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# Meeting and Greeting: activities in public outdoor spaces outside high-density urban residential communities

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#### Abstract

This paper examines the opportunities for social activities in public outdoor spaces associated with high-density residential living. This study surveyed activities in outdoor spaces outside three high-density residential communities in Brisbane. Results indicated that activity patterns in public outdoor space outside residential communities are different to general urban public outdoor space. This broadly but not fully supports current theories concerning activities in public space. That is some environmental factors have impacts on the level of social interaction. The relationship between outdoor space and a residential building may have a significant impact on the level of social activities. As a consequence, a new classification of activities in public space is suggested. In improving the level of social contact in public outdoor space outside a residential community, the challenge is how to encourage people to leave their comfortable homes and spend a short time in these public spaces. For residential buildings and public space to be treated as an integrated whole, the outdoor open spaces close to and surrounding these buildings must have a more welcoming design.

**Key words:** community design; social activity; public space; residential community; Brisbane

# Introduction

There is a growing concern about socialization in high-density communities. Relationships between residents are likely to become more estranged with many people in modern cities experiencing a feeling of isolation and loneliness, lack of social ties, and hostility to community (Jacobs 1961; Tonkiss 2005). Theorists such as Newman and Katz have focused on how public open spaces in communities may encourage people to contact each other. Other theorists such as Gehl and Whyte have done some studies to explore the relationship between the level of activities and physical elements in public spaces. Despite these related efforts, the issue of how to create good open spaces for residents to engage in social activities is not totally understood.

The aims of this study are to explore the relationship between activities of residents and their open spaces, to identify common factors of good open spaces where residents often meet, and to seek an understanding of community design. A key objective is to discover where people often meet in public outdoor spaces near high-density urban residential communities, and what social activities often happen, and to identify the characteristics of good meeting spaces.

This paper firstly introduces a theoretical framework of social activities in public outdoor spaces, and an outline of studied communities. Secondly, it reports on methods used to identify good physical activities that encourage social contact. This is followed by an analysis of a survey of three communities in Brisbane. Finally directions for future research are outlined and discussed.

# **Theoretical Background**

The social activities in public outdoor spaces have not been emphasised enough in community design, because community designers usually pay attention to form rather than activities of public outdoor spaces (Lozano 1990). In modern urban design, zoning is popular but separates people into homogenous groups and often results in poor social activities in communities. On the other hand, the need for privacy encourages people to maintain a distance from each other (Tonkiss 2005). Furthermore, the modern residence provides a self-sufficient home for people and separates families from society (Madanipour 2003). One of the solutions for this social problem is mixed usage of the public space that not only values social diversity but can encourage residents to interact in positive ways (Jacobs 1961; Katz. 1994).

There is little known regarding the psychological benefits of social support facilitated by outdoor spaces. What is known is that people cope with stressful lives by turning to others. Social support has been defined as the information from others that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligation (Taylor et al 2003, 314). It is from this point that facilitating social interaction in high-density residential communities is assumed to be beneficial to local inhabitants in coping with stressful lifestyles.

Madanipour (1996, 144) claims that "public space has played a considerable role as a meeting point and container for social movement". Good public and semi-public spaces can largely contribute to the social activities of people. Gehl (1987, 13) defines social activities are "all activities that depend on the presence of others in public spaces." Staying in a public space is a starting point of physical contact. When a person stays in outdoor space watching passing pedestrians, he/she enhances the opportunity for social interaction (Gehl 1987). Whyte (1980) suggests some factors such as seats, fruit trees, water and legibility of spaces encourage people to stay in public outdoor spaces. Furthermore, these activities can attract more activities (Jacobs 1961; Gehl 1987).

In area surrounding high-density residential communities, residents may face pathological behaviours in public outdoor spaces because of overcrowding. Theorists argue that high-density is not equal to crowding, but the public outdoor spaces around high-density communities are limited and often do not match the number of residents using the area (Lozano 1990). This will discourage residents from taking part in social activities in public outdoor spaces. However, surveys have found well defined public outdoor spaces can increase the sense of territory and encourage the connection between residents (Newman 1973).

# Methodology

Yam (2006) claims a public space is accessible to everyone at all times. Madanipour (1996, 146-148) reviewed a number of definitions of public space and finds the key characteristics of public space to include: the opposite of private, open to all people, everyday use, physical and visual access and a place for human contact and interaction. He then defined public space as a "space that allows all the people to have access to it and the activities within it, which is controlled by a public agency, and which is provided and managed in the public interest". In residential communities, the

outdoor spaces around and between buildings are usually classified as semi-private space (Ford 2000). However, these kinds of spaces have the characteristics of public spaces because the number of users is large, and "the word public refers to a large number of people" (Madanipour 2003, 1109), and the principles of public space are at work in these spaces. Shonfield (1998) expands the concept of public space: "any place that people use when not at work or at home", emphasizing the oppositeness of private space. In this study, "public outdoor space" refers to the outdoor spaces adjacent to residential buildings, open to residents of a community which may or may not be open to the general public.

According to Gehl (1987), activities in outdoor spaces can be grouped into three types (from low to high level of social contact): necessary activities, optional activities and social activities. *Necessary activities* are the activities people have to do, such as walk through outdoor spaces of apartment to get public transport. *Optional activities* are the activities people choose for clear or unclear purposes, such as taking a walk to get fresh air, and standing or sitting outdoor to enjoying life. These activities are choose-able, and especially depend on environmental conditions; a high quality outdoor space will attract people to stop, sit, play, and so on (Gehl 1987) *Social activities* include physical contact and passive contact. Physical contact includes children at play, greetings and conversations. Passive contacts such as simply seeing and hearing other people". In this study, a new classification based on these concepts is suggested.

Huang (2006) suggests the outdoor space in high-rise housing can be classed into seating, scenic, circulation, activity and vague space. Each kind of space has some key design elements: seating space contains concave or convex seating; scenic space includes visual focus and plants; circulation space is characterised by nodes and routes; activity space has play areas and open areas; and undefined and border areas are considered to be vague space.

## **Methods**

#### **Community Selection**

Brisbane is a rapidly growing Australian city in South East Queensland, the fastest growing region in the country. It has the potential to increase its city centre residential density to 150 persons per hectare, accommodating another 60 000 residents by 2026 (Smart State Council 2007, 13). There are a number of high-density residential

communities in Brisbane. The built forms of these communities are medium to high-rise apartments. Sampled communities were selected from the apartments close to CBD with good public transport services. This meant less dependence on cars and an acceptable variety of activities. They were grouped into four types (type A-D) based on the relationship between buildings and their outdoor space. Figure 1 shows the locations of these communities and Table 1 shows the characteristics of the four types.

Sampled communities were selected from type B apartments because the outdoor spaces of these communities were integral, visible and open to the public to a greater degree than other communities. In particular, B1 Apartments (north west of the CBD), B2 Apartments (south west of the CBD) and B5 Apartments (south of the CBD) were selected as sampled communities. These three communities faced significant landscape elements in different ways: the B1 Apartments faced a large area of parkland and a lake, the B5 Apartments faced the Brisbane River and the B2 Apartments faced both a large area of parkland and the Brisbane River. The total number of residential units in each community was: B1 Apartments 139, B2 Apartments 68 and B5 Apartments 93. These communities were selected as comparable samples based on differences in outdoor layout and design elements.

### **Procedure**

To achieve the objectives of this study, site plans and observation sheets were used to systematically collect data outside each of the selected communities. Unplanned activities or additional information were also recorded. Data collection included:

- number of people engaged in social activities (people who occupied outdoor spaces during observation periods, the number of people sitting in outdoor café areas);
- type of social activities (specific actions, interactions, any changes in activities); and
- characteristics of the outdoor spaces (location, size, form, relationship to buildings, facilities) excluding single use spaces such as carparks.

Observations were conducted for four days outside each of the three communities, including two workdays (Thursday and Friday) and a weekend (Saturday and Sunday). There were two stages of sequential observation: behaviour recorded with notes and photographs and numbers of people recorded in heavily used public areas. Data was recorded six hours per day, from 11:00am to 3:00pm and 5:00pm to 7:00pm.

These observation times were selected based on preliminary observations that suggested that these were the busiest times of the day. The four days were chosen because of the likelihood of different types of activities on workdays and the weekend. For each selected community, a main observation space was chosen. These observation spaces were the main public outdoor spaces outside each community containing main entrances and facilities such as cafes and seating. The observation points were on public thoroughfares located where the observer had the best field of view but did not catch residents' attention. It should be noted that the same people who occupied two or more activities at different times were counted more than once.

Observations were limited to those activities that involved two or more people in the space. For instance, people walking directly through a corner of the observed space were disregarded. Some complex activities such as a person standing, talking on a phone, and watching at the same time were classified as standing (the principle was to eliminate low level individual activities). The activities of directly going to the shop and ATM were not included because they only happened in the B1 Apartments. There are no shops or ATMs in the outdoor space of the other two communities. Additionally, the number of these activities was small (covering less than 1% of all observed activities) so this data was not included.

Data was analysed after an initial data collection period when some conclusions were drawn and the observation process modified (as suggested by Charmaz 2006). These results were examined in later observations then compared and categorised. Activities were classified into three types based on the level of social contact and the different activity types. The physical factors of public outdoor space were summarised as four aspects: location of outdoor space, its size and form, its relationship to buildings and the provision of facilities.

## Results

The total number of people in observed activities was 3,073. The activities outside the three sampled communities were classified into three different types: process activity, physical contact, and transitional activity. *Process activity* included the activity between two activities when the purpose appeared clear. For instance, if a man left for his office aiming to come home later, he would walk through the outdoor space of his community at least twice. This kind of activity was necessary and people spent only a minimum amount of time on them. Most people selected the shortest route for this

purpose without stopping. *Physical contact* occurred when more than one person had contact or interacted with another person such as talking or playing together. The time people spent on these activities was different from individual to individual. *Transitional activity* was the activity people chose without obvious purpose such as standing, sitting, and pacing. One person standing in a public area could be waiting, watching or looking for social contact simply by chance. The time people spent on this kind of activity was variable but often not long.

In all outdoor spaces outside the selected communities, process activities occupied the largest number of people (99.2% in the B5 Apartments; 94.3% in B1 Apartments and 68.8% in the B2 Apartments). The total number of people who exhibited process activities outside the B5 and B2 Apartments were similar. The number outside the B1 Apartments was much larger having the highest population of residents. The B2 Apartments had the largest number of transitional activities (n=112, 22%) and physical contacts (n=44, 8.8%), which indicated a high level of optional activities. In contrast, the B5 Apartments had lower transitional activities (n=3, 1.8%) with no physical contact observed while the B1 Apartments had a low level of transitional activities (n=46, 2.8%) and a low number of physical contacts (n=48, 3.3%) in its adjacent public outdoor spaces (see table 2).

The physical characteristics of the public outdoor spaces outside the sampled communities were categorised according to four aspects: location, size and form, relationship to buildings and provision of facilities in outdoor space. The comparisons of location and surrounding landscape elements did not show that these elements had a significant impact on the level of activities. Similarly, the size and form of outdoor spaces did not have any obvious effects on social activities (table 3). However, the relationship between the buildings and outdoor spaces influenced the level of social contact. Outside the three sampled communities, the larger the distance between the outdoor space of the residential buildings and the adjacent public open space, the lower the level of activities (see table 3). On the other hand, the outdoor café areas made significant contributions to social activity, while other facilities seemingly attracted activities but did not show significant effects on social interaction (table 3).

In summary, the results suggested that most activities in the outdoor spaces were process activities. However, the level of transitional activities and physical contacts were different, depending on the different relationships between the outdoor spaces

and public open spaces as well as the number of facilities in the outdoor spaces.

## **Discussion**

Huang (2006) identifies the phenomenon of social withdrawal in the behaviour of residents of three high-rise communities in Taipei. She defines five types of outdoor space and of these, there are significantly more social interactions taking place in circulation spaces. This supports the focus of this study on social interaction in circulation spaces outside high-rise communities in Brisbane. Gehl (1987) suggests that there are three types of activities in public space: necessary activities, optional activities and social activities. However, this did not adequately describe the observed activities in this study. It was found to be very difficult to judge optional activities and passive contact (a kind of social activity). Thus an alternative classification was proposed that described process activity, physical contact and transitional activity.

The results suggest a general pattern of behaviour in public outdoor spaces outside high-density residential communities. There was no direct correlation between physical contact and process activities such as passing through a public outdoor space, despite the fact that some physical contact may have begun from process activities. The size and number of public outdoor spaces did not contribute to the improvement of social interactions among people. The key to public outdoor activities would seem to be quality of space. According to Gehl (1987), the more time people spend outdoors, the more frequently they meet and interact socially. According to this work, the frequency and duration of residents staying in the public outdoor spaces were the decisive factors to promoting physical contact. However, this study did not provide strong evidence to support this idea, because there was no apparent linkage between physical contact and process activities.

Whyte (1980) suggests that pedestrian flow, food, sitting facilities, and natural elements can attract activities in public spaces, which was found in the observations outside the B2 Apartments. However, most of these elements were provided in the outdoor space outside the B1 Apartments but they did not attract many activities. People did not stay or stayed for only a short time. So far, in this case, it is not clear why this public meeting space did not work. A possible explanation is that the behavioural pattern in residential communities is different from urban public places. Generally, in an urban public place such as a square, the general purpose is for people to watch (Gehl 1987; Bentley et al. 1985). They go to the square because they

want to, which means more staying and less process activities. On the other hand, this study found that most activities in public outdoor spaces near high-rise communities were process activities such as leaving and coming back, which many people needed to do. Many of those observed may not wish to use the adjacent public outdoor spaces and simply pass through them to get to the residential communities. The issue in the outdoor spaces of residential communities is not what kind of space can attract more people but how to encourage local people to interact socially and leave their homes to stay in outdoor spaces for enough time to meet each other. For the above reasons, activities in public spaces outside residential communities can be very different to other urban public spaces.

Gehl (1987) suggests that facilities such as seating arranged in groups can encourage group activities. Huang (2006) suggests that visual foci, plants, play and open areas can encourage social behavior. In contrast to Gehl (1987) and Whyte (1980), Huang (2006) argues that seating alone does not significantly promote social interaction. This study supports this view as the seats and tables with café umbrellas in the outdoor space of the B1 Apartments did not attract many people. This suggests that the factors of a successful outdoor space cannot work alone, they must be considered comprehensively.

The facilities for daily needs, such as an ATM or grocery store, can attract people but may not encourage them to stay. During the evening, the small square of the B1 Apartments is pleasant, but nobody stayed there and only a few people went directly to the ATM or grocery store, leaving immediately. Compared to activities in the open spaces outside the B2 Apartments during the evening, the open spaces outside the B1 Apartments looked lifeless. Compared to activities in the open spaces outside the B5 Apartments during the evening, there was no evidence that the ATM or grocery store outside the B1 Apartments encouraged people to stay.

A lack of facilities may be one reason for the low level of activities outside the B5 Apartments, but as the above discussion suggests, facilities do not have a decisive impact on the activities of residents. Perhaps the relationship between residential buildings and outdoor spaces is the more important factor contributing to a low level of social activities. According to the "edge effect" theory, most activities occur on the edges of public outdoor space (Gehl 1987; Bentley et al. 1985). Gehl then explains that people like edges because they provide protection while maintaining a good view. In the outdoor space near the B5 Apartments, one side faces the urban public space

and another is under the view of residents in the building. People who stayed in this space were under surveillance and may have felt a lack of privacy, because there was no edge. In contrast, the outdoor space outside the B2 Apartments provided protection such as umbrellas and bush.

## Conclusion

This study can be regarded as preliminary research into understanding the influences of environmental factors on social activities in public outdoor spaces. It explored the relationship between social activities of residents and the physical environment in high-density urban residential communities. To achieve this aim, the important factors that can be controlled by community design were assessed according to resident behaviour. Activities in the public outdoor spaces of three selected communities were observed and analyzed.

This study highlights that a lack of social contact is a serious problem in high-density residential communities and confirms that community design generally has an impact on the level of social activities. The relationship between outdoor space and the building has a great impact on the level of social activities, with outdoor café areas greatly contributing to the attraction of activities. Other facilities seemingly attract activities but do not show significant effects on social interaction and other factors such as location, landscape and the size and form of outdoor spaces have little influence. Furthermore, this study assessed Gehl's (1987) classification of activities in public space and from this proposed a new classification that emphasised the purpose of activity.

Some questions remain, as the results are general but do not fully support the current theories of activities in public spaces. They suggest that activities in residential communities may be different to general public outdoor space. Their differences should be explored in further research.

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