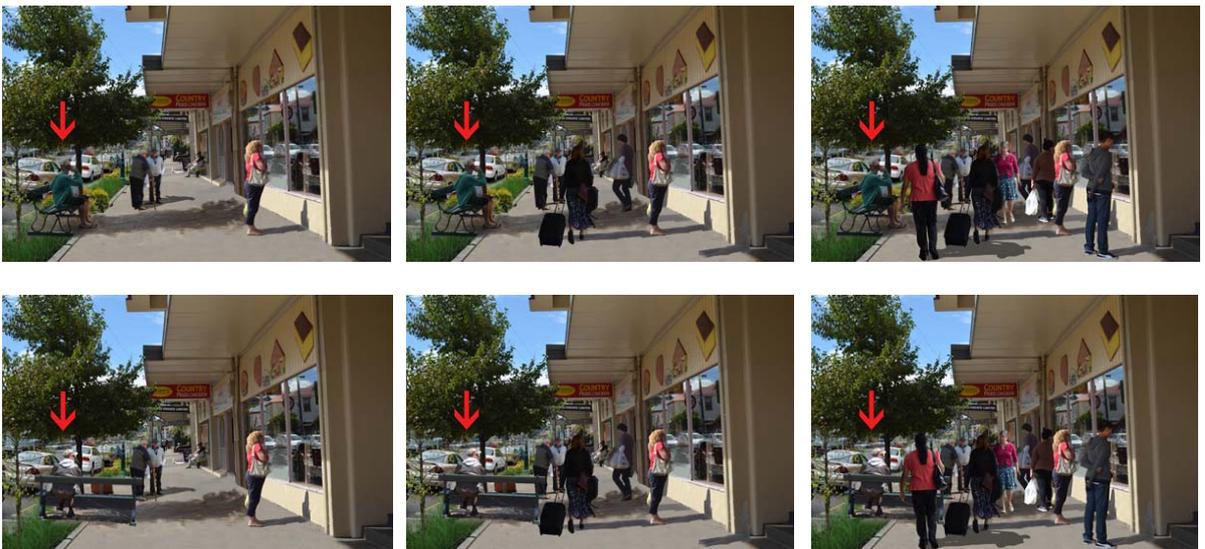


Figure 6-8: Participants were asked to rate their preference for sitting on the benches parallel and perpendicular to the footpath with three density levels

The people represented in this simulation were from different cultural groups, ages and both genders, based on the existing cultures in New Zealand. The diversity of personages helps avoiding a bias ranking by the participants (Reich Roman, 2012).

#### **6.4 Pilot Study**

A pilot study was conducted to test the methods developed for the second stage of the study. The test was administered with representatives of diverse cultural groups. The questionnaire was sent to ten people, who were asked to fill in the questionnaire and to make comments and suggest changes for improvement.

Different aspects were tested within the pilot study; the examined issues were:

1. The length of the survey and the average time it takes the participants to take the survey
2. Ease of understanding the questions without confusion
3. The structure of the questionnaire and the order of the questions
4. Number of simulation-sets presented in the survey
5. Number of images presented in each simulation set
6. The size of the images and the associated text

Several changes were made to strengthen links between images and their captions. Font size of the image captions was increased, and the important wordings that made each image different from other images were underlined or highlighted to make the difference between questions and simulation sets clearer.

The wording of questions that seemed to be confusing was changed based on the participants' recommendations. The question of native plant or exotic plant seemed to be confusing. Instead of asking how they would like to sit on the bench shown in the picture it was decided to ask how they would like urban footpath spaces with native or non-native landscapes.

The time to complete the survey ranged from 7 minutes to 16 minutes, with an average time of 12 minutes. Most participants appeared to find it entertaining to answer the visual on-line questionnaire. No concerns were raised about the number of sets and the number of simulations per set in the pilot study. The short questionnaire made it possible for the researcher to add a limited number of simulation sets on pedestrian density to the initial survey.

## 6.5 Population Sampling

Roscoe (1975) advises that a minimum sample size of 30 participants in each subsample (ethnic group) is required to ensure statistical relevance. This then became the minimum target for each ethnic group considered in this research. Recruitment sought to ensure that all ethnic groups had an equal chance to participate in the study. This led to development of a multi-stage approach. A flyer seeking participation in the visual preference survey was designed and distributed in a variety of ways. A number of participants were recruited using "snowball sampling" through the researcher's personal and professional contacts. In snowball sampling, the researcher initially targets a few numbers of the sample population then asks those members to target other members of that population through their social networks and extended associations and so on (Bryman, 2012). Each person was asked to resend the flyer to their contacts residing in NZ and to share it on their Facebook page. The flyer was posted on different Facebook pages, including those of the Victoria University of Wellington- Faculty of Architecture and Design and Centre for Applied Cross-Cultural Research, asking members of the four cultural groups to complete the survey. A number of European and Asian participants were recruited in this manner. Sampling of Maori and Pacific Island respondents required closer management. Members of these two groups were recruited via Te Rōpū Āwhina whānau and Pasifika groups of Victoria University of Wellington and Wellington Methodist Parish Church ethnic communities. Participants were also recruited through the different spaces of the University such as the Library, the Hub (both staff and students), and key public spaces including parks and museums. During Wellington's Pasifika Festival the researcher asked participants to provide their email addresses, to which the survey link was then sent. Once again, participants were asked to share the flyer with friends, family and other members of their ethnic community.

The responses were collected over a four-month period (from December 2013 to March 2014) using the Qualtrics online survey service. The specific number of participants who participated in the study with the associated characteristics are described in Section 6.6.1.

## 6.6 Analysis and Findings

Different statistical methods were used to analyse the questions depending on the type of questions and the number of changing variables. Descriptive statistics as above were used to describe the demographic characteristics of the sample. Methods of analysis include one-way ANOVA, Generalized Estimating Equations, and repeated measures analysis of variance. Numerical values were used for processing the data analysis. The numerical value of "dislike extremely" is equal to 1, and "like extremely" equals 7. The researcher tested whether the mean response (1-7) differed by group. The null hypothesis of each question is that all cultural groups are alike in their preferences and that there are no preferences over the examined design attributes. The statistical significance of the comparisons were measured by the "p" value. A significance level of 0.05 has been established as a commonly acceptable level of confidence in most behavioural studies and was chosen for this study. A "p" value lower than 0.05 suggests that the null hypothesis can be rejected and the alternative hypothesis, suggesting that there are differences, can be accepted (Privitera, 2012).

### 6.6.1 Participant Details

A total of 181 people, 78 males (43%) and 103 females (57%), participated in Stage Two of this research. The sample included 41 Europeans (22.6%), 32 Māori (17.6%), 34 Pacific Islanders (18.8%), 46 Asians (25.4%) and 28 (15.6%) from other ethnicities such as North or South American, African, Middle Eastern. Those of mixed-race backgrounds sometimes identified themselves as the other group. Participation rates were highest among groups aged 13 to 24 and 25 to 34. Only 9% of participants aged 55 and above participated in the survey.

The majority of the respondents had lived in New Zealand since birth (45%) followed by most recent immigrants who had resided in New Zealand less than 5 years (25%). 8% of participants had lived in New Zealand for more than 20 years. Figure 6-9 shows the general demographic characteristics of the participants.

While a multi-stage approach was used for sampling procedures, the majority of those who participated in the study were well-educated and held a Bachelors or Honours degree (40%) and above (35%). 14 % held tertiary trade qualifications and only 11% with high school, college and below qualifications participated in the study.

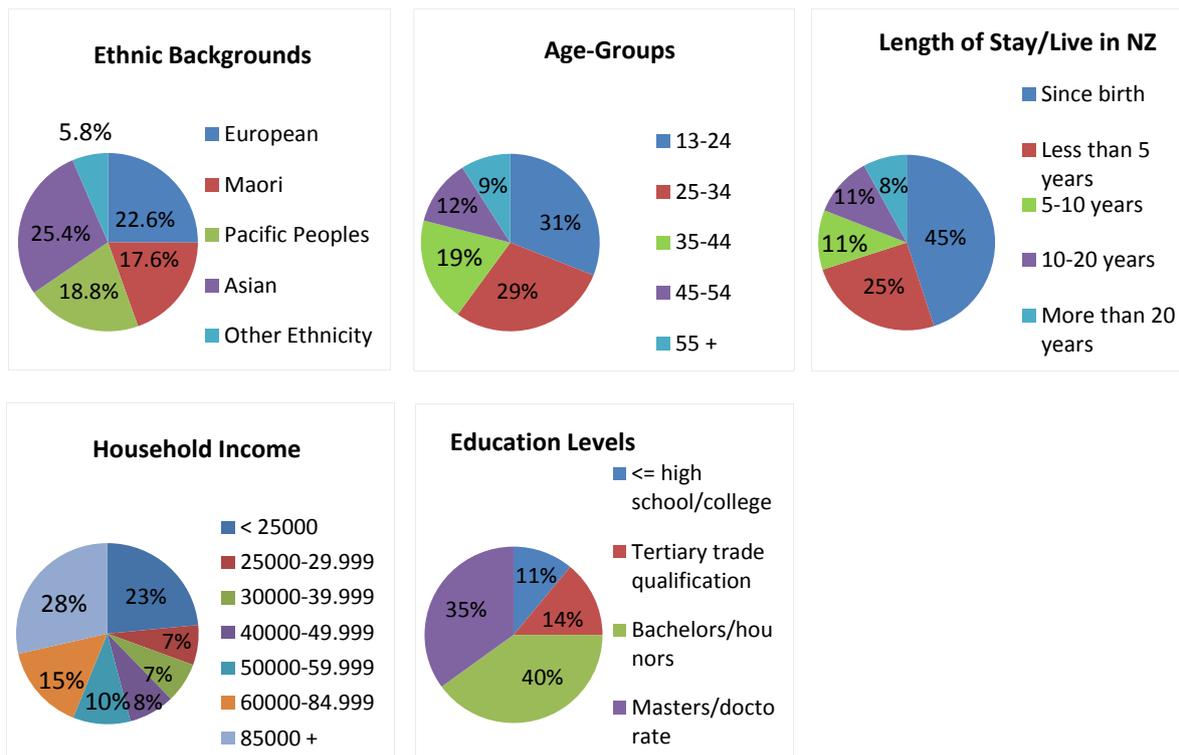


Figure 6-9: Demographic characteristics of the participants

The majority of those who participated (55%) considered New Zealand as their home country, followed by those which considered Asian countries (20%), and countries located in the Pacific (10%). 8% of participants referred to the Europe, the UK, USA and Canada as home countries and a small number referred to Middle Eastern (3%), South American (2%), and African (2%) countries. For more information on the specific list of countries chosen as homeland by participants and their occupations refer to appendix F.

### 6.6.2 Preferences for Shop Displays

Mean preferences and differences between groups were examined by considering the results of one-way ANOVA. Tukey's Post Hoc test was used to examine which specific groups were different from which others. Results are reported as mean±SD for each ethnic group (table 6-2). The highest mean preference among all cultural group related to café seating on the footpath, followed by boutique and open shop window displays. On the other hand, shop displays out on the footpath had the lowest mean preference among all shop frontage types.

1) There was a significant difference in the mean preference for shop displays out on the footpath by cultural group ( $F(4, 176) = 4.006, p = 0.004$ ). Tukey's Post Hoc test established that Europeans and Māori had a significantly lower preference for shop displays

spreading onto the footpath than did Pacific Islanders. Asians also had a higher mean preference than Europeans and Māori.

2) There were no significant differences in preferences for fruit and veg shops displaying their items on the footpath among different ethnic groups ( $F(4, 176) = 2.097, p = .083$ ). However, the highest mean belonged to Pacific Islanders (mean=5.00) followed by Europeans (4.88), and the lowest mean belonged to Asians (mean=4.20).

3) There was a significant difference in the mean preference for shops displaying inside their premises by cultural group ( $F(4, 176) = 3.244, p = .013$ ). Tukey's Post Hoc test established that Asians had a significantly higher preference (mean=4.63) than did Europeans (mean=3.49). Their preference might be related to their activities as they are more indoor focused people.

| Type of shop frontages                   | Europeans               | Māori                   | Pacific Islanders       | Asians                  | Others                  | All Groups              | F     | p-value     |
|--|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------|-------------|
| 1 Shop displays out on the footpath      | <b>2.95</b><br>(±1.564) | <b>3.16</b><br>(±1.439) | <b>4.29</b><br>(±1.661) | <b>3.46</b><br>(±1.486) | <b>3.68</b><br>(±1.486) | <b>3.48</b><br>(±1.601) | 4.006 | <b>.004</b> |
| 2 Fruit and veg shops                    | <b>4.88</b><br>(±1.631) | <b>4.38</b><br>(±1.561) | <b>5.00</b><br>(±1.255) | <b>4.20</b><br>(±1.600) | <b>4.75</b><br>(±1.143) | <b>4.62</b><br>(±1.496) | 2.097 | <b>.083</b> |
| 3 Shops displaying inside their premises | <b>3.49</b><br>(±1.777) | <b>3.97</b><br>(±1.636) | <b>4.21</b><br>(±1.572) | <b>4.63</b><br>(±1.583) | <b>4.57</b><br>(±1.574) | <b>4.17</b><br>(±1.675) | 3.244 | <b>.013</b> |
| 4 Boutique and open shop window displays | <b>4.95</b><br>(±1.448) | <b>5.00</b><br>(±1.391) | <b>5.44</b><br>(±1.078) | <b>5.02</b><br>(±1.256) | <b>5.29</b><br>(±1.410) | <b>5.12</b><br>(±1.319) | .910  | <b>.459</b> |
| 5 Café seating on the footpath           | <b>5.80</b><br>(±1.327) | <b>5.34</b><br>(±1.382) | <b>5.74</b><br>(±1.163) | <b>4.83</b><br>(±1.371) | <b>5.37</b><br>(±1.395) | <b>5.37</b><br>(±1.395) | 3.617 | <b>.007</b> |
| 6 Open shop frontages                    | <b>4.44</b><br>(±1.598) | <b>4.59</b><br>(±1.241) | <b>5.15</b><br>(±1.500) | <b>4.54</b><br>(±1.206) | <b>4.39</b><br>(±1.499) | <b>4.62</b><br>(±1.419) | 1.574 | <b>.183</b> |

**Table 6-2: Comparison of mean preference scores (± standard deviation) among groups for different type of shop frontages**

4) There were no significant differences in preferences for boutique and open shop window displays ( $F(4, 176) = .910, p = .459$ ). Pacific Islanders showed higher levels of interest (mean=5.44). On the other hand, Europeans had a lower mean preference (mean=4.95) for open shop window displays.

5) There was a significant difference in mean preference for café seating on the footpath by cultural group ( $F(4, 176) = 3.617, p = .007$ ). Tukey's Post Hoc test established that Asians had a significantly lower preference (mean=4.83) than did Europeans (mean=5.80). As expected, Europeans had the highest mean for café seating on the footpath, followed by Pacific Islanders, Māori and Others. Asians showed lower levels of interest for café seating compared to other cultural groups. This might be related to their footpath activities where they usually do not use the footpath spaces for eating/drinking and might also relate to their

higher preferences for shops displaying inside their premises. However, all groups scored the café seating on the footpath relatively higher than other displays.

6) There were no significant differences in preferences for open shop frontages ( $F(4, 176) = 1.574, P = .183$ ). Pacific Islanders had the highest preference, followed by Māori, whereas Europeans had the lowest preference for these types of shop frontages. Takeaways in the case studies were usually associated with open shop frontages. The visual culture in their storefronts may have conveyed meanings for Pacific Islanders and Māori. Therefore, it scored higher among the participants of these groups.



Figure 6-10: Top three images: shop frontages that had significant differences in mean preference by ethnic cultures. Lower three images: shop frontages that showed no significant difference in preference among cultural groups

### 6.6.3 Seating Conditions

The third section is constituted of nine simulation sets (27 images). Generalised Estimating Equations (GEE) were utilised to analyse the questions of this section. Generalised Estimating Equations (GEE) are a way of modelling the effect of variables (shop fronts, benches and landscape) on a response that does not depend on having a normally distributed response. It allows for correlated data in that the same person gives a response for different levels of shop frontage, benches and landscape.

The result of GEE analysis for the third set of questions with three changing variables (shop, bench, landscape), show that main effects+interactions all have a statistically significant effect on response ( $p < .0005$ ). However, when ethnic group, age group, income,

gender, education levels, and length of live or stay in NZ were added to the model, none was statistically significant ( $p>0.1$ ).

Pairwise comparisons using the sequential Bonferroni adjustment were used in order to show which condition is different from the others, if any.

1. Shop frontage pairwise comparison showed all three shop frontages were significantly different from the other two ( $p<.05$ ).
2. Bench pairwise comparisons showed that benches 2 and 4 were statistically similar, but all other benches were different from each other ( $p<.05$ ).
3. Landscape pairwise comparison showed all three types of landscapes were significantly different from the other two ( $p<.05$ ).

In order to compare different seating conditions, first, each shop frontage type is kept consistent, and bench types, different landscape edgings and their relationships are compared. Second, different landscape types are kept consistent, and bench types, shop frontage types and the interactions between them are compared. Table 6-3 shows units of measurement, descriptors and graphic elements of the design variables that are used for the analysis of seating conditions.

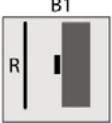
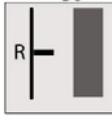
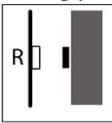
| Design Variables     | Measurement Unit | Descriptor   | Graphic Element   |
|----------------------|------------------|--|---|
| Bench type 1         | B1               | Bench faces the footpath   |  |
| Bench type 2         | B2               | Bench faces the footpath and backs on to traffic                   |  |
| Bench type 3         | B3               | Bench is perpendicular to the footpath                             |  |
| Bench type 4         | B4               | Bench faces the footpath and another bench                         |  |
| Bench type 5         | B5               | Bench faces the footpath and another bench. It backs on to traffic |  |
| Shop frontage type 1 | SF1              | Organised shop frontage  | I   |
| Shop frontage type 2 | SF2              | Spreading onto the footpath  | I   |
| Shop frontage type 3 | SF3              | Café shop frontage   | I   |
| Landscape type 1     | L1               | No Landscaping along street edge                                   | I   |
| Landscape type 2     | L2               | Low landscaping along street edge                                  | I   |
| Landscape type 3     | L3               | Tall landscaping along street edge                                 | I   |

Table 6-3: Units of measurement, descriptors and graphic elements of the design variables of seating conditions

### Shop Frontage Type 1 (SF1)

Organised shop frontage: Figure 6-11 represents a graph based on two axes; the horizontal axis represents 5 different bench types. The vertical axis represents the mean preferences for different bench types over three types of landscape. Bench types B1, B4 and B5 are only associated with the organised type of shop frontage. Figure 6-12 shows the preferred seating situations around shop frontage type 1, in a descending order from upper left to bottom right. The most preferred seating is the seating situation where the bench faces the footpath with low landscaping along the street edge (image 6-12-1) followed by the seating location where the bench faces the footpath with tall landscaping along the street edge (image 6-12-2). The mean preference for tall landscaping (L3) significantly decreases compared to short landscaping (L2) while seated on bench B1 (figure 6-11).

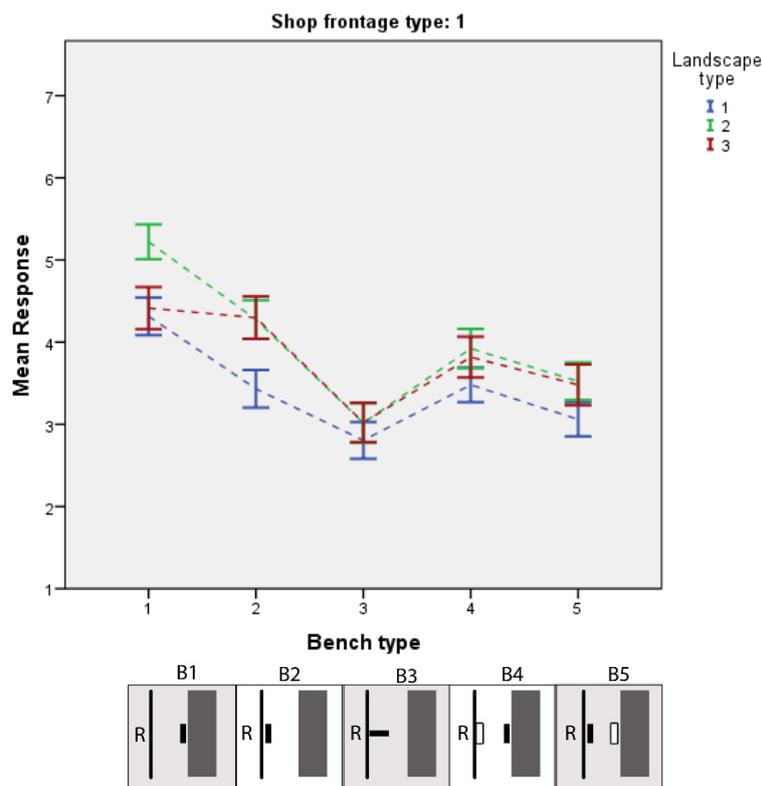


Figure 6-11: Mean and 95% confidence interval of preference for different types of landscape while seated on various bench types by shop frontage type 1(organised)

The preference for seating B1 with low landscaping (L2) along the edge further supports Appleton’s prospect and refuge theory. Bench B1 is positioned at the edge of the buildings, where the back is protected. Placing low landscaping along the footpath edge provides a broad view of the environment and enables easy refuge. People could both enjoy the landscape and the most depth of vision to the environment while seated on bench B1 (image

6-12-1). Therefore, placing low landscaping edge along the street becomes an important design factor while locating benches in zone “A”.

Tall landscaping (L3) blocks the complete outlook to the street environment. However, between the sitting situation (B1, SF1, L1) where participants could have the broadest vista to the environment but no landscaping along the edge (image 6-12-3) and the situation (B1, SF1, L3) where participants would have a more limited depth of vision (image 6-12-2), the latter was slightly preferred. This reinforces the importance of planning for landscapes along the edges of footpaths. Seating B4 where the bench faces the footpath and another bench (images 6-12-6, 6-12-7 and 6-12-10) shows a similar pattern of preference for landscape types to seating B1 where the bench faces the footpath only. However, changes in landscape layout are less important to users compared to the situation where the bench just faces the footpath without facing another bench.



Figure 6-12: Preferred seating situations around shop frontage type 1, in a descending order from upper left to bottom right

Seating B2 where the bench backs onto traffic with both low and tall landscaping along the street edge (images 6-12-4 and 6-12-5) has a high mean preference. These conditions were preferred almost as much as the seating condition where the bench faces the footpath and there is no landscaping along the street edge (image 6-12-3). However, both situations

are strongly preferred to the condition with no landscape edging the footpath (image 6-12-11). Therefore, placing landscape edging is an important design factor while locating benches in zone “C” where the bench backs on to the traffic. However, the back does not necessarily need to be supported by tall landscaping and low landscaping is almost preferred as much. It can be concluded that while low landscaping shows significant preference over tall landscaping in bench B1, not much difference is seen between tall and low landscaping while seated on bench B2.

Benches facing one another on the footpath (B4, B5) are likely to be less preferred and used. Seating B4 has a lower mean preference than seating B1 and this associates among all landscape types. Similarly, seating B5 is less preferred compared to seating B2.

Seating B5 where the bench faces another bench but backs on to traffic with tall and low landscaping is almost preferred similarly (images 6-12-8 and 6-12-9). However, having low or tall landscaping is highly preferred to the conditions when the bench backs on to traffic with no landscape edging the footpath (image 6-12-12). Whereas in seating B4, the placement of low landscaping along the edge (image 6-12-6) is slightly preferred to tall landscaping (image 6-12-7). This suggests that people still prefer to have a broader vision of the environment while seated with a bench in front of them. However, landscape types have less importance compared to the same situations where the bench does not face another bench. In other words, less difference exists between different landscape types (look at how landscape indicators get closer together in bench types B4 and B5 compared to types B1 and B2 in figure 6-11). These findings convey the meaning that while facing another bench, people pay less attention to the landscape types behind.

Seating B4 (images 6-12-6, 6-12-7 and 6-12-10) is slightly preferred to seating B5 (images 6-12-8, 6-12-9 and 6-12-12) and it correlates among all three types of landscapes. This preference could relate to Appleton’s prospect and refuge theory where people prefer to sit on benches where their back is protected.

Seating conditions where benches are placed perpendicular to the footpath (B3) have the lowest mean preference among different seating types. There is no difference between low and tall landscaping among users’ preferences (images 6-12-13 and 6-12-14). The least preferred seating is where the bench is perpendicular to the footpath and there is no landscaping along the street edge (image 6-12-15).

Findings show an overall higher preference for seating B1 and B2, and the preference for each of these bench types is strongly associated with landscape types.

### Shop Frontage Type 2 (SF2)

Shop frontage spreading onto the footpath: as noted, shop frontages SF2 and SF3 are not possible with footpath seating in Zone “A”. Therefore, seating could only be placed in zone “C” within these types of shop frontage managements. Zone “C” on footpaths usually has two types of seating orientations: parallel and perpendicular

In general, people have a low mean preference for sitting in front of shop fronts spreading onto the footpath (SF2) compared to the organised type (SF1). The most preferred seating associated with this frontage is the seating situation (B2, SF2, L2) where the bench backs on to the traffic with low landscaping along the street edge (image 6-14-1). Seating parallel to the footpath is preferred to the perpendicular type and correlates among all three types of landscapes (image 6-13). The least preferred situation among landscape types for both seating types (B2 and B3) is where there is no landscaping along the street edge (images 6-14-3 and 6-14-6).

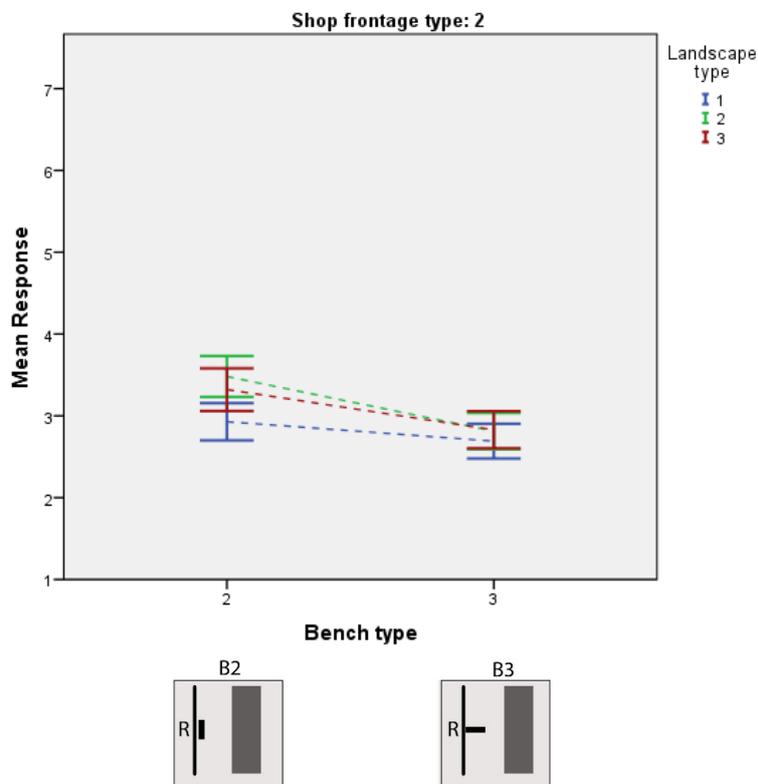


Figure 6-13: Mean and 95% confidence interval of preference for different types of landscape while seated on various bench types by shop frontage type 2

The seating situation where the bench faces the footpath and the shop frontages but backs on to the traffic with low landscaping along the street edge (B2, SF2, L2) is slightly preferred over the seating situation where the bench faces the footpath and the shop frontages but backs on to the traffic with tall landscaping along the street edge (B2, SF2, L3). This may suggest that people seek more refuge while seated in front of shops spreading onto the footpath, comparatively.

There is not much difference between low and tall landscaping among users' preferences where the bench is perpendicular to the footpath. Both of these situations are slightly preferred to the seating situation where the bench is perpendicular to the footpath with no landscaping along the edge. This suggests that changes in landscape layout are less important to users while seated perpendicular to the footpath. The equally low scores indicate that no matter what the landscaping is like, users would prefer not to be sitting with their backs exposed to others on the footpath.



Figure 6-14: Preferred seating situations around shop frontage type 2, in a descending order from upper left to bottom right

### Shop Frontage Type 3 (SF3)

Café shop frontage: similar to the other shop frontage types, seating parallel to the footpath (B2) is preferred to seating perpendicular (B3) and correlates among all three types of landscapes (image 6-15). The most preferred seating condition associated with the café style frontage is where the bench faces the footpath and the shop frontages, but backs onto the traffic with low landscaping along the street edge (image 6-16-1).

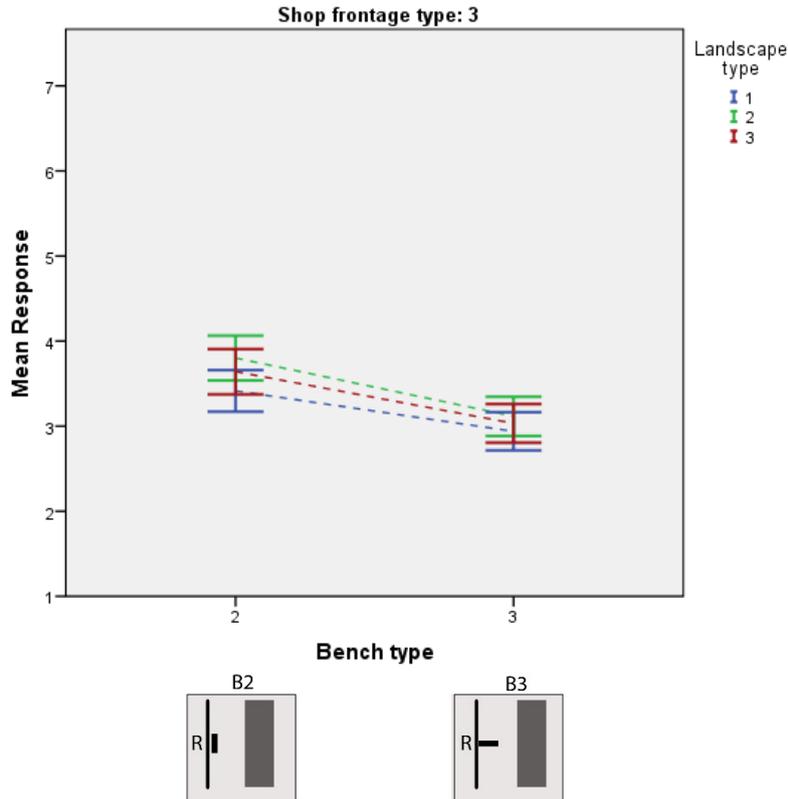


Figure 6-15: Mean and 95% confidence interval of preference for different types of landscape while seated on various bench types by shop frontage type 3

In both parallel and perpendicular seating types, low landscape edging along the footpath was slightly preferred over tall landscape edging (images 6-16-1, 6-16-2 and 6-16-4, 6-16-5). The least preferred seating condition is where the bench is perpendicular to the footpath (B3) and there is no landscaping along the street edge (image 6-16-6). Similar to other frontage types, changes in landscape layout are less important to users while seated perpendicular rather than parallel to the footpath.

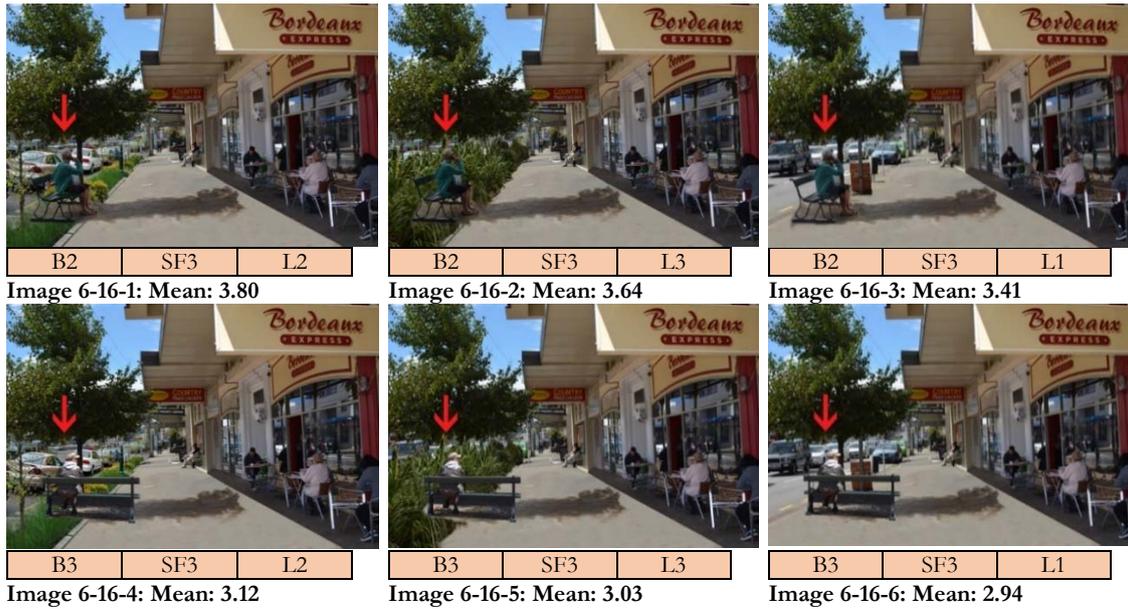


Figure 6-16: preferred seating situations around shop frontage type 3, in a descending order from upper left to bottom right

#### Preference for Bench and Landscape Types Averaged Over Shop Frontages

Figure 6-17 shows that seating B1 where the bench faces the footpath and the road is the most preferred type of seating among five seating types averaged over shop frontages. The preference for seating B1 over other seating types correlates among all different landscape types. Seating B4 where the bench faces the footpath and another bench is the second most preferred seating type. This reinforces the importance of the edge effect for people's choice of seating spaces. The lower preference for seating B2 averaged over different frontage types compared to its relative popularity for frontage SF1 suggests that the preference for seating on bench B2 is strongly related to the type of shop frontage that it faces. Bench B3 (perpendicular) was preferred the least among all bench types.

Not many differences were seen among different landscape types while seated perpendicular to the footpath (landscape indicators get closer together for bench B3). In all seating types, conditions with landscaping are highly preferred to where there is no landscaping along the edge. The preference for low or tall landscaping differs for different bench types; in bench B1 short landscaping is strongly preferred to tall landscaping along the edge, in seating B4 and B5 low landscaping is slightly preferred to tall landscaping, and in seating B3 and B5, there are almost no differences between low and tall landscape types (figure 6-17). The preference for short or tall landscaping was different from one shop frontage to another while seated on benches B2 and B3 but the differences were insignificant and negligible. Therefore, including landscape buffers while locating benches in different

zones is highly necessary and, in all seating types, planning for low landscaping could be beneficial.

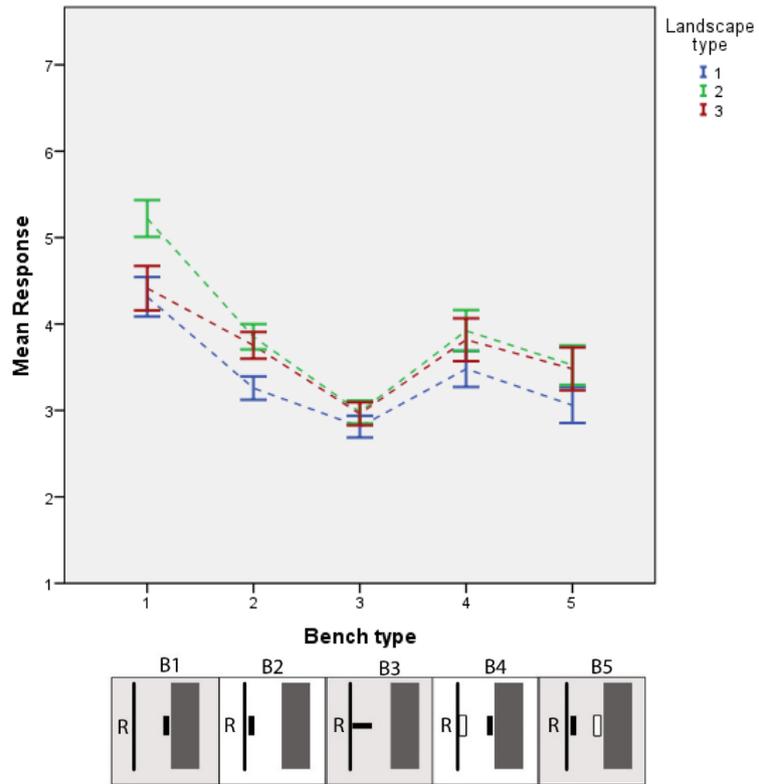


Figure 6-17: Mean and 95% confidence interval of preference for different type of landscape while seated on various bench types , averaged over all shop frontages

### Landscape Type 1 (L1)

No landscaping along the edge: the most preferred seating associated with no landscaping along the edge are the seating situations B1 and B4 where the back is protected by the building edges (images 6-19-1 and 6-19-2). Seating B2 where the bench faces the organised frontage (SF1) and the café frontage (SF3) but backs onto the traffic (images 6-19-3 and 6-19-4) is preferred to the seating situation (B5, SF1, L1) where the bench faces the footpath and another bench (image 6-19-5).

Seating B2 (images 6-19-3, 6-19-4 and 6-19-7) is preferred to seating B3 (images 6-19-6, 6-19-8 and 6-19-9) and it correlates among all three types of frontages. The shop frontage spreading onto the footpath (SF2) was the least preferred frontage type among seating types with no landscaping along the edge (look at shop frontage indicators in figure 6-18). However, there were slight differences between the preferences for three types of shop frontages in seating B3. This could be further explained that people care less about the types of shop frontages when they sit perpendicular to the footpath or that they dislike perpendicular seating more than they like different shop frontages.

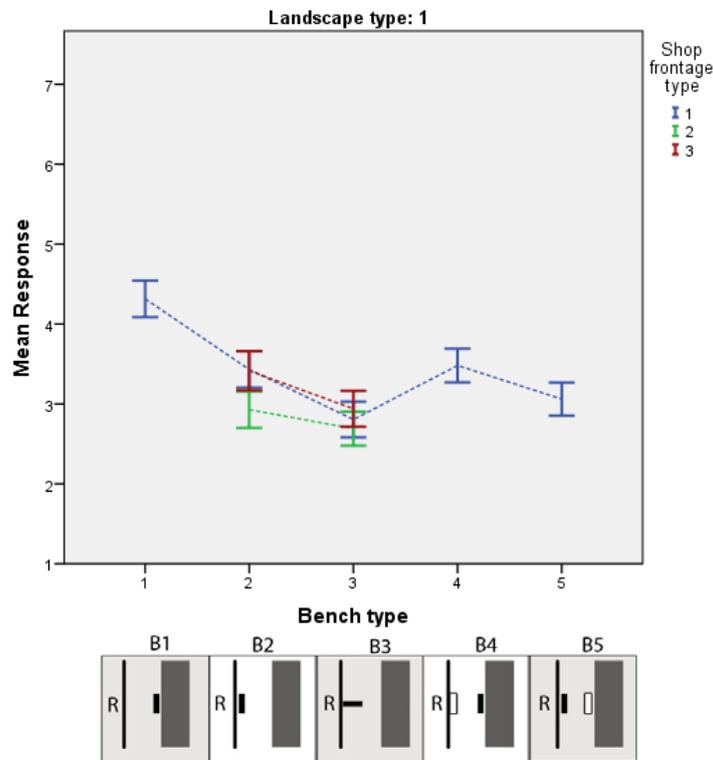


Figure 6-18: Mean and 95% confidence interval of preference for different type of shop frontages while seated on various bench types by landscape type 1

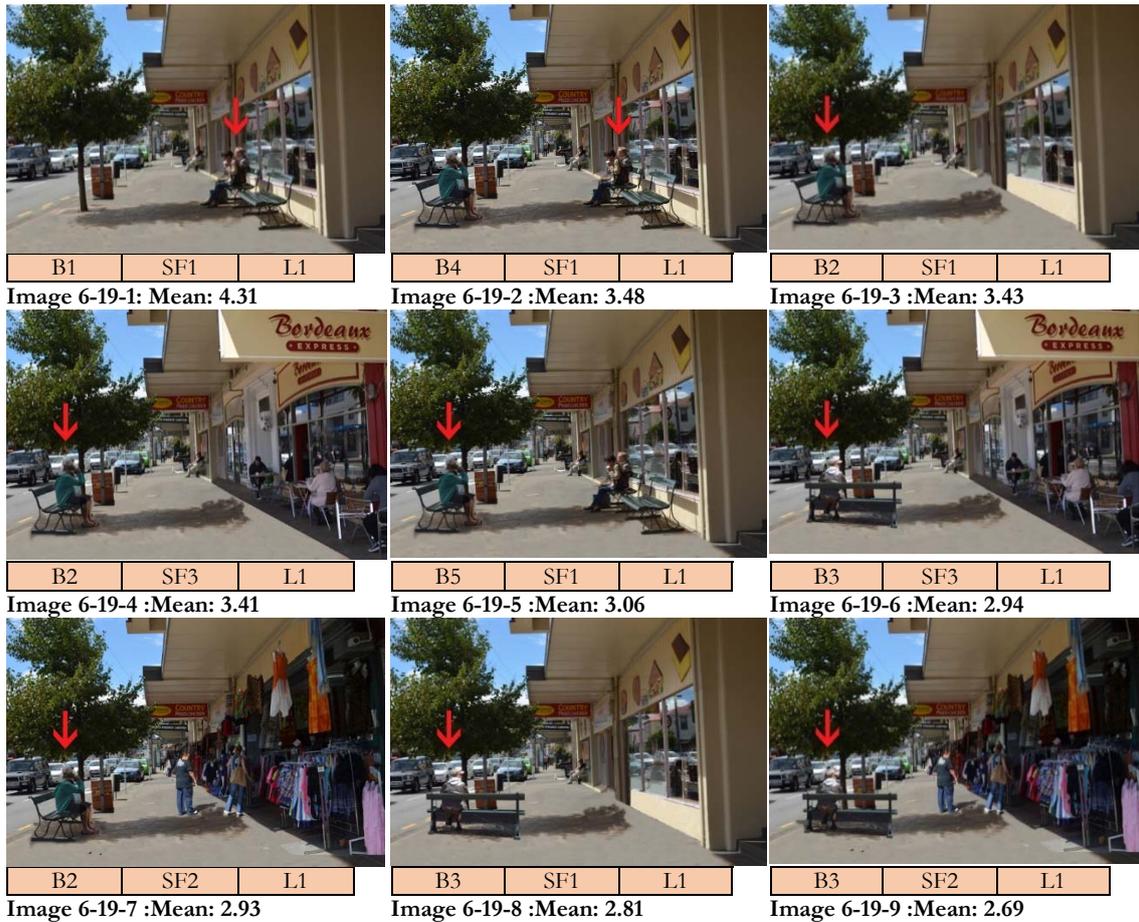


Figure 6-19: Preferred seating situations around landscape type 1, in a descending order from upper left to bottom right

Another notable fact is that while shop frontages SF1 and SF3 were preferred similarly while seated parallel to the footpath (bench B2), there was a slight preference for the café frontage (SF3) while seated perpendicular. This suggests that having activity supporting premises might have more importance while seated perpendicular to the footpath than when seated parallel (figure 6-18).

## Landscape Type 2 (L2)

Low landscaping along the edge: the most preferred seating associated with this landscape is the seating situation B1 where the bench backs onto the building edges (image 6-21-1) followed by the seating situation B2 where the bench faces the organised shop frontage, but backs onto the road (image 6-21-2). The latter seating situation (B2, SF1, and L2) scored even higher than seating situation B4 where the bench is protected by the building edges but faces another bench (image 6-21-3). This suggests while the edge effect is an important factor in choosing a place to sit, preference is also related to other factors. Seating B2 (images 6-21-2, 6-21-4 and 6-21-6) is preferred to seating B3 (images 6-21-8, 6-21-7 and 6-21-9) and it correlates among all frontage types. Figure 6-20 shows the least preferred seating situation is where the bench is perpendicular to the footpath and the shop frontage spreading onto the footpath (image 6-21-9).

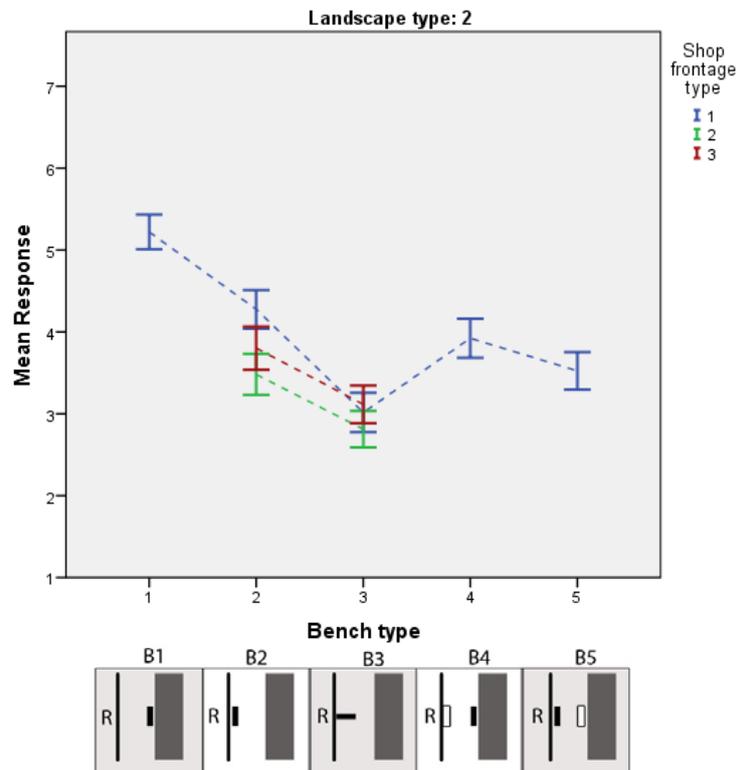


Figure 6-20: Mean and 95% confidence interval of preference for different type of shop frontages while seated on various bench types by landscape type 2

While seated on bench B2, the organised shop frontage (SF1) was preferred over café frontage (SF3) and the frontage spreading onto the footpath (SF2). This might suggest that people would not necessarily like to sit in front of a café frontage due to the need for personal space in which they feel comfortable. However, there is a slight preference for sitting in front of café seating with activities (image 6-21-4) rather than directly facing another bench (image

6-21-5) while seated in zone “C”. In other words, facing each other directly might not feel as comfortable as facing activities.



Figure 6-21: Preferred seating situations around landscape type 2, in a descending order from upper left to bottom right

For seating B3, there was a slight difference between the preferences for three types of shop frontages (figure 6-21). This again conveys that people care less about shop frontage types while seated perpendicular to the footpath. Another notable fact is that while organised shop frontage (SF1) was preferred over the café frontage (SF3) while seated on bench B2, there was a slight preference for the café frontage while seated perpendicular (image 6-21-7). This might mean that having activity supporting premises might be more important while seated perpendicular to the footpath than parallel.

### Landscape Type 3 (L3)

Tall landscaping along the edge: the most preferred seating associated with this landscape were the seating B1 and 2 associated with the organised shop frontage (images 6-23-1 and 6-23-2).

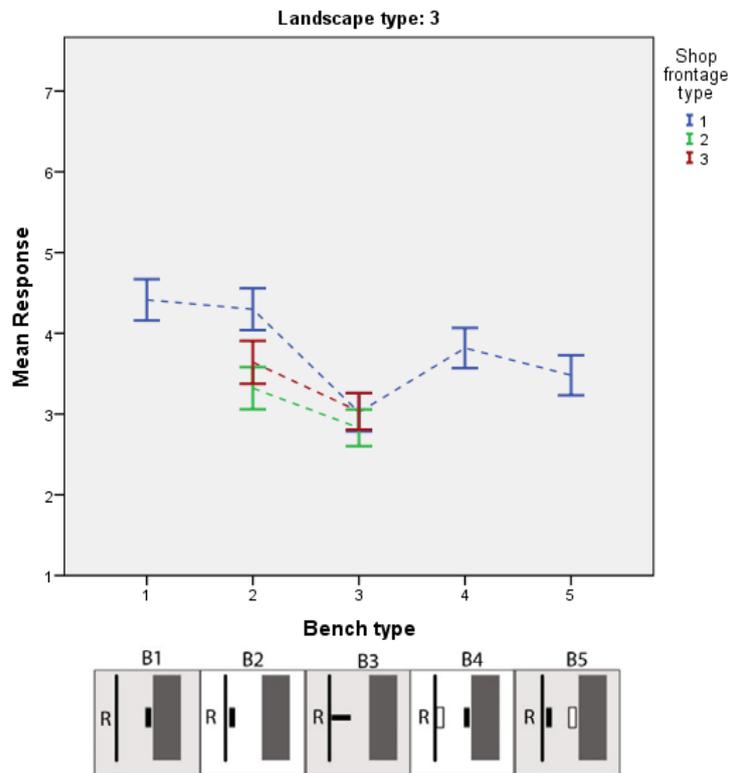


Figure 6-22: Mean and 95% confidence interval of preference for different type of shop frontages while seated on various bench types by landscape type 3

Not many differences were seen in the mean preference for seating B1 and seating B2 where the bench faces the organised shop frontage but backs onto the road (figure 6-22). This suggests that the preference for zone “A” over zone “C” is mainly related to the “prospect and refuge theory”. Tall landscaping along the edge provides the edge effect for bench B2 as well as it limits the complete view to the environment for bench B1. Figure 6-22 suggests there are notable differences between shop frontage types while seated on bench B2. While seated on bench B2, the organised shop frontage (SF1) was preferred over the café frontage (SF3) and the frontage spreading onto the footpath (image 6-23-2, 6-23-4 and 6-23-6). This might convey the meaning that people would not necessarily like to sit in front of café frontages. Similar to the previous landscape types, there is a slight preference for sitting in front of another public bench (B4, SF1, L3) in zone “A” (image 6-23-3) rather than sitting in front of café seating (B2, SF3, L3) with activities in zone “C” (image 6-23-4). On the other hand, people are less attentive about shop frontages where they sit perpendicular

to the footpath than parallel. Similar to other landscape types, the least preferred situation is where bench is perpendicular to the footpath and the shop frontage spreading onto the footpath (image 6-23-9).



Figure 6-23: Preferred seating situations around Landscape type 3, in a descending order from upper left to bottom right

### Preference for Shop Frontage Types Averaged over Landscape Types

Figure 6-24 suggests that the type of shop frontage is an important factor while seated on bench B2, parallel to the footpath. On the other hand, people are less attentive about shop frontages where they sit perpendicular to the footpath. The mean preference for different shop frontage types found less difference from each other while seated perpendicular to the footpath.

The shop frontage spreading onto the footpath (SF2) has the lowest mean preference while seated parallel or perpendicular to the footpath. Participants prefer the organised shop frontage (SF1) to the café frontage (SF3) while seated parallel to the footpath (B2). The café frontage while seated parallel to the footpath (B2, SF3) is preferred to the condition where the bench faces another bench (B5, SF1). It appears that participants would like to sit on

benches that support less chances of direct eye contact. On the other hand, the café frontage was slightly preferred over the organised shop frontage while seated perpendicular to the footpath. This suggests the importance of personal space while choosing spaces to sit. People would like to sit close to activity supporting businesses as long their personal space is respected.

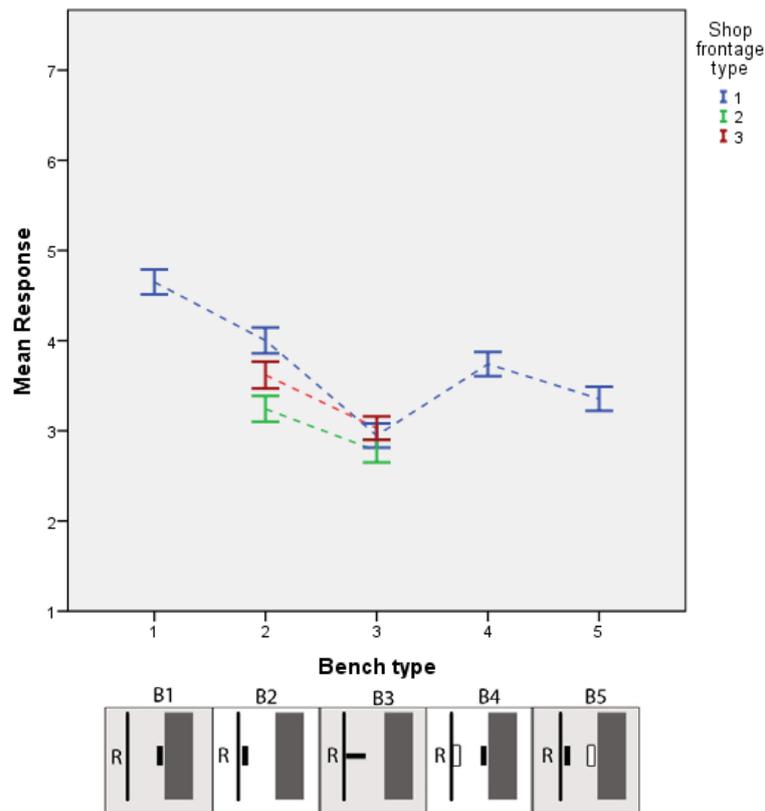


Figure 6-24: Mean and 95% confidence interval of preference for different type of shop frontages while seated on various bench types , averaged over all landscape types

Participants show a similar pattern of preference for seating situations towards different shop frontages over short and tall landscaping (figures 6-21 and 6-23). However, the trend does not exactly follow the same pattern where there is no landscaping at the edge (figure 6-19).

This section has measured the preference for seating conditions through the analysis of a range of design attributes; seating, shop frontages and landscape against each other.

## 6.6.4 Seating Arrangement Types

### Group Sizes

Most participants mentioned they usually visit the street in groups of 3-4 persons. This was consistent among participants of various cultural backgrounds. Most of the ethnic groups come to the street with companions. Only 12 out of 181 participants say they come to the street alone. Europeans had the highest percentage of coming to the street by themselves while none of the Pacific Islanders come to the street alone. Nearly half (47%) of the Europeans come to the streets in groups of two for leisure/social activities. Similarly, Asians had a high percentage of coming to the street in pairs as well as in groups of 3-4 people. On the other hand, Māori and Pacific Islander groups mostly comprised 3-4 people and they also had higher percentages of 5-6 person groups. Asians have a higher percentage of wanting to visit the street in group sizes more than 7 (table 6-4).

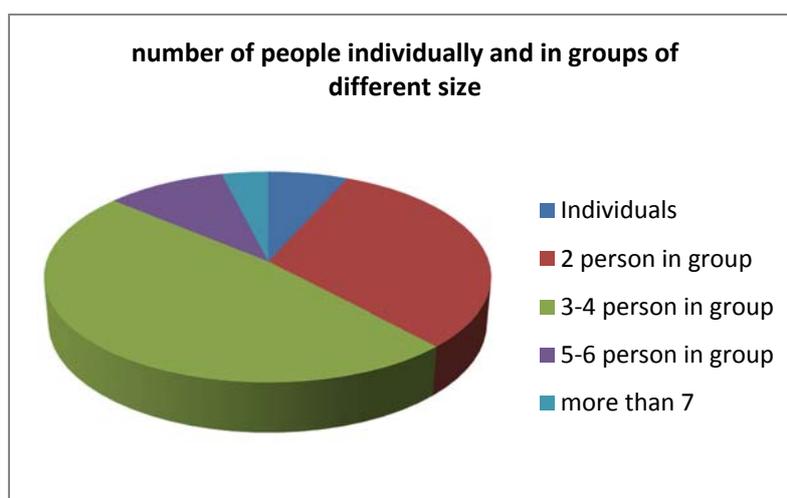


Figure 6-25: Group sizes while participants visit streets for social and leisure activities

| Ethnic cultural background | Only me  | 2               | 3-4             | 5-6             | More than 7 | Total  |
|----------------------------|----------|-----------------|-----------------|-----------------|-------------|--------|
|                            | European | 5 (12%)         | <b>19 (47%)</b> | <b>15 (36%)</b> | 2 (5%)      | 0 (0%) |
| Māori                      | 2 (6%)   | 5 (16%)         | <b>18 (56%)</b> | <b>6 (19%)</b>  | 1 (3%)      | 32     |
| Pacific Islander           | 0 (0%)   | 8 (23%)         | <b>18 (53%)</b> | <b>6 (18%)</b>  | 2 (6%)      | 34     |
| Asian                      | 3 (6.5%) | <b>17 (37%)</b> | <b>22 (48%)</b> | 1 (2%)          | 3 (6.5%)    | 46     |
| Other                      | 2 (7%)   | 8 (28%)         | <b>14 (50%)</b> | <b>3 (11%)</b>  | 1 (4%)      | 28     |
| Total                      | 12 (7%)  | 57 (31%)        | 87 (48%)        | 18 (10%)        | 7 (4%)      | 181    |

Table 6-4: Group sizes among participants of various ethnic backgrounds

### Seating Arrangements/ Individual/Groups

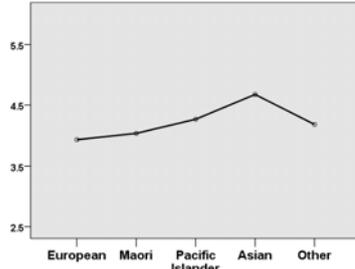
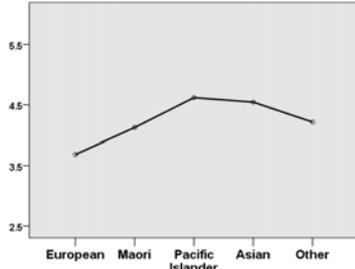
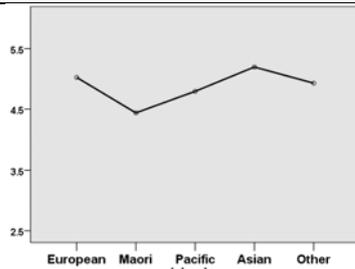
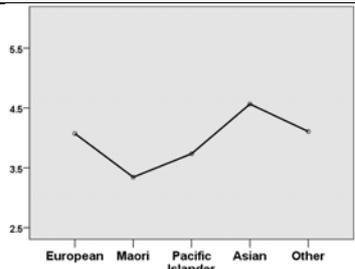
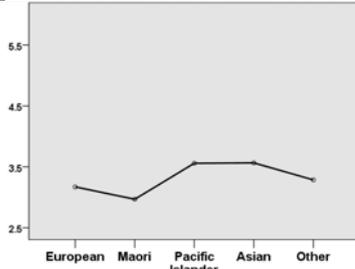
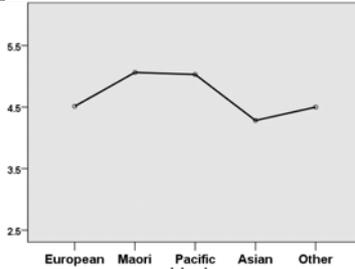
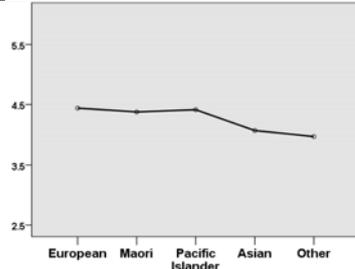
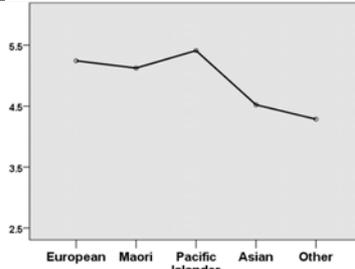
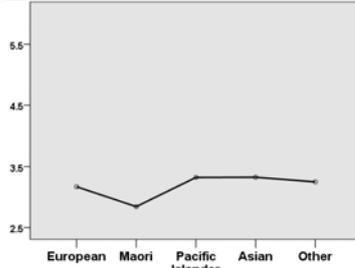
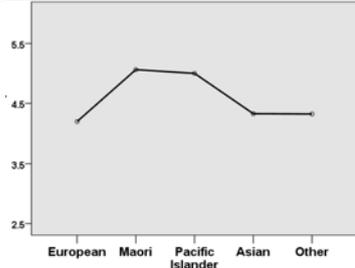
Differences between individual/groups and different seating arrangement types were examined using repeated measures analysis and variance. Analysis shows there is a difference by seating arrangements (Wilk's,  $F(8,169) = 34.472, p=.000$ ).

The difference by individual/groups (friends/family) was not statistically significant (Wilk's,  $F(1,176) = 3.158, p=.077$ ). There is a statistically significant difference in the preference profile of seating arrangements by ethnic group (Wilk's,  $F(32,625) = 2.003, p=.001$ ).

Differences between ethnic groups were examined using one-way ANOVA for each seating arrangement and individual/group. The researcher tested whether the mean response differed by ethnic group. Tukey's Post Hoc test was used to examine which specific groups were different from which others. No statistically relevant differences were observed among cultural groups while seated by themselves (alone). The most preferred seats while sitting alone were seating type 6 (mean=5.17), seating type 9 (mean=5.02), seating type 2 (mean=4.91) and seating type 7 (mean=4.53) (see Figure 6-6 above and Table 6-4 below for seating types).

The seating arrangements most preferred for social activities (when they come accompanied) were seating type 9 (mean=5.72), type 4 (mean=4.92), and type 3 (mean=4.65). There was a significant difference in the preferences for group seating (family, friends) by ethnic groups. The least preferred types of seating arrangement for social activities were seating type 8 (mean=3.49) and seating type 7 (mean=3.51).

Statistical differences were observed for seating arrangement types 2, 4 and 7 by ethnic groups when they come to the streets with friends/family members. Preferences for seating type 2 were significantly different between Asians and Māori (Tukey's,  $p=.019$ ). While they were preferred by Asians, Māori had a very low ranking of this type of seating for social activities. For seating type 4, Tukey's Post Hoc test established that Pacific Islanders had a significantly higher preference than did "Others" for group activities ( $p=.012$ ). For seating type 7, there was a statically significant difference between the preferences of Māori and Asians where Māori had a significantly lower preference than Asians (Tukey's,  $p=.028$ ). This shows the importance of socio-petal seating for social activities.

| Seating arrangement types   | alone  | with family/friends   |
|---|--|---|
|    |    |    |
| Seating arrangement type 1  | Mean : 4.24  | Mean : 4.24   |
|    |    |    |
| Seating arrangement type 2  | Mean: 4.91   | Mean:4.01 (varies)  |
|   |   |   |
| Seating arrangement type 3  | Mean: 3.33   | Mean: 4.65  |
|  |  |  |
| Seating arrangement type 4  | Mean: 4.25   | Mean:4.92 (Varies)  |
|  |  |  |
| Seating arrangement type 5  | Mean: 3.19   | Mean: 4.55  |

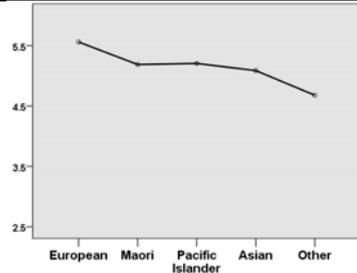
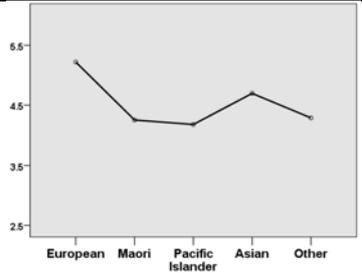
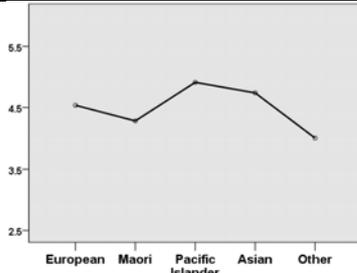
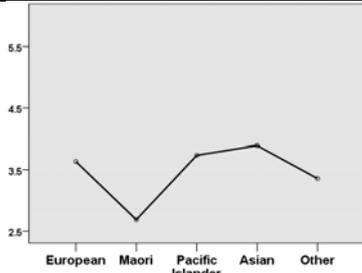
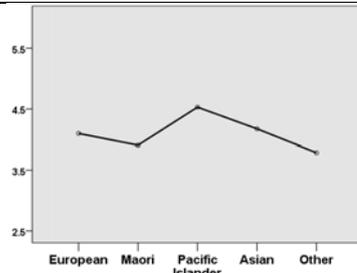
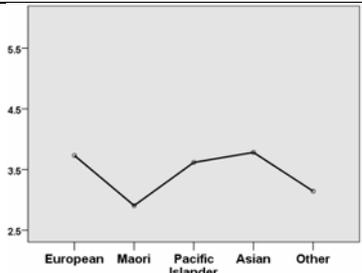
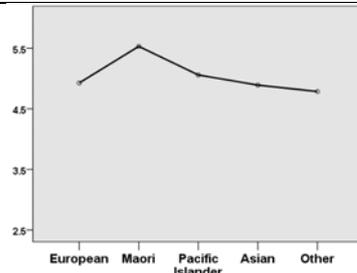
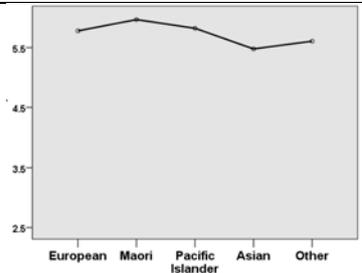
|   |  |   |
|---|--|---|
|    |    |    |
| Seating arrangement type 6  | Mean: 5.17   | Mean: 4.57  |
|    |    |    |
| Seating arrangement type 7  | Mean: 4.53   | Mean 3.51 (Varies)  |
|   |   |   |
| Seating arrangement type 8  | Mean: 4.12   | Mean: 3.49  |
|  |  |  |
| Seating arrangement type 9  | Mean: 5.03   | Mean: 5.72  |

Table 6-5: Mean of preference for various seating arrangement types by participants of various ethnic backgrounds, when they come to the street alone and in groups

There is a statistically significant difference in the preference profile of individuals and groups (Wilk's,  $F(8,169) = 21.045, P = .000$ ). The three way interaction between seating arrangement preferences, individual versus group and ethnic group was not significant (Wilk's,  $F(32,625) = 1.282, P = .139$ ).

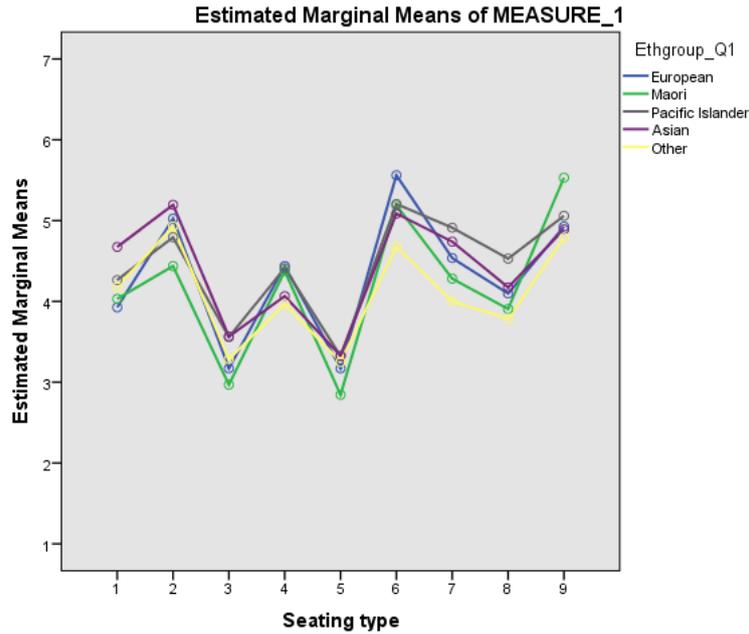


Figure 6-26: Preference for different type of seating arrangements for individual activities by different ethnic groups

Figure 6-26 indicates that different groups show similar pattern for different seating arrangement types while seated alone. While the concept of proxemics developed by Edward T. Hall (1966) describes that people of various cultural backgrounds have different standards of personal space, the current study shows that people of various backgrounds have similar requirements for sitting individually on all the nine described seating arrangements. In other words, people of various cultures might not behave and react differently in different types of seating arrangements while seated individually, based on what Hall describes as culturally defined personal space. As mentioned previously, the most preferred types of seating arrangements are seating type 6, 9, 2 and 7 (figure 6-27).



Figure 6-27: Preferred types of seating arrangements for individual activities, in descending order left to right

As expected, most preferred seating arrangement types for individual activities follow a socio-fugal arrangement (Ostmond, 1957). The exception is seating type 9 which has a socio-petal arrangement of seats around the table.

Figure 6-28 shows mean preferences for different seating arrangement types for social activities by different cultural groups.

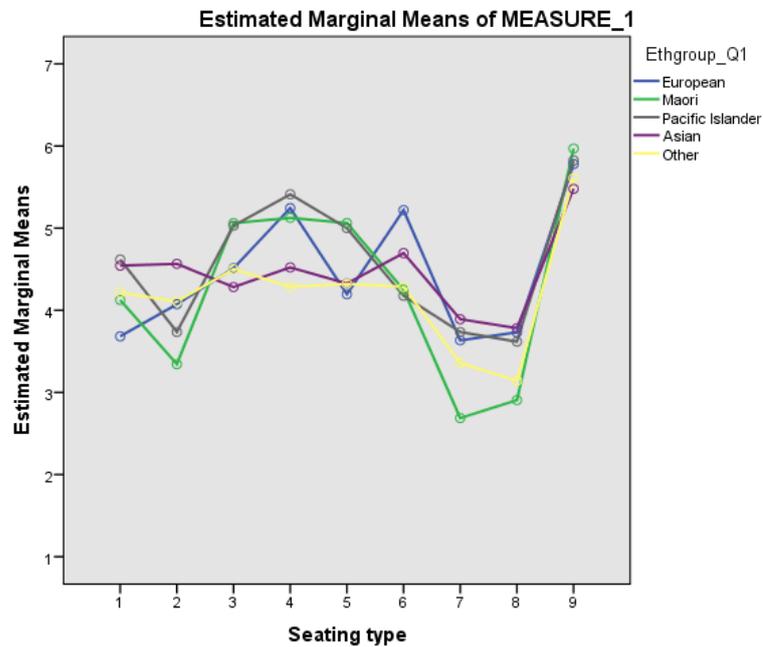


Figure 6-28: Preference for different type of seating arrangements for social activities by different ethnic groups

The most preferred type of seating type for social activities among all different ethnic groups is seating type 9. Not much difference could be seen between benches 3, 4 and 5 for the social activities of Māori and Pacific Islanders. On the other hand, the graph reaches a peak for Europeans in seating types 4 and 6. This might both relate to their group sizes and also cultural preference (there was a preference for 90-deg orientation rather than a face-to-face orientation among Europeans).



Figure 6-29: Preferred types of seating arrangements for social activities, in descending order left to right

Figure 6-29 shows the most effective type of seating arrangement for social activities of groups of up to 4 persons. Most participants come to the street for leisure/social activities in groups of 3-4 followed by pairs, thus the averaged most preferred types of seating arrangement could relate to these group sizes.

The types of seating most preferred among Asians are seating type 6, type 4 and type 2. It seems that their preference for seating type is highly related to their smaller group sizes

where they prefer socio-fugal types rather than socio-petal types. Māori and Pacific Islanders have a higher preference for seating types 3, 4 and 5 for social and group activities (figure 6-30). A considerable number of Māori and Pacific Islanders have 5, 6 and groups with more than 7 persons in a group and the averaged most preferred types of seating arrangements could relate to their larger group sizes.



Figure 6-30: Preferred types of seating arrangements for social activities among various cultural groups

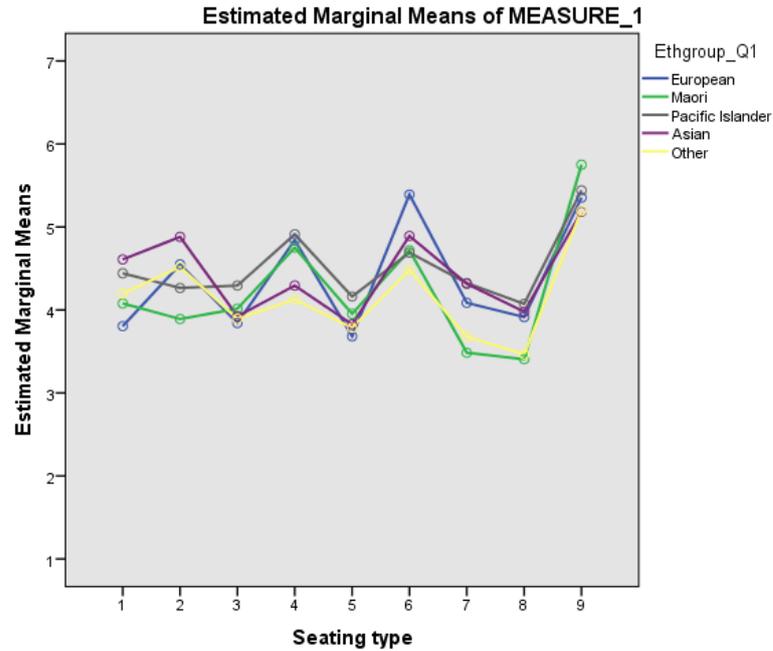


Figure 6-31: Preference for different type of seating arrangements for both individual and social activities by different ethnic groups

Seating types 9, 6, 4 and 2 are most preferred averaged over individual and social activities among different cultural groups (figure 6-32). Seating type 9 is strongly preferred for both individual and social activities of all groups. Therefore, it scored higher than all types. Seating type 6 is mostly preferred among all groups while seated alone. However, it is also preferred for social activities, especially among Europeans and Asians. Seating type 4 is highly preferred among European, Pacific Islanders and Māori for social and individual activities. Seating type 2 is preferred for individual activities of all groups as well as social activities of Asians and Europeans as they visit the street in smaller groups. However, it is less preferred by Māori and Pacific Islanders for communal activities.



Figure 6-32: Mean of preference for different type of seating arrangements, averaged over individual and social activities

### 6.6.5 Other Design Variables

Repeated measures analysis was utilised for questions where only one variable changed between questions and all other variables remain alike. Preferences over native or non-native plants, paving, colours in the landscape and three levels of visual permeability were analysed using the repeated measure analysis. Pairwise differences were compared using Bonferroni adjustments.

#### **Native-Non-Native Planting**

There was a significant difference between native and non-native landscape (Wilk's,  $F(1,176) = 79.619, p=.000$ ). There was no difference in this preference by ethnic groups (Wilk's,  $F(4, 176) = 1.570, p=.184$ ). All different ethnic groups show a higher preference for native landscape. Māori, however have the steepest slope between their preference for native and non-native landscapes (figure 6-33). This shows that the use of native landscape along footpath edges has a greater importance for Māori than other cultures, although this is not established statistically. This reinforces the findings of the first stage where Māori stressed the use of native landscaping along street footpaths.

#### **Paving**

There was a significant difference in mean preference for three types of paving by the Wilk's Lambda test ( $F(2,175) = 42.141, p=.000$ ). However, there was no difference in this preference by ethnic groups (Wilk's,  $F(8, 350) = 1.083, p=.374$ ). The pavement of interlocking concrete blocks was preferred among all ethnic cultures.

#### **Colour in the Landscape**

There was a significant difference in mean preference for three types of colour in the landscape by the Wilk's Lambda test ( $F(2,175) = 13.776, p=.000$ ). There is a difference in this preference by ethnic groups (Wilk's,  $F(8, 350) = 1.986, p=.047$ ). Europeans show a greater preference for the multi-coloured landscape whereas other ethnic groups had a higher preference for two-coloured landscaping along the edge.

#### **Visual Permeability**

There was a significant difference in mean preference for sitting in front of shops with three levels of visual permeability (Wilk's,  $F(2,175) = 23.803, p=.000$ ). There was no difference in this preference by ethnic groups (Wilk's,  $F(8, 350) = .712, p=.681$ ). The graph shows that Europeans and Pacific Islanders express a greater preference for high levels of

permeability compared to medium levels of permeability relatively; on the other hand, there is less difference between Māori and Asians' preferences among medium and high levels of permeability. However, this is not established statistically as the adjusted p-value of compared pairs was more than 0.05.

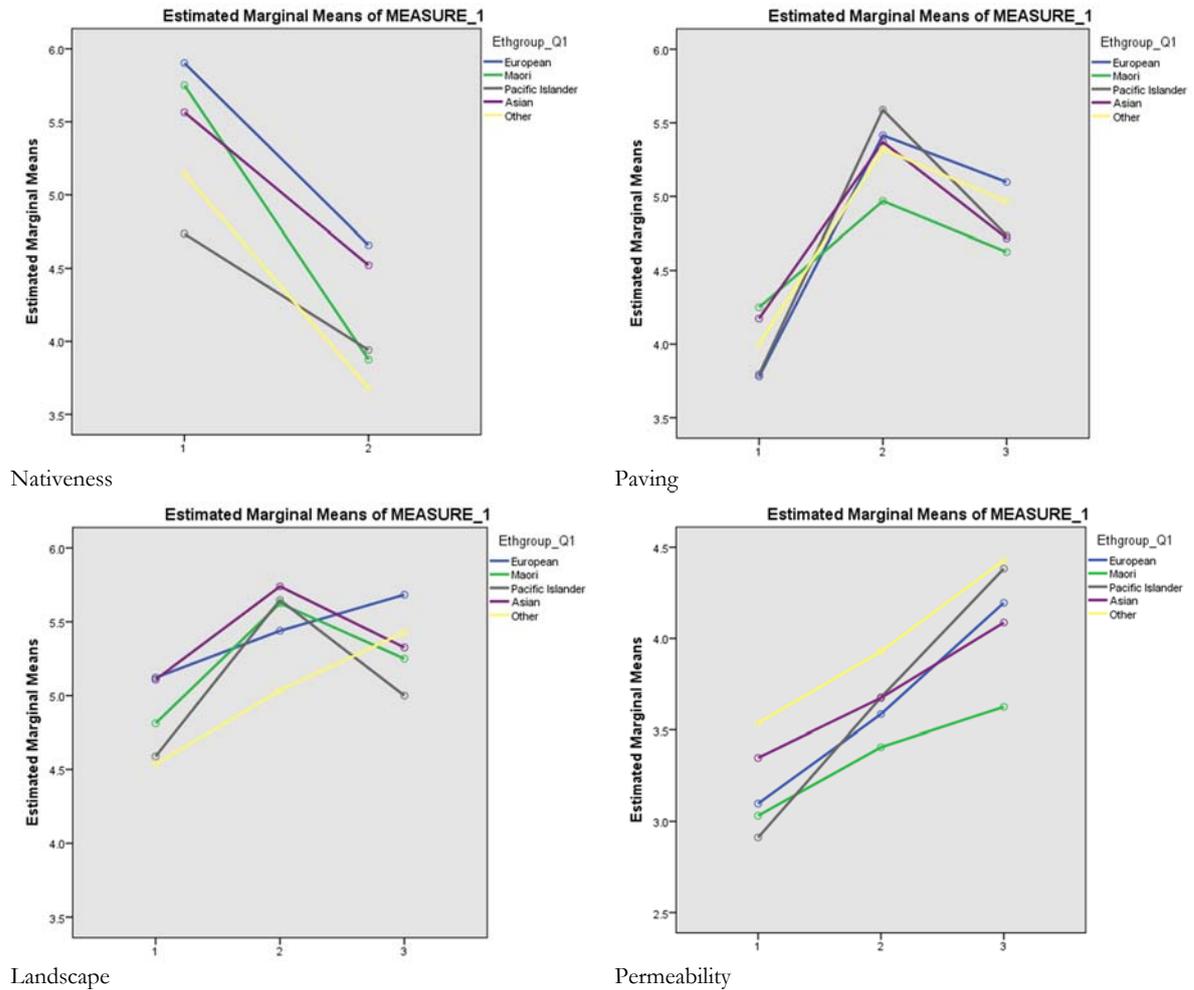


Figure 6-33: Repeated measures analysis was utilised to measure difference among native, non-native, three different paving types, single, two and multi-coloured landscape and three levels of visual permeability

### 6.6.6 Pedestrian Density Levels

The results of the GEE (Generalised estimating equations) analysis show that for the second set of questions with two changing variables (bench, density) main effects+interactions all have a statistically significant  $p < .0005$  effect on response. However, there was no difference in this preference by ethnic groups, age groups, gender, length of stay/live in NZ, and level of education. Although preference is different by income levels, there was no consistent pattern of preferences by income.

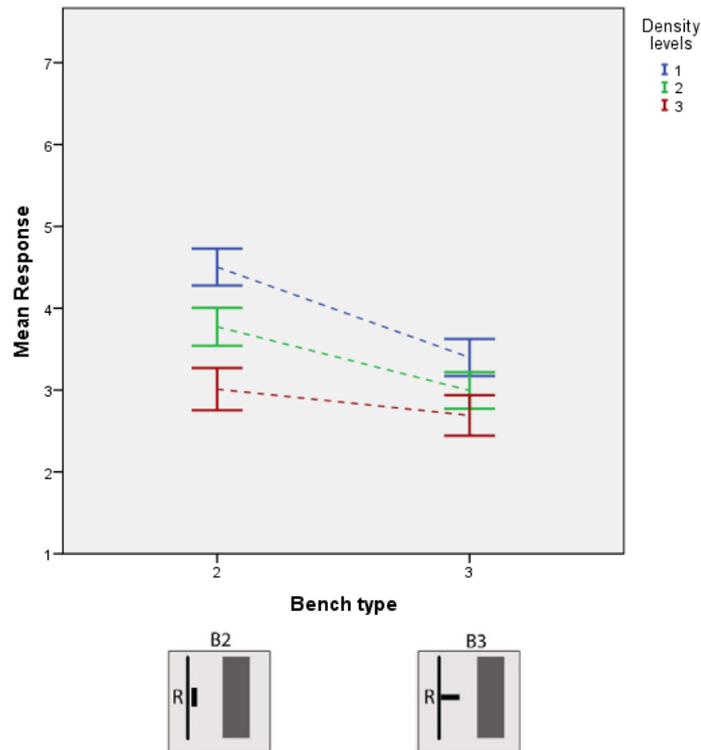


Figure 6-34: Mean and 95% confidence interval of preference for different type of density while seated on various bench types

Figure 6-34 shows bench B2 (facing the shops) with lowest density levels is the most preferred seating condition (image 6-35-1). In both bench types (parallel and perpendicular to the footpath), higher preference is associated with lower density levels. On the other hand, participants did not prefer to sit on benches with higher density levels. The differences of mean preference for different density levels become less while seated on perpendicular (bench B3).



Image 6-35-1: Mean: 4.50



Image 6-35-2: Mean: 3.77



Image 6-35-3: Mean: 3.40



Image 6-35-4: Mean: 3.01



Image 6-35-5: Mean: 2.99



Image 6-35-6: Mean: 2.69

Figure 6-35: Preferred seating situations around different levels of density, in a descending order from upper left to bottom right

Bench type 3 with medium level of density (level 2), has a higher mean preference than bench type 2 with high level of density (level 3). While it has been claimed that peoples' perceptions of density and noise levels differ according to their ethnic background (Main & Hannah, 2010), the findings of this research did not establish differences in preference ratings by the different cultures. However, the findings strikingly contrast with Reich Roman's (2012) study in Israeli society where there were differences between ethnic groups' tendencies towards density levels and, overall, medium levels of density were preferred.

## 6.7 Discussion and Conclusion

This section discusses the results of the visual preference survey. The section includes a summary of planning and design recommendations for urban designers for streets to become more "*public*".

Shop displays: the findings of the second stage suggest that there are main differences in perception and preference for different types of shop frontage among users of different cultural backgrounds. It confirms the findings of the first stage of the research where Pacific Islanders had higher preferences for shop displays out on the footpath whereas Europeans and Māori did not favour these shop frontages. Asians did not like these shop frontages as much as Pacific Islanders but had higher mean preference scores than Europeans and Māori. This confirms the findings of the first stage of the research where there were main differences on the perceptions and preferences of participants of various ethnic groups. Pacific Islanders and Asians often complimented shop displays out on the footpath in the interviews. They associated them with certain qualities such as interesting, cheap and colourful. Many merchants on streets in eastern countries use the street to display their goods (Mazumdar, 2002). These types of storefronts may create a familiar setting and convey meanings for these ethnic groups (A. Sen, 1998, 2006). However, the overall low mean preferences for shop displays on the footpath suggests taking further considerations while planning for these types of shop displays along streets.

On the other hand, fruit and vegetable shops displaying their items on the footpath were preferred by all cultures. Levels of acceptance might relate to the type of items that shops display on the footpath. While expressing acceptability of fruit and vegetables, different cultural groups show different attitudes towards apparel and footwear businesses spreading onto the footpath.

Asians had higher preferences for shops displaying inside their premises compared to Europeans, Māori and Pacific Islanders. Many Asians in the first stage stated their preference for activities such as eating/drinking to take place in the private side of the street (shops, businesses). Also, they had the lowest preference for café seating among various ethnic groups. Their lower preference for café frontages might indicate that they are more indoor focused people where they like their activities to take place in the semi-private and enclosed indoor spaces. There were no significant differences in preferences for boutique and open shop window displays or shops with open displays, such as takeaways. These types of shops could be planned along the street with less consideration. Europeans had the highest preference for café seating on the footpath. The high preference of Europeans for café seating supports the findings of the first stage, where Europeans were found to be the main group using café seating for social activities. The overall high mean preference for café seating among various cultural groups suggests planning for eating premises that extend their interior dining space onto the footpaths. However, culinary preferences and the financial capability of different users should be taken into account.

Stage One revealed that the diversity of shops offering goods and services on the street were the main reason people are attracted to use the footpaths. The findings of the online surveys suggest that the way shop frontages are managed, controlled and designed greatly influences people's perceptions and preferences. Thus, urban planners and designers could help foster a mix of business activities as well as managing shop frontages to attract different ethnic cultures to make use of streets for social activities.

Seating conditions: analysis did not show any difference for seating conditions among different ethnic groups. Seating type B1 where the bench faces the footpath is the most preferred type of seating among all. The most preferred seating situation is where seating type B1 is associated with low landscaping along the street edge. The preference for the current seating condition further supports the "prospect and refuge theory" and that people like to have their back protected by buildings lining the street and to have a good view to the environment. Thus, it is of great importance to locate footpath benches in zone "A" where the bench faces the footpath in areas where buildings and shop frontages allow for that. The second most preferred situation is where the bench faces the footpath with tall landscaping along the street edge followed by the same location and orientation without any landscaping along the street edge. Planning for low landscaping along the edge while benches face the footpath would increase the chance of seating to be more inviting for members of different ethnic groups.

The preference for the bench with a similar zoning where the bench faces the footpath and another bench significantly decreases compared to the same situation without facing the other bench. Therefore, it would be mindful not to locate footpath benches in front of each other on the two sides of footpaths. Analysis of the online survey shows participants had a lower preference for seating located in zone “C” compared to zone “A”. Zone “A” along the edges of the buildings is used for different activities such as entering and exiting the businesses, window shopping, reading signs displayed by businesses, and using ATM machines. Also, sometimes shops spread their items on the footpath spaces in zone “A”. Consequently, there are fewer opportunities for locating benches along the edges of the buildings in zone “A”. Placing too many seating spaces in zone “A” could distract people from shopping and window shopping on footpaths. Thus, in many cases seating is located in zone “C”, next to the kerb.

The preference score correlates strongly with seating orientation, type of landscaping along the edge and shop frontage types while seated in zone “C”. Findings confirm the importance of planning for landscape buffers while locating benches in zone “C”, where the bench faces the footpath and the shop frontage, but backs on to traffic. There is an overall slight preference for short landscaping to tall landscaping when the bench backs onto traffic. Bench type 3 (perpendicular) was the least preferred type of seating among all different seating conditions. Landscaping also found less importance than the other seating conditions as not many differences were seen amongst different landscape types while seated perpendicular to the footpath. However, there is a slight preference towards short and tall landscaping rather than having no landscape. Thus, planning for less perpendicular seating with landscaping edges along footpaths is essential.

In general, participants favoured the organised shop frontage and café frontage compared to the shop frontage spreading onto the footpath in all different seating conditions (parallel and perpendicular). Although Pacific Islanders had a higher preference for types of shop frontages that extended onto the footpath, they did not wish to sit on benches facing this shop frontage type. Their sitting preference was not different to any other cultures. The organised shop frontage (B1) was preferred over the café frontage (B3) while seated on bench type 2, averaged over all types of landscaping. It appears that people would not like to sit where the bench faces the footpath and a café with outdoor seating and activities as much as they would like to sit in front of an organised shop front without outdoor activities. This finding conflicts with the findings of the first stage where seating locations and activities show strong associations. One explanation could be that people like to observe dynamic

activities while seated but feel less comfortable to face sedentary activities directly. This finding coincides with the low mean preference of participants for sitting on benches in front of each other on two sides of the footpath. Thus, planners must be attentive to personal space and the concept of proxemics (Hall, 1966) while placing benches adjacent or in close distance of activity supporting businesses.

Shop frontages found less importance while seated perpendicular to the footpath than parallel (there were less difference among participants' preferences for different shop frontage types). Café seating (B3) was preferred over the organised shop frontage (SF1) while seated perpendicular to the footpath and people slightly preferred active frontages of the café. The preference for café frontage while seated perpendicular is contrary to the type of preferred shop frontage while seated on bench type 2 where the bench faces the footpath but backs onto traffic. The shop frontage spreading onto the footpath (B2) was the least preferred type while seated parallel or perpendicular to the footpath. Thus, it is mindful not to locate seating in front of shops that extend their merchandise onto the footpaths.

Density of people on the footpath: for the three density levels, participants strongly preferred the bench parallel to the footpath rather than perpendicular. The finding reinforces the importance to prioritise orienting benches that face the footpath rather than are perpendicular. In both bench types (parallel and perpendicular) lower levels of density were preferred to medium and high density. This finding might relate to lower density of urban areas in New Zealand. Therefore, urban planners and designers are advised to plan for low density around seating areas as all different ethnic cultures preferred to sit on benches with a fewer number of people. Another way that this goal could be achieved is to increase the width of the footpath in seating areas with medium or high-density levels.

Seating arrangements: The findings suggest in general; socio-fugal arrangements are more preferred for individual activities and socio-petal arrangements are most favoured for social activities. However, not necessarily all preferred types of arrangements for individual activities were socio-fugal, and some socio-petal forms also found a high mean preference. Some socio-petal seating arrangements were also preferred for social activities. These were most popular among Europeans and Asians as considerable percentages came to the street in smaller numbers. Thus, not necessarily all groups need big and socio-petal seating arrangements for social activities. Benches with linear arrangements should not be placed together. This arrangement type does not encourage social activities as it makes face to face interactions difficult. In addition, it discourages individuals from using them. A considerable

number of Pacific Islanders and Māori come to the street in larger groups, and they had a higher preference for bigger socio-petal seating arrangement types. Thus, urban planners and designers should be mindful that in areas with a greater population of Māori or Pacific Islanders placing a number of larger socio-petal seating arrangements would be essential.

The study found an overall preference for 90-deg orientation over face-to-face orientation of benches for social activities. While Europeans significantly preferred to sit on benches side by side rather than in front of each other, there were no difference among Māori. Pacific Islanders and Asians also slightly preferred the 90-deg orientation over face-to-face orientation of benches. Furniture arrangements could affect the quality of interactions among different ethnic cultures. However, as the 90-deg orientation got a high preference over a diverse range of cultures, locating it on footpaths where the aim is to cater to needs of all represented ethnicities would be more effective. Selecting a 90-deg orientation could also increase the chance of this type of arrangement to be used by individuals to sit alone. As *“People tend to feel uncomfortable when they sit face to face with a stranger, and will twist around or sit sideways to avoid eye contact”* (PPS, n.d.-c). The findings reinforced the importance of tables for leisure and social and individual activities of diverse groups. Thus, it is mindful that benches should not be placed to face each other directly, unless there are tables between them.

Nativeness: the findings of Stage One suggested the importance of native landscaping for Māori. The findings of Stage Two suggest that native landscaping is preferred to non-native landscaping among all different cultural groups. However, still Māori had a higher difference in the mean preference for native than non-native landscaping compared to other ethnic cultures. Choice of plant species needs careful consideration along streets. Urban planners and designers are advised to plan for more native landscaping along streets.

Paving: according to Rapoport (2005), materials convey specific meanings for people of different cultures. In her study of public space among different groups in Israeli society, Reich Roman found differences in the studied culture’s preferences for different materials used in the public space such as benches and paving. Unlike Reich Roman (2012) who found differences in the preferred paving among different ethnic groups, the current study did not find differences for paving by ethnic cultures. The pavement of interlocking concrete blocks was preferred among all ethnic cultures and thus it is beneficial to use this type of paving for footpaths in multi-cultural areas.

Colour in the landscape: Europeans had a greater preference for the multi-coloured landscape whereas other ethnic groups had a higher preference for two-coloured landscaping along the edge. While Pacific Islanders underlined the importance of the role of colour in urban environments as what would attract them to the footpath, surprisingly, they preferred the two colour landscaping to the single and multi-colour landscaping. Thus, it is important to combine both two colour and multi-colour landscaping in the landscape planning of streets in multi-cultural societies.

Visual permeability: all ethnic cultures expressed higher preference to sit in front of the premises with a higher level of visual permeability. The preference for shop frontages with higher levels of visual permeability could relate to the possible interactions with the activities occurring inside the businesses and what Carmona et al.(2010) mention as active frontages. People like to use and sit in spaces where they can see activities. Thus, it is important to plan seating in front of premises with higher levels of visual permeability where there is a possibility of facing activities on streets in multi-cultural societies.

This chapter has provided insight on a range of physical characteristics that could help streets to become more public for a diverse range of ethnic cultures through a visual preference survey. The next chapter presents the conclusions of the research based on qualitative and quantitative data presented in chapters five and six. The first section includes a summary of the research, followed by the limitations and benefits of the study. The final section offers recommendations for future research.

## 7 Chapter Seven: Conclusion

### 7.1 Summary of Research

This study was an empirical examination of behaviours, attitudes and preferences of people of diverse ethnic backgrounds with regard to the characteristics of streets in multi-ethnic urban settings. It was an extension of previous work on “Lively Streets” with an emphasis on user associations and cultural backgrounds. It took the research on streets as public spaces a step further and dug deeper into the suggested characteristics of streets in order to make them more diverse and “*public*”. Whereas earlier studies identified street characteristics that form and maintain lively neighbourhood streets in the city, this research acknowledged those characteristics that maintain liveliness and “**promote and maintain cultural diversity**”. The physical setting of New Zealand’s streets, and the four primary ethnic groups; Europeans, Māori, Pacific Islanders, and Asians, provided the setting for this research. The research identified the primary needs and desires of all users of streets while understanding how the specific needs of ethnic groups could be accommodated at the same time.

The research was completed in two stages. Stage One made use of ethnographic fieldwork as a basic method, complemented by structured field observations using behavioural mapping techniques, and structured interviews with users of the streets. This stage provided data on specific streets and their usage through three case studies. Stage Two developed online surveys to capture responses to visualisations of street scenes. The latter stage identified preferences for a range of shop frontages and other design characteristics that are associated with stationary, gathering and lingering activities of people. Through these two stages and the complementary methods, a rich set of data was generated in order to answer the research question;

*“How are physical characteristics, land use activities and management strategies able to support static and social activities of people with different cultural backgrounds on streets in urban settings of multi-cultural societies?”*

The findings of this study confirm earlier research where the stationary, lingering and social activities on streets happen in the engagement of the land-uses and their management, the qualities of the physical environment and social qualities, including places that have important meaning for ethnic communities (Mehta, 2007, 2009a). Findings confirm earlier

readings suggesting that retail tenant mix and atmosphere are the most significant factors in attracting people to a street (Teller, 2008). The most important finding is that retail activities remain the main concern of people in multi-cultural streets. Streets attract different ethnic groups based on the composition of retail activities and their associated characteristics. Retail activities make important contributions to the perceptual quality of streets and in many instances help generate cultural diversity. The findings of this research suggest that people prefer the streets to have a variety of different businesses and shops that cater to their daily/weekly needs (supermarkets, fruit shops, banks), places for leisure activities (cafés, takeaways, restaurants) and other services (such as apparel, shoe shops, book stores). There were both similarities and differences among different cultural groups for the preferences for locations of daily shopping, functional and other commercial activities as well as the locations they chose for leisure and social activities. It is likely that class and levels of acculturation, as well as other factors such as age and gender, have an important role in shaping preferences for the locations people choose among different businesses.

A key objective in street management would seem to be to create a mixture of necessary (daily services) and optional (café, takeaways, restaurants) opportunities that are truly meaningful to residents and socially and economically inclusive of different groups with different financial capability. Findings show that the provision of cultural shops and restaurants and the overall commercial makeup of the street could increase or decrease participation of different cultures. In general, it could be concluded that the success of the street as a more public place is mainly dependent on the right management of the mix of its retailers and their associated characteristics.

Management and higher level planning of retail activities could encourage and motivate possible tenants in order to enrich the retail assortment of the street and provide a means for social and cultural diversity. While the findings of this research suggest the importance of inclusionary retail activity controls so that retail activities along the streets allow a wide range of choice, providing social and cultural requirements to people, it is difficult to achieve this in reality. First, the types of businesses along the strips reflect the political, economic and social limitations on the opportunities of the social class of the residing population and specific ethnic backgrounds. Secondly, the free marketplace is a major threat to street retail management. Decisions are usually made by the individual owners along the streets for other reasons than the necessity to create more ethnic diversity. In addition, diversity of the range of people using streets might make the planning procedure more difficult as there are conflicts between the needs of different users. Unlike streets, shopping malls include a

defined and determined management concept in terms of their tenant retail activities and store assortment (Teller, 2008). Following contract-based obligations regarding policies and strategies, lessons can be learnt from shopping malls in terms of how to create the right mixture of retailers on streets. Street administrators and government officials could do well to consider the administrative organising systems of shopping malls in order to support collaboration and management among different businesses along streets.

In addition to types of business activities, certain characteristics of the businesses such as types of interactions with footpaths, the way they present their merchandise, levels of personalisation and permeability affect users' perceptions and preferences. These characteristics could also provide a means for promoting stationary and lingering activities on footpath spaces. Maintaining an appropriate balance between these conflicting needs, behaviour planning for different types of premises, and managing and designing shop frontages seem to be a challenge in order to serve a diverse range of backgrounds. Implementing an inclusionary business agglomeration with the associated perceptual characteristics and promoting stationary and static activities on footpaths might not be simple and straightforward.

The second stage aimed to understand whether there were differences among different groups for design/management attributes and to identify those conditions that were preferred by the most diverse range of ethnic groups. Stage Two examined a range of characteristics identified as most important in Stage One. The studied characteristics were shop displays, seating conditions (location, orientation, shop frontage, landscape), seating arrangements, vegetation types, paving materials, colour, visual permeability, and pedestrian density. This research stage found both similarities and differences among the perceptions of people of different cultural backgrounds between the examined characteristics. There were main differences on the perception and preferences for different types of shop fronts among various backgrounds. These findings further supported the findings of the first stage of the study. On the other hand, preferences for seating conditions found a consensus among all cultural groups. The most preferred seating condition was where the bench faced the footpath, and the back was protected by buildings and short landscaping edged the kerb. In almost all conditions, people preferred to sit parallel to the footpath than perpendicular. While the preference for short and tall landscaping along the footpath edge differed from one case to another, in all conditions participants preferred to have landscaping (either low or tall) along footpath edges.

There were both similarities and differences among the perceptions of people of different cultural backgrounds among seating arrangements. There were no differences between different groups in their preference for seating arrangement types while seated alone. However, there were differences among the preference for different types of seating arrangements for social activities among ethnic groups, which mainly relates to group sizes. The research proposed optimum types of arrangements that could be used by both individual and social activities among all different ethnic groups on footpaths. The research did not find any significant differences among preference for native planting, paving material and visual permeability of the shop fronts while seated. There were differences between Europeans and non-Europeans on the preferences for colour in the landscape. Participants of different ethnic backgrounds had a common preference for seating orientation and density levels.

The research provided design guidelines and recommendations relating to streets in New Zealand by focusing on different physical characteristics of footpaths. The decisions and choices urban planners and designers make on footpath furniture greatly influence users' preference and use.

This research found that the preferences of different ethnicities choosing desirable seating spaces are similar in many cases. Findings suggest that the placement of the preferred types of seating conditions and arrangements adjacent to activity supporting businesses increases the possibilities of use. The first stage recommended that some business activities are important for social activities of specific groups, such as affordable eating places for Māori and Pacific Islanders. The second stage suggested the type of seating preferred for social activities of groups. Therefore, placing the preferred types of seating arrangements, including tables in proximity to bakeries and takeaways, could increase static and social activities on footpaths. Many of the preferred types of seating conditions (with landscape edges) and seating arrangements have large footprints. Not many locations on the footpaths of the studied streets provided sufficient footpath width for these types of arrangements. Footpath width is often a constraint for providing an environment with efficient seating types. Generous footpath width could also provide more opportunities for cafés and other commercial businesses to expand their interior space onto the footpaths than narrow footpaths. Therefore, it increases the possibility of liveliness and makes the street *more public*.

Observations showed the importance of activity supporting businesses in relation to the use of public benches. However, in both interviews and the online survey it became obvious

that people less preferred to sit on benches with traffic and high density of people around. Thus, seating locations should have visual access to activities, yet distance from the traffic and crowd. Findings also suggest that people less preferred to sit on benches that directly faced another bench or café activities. The findings of this research bring us to the fact that there are more complicated patterns for the placement of seating on footpaths than just their relation to business activities. While locating benches in relation to activity supporting businesses is critical and important for their use, the type of activity they face (whether it is dynamic or sedentary) is also important. Designers could be mindful of the placement of public benches in relation to other street amenities and physical artefacts, in addition to the type of business activities and their levels of interactions with footpaths.

The main conclusion from this research is that differences in preferences of footpath spaces mainly relate to the private section of the street. Types of business activities, and how they interface footpaths have a great role in creating stationary and lingering activities. They also greatly influence the shaping of perceptions and preferences among cultures. Thus, inclusionary business agglomeration policies including shop frontage management increase the chance of meeting the needs of a more diverse range of ethnic groups. An appropriate selection, placement and combination of footpath design characteristics influence behaviour and use. Together these help streets become more public for more publics.

Based on the findings of this research, a number of changes are made to the theoretical framework suggested at the final section of Chapter Three. The proposed framework was based on the literature, where it suggested that all factors have the same importance in generating stationary and social activities in streets. The updated framework (figure 7-1) shows that different characteristics are interrelated

In this regard, type of land-uses also influences the socio-cultural characteristics of a place and the type of people it attracts. The socio-cultural characteristics of a neighbourhood also have an important role in the type of businesses that are developed along commercial strips. For example, it is less likely that a business owner starts to run a pricey restaurant in a neighbourhood with a low socio-economic profile. The ways businesses organise their shop fronts (shop frontage design and management) are also influenced by the businesses that aim to target specific ethno-cultural groups (the way a take-away frontage is organised compared to a pricey restaurant). The findings of this study also show that it is important that the design of footpaths is based on the socio-cultural characteristics of an area.

The updated framework also suggests that different characteristics have different weighting and importance compared to the model extracted from the literature. In the model, land-use characteristics, social characteristics and their managements have a major role in making streets become multi-cultural and diverse. Design attributes also play a significant role in creating stationary and social activities, only if planners and designers place them in an appropriate context; which means a context that supports diversity by its land-use and social characteristics. Therefore, design attributes are of secondary importance. However, placing suitable design characteristics in the context of streets that attract a diverse range of users, enhances their characters and adds to the streets' successfulness.

The framework suggested in section 3.7 focuses on ethnicity where other factors such as age, gender, socio-economic status, education and so on also reflect one's association and cultural background. Among the characteristics, socio-economic conditions had great importance among ethnic minorities to access streets for day to day shopping, leisure, and recreation activities. In many cases, ethnic cultural needs were overshadowed by the socio-economic situations of the users. This reinforces that ethnicity and economic disparity are often tied together in the formation of ethnic minorities (Pearson, 2012). Therefore, the socio-economic factors in the model are located at the same level as ethnicity (figure 7-1). This could also be related to the lower socio-economic profile of the studied neighbourhoods.

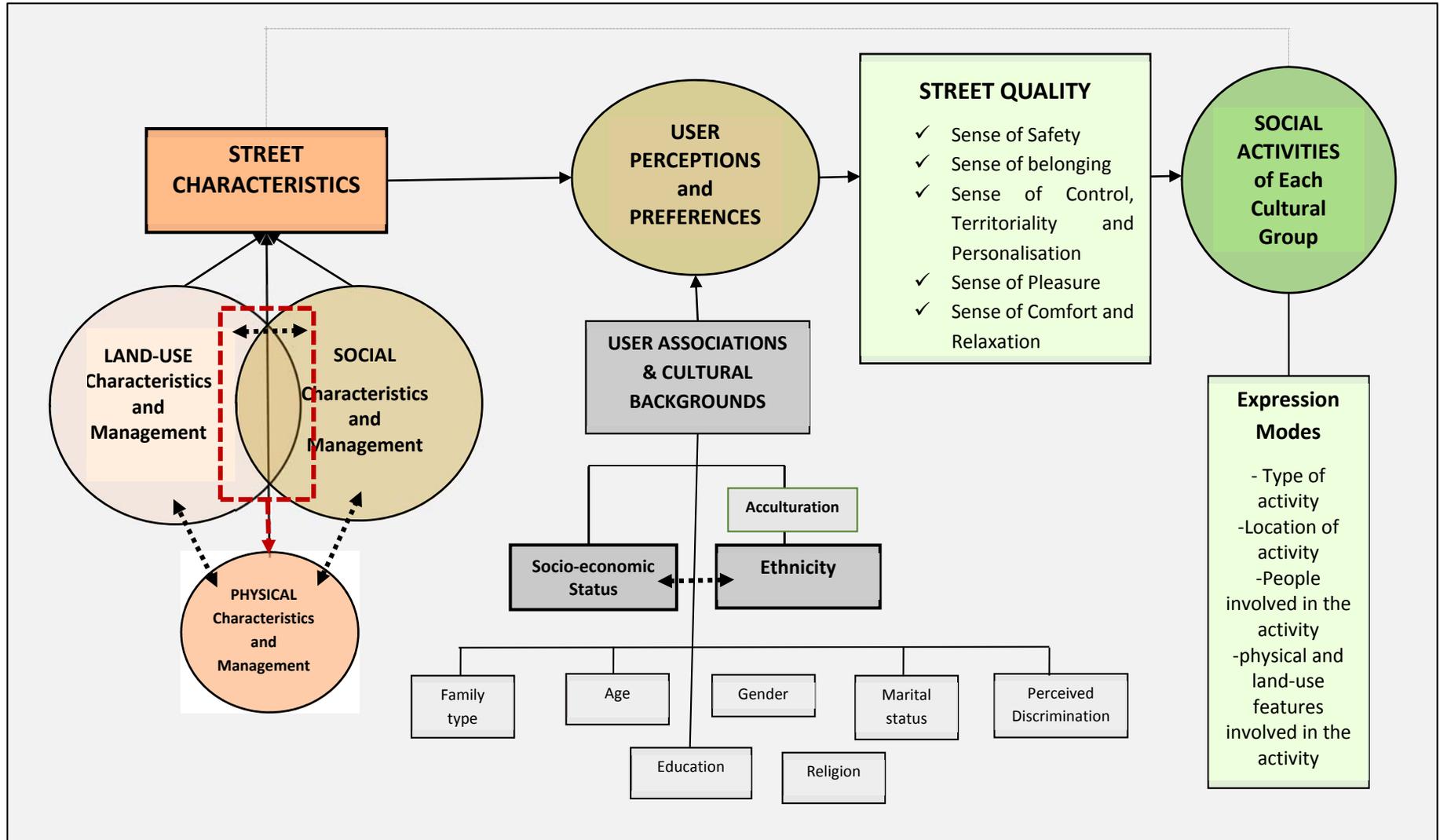


Figure 7-1: Updated framework of the study

## 7.2 Limitations and Benefits of the Study

Almost every piece of research is limited by budget, available resources and time constraints. The first stage inquiry was limited to three neighbourhood commercial streets in two cities in New Zealand and studied the main ethnic composition of New Zealand society. The type of activities, social interactions, and locations for various activities, attitudes and preferences might not represent a universally accepted pattern. It is likely that in neighbourhood commercial streets in other societies with different socio-ethnic compositions, the patterns of use of these environments is different.

There are a number of limitations embedded in the design of this research. Future research may address these. The methodology was limited to walk-by observations and excluded structured observations. Structured observation would have added to the richness of the data as it measures the time that each cultural group spends at different street areas. The walk-by observations were constrained to the months of March and April, in the beginning of autumn, whereas conducting observations at different seasons and months of the year would add strength and accuracy to the research. Data was collected during day time between 10 am and 6 pm and excluded night time observations due to security precautions. The behavioural mappings coded Māori and Pacific Islanders under one group. However, the mingling between Māori and Pākeha has drawn them closer together where their differences are diminishing gradually (Booth & Hunn, 1962).

The weakness of the analysis of this study is that it considers ethnicity as a homogeneous concept while there are possible differences between the members of each cultural group. It should be noted that not all individuals within an (ethnic) culture behave in the same manner. The opportunities that an environment affords are not perceived and taken up in the same way by different individuals within the same (ethnic) culture (Lang, 1987).

There are several nationalities and religious groups within the Asian, European (NZ European, Australian, or Europe European) and Pacific Islander cultural backgrounds. Māori everyday contact with Pākeha (Europeans) in New Zealand has led to a more homogenous culture. In addition, the levels of acculturation differ from one individual to another. Other factors such as gender, age group, and socio-economic situation also have a significant role in moulding attitudes, preferences and behaviour in public space. The relatively small sample sizes (30 and below for interviews in each case study and 181 for the

visual preference survey) are a threat to the external validity of the research and the extent to which the findings could be generalised to other situations and to other people.

The online survey method limited responses to those who could use a computer and had internet access. The ability to print out the visual preference survey among those communities and age-groups without equal access to computers and internet would have enriched the possibility for more equally inclusive and accurate research. The researcher approached a diverse range of ethnicities, age and groups with different levels of education for the visual preference surveys. However, those that completed the survey were mostly students and those with higher education levels. While the specific range of participants might also decrease the external validity, the research, however, sought to understand whether there were differences among different *ethnic* groups. The composition of each ethnic group, such as age, gender and education levels was less relevant.

There is a tendency that the descriptors "native or non-native planting" above images presenting these landscape types have made the answers become biased. If the participants were choosing based on visual appearance of the planting the answers would be likely to be based on the visual quality with no in-built bias. However, in that case participants would choose them by visual appearance without native or non-native considerations. A group of images presenting different native and non-native planting would have been the best solution as it would have reduced the chance that responses were only based on visual preference.

Finally, it has been stated "*ethnographic accounts can be constrained by language*" (Mazumdar, 1991, p. 125). The researcher does not speak languages other than English and Farsi. During the interviews, it became relevant that language was a barrier for some new immigrants in New Zealand. There were some people sitting on benches on the footpaths, in the park and the playground from different ethnicities, but the researcher was not able to approach them due to their poor English levels. This research would have become richer with the assistance of translators for different ethnic groups.

Despite the limitations, the research has several benefits. This research interrogated the idea that streets are public spaces capable of fostering multiculturalism. While the streets may be "public", it is their "publicness" that plays a significant role in promoting multiculturalism. Therefore, it presented a new framework for assessing the publicness of streets. It was an innovative attempt at exploring new ways of integrating different approaches to arrive at an understanding of the nature of multicultural streets. It employed

complementary mixed methods research, benefiting from both qualitative and quantitative approaches in order to make an understanding of street qualities at different levels of planning, management and design. The fruitful combination of both approaches drew on the strengths and balanced the weaknesses of each and generated a wide range of original data, from which the research objectives were met. The research examined how publicness is manifested through the relationship between the built environment and social behaviour at street level in the public domain.

The first stage conducted a socio-cultural analysis of street users, focusing on street physical characteristics, activities and their management considering socio-cultural backgrounds. Engagement with the daily users and inhabitants of the areas supplemented explicit empirical evidence and provided multi-dimensional perspectives on the cultural life of the studied streets.

The second stage took the findings of the first stage a step forward and examined a number of design attributes by using computer-aided simulations. In previous studies, images were usually chosen based on one changing variable. The research design of the second stage of this study integrated a number of design/management attributes into simulations and examined relationships among them. The research proposed guidelines that promote and maintain cultural diversity in streets in multicultural societies as well as policies on the effective management of street spaces in order to enhance equity in the use of streets.

Cultural diversity remains a neglected area of research in urban design and this study has made a significant contribution to knowledge on the meaning and multiple uses of streets. Streets are one of the primary places where diverse cultures come together. This study provides empirical information on the characteristics of the street setting that contribute to retaining people from different cultural backgrounds on commercial streets and support social interaction.

### **7.3 Recommendations for Future Research**

The management of business activities along streets is a neglected aspect of urban design and has been under-addressed by municipality planners and policy makers (Preston & Lo, 2009). The focus of past studies has been mainly on the right selection of tenant mix for “*new place making retail projects along streets*” (Laniado, 2005) and the role of ethnic enclaves in creating a sense of place among immigrants (Mazumdar et al., 2000). Further research, however, could

investigate whether the right tenant mix along streets in multi-cultural societies helps create a familiar setting and shapes a sense of place for people of various backgrounds. In other words, “*how could retail activity controls on commercial streets lead towards cultural inclusion?*” remains an open question. In this vein, how can managers and policy makers support and encourage different ethnic groups, especially those that are less represented, to operate and run activities?

This research indicated that there are similarities and differences in preferences for different shop frontage types. It would be appropriate to conduct further research regarding complexity and obtrusiveness of the combination of a range of shop fronts on the perception and evaluation of different cultural groups. Well-designed streetscapes can create positive mental images and place identity among citizens (Gjerde, 2011). Shop fronts have an important role in enhancing or harming streetscapes. Businesses and their shop fronts are also able to generate or support certain levels of activities on footpath spaces or detract from them. Further research would help to understand the optimal compositions of different shop frontages lining the streets in order to make them more inclusive, lively and public.

The research found that the engagement between certain businesses and physical elements of the built environment on the one hand, and the combination of specific physical elements on the other hand, serve to influence users’ preference for and use of static and social activities. However, in many cases decisions on footpaths are made in a piecemeal fashion by different municipal departments without the overview needed to enable the whole picture to be seen. There is a lack of a holistic approach towards streets as urban environments. There is no specific department in charge of the retail activity controls or the overall management and operation of footpaths, engaging various fields and professions such as urban design, geography, and social sciences. “*Who is responsible for the overall management of streets to make them more inclusive and lively?*” remains unanswered.

The findings of the study indicated that adults were the main users of public space. The percentages of age groups varied among different cultural groups. Older adults, teenagers and children seem to be less represented, comparatively. The research also found gender differences in the use of public space among specific ethnic groups. For streets to be truly public, they should accommodate a wide range of age groups and genders within different ethnic groups. These considerations lead to the question of “how could we consider different

genders and age groups in the planning, design and management of streets to make them more inclusive?”

Further research could examine deeper place attachment or sense of belonging to a particular street or location by a cultural group beyond just retail activities. This could also play an important role in attracting specific cultural groups to an area.

The importance of the courtyard off the street emerged in one of the case studies (St George Street). This raises the significance of adjacent or nearby spaces that may have a positive or negative impact on the street. This could be considered in future studies since it was not included within the scope of this study.

Further research could investigate other characteristics of streets such as colour or cultural art in greater detail;

This study only examined a spectrum of single colour to multi-colour landscape along the footpath edges. Continued study in this area can help designers to understand which colour combinations (different value, hue, and contrast levels) in urban environments are acceptable for various cultures.

Interviews suggested that cultural art has an important role for social activities of ethnic groups, especially Māori. Efforts have been made to include indigenous art, signs and symbols in public spaces of New Zealand in recent years. For example; in Wellington, Māori iconography has been included in the public spaces of the city such as the “Civic Square” (Parkinson, 2009). However, not much has been done on streets in less affluent areas or non-tourist destinations. Including public and cultural art in public spaces of the city also needs a democratic process. Further research is needed to understand how the use of public art in streets and other public spaces in multi-cultural societies can foster inclusion among various ethnic groups.

It can be noted that democracy (publicness) in public spaces is a long-term and ongoing process. Public spaces might never become truly public, however, empirical studies incorporating different characteristics of urban environments as well as including different groups of people, like the ones in this research, help public spaces become more public for multiple publics and increase their levels of publicness.





# Appendices



## Appendix A: Sample of Information Letter for Interviews



Research Project Title:

**Democratic Streets: Exploring the Relationship between Cultural Background, Built Environment, and Social Behavior**

### Information Letter

My name is Maryam Lesan. I am a PhD student at Victoria University of Wellington. My research examines the relationship between cultural background, street design and social behavior. As a part of my research, I am studying how streets may be used for social activities.

An important aspect of the study is to learn whether people's ethnic cultural backgrounds influence the way they use streets. I would like to interview you about your social and recreational activities in the context of St George Street (Papatoetoe). The interview will take about 20 minutes. You do not have to answer any questions that you do not want to answer. This discussion will be voice recorded. This process has been approved by the Human Ethics Committee of the Victoria University of Wellington (approval number: 19607).

Your participation in this study is completely voluntary. Should you feel the need to withdraw from the project, you may do so without question at any time before the end of the survey and all recorded information will be deleted.

I am not testing how much you know and anything you say will be treated as confidential. The information you provide and your quotes will only be associated with your ethnic cultural background and your age group without mentioning any names. Interview responses will be grouped for analysis. For example, the thesis may discuss how many people (from [European/Maori/Pacific Islander/Asian/other] cultural background) offered a similar response to a question. You will not be personally identified in any part of the thesis or any subsequent publication based on this research. All material collected will be kept confidential in a locked office and a password protected electronic file which only I will have access to.

The thesis will be deposited in the University Library in 2014. It is intended that one or more articles will be submitted for publication in scholarly journals.

If you have any questions or would like to receive further information about the project, please contact me by email: ([lesanmary@myvuw.ac.nz](mailto:lesanmary@myvuw.ac.nz)) or email my supervisors, Professor Jules Moloney ([jules.moloney@vuw.ac.nz](mailto:jules.moloney@vuw.ac.nz)) and Morten Gjerde ([morten.gjerde@vuw.ac.nz](mailto:morten.gjerde@vuw.ac.nz)), at the School of Architecture at Victoria University.

I appreciate your participation in this study. None of the information I collect today will be associated with you directly. Informed consent is implied by voluntary participation in completing this survey.

If you would like to receive a summary of the results of this research when it is completed please contact the researcher or provide your email.

Email: \_\_\_\_\_

Thank you for your time.

Maryam Lesan  
Ph.D. Architecture Candidate, Victoria University of Wellington

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## Appendix B: Semi-structured Interviews

### SEMI-STRUCTURED INTERVIEW FOR CULTURAL PARTICIPANTS

Date \_\_\_\_\_ Day of Week \_\_\_\_\_

Weather Temp \_\_\_\_\_ wind \_\_\_\_\_ Time of the day \_\_\_\_\_

Dryness \_\_\_\_\_ sunshine \_\_\_\_\_

#### Section One: Demographic Data

1. What best describes your cultural background?

2. What country do you consider your home-land?

3. What best describes your age group?

18-24  25-34  35-44  45-54  55-64  65 and over

4. Gender: Male  Female

5. What best describes your highest level of education and training?

Less than High school  High school  Trade-qualification  University

Bachelor or Honours degree  Master's or Doctorate

Other, Please specify

6. What is your Occupation?

7. How long have you been living in New Zealand?

8. How familiar are you with St George Street?

1 2 3 4 5 6 7 8 9 10

Not  
Familiar

Somewhat  
Familiar

Very  
Familiar

**Section Two: Individual Patterns**

9. How safe do you feel to stop/sit and have a conversation on St George Street?

1      2      3      4      5      6      7      8      9      10  
Very poor                  Poor                  Fair                  Good                  Excellent

10. Do vehicles and traffic dominate your use of this street?

1      2      3      4      5      6      7      8      9      10  
Not at all                                  Fair                                  Very much

11. Do you use this street for any **recreational/social purpose**? What brings you here? And, what do you do when you are here?

**Yes, I go to the Street**

To meet friends                   to watch people around                   for a meal/drink

To sit down/rest                   to shop                   to window shop

Other (please specify) .....

No, I just pass along this Street to go to my favourite place

No, I just come to wait for the bus at the bus stop

No, I just come to buy necessities

12. How often do you visit St George Street for leisure/recreation/ social activities?

Less than once in a week                   1-2 times in a week                   3-5 times in a week

More than five times in a week                   daily                   several times daily

13. Which days of the week do you usually come to St George Street for leisure/social activities?

Weekdays                                   weekends                                   both

14. What time of the day do you prefer to come for leisure to St George Street?

Morning                                   midday                                   afternoon

Evening                                   night



### Section Three: Culture-related Questions

20. My observations show that there are many different social activities on St George Street. Can you describe how people from your ethnic culture often socialize with each other on sidewalks? What **specific activities** are related to your **culture**? What **kinds of activities** do people from your ethnic cultural background participate in, **when they take place** and **how many people** do your groups usually constitute?
21. What are the places (buildings, specific locations, shops/restaurants on the street) that are important to your ethnic members for their desired activities? Please explain why they are important, in what way.
22. What are the features of this street's sidewalk that accommodate your ethnic group's activities? Imagine that you are going to **sit and talk/eat** with your friends on the sidewalks of St George Street, which features of the environment are important for you in choosing a place for social activities?

If you don't socialize for a long time on the sidewalks (sitting, talking, and eating) and choose other places, inside the restaurants, shops, building, could you please provide me the reasons for that.

If you go to St George Street for window shopping, alone or with friends; which shops have the most attractive, interesting frontages that make you enjoy your activity? What makes them be attractive, interesting?

23. Thinking about this street (sidewalks+ shop frontages/ types of shops and different events and activities) can you name (three to five features) that you would like to change or add on this Street (those specific chosen spaces) to become a hospitable and welcoming place you like to stay for your ethnic group social activities? What is missing here? What should change? Why?

24. The design of St George Street (sidewalks and shop frontages) reflects [Ethnic Culture's name] culture.

|                     |   |   |   |      |   |                  |   |   |    |
|---------------------|---|---|---|------|---|------------------|---|---|----|
| 1                   | 2 | 3 | 4 | 5    | 6 | 7                | 8 | 9 | 10 |
| Completely Disagree |   |   |   | Fair |   | Completely Agree |   |   |    |

25. Is there anything on this street that your ethnic culture considers important? If yes, please describe. If not, in which ways, in your opinion, (ethnic culture's name), may use and maintain sidewalk spaces so that its culture is represented and make the street a meaningful place for social/ leisure activities?

## Appendix C: Characteristics of Interview-Participants

| Demographic Data          |                                | Riddiford Street |         | St George Street |         | Great South Road |         | Total   |         |
|---------------------------|--------------------------------|------------------|---------|------------------|---------|------------------|---------|---------|---------|
|                           |                                | Numbers          | Percent | Numbers          | Percent | Numbers          | Percent | Numbers | Percent |
| Cultural Background       | European                       | 9                | 30%     | 5                | 18.5%   | 2                | 7.1%    | 16      | 18.8%   |
|                           | Maori                          | 8                | 26.7%   | 6                | 22.2%   | 6                | 21.4%   | 20      | 23.6%   |
|                           | Pacific Islander               | 7                | 23.3%   | 7                | 26%     | 12               | 42.9%   | 26      | 30.6%   |
|                           | Asian                          | 6                | 20%     | 9                | 33.3%   | 8                | 28.6%   | 23      | 27%     |
| Gender                    | Male                           | 9                | 30%     | 18               | 66.7%   | 15               | 53.6%   | 42      | 49.4%   |
|                           | Female                         | 21               | 70%     | 9                | 33.3%   | 13               | 46.4%   | 43      | 50.6%   |
| Age                       | 18-24                          | 5                | 16.7%   | 3                | 11.1%   | 6                | 21.4%   | 14      | 16.5%   |
|                           | 25-34                          | 7                | 23.3%   | 3                | 11.1%   | 3                | 10.7%   | 13      | 15.3%   |
|                           | 35-44                          | 7                | 23.3%   | 3                | 11.1%   | 4                | 14.3%   | 14      | 16.5%   |
|                           | 45-54                          | 5                | 16.7%   | 3                | 11.1%   | 3                | 10.7%   | 11      | 12.9%   |
|                           | 55-64                          | 5                | 16.7%   | 8                | 29.6%   | 3                | 10.7%   | 16      | 18.8%   |
|                           | 65+                            | 1                | 3.3%    | 7                | 26%     | 9                | 32.2%   | 17      | 20%     |
| Level of Education        | Below high-school              | 1                | 3.3%    | 5                | 18.55%  | 6                | 21.4%   | 12      | 14.1%   |
|                           | High-school                    | 4                | 13.4%   | 8                | 29.65%  | 14               | 50%     | 26      | 30.5%   |
|                           | Trade qualification/university | 12               | 40%     | 9                | 33.3%   | 6                | 21.4%   | 27      | 31.9%   |
|                           | Bachelors/honours              | 7                | 23.3%   | 3                | 11.1%   | 1                | 3.6%    | 11      | 12.9%   |
|                           | Masters/doctorate              | 6                | 20%     | 2                | 7.4%    | 1                | 3.6%    | 9       | 10.6%   |
| Length of stay/live in NZ | Since birth                    | 18               | 60%     | 11               | 40.8%   | 14               | 50%     | 43      | 50.6%   |
|                           | Less than 5 years              | 3                | 10%     | 3                | 11.1%   | 4                | 14.3%   | 10      | 11.7%   |
|                           | Between 5-10 years             | 3                | 10%     | 2                | 7.4%    | 2                | 7.1%    | 7       | 8.3%    |
|                           | Between 10—20 years            | 1                | 3.3%    | 5                | 18.5%   | 5                | 17.9%   | 11      | 12.9%   |
|                           | More than 20 years             | 5                | 16.7%   | 6                | 22.2%   | 3                | 10.7%   | 14      | 16.5%   |
| Occupation                | Housewife                      | 3                | 10%     | 5                | 18.5%   | 4                | 14.3%   | 12      | 14.1%   |
|                           | Unemployed                     | 2                | 6.7%    | 4                | 14.85%  | 4                | 14.3%   | 10      | 11.7%   |
|                           | Retiree                        | 1                | 3.3%    | 4                | 14.85%  | 4                | 14.3%   | 9       | 10.6%   |
|                           | Student                        | 6                | 20%     | 0                | 0%      | 1                | 3.6%    | 7       | 8.2%    |
|                           | Business-owner/manager         | 0                | 0%      | 3                | 11.1%   | 1                | 3.6%    | 4       | 4.7%    |
|                           | Administration                 | 0                | 0%      | 1                | 3.7%    | 0                | 0%      | 1       | 1.2%    |
|                           | Business analyst               | 1                | 3.3%    | 0                | 0%      | 0                | 0%      | 1       | 1.2%    |
|                           | Bank Teller                    | 1                | 3.3%    | 1                | 3.7%    | 0                | 0%      | 2       | 2.3%    |
|                           | Chef/food technician           | 2                | 6.7%    | 1                | 3.7%    | 1                | 3.6%    | 4       | 4.7%    |
|                           | Busker                         | 1                | 3.3%    | 0                | 0%      | 0                | 0%      | 1       | 1.2%    |
|                           | Health-board                   | 2                | 6.7%    | 3                | 11.1%   | 2                | 7.1%    | 7       | 8.3%    |
|                           | Community worker/Civil servant | 2                | 6.7%    | 1                | 3.7%    | 0                | 0%      | 3       | 3.5%    |
|                           | Care giver                     | 2                | 6.7%    | 0                | 0%      | 1                | 3.6%    | 3       | 3.5%    |
|                           | Operator                       | 0                | 0%      | 1                | 3.7%    | 1                | 3.6%    | 2       | 2.3%    |
|                           | Traffic controller             | 0                | 0%      | 0                | 0%      | 1                | 3.6%    | 1       | 1.2%    |
|                           | Church-evangelist              | 0                | 0%      | 1                | 3.7%    | 0                | 0%      | 1       | 1.2%    |
|                           | Teacher/Lecturer               | 5                | 16.7%   | 1                | 3.7%    | 0                | 0%      | 6       | 7.1%    |
|                           | Architect                      | 1                | 3.3%    | 0                | 0%      | 0                | 0%      | 1       | 1.2%    |
| Translator                | 1                              | 3.3%             | 0       | 0%               | 0       | 0%               | 1       | 1.2%    |         |
| Labourer                  | 0                              | 0%               | 1       | 3.7%             | 8       | 28.4%            | 9       | 10.6%   |         |
| Homeland                  | New Zealand                    | 21               | 70%     | 15               | 55.6%   | 18               | 64.3%   | 54      | 63.6%   |
|                           | Samoa                          | 1                | 3.3%    | 1                | 3.7%    | 2                | 7.1%    | 4       | 4.7%    |
|                           | Tonga                          | 1                | 3.3%    | 2                | 7.4%    | 1                | 3.6%    | 4       | 4.7%    |
|                           | Cook Islands                   | 1                | 3.3%    | 2                | 7.4%    | 0                | 0%      | 3       | 3.5%    |
|                           | Fiji                           | 0                | 0%      | 4                | 14.8%   | 4                | 14.3%   | 8       | 9.4%    |
|                           | India                          | 1                | 3.3%    | 3                | 11.1%   | 3                | 10.7%   | 7       | 8.2%    |
|                           | Niue                           | 1                | 3.3%    | 0                | 0%      | 0                | 0%      | 1       | 1.2%    |
|                           | Malaysia                       | 1                | 3.3%    | 0                | 0%      | 0                | 0%      | 1       | 1.2%    |
|                           | Indonesia                      | 2                | 6.7%    | 0                | 0%      | 0                | 0%      | 2       | 2.3%    |
|                           | England                        | 1                | 3.3%    | 0                | 0%      | 0                | 0%      | 1       | 1.2%    |

## Appendix D: Flyer Advertising the Visual Preference Survey



Your opinions and ideas can help shape  
street design in New Zealand!



I am a PhD student at Victoria University of Wellington. My research studies the relationship between design, people's cultural background and how these affect social behavior.

If you could spare a few minutes to complete the following survey it would be greatly appreciated. Please begin with the survey by opening the link below in your browser.

[http://vuw.qualtrics.com/SE/?SID=SV\\_a4da7rVnXWdW18N](http://vuw.qualtrics.com/SE/?SID=SV_a4da7rVnXWdW18N)

To enter the PRIZE DRAW (2 X \$30 Dinner Vouchers) you must complete the survey and include your email address at the end.

Please note that your responses are completely anonymous. This process has been approved by the Human Ethics Committee of the Victoria University of Wellington (approval number: 19607).

Thank you very much for your time and support.

Maryam Lesan

Email address: Lesanmary@myvuw.ac.nz

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## Appendix E: The Visual Preference Survey



You are invited to participate this study, where you will be asked to indicate your preferences for images of different streets environments. The project is being carried out as part of a PhD thesis by Maryam Lesan at Victoria University of Wellington. The research examines the relationship between cultural background, street design and social behaviour. This process has been approved by the Human Ethics Committee of the Victoria University of Wellington (approval number: 19607).

The survey does not aim to test your knowledge and instead asks you to indicate your preferences. Your responses will be treated as confidential and your participation is voluntary. Should you feel the need to withdraw from the project, you may do so without question at any time before the end of the survey and all recorded information will be deleted. The thesis will be deposited in the University Library in 2015. It is intended that one or more articles will be submitted for publication in scholarly journals.

If you have any questions or would like to receive further information about the project, please contact me by email: (lesanmary@myvuw.ac.nz) or email my supervisors, Morten Gjerde (morten.gjerde@vuw.ac.nz) and Professor Jules Moloney (jules.moloney@vuw.ac.nz) at the School of Architecture at Victoria University.

I appreciate your participation in this study. None of the information I collect today will be associated with you directly. Informed consent is implied by voluntary participation in completing this survey.

I would like to participate

1. What best describes your cultural background?

- European
- NZ European
- Maori
- Pacific Islander
- Asian
- Indian
- Middle Eastern
- African
- South American
- Other

If you chose "Other" please specify your cultural background.

2. What country do you consider your home-land?

 [Click here to edit choices](#)

3. Indicate your total household income in NZ \$.

- under \$25,000
- \$25,000 - \$29,999
- \$30,000 - \$34,999
- \$35,000 - \$39,999
- \$40,000 - \$49,999
- \$50,000 - \$59,999
- \$60,000 - \$84,999
- Over \$85,000

4. What best describes your age group?

- 13-18
- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 and over

5. What is your gender?

- Male
- Female
- Other

6. What best describes your highest level of education and training?

- School leaver
- High-school/college
- Tertiary trade qualification
- University Bachelor or Honours degree
- Master's degree or Doctorate

7. What is your Occupation?

8. How long have you been living in New Zealand?

- Less than 5 years
- Between 5 to 10 years
- Between 10 to 20 years
- More than 20 years
- Since birth

9. How do you like this group of shop frontages?

Dislike Dislike Dislike Neither Like Like Like  
Extremely Moderately Slightly Like nor Like Moderately Like  
Dislike Slightly Moderately Extremely

Theme: Shop displays out on the footpath



10. How do you like this group of shop frontages?

Dislike Dislike Dislike Neither Like Like Like  
Extremely Moderately Slightly Like nor Like Moderately Like  
Dislike Slightly Moderately Extremely

Theme: Fruit and veg shops displaying their items on the sidewalks



11. How do you like this group of shop frontages?

Dislike Dislike Dislike Neither Like Like Like  
Extremely Moderately Slightly Like nor Like Moderately Like  
Dislike Slightly Moderately Extremely

Theme: Shops displaying inside their premises only



12. How do you like this group of shop frontages?

Dislike Dislike Dislike Neither Like Like Like  
Extremely Moderately Slightly Like nor Slightly Moderately Extremely  
Dislike

Theme: Open shop window displays.



13. How do you like this group of shop frontages?

Dislike Dislike Dislike Neither Like Like Like  
Extremely Moderately Slightly Like nor Slightly Moderately Extremely  
Dislike

Theme: Cafe seating on the footpath



14. How do you like this group of shop frontages?

Dislike Dislike Dislike Neither Like Like Like  
Extremely Moderately Slightly Like nor Slightly Moderately Extremely  
Dislike

Theme: Open shop frontages



15. How would you like to sit on the bench shown in the pictures?

Neither  
 Dislike Dislike Dislike Like Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike

Bench faces the footpath.



Bench faces onto footpath. Low landscaping along street edge.



Bench faces onto footpath. Tall landscaping along street edge.



16. How would you like to sit on the bench shown in the pictures?

Dislike Dislike Neither  
Extremely Moderately Slightly nor Like Like  
Dislike Slightly Moderately Extremely

Bench faces the footpath and backs on to traffic.



Bench faces onto footpath and backs on to traffic. Low landscaping along street edge.



Bench faces onto footpath and backs on to traffic. Tall landscaping along street edge.



17. How would you like to sit on the bench shown in the pictures?

Neither  
 Dislike Dislike Dislike Like Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike

Bench is perpendicular to the footpath.



Bench is perpendicular to the footpath and traffic. Low landscaping along street edge.



Bench is perpendicular to the footpath and traffic. Tall landscaping along street edge.



18. How would you like to sit on the bench shown in the pictures?

Dislike Dislike Dislike Like Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike

Bench faces the footpath and another bench.



Bench faces the footpath and another bench. Low landscaping along street edge.



Bench faces the footpath and another bench. Tall landscaping along street edge.



19. How would you like to sit on the bench shown in the pictures?

Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike

Bench faces the footpath and another bench. It backs on to traffic.



Bench faces the footpath and another bench. It backs on to traffic. Low landscaping along street edge.



Bench faces the footpath and another bench. It backs on to traffic. Tall landscaping along street edge.



20. How would you like to sit on the bench shown in the pictures?

Dislike Dislike Dislike Like Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike

Bench faces the footpath and busy shop fronts. It backs on to traffic.



Bench faces the footpath and busy shop fronts. It backs on to traffic. Low landscaping along street edge.



Bench faces the footpath and busy shop fronts. It backs on to traffic. Tall landscaping along street edge.



21. How would you like to sit on the bench shown in the pictures?

Neither  
 Dislike Dislike Dislike Like Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike

Bench is perpendicular to the footpath, traffic and busy shop fronts.



Bench is perpendicular to the footpath, traffic and busy shop fronts. Low landscaping along street edge.



Bench is perpendicular to the footpath, traffic and busy shop fronts. Tall landscaping along street edge.



22. How would you like to sit on the bench shown in the pictures?

Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike

Bench faces the footpath and a cafe frontage. It backs on to traffic.



Bench faces the footpath and a cafe frontage. It backs on to traffic. Low landscaping along street edge.



Bench faces the footpath and a cafe frontage. It backs on to traffic. Tall landscaping along street edge.



23. How would you like to sit on the bench shown in the pictures?

Dislike Dislike Dislike Neither Like Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike Dislike Dislike Dislike

Bench is perpendicular to the footpath, cafe frontage and traffic.



Bench is perpendicular to the footpath, cafe frontage and traffic. Low landscaping along street edge.



Bench is perpendicular to the footpath, cafe frontage and traffic. Tall landscaping along street edge.



24. How big is your group (generally) when you visit a street for social and leisure activities?

- Only me
- 2
- 3-4
- 5-6
- 7-8
- more than 8

25. How would you like to sit on the bench shown in the pictures if you come to the street **by yourself**? (There is a possibility that another person comes and sit on the bench you are not sitting on)

Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike



Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly Like nor Slightly Moderately Extremely  
 Dislike



26. How would you like to sit on one of the benches shown in the pictures if you come to the street **by yourself**? (There is a possibility that another person will sit on the bench you are not sitting on)

Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly Like Like Like  
 Dislike Slightly Moderately Extremely



27. How would you like to sit on the bench shown in the pictures if you come to the street **with your friends/family members**? (There is a possibility that another person comes and sit on the bench you are not sitting on)

Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike



Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly Like nor Slightly Moderately Extremely  
 Dislike



28. How would you like to sit on one of the benches shown in the pictures if you come to the street **with your friends/family members?** (There is a possibility that another person will sit on the bench you are not sitting on)

Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly Like Like Like  
 Dislike Slightly Moderately Extremely



29. The landscape shown in this image is comprised of **native plants**. How would you like urban sidewalks with **native landscaping**?

Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly nor Slightly Moderately Extremely  
 Dislike



30. The landscape shown in this image is comprised of **non-native plants**. How would you like urban sidewalks with **non-native landscaping**?

Dislike Dislike Dislike Neither Like Like Like  
 Extremely Moderately Slightly Like nor Slightly Moderately Extremely  
 Dislike



31. Indicate your preference for each of these pavements?

Dislike Dislike Dislike Like Like Like Like  
Extremely Moderately Slightly nor Slightly Moderately Extremely  
Dislike

**Asphalt**



**Brick or concrete pavers**



**Stone pavers**



32. Indicate your preference for each of these landscape strips?

Dislike Dislike Dislike Neither Like Like Like  
Extremely Moderately Slightly nor Slightly Moderately Extremely  
Dislike

**single-colored** landscaping



**two-colored** landscaping



**Multi-colored** landscaping



33. How would you like to sit on the bench shown in the pictures?

Neither  
Dislike Dislike Dislike Like Like Like Like  
Extremely Moderately Slightly nor Slightly Moderately Extremely  
Dislike

Bench faces the footpath and small number of people



Bench faces the footpath and more people



Bench faces the footpath and many people



34. How would you like to sit on the bench shown in the pictures?

Dislike Dislike Dislike Neither Like Like Like  
Extremely Moderately Slightly nor Slightly Moderately Extremely  
Dislike

Bench is perpendicular to the footpath and small number of people



Bench is perpendicular to the footpath and more people



Bench is perpendicular to the footpath and many people



35. How would you like to sit on the bench shown in the pictures?

Dislike Dislike Neither  
Extremely Moderately Slightly nor Like Like Like  
Dislike Slightly Moderately Extremely

Bench faces a shop with **low visual permeability.**



Bench faces a shop with **medium visual permeability.**



Bench faces a shop with **high visual permeability.**



If you would like to participate in the PRIZE DRAW (2 X \$30 Dinner Vouchers) include your email address below (optional). Your email address will be kept confidential and only be used for the prize draw.

You have completed the survey now. If you wish to submit your answer click the next button.

## Appendix F: Characteristics of Visual Preference Survey -Participants

| Demographic Data                 |  | Numbers | Percent | Demographic Data        | Numbers             | Percent |     |
|----------------------------------|--|---------|---------|-------------------------|---------------------|---------|-----|
| <b>Cultural Background</b>       | European                               | 41      | 22.6%   | <b>Homeland</b>         | New Zealand         | 99      | 55% |
|                                  | Maori                                  | 32      | 17.6%   |                         | Vietnam             | 11      | 6%  |
|                                  | Pacific Islander                       | 34      | 18.8%   |                         | China               | 7       | 4%  |
|                                  | Asian                                  | 46      | 25.4%   |                         | Samoa               | 6       | 3%  |
|                                  | Other                                  | 28      | 15.6%   |                         | Japan               | 6       | 3%  |
| <b>Gender</b>                    | Male                                   | 78      | 43%     |                         | UK                  | 5       | 3%  |
|                                  | Female                                 | 103     | 57%     |                         | Tonga               | 4       | 2%  |
| <b>Age</b>                       | 13-24                                  | 56      | 31%     |                         | Iran                | 4       | 2%  |
|                                  | 25-34                                  | 53      | 29%     |                         | Indonesia           | 4       | 2%  |
|                                  | 35-44                                  | 35      | 19%     |                         | Fiji                | 4       | 2%  |
|                                  | 45-54                                  | 21      | 12%     |                         | Malaysia            | 3       | 2%  |
|                                  | 55+                                    | 16      | 9%      |                         | United States       | 2       | 1%  |
| <b>Level of Education</b>        | High-school & below                    | 20      | 11%     |                         | Russia              | 2       | 1%  |
|                                  | Trade qualification/ university        | 25      | 14%     |                         | India               | 2       | 1%  |
|                                  | Bachelors/honours                      | 73      | 40%     |                         | Ghana               | 2       | 1%  |
|                                  | Masters/doctorate                      | 63      | 35%     |                         | Cook Islands        | 2       | 1%  |
| <b>Length of stay/live in NZ</b> | Since birth                            | 82      | 45%     |                         | Brazil              | 2       | 1%  |
|                                  | Less than 5 years                      | 45      | 25%     |                         | Australia           | 2       | 1%  |
|                                  | Between 5-10 years                     | 20      | 11%     |                         | Argentina           | 2       | 1%  |
|                                  | Between 10—20 years                    | 19      | 11%     |                         | Sri Lanka           | 1       | 1%  |
|                                  | More than 20 years                     | 15      | 8%      |                         | Solomon Islands     | 1       | 1%  |
| <b>Occupation</b>                | Student                                | 58      | 32%     |                         | Saudi Arabia        | 1       | 1%  |
|                                  | Researcher/lecturer                    | 18      | 10%     |                         | Portugal            | 1       | 1%  |
|                                  | PhD student                            | 11      | 6%      |                         | Niue                | 1       | 1%  |
|                                  | Designers                              | 10      | 5.5%    |                         | Nigeria             | 1       | 1%  |
|                                  | Customer service/sales representatives | 8       | 4.5%    |                         | Netherlands         | 1       | 1%  |
|                                  | Managerial                             | 8       | 4.5%    |                         | Iraq                | 1       | 1%  |
|                                  | Building industry                      | 6       | 3.2%    |                         | Hong Kong           | 1       | 1%  |
|                                  | Teacher                                | 6       | 3.2%    | Canada                  | 1                   | 1%      |     |
|                                  | Administration                         | 6       | 3.2%    | Cambodia                | 1                   | 1%      |     |
|                                  | IT                                     | 5       | 2.8%    | Burundi                 | 1                   | 1%      |     |
|                                  | Unspecified                            | 7       | 3.9%    | <b>Household Income</b> | less than 25000 NZD | 42      | 23% |
|                                  | Librarian                              | 4       | 2.2%    |                         | 25000 to 29,999 NZD | 12      | 7%  |
|                                  | Retired/unemployed                     | 4       | 2.2%    |                         | 30000 to 39,999 NZD | 13      | 7%  |
|                                  | Social worker                          | 4       | 2.2%    |                         | 40000 to 49,999 NZD | 15      | 8%  |
|                                  | Consultant-Advisor                     | 4       | 2.2%    |                         | 50000 to 59,999 NZD | 19      | 10% |
|                                  | Massage therapist                      | 3       | 1.7%    |                         | 60000 to 84,999 NZD | 30      | 17% |
|                                  | Care giver                             | 3       | 1.7%    |                         | 85000 NZD+          | 50      | 28% |
|                                  | Civil servant                          | 3       | 1.7%    |                         |                     |         |     |
|                                  | Photographer                           | 3       | 1.7%    |                         |                     |         |     |
|                                  | Diplomat                               | 2       | 1.1%    |                         |                     |         |     |
| Other                            | 8                                      | 4.5%    |         |                         |                     |         |     |





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