

7 Role of Public Spaces in Promoting Social Interaction in Divided Cities

The Case of Nicosia, Cyprus

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7.1 INTRODUCTION

Nicosia is the last divided capital city in the world, being both the capital city of the Republic of Cyprus and the capital city of the Turkish Republic of Northern Cyprus. A UN-administered buffer zone still divides the island of Cyprus and passes through the centre of Nicosia. This buffer zone, also referred to as the 'dead zone', can only be crossed through checkpoints. Currently there are three crossing points in Nicosia, around which several public spaces exist, ranging from commercial streets to parks and markets. The aim of this chapter is to analyse opportunities for social interaction in a divided city by focusing on the potential of public spaces in Nicosia to enable this social interaction among the city's divided communities.

Divided cities originate as a result of dividing a nation in two (Kliot and Mansfeld, 1999). Examples are the formerly divided cities of Berlin and Belfast and Nicosia (Kliot and Mansfeld, 1999). The spatial division of a wall can create a distinct urban environment on either side of it. This division of space has a physical function that is as significant as its effects on administrative and political structures, thereby creating an imbalanced distribution of resources and opportunities (Abdelmonem and McWhinney, 2015). It also becomes a negative feature that deters mobility, interaction and social cohesion. The built-up fabric of the city becomes an object of remembrance that is paradoxical and contested, with different meanings and connotations (Bevan, 2007).

However, in divided cities where the citizens are allowed to move across borders, public spaces provide shared spaces where people can interact (Pullan et al., 2012b). For residents of both sides, these public spaces can become a common space for shared functions and social activities, and

important catalysts for change that allows people to experience life on the other side and bond with their neighbours. This interaction discourages stigmatization of ‘the other’ through shared experiences that promote mutual trust and respect. Hence, public spaces become places of exchange with a significant social role as complex systems of open socio-spatial engagement (Marcus and Francis, 1998). Even streets can act as shared spaces and binding factors within divided cities (UN Habitat, 2013). Any public space, if accessible to both conflicted communities, could contribute to renewing past relationships and memories of what was once a unified area.

Researchers have long been interested in divided cities and on the effect this has had on public spaces within those cities, particularly focusing on political or historical aspects of the division (Till et al., 2013; Öngül, 2012). Others stress the importance of public spaces as binding mechanisms in divided cities, analysing the physical aspects and the ways in which people use the space (Nagle, 2009). In locations where a physical barrier that divides the city sends a clear message of exclusion, public spaces contest this notion by presenting a shared space where everyone is welcome. Gaffikin et al. (2010) analyse the concept of public spaces in divided cities from the perspective of urban design and the role those spaces play in that context, concluding that public spaces provide an opportunity for social contact, which can lead to social interaction. Other researchers have observed how people interact with the public space, as well as how they interact within one another (Abu-Ghazze, 1999; Talen, 1999).

We developed an index that measures the potential of the public spaces in Nicosia to promote social interaction. Experts were then interviewed about the index outcomes. These experts were people involved in bi-lateral projects at both the municipality and the NGO level. The index illustrates those dimensions of public spaces that have the greatest potential to enable social interaction. The interviews with experts were used to validate the index and to contextualise its results.

Following this introduction, in this chapter we discuss what divided cities are and how public spaces can enable social interaction within them. We then introduce the case study of Nicosia, briefly describe the public spaces that we analysed, explain how the data were collected and analysed and explain how an index of social interaction was built. The results focus on public spaces that scored highest and lowest in the index, with expert interviews providing a context for the results. The discussion and conclusions are presented in the final section.

7.2 PUBLIC SPACES AS PLACES OF SOCIAL INTERACTION IN DIVIDED CITIES

7.2.1 DIVIDED CITIES

A divided city has been defined as a city comprising two or more distinct entities that have to be spatially separated, mutually exclusive and relatively homogeneous enclaves (Nagle, 2009). Van Kempen (2007) and Marcuse (1993) consider highly fragmented cities to be divided cities, whereas O’leary (2007) refers to this phenomenon as a political partition, where an entity becomes divided by a barricade in the form of a wall, fence or another type of physical obstacle.

The physical borders dividing cities have a practical and a symbolic function. They represent ‘infrastructures of conflict’ (Till et al., 2013), such as walls, barricades and buffer zones, which are not only a physical but also a social and symbolic divide (Pullan et al., 2012a). The symbolic divide may be the deepest. It causes stigmatization, feelings of insecurity and disassociation from the population on the other side (Pullan et al., 2012a). Symbols of divisions can also become ‘infrastructures of peace’ (Till et al., 2013), as is, for example, the ‘Home for Cooperation’, a revitalised building in the buffer zone of Cyprus that is located on neutral ground and administered by both Greek and Turkish Cypriots. Such symbols send a message of unity and cooperation, turning an artefact of conflict into a promise of peace (Till et al., 2013).

Even in cases where members of the divided communities are free to move across the divide, they often opt not to do so, either due to personal beliefs or out of principle (Pullan et al., 2012b).

In Nicosia, some of the Greek Cypriot population consider that by crossing the divide and showing their identification at the border they acknowledge the legitimacy of the Turkish Republic of Northern Cyprus (Webster and Timothy, 2006). However, opening the border has helped the economic development of both communities in Nicosia and revived public spaces in the area (Gaffikin et al., 2010).

7.2.2 PUBLIC SPACES

Any space accessible to the general public and part of the built environment could be considered a public space: squares, streets, gardens, cafés and markets, among others, qualify as public spaces. Dymnicka (2010) argues that a public space is formed by the interactions of its users, while at the same time shaping their interactions. These are social spaces of public life, whereas public life is an interaction between life itself and a public space (Gehl and Svarre, 2013). Nevertheless, a public space is defined by a set of rules and restrictions that applies to it and determines who can use it and how.

Public spaces have been studied based on their functions at the city level, their use and the roles of different stakeholders in shaping them (Madanipour, 2010). In a physical sense, public spaces are urban generators that stimulate communication channels with morphological, environmental and aesthetic values (Lynch, 1960; Marcinczak and Sagan, 2011; Woolley, 2003). Culturally, they are common points of convergence that host numerous traditional functions that allow for symbolic value embedded in identity and sense of place. The cultural and political meanings of these spaces are vital in day-to-day life, where meanings emerge through social interactions (Low, 2000). Politically, they are spaces for demonstrations, an arena for negotiations of conflict and for political action (Van Deusen, 2002; Low, 2000; Mitchell, 1995). They can host clashes among opposing groups, but social tensions can change over time and the resulting effect can be witnessed in shared spaces.

The functions that public spaces allow diverge extensively, and so do their users. Activities in public spaces are determined by the socio-economic attributes of their users (Aziz et al., 2012; Aratani, 2010), as well as influenced by the political ideology of their users. Differences in personal beliefs can change the way people behave in these spaces. Public spaces are experimental environments that groups use to legitimise themselves through decisions about where to stay, gather and socialise (McCann, 1999). They gain genuine significance as locations in which groups can react to the condition of co-existence and overcome boundaries of division in a quest to build a consensus of shared living (Abdelmonem and McWhinney, 2015).

Amin (2002) argues that most public spaces are 'places of transit', where meaningful interactions among strangers are unlikely. There is, however, potential for chance encounters among strangers, and 'in such serendipities rests the opportunity for exchange and learning that can help break barriers' (Gaffikin et al., 2010, p. 498). In divided cities, the motivation for using public spaces may arise from daily tasks such as going to shops and parks and doing other activities, rather than a desire to integrate with neighbouring communities (Pullan et al., 2012b). Thus, the roles, function and even definition of public spaces can have varied connotations. For the purposes of this chapter, we consider a public space as an urban space, including but not limited to streets, squares, cafés and parks that are accessible to everyone pending a set of rules applied to all users, visible from street level and determined by and determining the interactions of its users.

7.2.3 SOCIAL INTERACTION

Social interaction is the contact that takes place between individuals, groups and environments (Talen, 1999). Individuals and groups feel the need for social interaction and find opportunities for it within public spaces (Drucker and Gumpert, 1998; Marcus and Francis, 1998). Social interaction can happen anywhere, between any two individuals or groups. Researchers often emphasise the

importance of social interaction in public spaces on a local level, such as a neighbourhood or a residential complex. Talen (1999) found that public spaces that are attractive to visitors promote a sense of community. Hickman (2013) analysed the social interaction promoted by spaces such as cafés, parks and shops and found that much of neighbourhood interaction takes place in these spaces. One of their most important characteristics is their functional role, for example for acquiring goods, for entertainment or for recreation.

Researchers also underline the importance of ‘place of contact’ (Abu-Ghazze, 1999; Farida, 2013; Talen, 1999), i.e. locations where strangers come into contact with each other in a relatively impartial and casual manner. These places of contact have special significance in divided cities. Regardless of the level of social interaction such places produce, their absence can have great consequences in divided cities and on the future of social life in them (Pullan et al., 2012b).

There are different levels of social interaction, starting with very superficial contact that includes, among other things, observing other individuals and greeting them, to a high level of interaction, which can be found in neighbourhoods where individuals form communities and share emotional investments in the same things (Talen, 1999). In situations where communities are physically separated by barriers, any level of social interaction becomes relevant and contributes to the social life of a divided city.

7.3 METHODOLOGY

7.3.1 CASE STUDY

BOX 7.1 Case Study Area



Nicosia is the last divided capital city in the world, being both the capital of the Republic of Cyprus, where people identify as Greek Cypriot, and the Turkish Republic of Northern Cyprus, where the population identifies itself as Turkish Cypriot. The island of Cyprus has been the home of Greeks and Turks since the 16th century. Conflicts between the two nationalities began in the 20th century, and by 1958 its largest city, Nicosia, was divided by a wire border. As the conflict escalated, the Greek and the Turkish populations immigrated to the south and the north of the island, respectively. The military invasion by the Republic of Turkey was followed by an intervention by the United

Nations, which set up a border, or buffer zone, in the city of Nicosia and the rest of the country in 1974 (Öngül, 2012). This division ended the conflict and the two parts of Nicosia continued to develop separately.

The UN-administered buffer zone still divides Cyprus. This strip of land, only 3.5 m wide at some points, and up to 5 km wide at others, passes through the centre of Nicosia (Grichting, 2014). The buffer zone is also referred to as the ‘dead zone’ since it was evacuated by the residents in the 1970s (Kliot and Mansfield, 1997). It divides Nicosia into a northern, Turkish Cypriot part, and a southern, Greek Cypriot part. The buffer zone can only be crossed through checkpoints. Currently, there are in total only seven checkpoints in Cyprus, three of which are located in Nicosia. The public spaces that were analysed in this research are located around two of these crossings: Ledra Palace and Ledra Street.

Our research focuses on the city of Nicosia (Cyprus), which is divided by an UN-administered zone, also known as the ‘buffer zone’ or the ‘green line’. The buffer zone can only be crossed through checkpoints, of which there are currently three in the city. The *Ayios Dhometios* (Metehan) crossing is located in the western suburb of Nicosia and is mostly used by cars. The *Ledra Palace* crossing is located just outside the Venetian walls that circle the old town, which is at the same time the centre of the city. The *Ledra Street* crossing is located in the very centre of the old town. Ledra Palace and Ledra Street are intended for pedestrians. Our analysis focused on public spaces in the vicinity of these two crossings.

The public spaces selected for our study had to meet the following criteria: they would need to be freely accessible to everyone; visitors would have to occupy these spaces for an amount of time longer than that just needed for passing through; the space would need to be used daily, not just during special events; and the public space would need to be used by the members of both majority communities in Nicosia. Based on field observations and expert interviews, we selected seven public spaces for the study, three on the Greek Cypriot side of Nicosia (Ledra Street, Faneromeni Square and the Municipal Gardens), three on the Turkish Cypriot side (Lokmaci Street, Buyuk Han market and Bandabulya market) and one located entirely in the UN buffer zone (Markou Drakou Street) (Figure 7.1).

Ledra Street is a pedestrian area, except in the early morning hours, when delivery trucks have access to the many shops, cafés and restaurants there. A department of the University of Cyprus is also located there, which brings many students and young people to the area. Ledra Street is very popular with both Greek and Turkish communities. According to the experts interviewed, Ledra Street and the surrounding areas underwent a revival after the Ledra crossing opened in 2008 (Figure 7.2a).

Ledra Street became more alive, right now, after the borders were opened. It's more commercialized (than the northern side), [...] When you walk from the north of Ledra Street to the south, you would



FIGURE 7.1 Location of crossings and public spaces analysed. (Base map source: University of Cyprus, 2016.)



FIGURE 7.2 (a) Ledra Street, Greek side, 2016; (b) Faneromeni Square, Greek side, 2016; (c) Buyuk Han market, Turkish side, 2016; (d) Bandabulya market, Turkish side, 2016; (e) Lokmaci Street, Turkish side, 2016; (f) Markou Drakou Street, buffer zone, 2016; (g) Municipal Gardens, Greek side, 2016.

see that it's gradually getting more commercialized and more internationalized. So, in the north you would see the local shops and in the south you would see more of the global brands. But there are many communities, not just Greek Cypriots and Turkish Cypriots – but many tourists walking and visiting the place.

(Interviewee 7)

Faneromeni Square hosts one of the oldest schools on Cyprus, and a church, a mosque and a museum are in its vicinity. The area also includes a square and a network of alleys with cafés and shops and is very popular with both communities (Figure 7.2b).

Faneromeni is not being used because it's a square, but because it's part of a café. If cafés bring their chairs outside, it is still public in that sense. But if we didn't have the cafés there, we wouldn't have many people sitting there.

(Interviewee 1)

Faneromeni is a lovely place to sit and have coffee and chat, and I'm sure Turkish Cypriots come over and Greek Cypriots come over. And it's a much more pleasant area than this area, for example (Markou Drakou Street).

(Interviewee 10)

Historically, *Lokmaci Street* was the street of craftsmen and tradesmen, and this tradition lives on in the types of shops found there nowadays. There are also several local cafés. The area gained significance after the Ledra Street crossing was opened (Figure 7.2e).

This area emerged after the borders were opened. It was deserted before the checkpoints opened; now it has come alive. It has attracted new and interesting uses, like cafés, cafés which breed respect for diversity. Places which are visited by all sorts of people. The mixing of different people creates a culture of diversity. If you look at pictures of the area of Lokmaci before they opened, it was deserted. And if you compare it with the picture of how it is now, it has come alive.

(Interviewee 11)

The *Buyuk Han market* originated in Ottoman times, when it was used as an inn. Nowadays it is used as a market and a public space. The open space on the ground floor has cafés, restaurants and several shops, locally owned, that sell hand-made products and typical Cypriot ornaments. On the first floor, shops coexist with artist's workshops and studios. Several festivals take place in Buyuk Han, as well as food markets and live music sessions (Figure 7.2c). Every Saturday, there is a regular meeting for Greek and Turkish Cypriots at one of the cafés, and everyone is welcome to join in.

Buyuk Han is a prime location, where Greek and Turkish Cypriots meet. For example, I go there every Saturday, and I meet my friends there.

(Interviewee 11)

The *Bandabulya market* is a municipal market dating back to 1939 and is located in the old town. Vendors, mostly Turkish Cypriots, sell fresh fruit and vegetables, meat, ornaments and souvenirs. There are art studios, cafés and restaurants. The market attracts tourists and the Greek and Turkish Cypriot population. The majority of people who sit in the cafés and spend time here, however, are members of the local, older population (Figure 7.2d).

Bandabulya is the old market. It's actually recently been renovated. And here you would see the Greek Cypriots also, but I don't know if you would see them spending a lot of time. They would go there for

shopping, I would say. Again, it's local people from the north selling. They also have somethings unique to Cyprus, like ornaments and souvenirs, etc.

(Interviewee 6)

Markou Drakou Street, located entirely in the buffer zone, is neutral ground for Greek and Turkish Cypriots, with many meetings and political discussions taking place there. International and non-governmental organizations are situated there, mainly in the 'Home for Cooperation'. This building is an educational centre, in which events, dialogues, workshops and Greek and Turkish language courses are held. In the building's café, many entertainment events are organised, such as bi-communal music nights, dance lessons and festivals (Figure 7.2f). The experts interviewed identified Markou Drakou Street as a place frequented by Greek and Turkish Cypriots, in most part thanks to the 'Home for Cooperation' and the events that take place there. Other experts observed that visitors to Markou Drakou Street form a select group who participate in the events held there and engage in social interaction. Several private businesses are also located there, as are educational centres and a restaurant, where many diplomatic events take place:

This space here (Markou Drakou Street), ok, it's controlled by the United Nations, but it's usually very quiet unless somebody arranges an event or something. You don't see people hanging out here, there's nothing to do here, [...] The 'Home for Cooperation' is very active, [...]. But you always see the same people who're going to come and interact here. It's always the same people.

(Interviewee 10)

The *Municipal Gardens* are a large green area, one of the few in Nicosia. Besides seating benches, a children's playground and one café, there are no other activities here (Figure 7.2g). According to some experts, these gardens are used mainly by minority communities during weekends. Experts from the Turkish Republic of Northern Cyprus, who are not very familiar with this area, suggested that it is used by cyclists from the Turkish side, while others claim that the park is frequented during events.

The Municipal Gardens are frequented by Sri Lankans and Filipinos. The Asian minorities use it more than Greek and Turkish Cypriots.

(Interviewee 13)

Some of my friends are passing [through] and riding bikes in this park. If it is this park. But I am not sure about it. But I know some, as I said, Turkish Cypriots will pass from the checkpoint and go to the park on the Greek side, and they're riding bikes and spending time there.

(Interviewee 4)

7.3.2 DATA AND METHODS

BOX 7.2 Methods Applied in the Chapter

Data were collected from expert interviews and fieldwork observations. The interviews were analysed with Atlas.ti™ software. The map used for quantitative analysis was in .dwg format, and the analysis was done with AutoCAD™ Map 3D software. The map includes all the

public spaces, the location of the border and details of the network of roads and streets. The road network was used to calculate the distance from the public space to the nearest border crossing point. Network analysis was performed in AutoCAD Map 3D.

The indicators for the index of social interaction were selected after review of the relevant literature and further aligned with expert interviews and fieldwork observations. Each of the indicators was calculated in its own unit and then standardised to a value ranging from 0 to 1. The same formula was used for standardizing most indicators, considering that they all present benefits:

$$\frac{\text{The value of 'X'} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}} = \text{Standardized value of 'X'}$$

Where 'X' stands for the value of an indicator for a public space, while the minimum and maximum values represent the lowest and highest values of the public spaces for that indicator.

Data for the index of social interaction was collected through expert interviews and fieldwork observations. The semi-structured interviews were set up to obtain information about the social interaction between the two major communities in Nicosia and the public spaces in the city, the way those spaces were used, what affects the social interaction in those public spaces and how the public spaces influence social interaction. A total of 13 interviews were conducted from 16 September to 18 October 2016 with Turkish and Greek Cypriot experts and international experts involved in bi-communal* work who have first-hand knowledge of the public spaces and bi-communal dynamics of the city. The interviews were analysed with the Atlas.ti software.

Quantitative analysis started by georeferencing the map of Nicosia provided by the University of Nicosia. The map was in .dwg format and the analysis was done with AutoCAD Map 3D software. The geographic coordinate system that was selected was the WGS 84 in the Universal Transverse Mercator zone 36N projection.

The map did not cover the entire city of Nicosia, but all of this study's public spaces were included, as were the location of the border and details of the network of roads and streets. The road network was used to calculate the distance from the public space to the nearest border crossing point. Analysis was performed in AutoCAD Map 3D. For each of the public spaces, possible routes from the nearest crossing point to the closest point of the public space were also calculated. The distances were measured taking into consideration all possible combinations with every street (for vehicles or pedestrians) located outside of the UN buffer zone, i.e. accessible to civilians. The closest distance was chosen as the best result.

The index of social interaction was designed as a tool for quantifying the potential ability of public spaces to host and facilitate social interaction. The indicators were selected through a review of the relevant literature and, based on the expert interviews and fieldwork observations, further aligned to our research aims. Each of the indicators was calculated in its own unit and then standardised to a value from 0 to 1. The same formula was used for standardizing most indicators, considering that they all present benefits:

$$\frac{\text{The value of 'X'} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}} = \text{Standardized value of 'X'}$$

* Bi-communal refers to 'involving or including two distinct communities of people: of relating to or being a society composed of two distinct or separate communities, often with conflicting interests' (Merriam Webster, 2017).

Where 'X' stands for the value of an indicator for a public space, while the minimum and maximum values represent the lowest and highest values of the public spaces for the indicator in question.

There are two exceptions to this. (i) The indicator 'Presence of different age groups in the public space' was given a value 1 if members of all age groups were present during the counting sessions and a value 0 if any age group was not represented. (ii) In the category 'Number of events taking place in the public space', the data was divided into three categories. The first category (< 2 events/month) was given the value 0, the second category (3–8 events/month) was given a value of 0.5 and the last category, (> 8 events/month) was given a value of 1.

The 'cafés and restaurants' sub-indicator was given a sub-weighting of 0.2, while the other sub-indicators were given a sub-weighting of 0.1, adding up to a total of 1; this was done because this activity was mentioned during the expert interviews as more likely to promote social interaction.

To determine the weights for each indicator, the indicators prioritised were those indicated by experts to have the biggest influence on social interaction.

Table 7.1 presents the overview of the indicators used, how the data was collected, their rationale and their weight.

7.4 RESULTS

The main feature of the index of social interaction is a score for each of the public spaces, representing its potential ability to promote and facilitate social interaction between the Greek Cypriot and the Turkish Cypriot communities. The results for each public space, as well as its position relative to the border and distance from the nearest crossing point, are shown in Figure 7.3. The public spaces are presented on the map as shaded circles, with darker shading representing higher index scores and the lighter shading lower scores.

Figures 7.4 through 7.6 show the results of the standardised values, from 0 to 1, for each of the indicators, grouped in dimensions of public spaces that influence their ability to promote social interaction: physical, social and activities/events. Figure 7.4 illustrates the physical and social dimensions of occupant density. The public space with the highest standardised value of the surface-area indicator has the lowest occupant density, both for walking and static visitors.

Figure 7.5 shows the extent to which the public spaces are visited by members of both communities and members of all age groups.

Figure 7.6 presents activities/events in the public spaces: the number of different types of activities, the number of each of type of activity and the number of events.

Closer examination of the public spaces with the highest and lowest index scores – Ledra Street and the Municipal Gardens, respectively – provides a better understanding of the relationship between the index and the situation in the public spaces. The results for Ledra Street are shown in Figure 7.7. The score is dominated by the fact that the area has the highest number of shops (both local and branded), cafés and restaurants among all the public spaces analysed. Also, many people occupy this public space, standing or sitting, considering its size; see Figure 7.2a. This can be related to the high concentration of cafés and restaurants, most of which have a sitting area outside; this therefore makes the outside area of the café a part of the public space in a functional sense, even though we do not consider it to be a public space in full, because one needs to pay for/consume something in the café or restaurant in order to sit on its sidewalk. The results of the index of social interaction for the Municipal Gardens are shown in Figure 7.8. In most of the indicators, these public gardens score 0. However, this does not mean that the occupant density of visitors that are walking or spending time in the Municipal Gardens is 0 people/m²: it simply means that the value of these indicators was the lowest among all the public spaces before they were standardised. Some of the experts mentioned events that are organised in the Municipal Gardens, but due to the low frequency of these events, this indicator also had a low score.

TABLE 7.1
Indicators of the Index of Social Interaction and Their Rationale

Indicator	Data Collection and Measurement	Rationale	Weight of Indicator
Surface area (m ²)	Extracted from the map of Nicosia. The surface area of any structure that was not a public space was deducted from the total surface area.	The surface area of a public space determines its capacity and the number of different activities that can be located there. More activities make the public space potentially more attractive for visitors and generate more opportunities for social interaction (Van Deusen, 2002).	0.1
Accessibility ^a	The road network was used to calculate the distance of each public space to the nearest border crossing point. The analysis was performed in AutoCAD Map 3D. Distances were measured considering all possible combinations with every street. The shortest distance was chosen as the best result.	A public space must be accessible to the population it serves (Whyte, 1988). Public spaces that are easily reachable and at a convenient location have more visitors (Shaftoe, 2008).	–
No. of different types of activities taking place	Guided observation: activities were counted and divided into groups: shopping; cafés and restaurants; education; art and culture; religion; private businesses; beauty services; non-governmental organizations; and international organizations.	The variety of activities attracts more visitors to an area. Activities such as cafés and restaurants, shopping, entertainment, culture, etc., can induce communities to cross divides and participate in social interaction (Pullan et al., 2012b).	0.1
No. of each type of activity taking place ^b	Guided observation.	A higher number of activities (shops, etc.) of the same type offers visitors a wider choice, increasing the chances of getting visitors interested in spending time in the public space.	0.1
No. of events taking place	Information about events in the public spaces came from websites of different organizations, expert interviews and social media. Grouped as 2 or less per month; 3–8 per month; more than 8 per month.	Events such as festivals or concerts in public spaces have the ability to build solidarity among participants (Shaftoe, 2008). Events also attract more visitors and make a public space more interesting (Holland et al., 2007).	0.15
Occupant density, walking	Guided observation: counting the number of people in a public space and then dividing by the surface area of the public space. The unit of this indicator is people/m ² . Public spaces were divided into sections of approximately the same size via imaginary lines, called ‘gates’, which were observed in five-minute counting sessions. Only those people who crossed the imaginary line were counted. The counting sessions were repeated at each gate at different times of the day (Grajewski and Vaughan, 2001). Counting was done at three different times of the day, morning (from 8 am to 10 am), lunch time (from 12 noon to 2 pm) and afternoon (from 4 pm to 6 pm).	The more visitors that circulate through a public space, the higher the opportunity for social interaction. The occupant density can also indicate the popularity of the public space.	0.15

(Continued)

TABLE 7.1 (CONTINUED)**Indicators of the Index of Social Interaction and Their Rationale**

Indicator	Data Collection and Measurement	Rationale	Weight of Indicator
Occupant density, static	Guided observation: Counted in a similar way as 'Occupant density, walking', i.e. the number of people who were standing or sitting in the public space inside each section. The people who were sitting in cafés and restaurants were only taken into account if they were sitting outdoors, located in the public space. Average number of visitors divided by surface area, providing an average occupant density for static users of the public space.	The more visitors that spend time in the public space, the higher the opportunity for social interaction. The occupant density can also indicate the popularity of the public space.	0.15
Presence of different age groups	Guided observation: the age-group classes were: 0–14; 15–24; 25–44; 45–64; 65 and older (Provisional guidelines on standard international age classifications, 1982).	Accommodating the needs of all age groups increases the sense of community (UN Habitat, 2013) and social interaction. Different age groups visit the public spaces for different reasons. Presence of all age groups in a public space indicates that it meets diverse needs and that it is safe and inviting.	0.05
Presence of members of both communities	Determined during expert interviews: interviewed experts were asked to identify whether members of both communities visited the public space or not. The testimonies of experts were counted as 1 if the answer was positive and then added up, giving each of the public spaces a maximum possible score of 13 (= total number of interviews).	In divided cities, residents have the option of whether or not to cross the dividing barrier (Pullan et al., 2012b). If both communities are present in public spaces on either side of the divide, the chances of interaction between them increase.	0.2

^a The indicator of accessibility was not relevant in the case of Nicosia, because all the public spaces identified were equally accessible and close to one another. Thus, it would not have a significant effect on the outcome of the index.

^b During the expert interviews, it was determined that locally owned shops and cafés have a greater impact on social interaction. Thus, locally owned activities were given a higher weighting.

7.5 DISCUSSION AND CONCLUSION

This chapter analyses social interaction in the public spaces of a divided city, Nicosia. An index of social interaction was designed and used to quantify the potential for public spaces to promote social interaction, and to offer an approach for discussing the social interaction that occurs there. Different public spaces have different characteristics and qualities that attract visitors, thus making comparison difficult. The results of this index were matched against the opinions of experts to gain a better understanding of the characteristics of the public spaces analysed.

Qualities that influence the potential for a public space to encourage social interaction can be incorporated in three dimensions: physical, social and activities in the public space. It is the representation of these dimensions and their combinations that determines the potential of public spaces to promote social interaction. Physical size was considered as beneficial due to the increased surface area available for hosting various activities, such as shops, cafés, events and festivals – hence

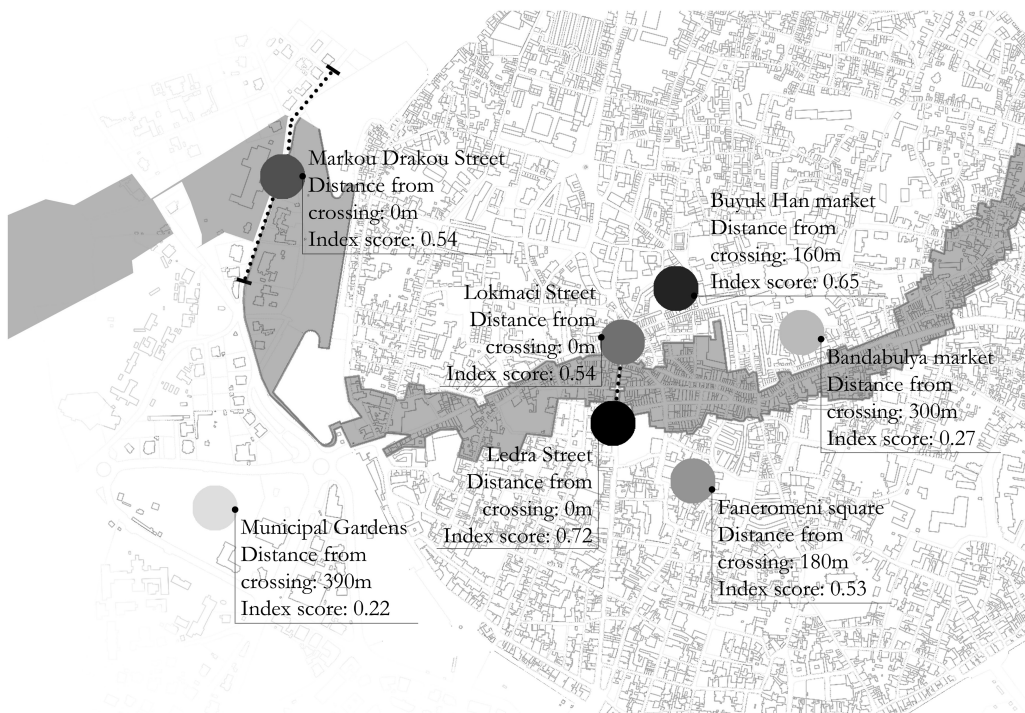


FIGURE 7.3 Map of selected public spaces (shaded circles) and their score on the social interaction index; the darker the shading, the higher the index score. (Base map source: University of Cyprus, 2016.)

more people for interaction. Nonetheless, the public space with the largest surface area was the one with the lowest score on the index of social interaction. This finding concurs with the study of Abu-Ghazze (1999), who found that, in the context of residential areas, smaller open spaces felt more inviting and intimate for residents. Residents also preferred smaller public spaces because these were more recognizable: residents knew who was using the place. Although Abu-Ghazze's study applies to public spaces in residential areas, it lends some insight as to why, in the context of

The physical dimension of size and the social dimension of occupant density of the public spaces

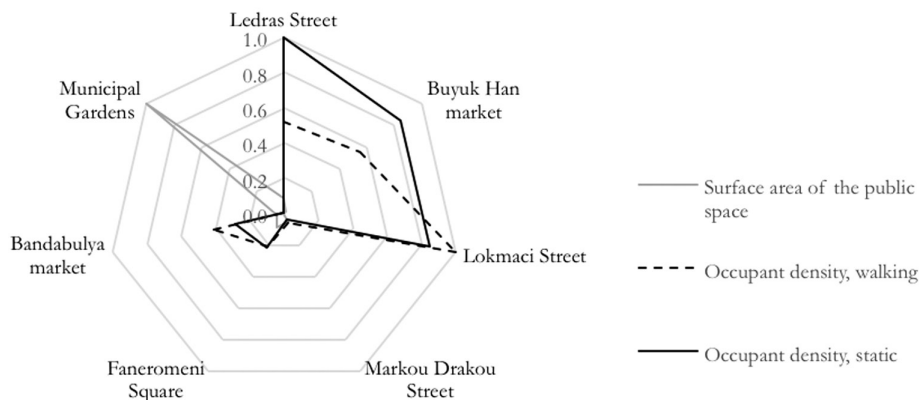


FIGURE 7.4 Standardised values of the indicators for the physical size and social dimensions of occupant density of public spaces.

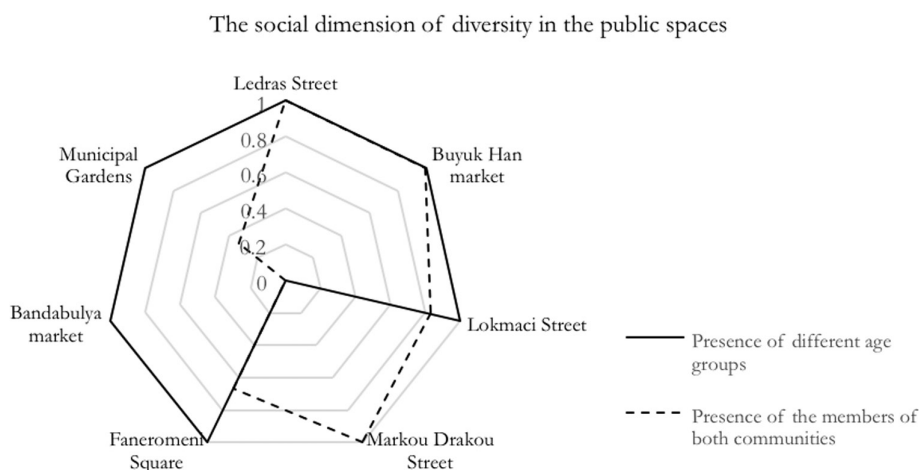


FIGURE 7.5 Standardised values of the indicators for the social dimension of diversity in public spaces.

our study, it is the smaller public spaces that have a bigger role in promoting social interaction and instigating stronger connections between their users.

There are other physical characteristics of public spaces that might also play a role in how they perform with regards to their potential to attract people to use them: namely their shape, exposure to weather, presence of urban furniture and proximity to major access roads or green infrastructure (Lynch, 1960; Gehl and Svarre, 2013; Marcus and Francis, 1998). We did not take these aspects into account in the development of our index. This is a limitation that is likely to be addressed in future research, judging by the wide range of work in urban design linked with the ability of places to promote walkability. Ewing and Handy (2009), for example, focused on measuring the subjective qualities of the urban street environment.

The social dimension of public spaces included the indicators of occupant density (walking and static) and diversity (of age groups and communities). The public spaces with the highest score are, apart from Markou Drakou Street, those with the highest occupant density and presence of different age groups.

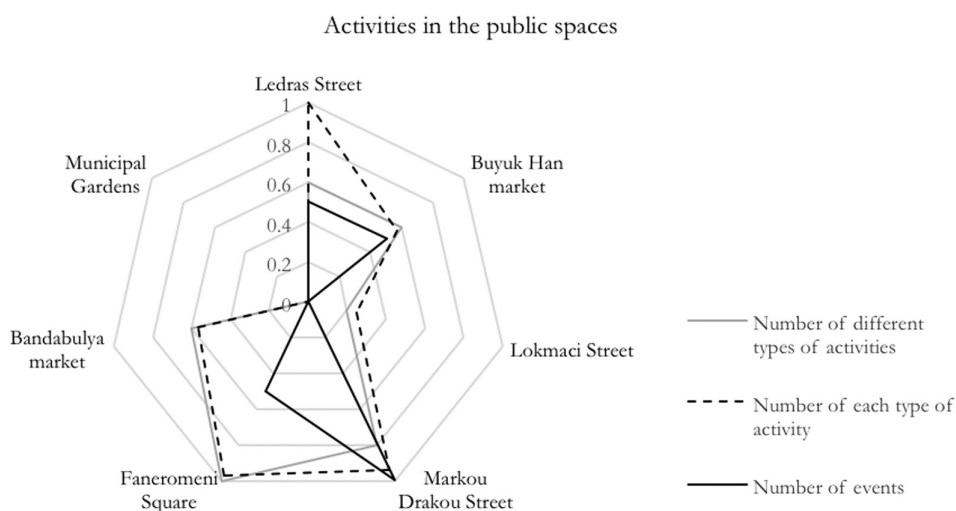


FIGURE 7.6 Standardised values of the indicators for the activities/events dimension of public spaces.

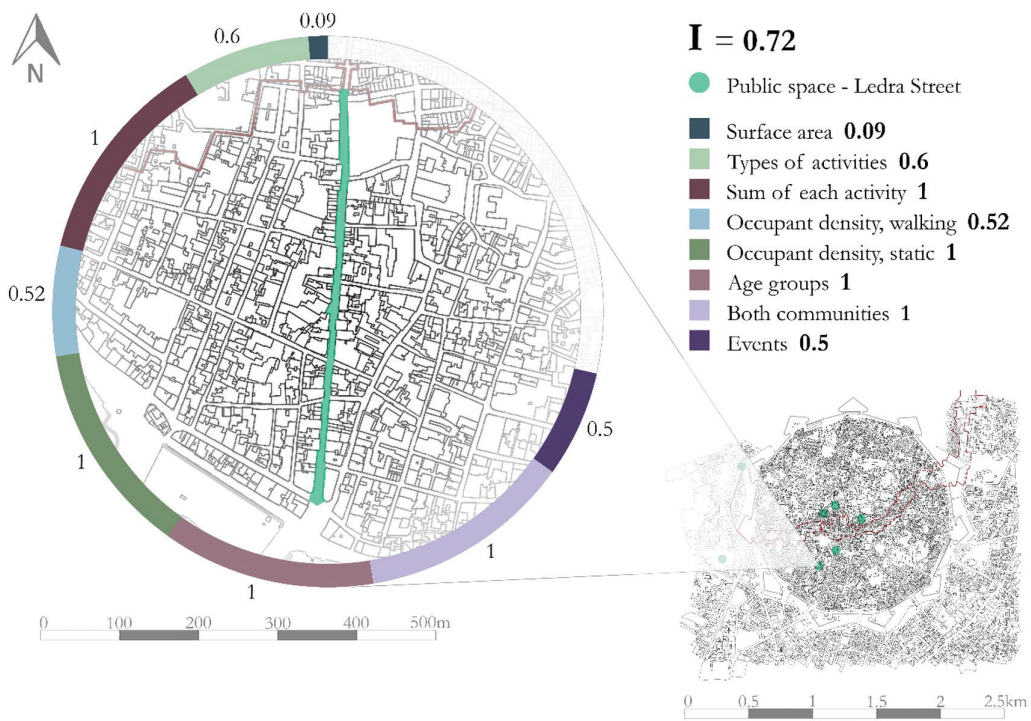


FIGURE 7.7 Index of social interaction for Ledra Street. (Base map source: University of Cyprus, 2016.)

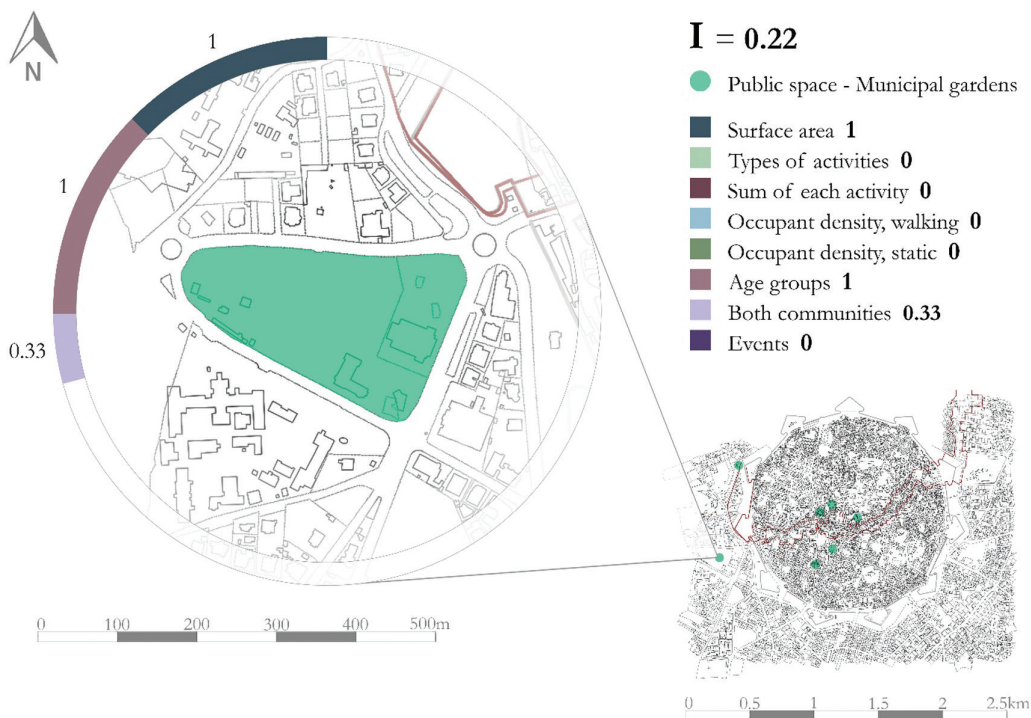


FIGURE 7.8 Index of social interaction for the Municipal Gardens. (Base map source: University of Cyprus, 2016.)

The dimension of activities included the number of different types of activities, their individual number and the number of events in the public space, all important aspects in Nicosia's relationship with public spaces according to the expert interviews. Markou Drakou Street has the single highest score for the indicator of events in public spaces and significantly high scores for the number of different types of activities and numbers of each type of activity.

Social interaction in Nicosia is place-dependent. Most experts agree that the form of interaction between the Greek and Turkish Cypriots varies depending on the place where it is happening. It is, however, always present to a certain degree, especially in cafés and in areas with high concentrations of both communities.

Recently there is a couple of new bars that opened in the north, and Greek Cypriot youth, [...] they are going there frequently. Not necessarily because they have friends or whatever, but they feel so comfortable to cross and go and sit there and have a drink [...] you would say that older people and maybe middle-aged people, they were so much more comfortable interacting because they knew people, and they knew why they were doing it. Whereas now, through kind of very casual occurrences, young people start to do the same.

(Interviewee 2)

According to expert testimonies, the role of public spaces as places of social interaction is significant because these are the rare spaces where the two communities come into contact and have the opportunity to interact. All public spaces we analysed were publicly owned areas and properties with free access, located within and around the walled city. Until the opening of the Ledra Street crossing, that area was heavily militarised. Even though the area had been used, it became significantly busier and livelier after the checkpoint was opened in 2008; of the public spaces we analysed, Ledra Street was the one with the highest potential for promoting social interaction. Some of the public spaces in this area underwent a revival after 2008.

For the newer generations of Cypriots, frequenting and sharing these spaces with the community from the other side of the dividing buffer zone is still a relatively new phenomenon. People are going back to using, or learning to use, the area of the walled city and the public spaces within for social and civic life, as opposed to letting their militarised, border-zone character prevail. 'Infrastructures for peace', such as the 'Home for Cooperation', are being built around and replacing 'infrastructures of conflict' (Till et al., 2013), i.e. militarised zones. One of the main streets and public spaces in Nicosia in the pre-conflict era was the Ermou Street. Now, the UN buffer zone passes through most of Ermou Street, restricting access to it. The citizens of Nicosia nevertheless still remember the spaces of the city for cooperation and sharing, and they commemorate it through a festival called 'Ermou 1900', organised by the Centre of Visual Arts and Research. The festival is an example of events organised in public spaces that evoke memories of conflict and division, but also of reunion and peace.

Ermou 1900, every Saturday before Christmas, Greek and Turkish Cypriot craftsmen, peddlers, come here in Ermou Street, and we dress up people as they were in the 1900s, and they sell their products, as they used to in the 1900s at Ermou Street, which was the most commercial street in the city, it was the hub, the heart of the city.

(Interviewee 12)

Ermou Street is an example of a public space that vanished with the division of the city, although others emerged from it. Markou Drakou Street would not be a public space if it were not for the 'Home for Cooperation'. This street was also identified by the experts as one of the public spaces with the highest levels of interaction. This suggests that the city is acquiring new 'places of contact' (Abu-Ghazzeh, 1999; Farida, 2013; Talen, 1999) between the two communities. The challenge now is how to turn these casual interactions into occasions that overcome the city's partition.

I think that public spaces help people to come together and be active, instead of being individuals. They become part of a team. It's a place to connect. [...] I think it's a great way to have people in an open space and react with each other [...] This is what I think people use them for, having fun. That is the main use of public spaces.

(Interviewee 9)

Expert testimony on the use of public spaces and their role in Nicosia acknowledge that these are not used to their full potential, perhaps because of people's perceptions of the role of the streets and where people traditionally spend their free time, where they socialise with neighbours and friends.

The Cypriot culture has never favoured active public spaces. Maybe because Cypriots were more home-based. I think the role of public spaces is not very prominent in the Cypriot culture. They're not particularly visited or populated. It's not a major element in the city. Of course it's there, and people put out chairs and they sit there and they have coffee. But people go to the restaurants, they go to cafés. If you go to any part of Nicosia, you find people in cafés, rather than in a square.

(Interviewee 11)

There is a tendency for inhabitants to use public spaces where semi-public activities develop outside, in the street or on a square. This is the case for cafés and restaurants, via their sidewalk areas, but also for shops or events that 'spill over' into the public streets. The public spaces that had a larger number of such activities had a higher potential for promoting social interaction, albeit not completely for free. Focusing on public spaces mainly located around the two pedestrian crossings in the city, we also observed that an area marked by infrastructures of conflict (Till et al., 2013), such as the UN-administered area and the dividing wall, is slowly evolving into an area where the two communities come together to interact, sometimes more and sometimes less intensively (Talen, 1999), offering a hopeful image of new places for exchange and interaction between the two sides of the city.

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